Atlantic States Marine Fisheries Commission

Atlantic Herring Management Board

November 9, 2026
9:30 – 10:15 a.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order *(E. Reid)*	9:30 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from August 2026	9:30 a.m.
3.	Public Comment	9:35 a.m.
4.	Set Specifications for the 2027-2029 Fishing Years *(E. Franke)* **Final Action**	9:45 a.m.
5.	Set Quota Period for the 2027 Area 1A Fishery *(E. Franke)* **Final Action**	9:55 a.m.
6.	Consider Approval of Fishery Management Plan Review and State Compliance for the 2025 Fishing Year *(E. Franke)* **Action**	10:05 a.m.
7.	Update from New England Fishery Management Council *(J. Cournane)*	10:10 a.m.
8.	Other Business/Adjourn	10:15 a.m.

This meeting will be held at The Hotel Viking (One Bellevue Avenue, Newport, RI; 844.806.4895) and via webinar; click here for details.

MEETING OVERVIEW

Atlantic Herring Management Board
November 9, 2026
9:30 – 10:15 a.m.

Chair: Eric Reid Assumed Chairmanship: 11/26	Technical Committee Chair: Vacant	Law Enforcement Committee Representative: Delayne Brown (NH)
Vice Chair: Vacant	Advisory Panel Chair: Vacant	Previous Board Meeting: August 4, 2026
Voting Members: ME, NH, MA, RI, CT, NY, NJ, NMFS, NEFMC (9 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2026

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Set Specifications for the 2027-2029 Fishing Years (9:45-9:55 a.m.) Final Action

Background

- In September 2026, the New England Fishery Management Council (NEFMC) recommended a 2027-2031 specifications package for Atlantic herring to be submitted to NOAA Fisheries **(Briefing Materials)**.
- Per the Interstate FMP, the Board can set specifications for up to three years.

Presentations

- Overview of NEFMC-recommended specifications by E. Franke

Board action for consideration at this meeting

- Set specifications for the 2027-2029 fishing years for Atlantic herring, pending release of a rule by NOAA Fisheries

5. Set Quota Period for the 2027 Area 1A Fishery (9:55-10:05 a.m.) Final Action

Background

- Per Amendment 3 (Section 4.2.3), quota periods shall be determined annually for Area 1A using bi-monthly, trimester, or seasonal quota periods.
- For the current 2026 fishing year for Area 1A, the Board adopted a seasonal quota approach with 72.8% available June-September, and 27.2% available October-December.

Presentations

- Overview of Amendment 3 quota period system by E. Franke

Board action for consideration at this meeting

- Set quota periods for the 2027 Area 1A fishery

6. Fishery Management Plan Review (10:05-10:10 a.m.) Action

Background

- State Compliance Reports were due on February 1, 2026.
- The Plan Review Team (PRT) reviewed each state report and compiled the annual FMP Review **(Briefing Materials)**.

Presentations

- Overview of FMP Review Report by E. Franke

Board action for consideration at this meeting

- Accept 2026 FMP Review and State Compliance Reports for the 2025 Fishing Year

7. New England Fishery Management Council Update (10:10-10:15 a.m.)

Background

- In December 2026, the New England Fishery Management Council (NEFMC) will discuss its 2027 work priorities.

Presentations

- Update on NEFMC Atlantic herring activity by J. Cournane

8. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC HERRING MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 4, 2026

These minutes are draft and subject to approval by the Atlantic Herring Management Board.
The Board will review the minutes during its next meeting.

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1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of October 27, 2025** by consent (Page 1).

3. **Move to accept the 2025 Research Track Stock Assessment and Peer Review Report for management use** (Page 10). Motion by Ray Kane; second by Dennis Abbott. Motion passes by unanimous consent (Page 10).

4. **Move to adjourn** by consent (Page 13).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for C. Wilson (AA)
Rep. Allison Hepler, ME (LA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Melanie Griffin, MA, proxy for D. McKiernan (AA)
Raymond Kane, ME (GA)
Rep. Sarah Peake, MA (LA)
Nicole Lengyel Costa, RI, proxy for J. McNamee (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Matt Gates, CT, proxy for S. Madsen (AA)
Robert LaFrance, CT, proxy for B. Hyatt (GA)
Rep. Joesph Gresko, CT (LA)
John Maniscalco, NY, proxy for M. Gary (AA)
Scott Curatolo-Wagemann, (NY), proxy for E. Hasbrouck (GA)
Sen. Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
Allison Murphy, NMFS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Atlantic Herring Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Tuesday, August 4, 2026, and was called to order at 10:00 a.m. by Chair Douglas E. Grout.

CALL TO ORDER

CHAIR DOUGLAS E. GROUT: Good morning, everybody. If everybody could take their seats and we'll get this Atlantic Herring Board meeting going. My name is Doug Grout; I am the Chair. We have a couple of agenda items here, one to consider the Research Track and Management Track Stock Assessments, and then we'll have an update on Fishery's Management Council on herring activities.

APPROVAL OF AGENDA

CHAIR GROUT: To begin with, I would like to see if there is an approval of the agenda here. Are there any objections to the agenda, any additions to the agenda, I should ask first. Seeing none; is there any objection to approving the agenda? It's approved by unanimous consent.

APPROVAL OF PROCEEDINGS

CHAIR GROUT: We also in our meeting materials we have proceedings from the October 2025 meeting. Are there any changes or edits that people would like to make? Seeing none; is there any objection to approving the minutes? Approved by unanimous consent. We now have public comment. Is there anybody out in the audience that would like to public comment? Yes, come on up.

PUBLIC COMMENT

MR. JASON JOYCE: Thank you, Mr. Chair and Commissioners. My name is Jason Joyce; I am a Maine lobsterman and Director of Advocacy at the New England Fishermen's Stewardship Association. NEFSA does not object to accepting the 2025 Research Track as an ecological foundation for the '26 Management Track.

We appreciate the additional data and revisions made since the Research Track. However, several important uncertainties remain. The assessment still lacks an independent Age 1 recruitment index. State survey information has not been incorporated and questions remain regarding the independent biological evidence supporting the model's estimate of current stock abundance.

The assessment also acknowledges unresolved numbers at age patterns, and continued uncertainty in the projections. We respectfully ask the Board to clarify that acceptance for management use does not mean these issues have been resolved, but that the Research Track should independently determine stock status or catch levels. These uncertainties should remain clearly documented and be fully considered when future management measures and catch limits are established. Thank you.

CHAIR GROUT: Thank you, Mr. Joyce. Is there any other public comment here? Any online? Okay, Toni has an announcement.

MS. TONI KERNS: My favorite part of the meeting, to mess up who is online. This morning, we have Sarah Peake, Melanie Griffen, Scott Curatolo Wagemann and Alli Murphy online.

CHAIR GROUT: Thank you.

CONSIDER 2025 RESEARCH TRACK AND 2026 MANAGEMENT TRACK STOCK ASSESSMENT

CHAIR GROUT: Item 4 on the agenda is to Consider the 2025 Research Track and 2026 Management Track Assessments, and we have John Deroba, who will be giving a presentation on that, I assume remotely. John, are you ready?

DR. JOHN DEROBA: I'm ready. We can just dive right in.

PRESENTATION OF STOCK ASSESSMENT REPORTS

DR. JOHN DEROBA: I'm going to start with a summary of the Research Track. This will be brief, because it's almost two years old now, and it's I

think a bit more impactful to talk about the Management Track. There is the Research Track Working Group and all the folks that contributed.

I just wanted to acknowledge them, because it was really a great working group with a lot of great people pitching in some good stuff. Thanks to everybody that was involved in the Research Track.

PRESENTATION OF PEER REVIEW PANEL REPORTS

DR. DEROBA: The Peer Review was completed in March of '25. There is the Review Panel with Conor McManus as the Chair, Henrik Sparholt, Gary Melvin and Florian Berg.

They concluded that all the Terms of Reference were met and the methods were accepted. I'll quickly go over Terms of Reference 1 through 3, and then jump into a little more detail on the modeling. Term of Reference 1 is considered ecosystem and climate. This was a really massive undertaking.

The place where it contributed the most was it identified likely covariates for us to evaluate, particularly covariates affecting recruitment we tested in the assessment later. The covariates identified were temperature, planktonic food sources, and haddock acting as predators on herring eggs that might be limiting recruitment.

Term of Reference 2 was, get the catch data together. We didn't make a whole lot of changes here, because you can make changes to data in management tracks in the future, so we didn't really focus much on making data changes. We did switch to the Catch Accounting Monitoring System, CAMS, that is close for what it stands for, and that begins in 2020.

Term of Reference 3 was, get the survey data together. Like catch we didn't make a whole lot of changes here. The survey inputs were similar to previous assessments, used the NMFS Spring, Fall and Summer Bottom Trawl Surveys, and an acoustic index that is collected during the Fall Bottom Trawl Survey.

We did examine the Maine/New Hampshire and Massachusetts Bottom Trawl Survey. The trends were generally consistent with assessment outcomes, but due to their small spatial footprint they weren't included in the assessment model. But we are working on trying to combine the state surveys with the federal surveys. As the gentleman mentioned, lacking Age 1 observations is a weakness, and the state surveys do catch some Age 1 fish. We are hoping to resolve that issue by combining the Federal and State surveys moving forward in the future. We did try to use an index of recruitment based on sea bird diet.

There is a publication out about that now that describes in great detail why it's not ready for prime time and some of the challenges associated with that. We gave that a shot but it needs some more follow up. Term of Reference 4, which I like to call, do a stock assessment. Our major priority here was move from the ASAP platform to the Woods Hole Assessment Model WHAM platform.

We used a broad range of model selection criteria, evaluated nearly everything under the sun, statistical properties, start year, time varying selectivity, natural mortality, all sorts of random effects. As I mentioned, recruitment covariates, and I'm sure some other things that I'm not remembering any longer.

Wd did well over 300 model variants. On the recruitment covariate topic, we didn't find any single recruitment covariate was a main driver, although all the ones we evaluated probably to some extent, are having some minor effect, but none of them made it into the final model as a main driver.

Ultimately, we ended up with a preferred model that had two fishing fleets. If you followed the herring assessment it has a mobile fleet, which is trawls and purse seines and a fixed gear fleet, which is largely Canadian weir catches. The model began in 1987; it used to begin in 1965. Beginning in 1987 was a necessity, because that is when age data begins in the surveys.

To evaluate all the bells and whistles available in WHAM, age data is kind of imperative, so we had to start in '87. M ended up being constant at 0.35, which was the status quo approach. We tried all sorts of things with natural mortality, and either the models didn't behave, they had diagnostic problems, or there was just not enough support in the data to estimate anything different.

Selectivity does not change through time. Recruitment is an independent and identically distributed random effect, that means there is no correlation to years, just each year recruitment can go wherever it would like, with no relationship to previous years or future years. The numbers at age random effects were correlated among ages.

I'll get into more detail about this when I get to the Management Track, but it's an interesting pattern, like I said, I'll talk more about that. What you're seeing here in the top graph is the recruitment time series and the spawning stock biomass time series in the bottom panel. The purple line is the 2024 Management Track using the ASAP Platform.

The yellow line is the preferred model coming out of the 2025 Research Track using the WHAM Platform. You can see in the Recruitment Time Series there are broad similarity. There are some peaks and valleys that don't quite jive, but broad similarity and spawning stock biomass is very similar as well. Reference Points, we could not estimate a stock recruitment curve, so we continued the use of proxies F40% and B40%. F40% only for the mobile fleet, which is the U.S. Fleet is used for official status. A truncated recruitment time series, which was supported in the old ASAP Platform Assessments was no longer supported using the WHAM Platform. We used a measure of long term mean recruitment is what that sub-bullet really says.

Using the WHAM Platform approach there is the reference points that resulted and the terminal year estimates. Research Tracks don't report stock status. But if you were to do the math, the stock is overfished, overfishing is not occurring. Retrospective pattern adjustments were unnecessary.

Projections, the recruitment random effect process continues into the projection period. That is different from what was happening in the ASAP Platform, where the recruitment was autocorrelated two years. Numbers at age random effects do not continue into the projection period. That became a bit of a sticking point in the Management Track.

Life history traits equaled five-year averages. Mobile fleet catches were projected using the New England Council's hockey stick control rule, and the fixed fleet, which again is largely Canadian is not quota controlled, and so typically we set that equal to a ten-year average in the projection period. That is considered a management uncertainty that can be tweaked by the New England Council.

Spawning stock biomass increased very quickly into the projection period, with a great deal of uncertainty. The Working Group and Review Panel had concerns that these were overly optimistic. That concern also carried over into the Management Track. Here is the spawning stock biomass time series, although somehow the year labels went missing.

But the vertical line is the delineation point between the estimation period and the projection period, and you can see the SSB increased quite rapidly. Those are 95% confidence intervals that range from nearly 0 to something astronomical. The quantitative and measurable uncertainty is pretty substantial, especially in the projection period.

Here is another example of basically the same thing, so the yellow line is the spawning stock biomass time series, and the purplish bars are recruitment. You can see into the projection period, which is again denoted by the vertical dash line, SSB increases very rapidly and recruitment in the projection period is basically reversed to a long-term mean. Term of Reference 7 and 8.

Seven was research recommendations from the 2024 Management Track. I'm not going to review those in detail here. Many of the recommendations were addressed during the Research Track, things like evaluate natural mortality, selectivity, move to WHAM, so on and so for. TOR 8 was the backup approach, which was not needed in this case. That is what I had on the Research Track, would you like me to pause there or just carry on into the Management Track?

CHAIR GROUT: Go ahead and carry on into the Management Track, and then we'll take questions after that on both.

DR. DEROBA: Okay, on to the Management Track then. Sorry, I didn't know I had animations in here, I often don't. I like having boring slides. Management Track summary assessed using the Woods Hole Assessment Model as I mentioned. We made no structural changes since the Research Track timeframe is 1987 to 2025.

Still using two fleets, same indices of abundance and surveys, as I mentioned, constant natural mortality, proxy reference points, and we'll get into the strong correlation among ages and the numbers at age random effects in a moment. Term of Reference 1, which is get your catch data together.

Again, we used CAMS since 2020 and there is a plot of the fixed fleet catches, which is the reddish line, and the greenish blue line is the mobile fleet. You can see catch has declined substantially as the stock has declined, and the Councils have ratcheted down quotas. As I mentioned, Canada is responsible for nearly all of the fixed-fleet catches, and they revised some of their methodologies.

What you are seeing here in the red line is their old catch time series, and that run by bluish green line is the updated time series that we used. This had almost no effect on the assessment, so they are still broadly similar. This is the age composition data for the mobile fleet. These are proportions not numbers, so if you could see the data behind this.

If you summed these values across ages within a year they would sum to 1. What you are seeing here, if you tack the bubbles sort of from high left to low right, you are seeing a cohort tracking. That is where the model gets information about recruitment and cohort size. This is a similar plot but for the fixed fleet.

You can see the fixed fleet catches almost exclusively Age 2 fish. Because of that there is no ability to track cohorts. On to Term of Reference 2 and the indices. Here is the Spring NMFS Bottom Trawl Survey time series, at least since the Bigelow came online in 2009.

No matter how you slice it, recent observations are much lower than they use to be. There is the NMFS Fall Bottom Trawl Survey. I am trying to remember if 2025 wasn't the lowest in the time series it was the second lowest. Again, no matter how you slice it, recent observations are lower than they were. This is the Summer Bottom Trawl Survey.

This survey has been paused or suspended, I'm not sure what kind of word they are using, but it hasn't been done since 2023, so there is really no new data here that we didn't already have during the Research Track. One nice thing about this survey is that there are no vessel changes, so it spans the transition from the Albatross to the Bigelow, which makes it a nice addition to the model.

Again, generally speaking, recent observations are lower than they use to be. This is the acoustic index that is collected during the Fall Bottom Trawl Survey. There is no 2025 data point here, because some calibration, I'm not an acoustician, so I don't know the details. Some piece of equipment wasn't calibrated correctly, so there are no 2025 data. The 2024 data point, which is the last one in the time series you see in front of you is the lowest in the time series. Term of Reference 3 is fit the stock assessment. We made a few minor changes, none of which had any significant impact on the assessment or reference points. Switch to a new version of WHAM, which was completely irrelevant, had no effect.

Added two years of data. I showed you the revised Canadian catch time series. We changed input effective sample sizes, which the model uses to sort of weight age composition matrices relative to each other. I was using year specific effective sample sizes, but we're now using a self-weighting likelihood that made that unnecessary, so I just simplified it.

The joy of it, at least from a statistical stock assessment standpoint is you can now compare parameters from the self-weighting likelihoods and directly infer which age composition matrices the model is treating as relatively precise and fitting well versus ones that it maybe thinks is more uncertain.

I made a correction to how I was calculating spawning stock biomass weights at age. I won't get into the details, but long story short it had a relatively minor effect on reference points, but was generally an improvement for what I was doing. This is the spawning stock biomass time series as a stacked bar plot.

You can see the contributions from each age. I just make a note there that 9 of the 10 lowest spawning stock biomass estimates have occurred since 2017, and 2025 is the second lowest in the time series. Here are the fleet-specific fully selected fishing mortality rates. The purple line is the mobile fleet; the yellow line is the fixed fleet.

You can see other than that anomalous year; F has generally come down for the mobile fleet. It has varied, but been relatively stable for the fixed fleet. This is the estimated recruitment time series. Seven of the 10 lowest have occurred since 2015, and 2024 was the second lowest in the time series.

You can see the horizontal dash line, I believe it is actually the geometric mean, it's essentially a measure of the long term mean of the recruitment. You can see most recent recruitments are well below it. Okay, numbers at age random effects. I'll spend a little bit of time on this. Each row here is an age.

The bottom row is Age 1, so that is basically a colored depiction of the recruitment time series. For example, I just mentioned most of the recent recruitments are below average, and you can see that in recent years they are all dark blue, which is indicative of a poor recruitment. The lighter yellow shades would be indicative of good recruitment.

For ages 2 through 8, the numbers at age random effects are essentially either killing fish faster than fishing and natural mortality alone, or actually causing fish to survive better and overcome some of the mortality being caused by fishing and natural mortality. You can see all the colors in a given year for all the ages are broadly similar.

I report the estimated correlation coefficient is 0.84. Perfect correlation would be a value of 1, so 0.84 is quite high. There was no support for correlation among years, although if you're looking at this and your eye tells you that there are more dark colors in recent years than there was early in the time series. You would be correct. But WHAM doesn't have features available to model and estimate sort of longer-term trends in these numbers at age random effects. One consequence of what you're seeing on screen, especially in recent years is you see a lot more darker blues across all ages for ages 2 through 8, meaning fish at older ages are disappearing faster than just fishing and natural mortality alone.

Not only has recruitment been poor, you can call it survival. We don't know what is causing these movements, no idea. But long story short, not only is recruitment terrible, but survival of older ages has also been rather poor, how we ended up in the state we are in. I mentioned the sort of longer-term trend that WHAM isn't capable of modeling at the moment.

That is one of the reasons when I get to projections you will hear more talk about them being overly optimistic, because these numbers at age random effects don't carry forward into the projection period. There are the updated reference points. The B40% is a bit lower than what came out of the Research Track.

That is partially because of the change I made to spawning stock biomass weights at age. But the bigger contributor is actually, as recruitment remains poor, the long-term mean recruitment is systematically shifting lower and lower. The mean recruitment is also quite a bit lower in this Management Track than it was even just two years ago in the Research Track.

There is F40% MSY. You can go to the next slide and it will have the status plot, I think. Stock is overfished; overfishing is not occurring. Retrospective adjustments were unnecessary. I think most folks are used to seeing this type of plot, F/ Fmsy proxy on the vertical, SSB/SSBmsy proxy on the horizontal, 90% confidence intervals with the black dot and the lines.

Then the red dot would be what happens if you do account for the retrospective pattern, but you can see the red dot is well within the confidence intervals and so generally we don't adjust. Projections, we didn't make any changes to the research track methods. Recruitment effectively goes back to a long-term mean.

As I had talked about those random effects do not continue into the projection period. Mobile fleet is going to use the control rule. Fixed fleet is set to a ten-year average. As with the Research Track, what you are seeing here is a 10-year projection, which I kind of did by default, because herring are in a rebuilding plan, so I just defaulted to providing 10-year projections. The vertical dash line is again the delineation point between the estimation period and the projection period.

You can see recruitment returns to a long-term mean, immediately another projection period, and SSB immediately sky rockets. SSB is the yellow line. We compared this to what came out of the Research Track. Even though this is believed to be optimistic, it is actually far more pessimistic than what came out of the Research Track. But since we're using the same methods, the concern remains that these are overly optimistic projections. Again, mostly because of the NAA random effects not continuing into the projection period, and also there is still no strong support in this model for correlation and recruitment through years, so we are still assuming recruitment immediately lives to a long-term mean. Future management tracks, I'm definitely going to have to just keep reevaluating that and reconsider what we're doing here, because staying on this treadmill of overly optimistic, overly optimistic is probably not a wise way forward. Here are the projected catches for the fixed fleet, which is red.

Again, they are going to be constant in a projection period, because it is assumed to be equal to a 10-year average. The mobile fleet is the bluish line, that is calculated using the New England Council's Harvest Control Rule. You can see given that SSB rapidly increases, stock status improves into the projection period and catches also quickly increase in the projection period.

With the exception of the second year. The vertical dash line is at 2025, the point immediately to the right of that would be 2026, which is set equal to the ACL. Then 2027 you can see catch goes down with a mobile fleet catch based on the Control Rule of somewhere in the neighborhood of 1,000 tons.

Really, really bad news in the short term, but again that overly optimistic projection allows that to recover very rapidly. Research recommendations. Term of Reference 6. There were lots of recommendations from the Research Track, but given the short turnaround time we didn't really make a whole lot of progress on them.

There was enough that going through three slides of research recommendations is not very interesting. During this Management Track, this Review Panel had 10 recommendations. I highlight the two that they chose as the most important. First was continue work on development of a VAST model.

VAST is just the fancy statistical approach that we would use to combine the State and Federal Surveys, and hopefully get some more information in this assessment on Age 1 fish. Then secondly, investigate the potential for auto correlation and

recruitment, which I just mentioned, and also see if we can come up with reasons that the numbers at age random effects look as they do.
I honestly do not have a whole lot of hope for that one, if I may speak freely. You know for years this assessment and many assessments in the region had retrospective patterns that for 20 to 30 years nobody has really been able to explain very well. What the numbers at age random effects are doing are implicitly accounting for whatever was causing the retrospective patterns that we couldn't explain.

Asking to explain why they look the way they do is akin to asking, please explain retrospective patterns, which we have failed to do for 30 years. I do think the pattern is interesting, and worth some thought. I do fear that it is a bit of a fool's errand though, but anyway. That's all I had.

CHAIR GROUT: Thank you, John, I appreciate that. It was great seeing both the Research Track and Management Track assessments and some of the things that you did in between them. I am going to go out to the Board here to see if there are any questions you might have. Melanie Griffen, I hear you have a question.

MS. MELANIE GRIFFIN: I do, Doug, thank you. Thanks, John, for the presentations. My questions are kind of next step questions. You know with the assessments going into management advice. My understanding is there is going to be some sensitivity information. I don't know if you or the member of the PDT or if Dr. Cournane is on, could speak a little bit more to what is anticipated with that. Then I do just have a follow up. I do find the research recommendations interesting, so I do have just a question on those after this question.

DR. DEROBA: I can speak to that. One thing I neglected to tell you all, and I probably should have, is that the projection term of reference was only deemed partially met, which leaves the Herring PDT at the moment with no clear path forward. What I did, and the PDT is doing, I think we have a meeting Friday to follow up on this.

We did the standard projection, which everyone believes is overly optimistic. I did another projection where I do continue the numbers at age random effects into the projection period, which gives as you would expect, a more pessimistic view of the future. The reason that wasn't our preferred way forward in this Management Track is that we're kind of on the cutting edge here.

Nobody has really figured out what to do with those numbers at age random effects in the projection periods. In the ISIS world they have had numbers at age random effects in assessment models for 15 or more years now, and still just ignore them in their projection methodologies. That doesn't seem to be the best way forward to me, but long story short, I'll quit rambling.

Basically, nobody has figured out how to do it best yet. There is very little evaluations on what to do with those numbers at age random effects int the projection period. What I did for a sensitivity was just ad hoc sort of willy nilly, let's let them persist into the future. But I don't have a good justification for putting it forward as a preferred approach.

We also did another projection, where the numbers at age random effects continue into the projection period and recruitment uses a recent 10-year average, rather than reverting back to a long-term mean. As you can expect, that was also sort of doubly pessimistic. I think we did one more tweaking catch in the bridge or something.

But that is what is out there right now. When we do continue the members at age random effects into the projection period, it does lead to fishery closures based on the New England Council's Control Rule. The conversations I expect to be quite interesting. I don't think I've been formally asked to do any other sensitivities yet.

I know industry at one point was asking for sort of averaging over the projection years, so sort of soften the blow of the hockey stick control rule really, really ratcheting down catch early in the projection period. But yet to be seen where that is going to go

MS. GRIFFIN: Thanks, John, yes, I think, I mean the takeaway for me is that these assessments are the best information we can use. I know it's a little awkward with the Commission right now, but actually wanting to understand how it is going to flow into the management discussion with the SSC. That all sounds good to me. Recognizing the concern that was expressed by both views about the projection uncertainty. It's not being ignored, you are trying to do what you can with sensitivity analyses, and that information will come before the SSC. That is what I'm getting from what you just provided us. My other question to you, on the research recommendations.

Because I think it is important for us again to keep an eye, we recognize, I mean there is always a need for improvement generally in assessments, with the very specific issues with this one. I know we don't know when our next assessment will be, but I think it's always good for us to understand, for the managers as well what is happening there.

As you say, the VAST modeling of the State Age 1 Index, that seems to be a consensus priority. There are the NAA random effects that sounds like you're going to continue looking at. I would say there is also some potentially actionable progress on the U.S./Canada catch uncertainty. Is there anything you can tell us kind of about any concrete steps, in terms of what the Science Center is? I mean are you committed to working on this?

Is there like, what roadblocks might there be to getting this information into whenever we do have the next assessment? I think this may be something, those assessment work sheets that have been going out, which are so great, I think, in terms of providing transparency, not just to managers but to the public.

Might the next steps on research recommendations be included in that. That was a lot, but just basically, what transparency and understanding you can give us on how these research recommendations might be acted upon.

DR. DEROBA: Yes, on the VAST model and to integrate the State and Federal Surveys. I am working with Conor McManus who is, what's the name of his branch? Advanced Technologies, because not only does he have an interest in one, integrating the state and federal surveys, but also folding in perhaps the acoustics as well.

He's got some thoughts as to how to maybe take better advantage of acoustics, and examine herring distribution and not just develop indices of abundance. That would also be happening. But long story short, myself and the Advanced Tech Branch have some similar interest in advancing these VAST models, again with an eye towards obviously improving the indices of abundance and getting Age 1 observations in there.

But from the Advance Tech standpoint, folding in some other data sources and making some better inference about herring distribution, and that work has already begun, although barely since the Management Track is still warm. That work has actually begun; we're committed to it. I don't have a timeline for it.

But I am hoping whenever the next assessment would be, certainly probably not before two years. I'm hoping to have something at least significant to report back on. I think the second recommendation there about numbers at age random effects. I think where more progress is likely to happen would be in evaluating how to do the projections better and treat the numbers at age and recruitment time series into the projection period better. As some of you may know, there was a Projections Research Track that has been paused. I think the NRCC voted not to resume that, which is all well and good. But the population dynamics branch has informally started to spin up in house some research plan, some evaluations on how to basically do projections better, because the optimism of projections isn't unique to herring. Typically, when the stock is in poor condition, we assume some reversion to a mean and all of our projections are probably optimistic.

That never seems to actually be what happens. The opposite is true as well. When things are in relatively good condition, we assume some reversion to a long-term mean and things decline pessimistically, think black sea bass. Anyway, internally but not formally, we are spinning up some research ideas and some sort of formal thinking on what we can do there.

CHAIR GROUT: Any other questions for the Board? Megan Ware.

MS. MEGAN WARE: Thanks, John, appreciate it and I appreciate all the PDTs work on the different sensitivity runs. I do think it is the right approach given the lack of confidence in the projection runs coming out of the Management Track. My question is on, I think you mentioned there was a bridge year catch sensitivity run, and I was wondering if you could speak to that a little bit. I know we did that last time, and that is what got implemented.

I think maybe what is different this year is we're in August and less than 10% of the total ACL has been caught, which I think is pretty unusual for this time of year. We can dig into why that is. But I think there is potential for real underages this year, and if those persist, I'm just curious kind of the range of bridge year catch that has been used in some of those projections.

DR. DEROBO: Even though I just did this recently, I'm still struggling to remember exactly what we did on bridge year catch. I don't know if Jamie is on, but I recall Jamie asking me. I think we did 75% of the ACL in the bridge year. We only did 1 sensitivity changing the bridge year catch. I think it was 75% of the ACL. I'm guessing we might have to sit on our hands for a little longer, before we figure out what that value might more realistically be. But that is all I've done thus far at the request of the PDT.

MS. WARE: Okay, thanks. I think we'll learn more rather quickly on the Area 1A situation. We'll see where that is. It might be helpful not to have you do more work, John, but understanding if there is a tipping point, in terms of if their bridge year is a certain percentage of the ACL that makes a meaningful difference versus 75 or 80% maybe doesn't make a difference, but good luck.

CHAIR GROUT: John, I might have a question for you. My name is Doug Grout. I wish we had Figure 2 from your Management Track Assessment. This is the one that gives the fishing mortality rate for Ages 7 to 8. Then also provided what the fishing mortality was on that ASAP with confidence intervals and then the current assessment.

Then it also has the current Fmsy proxy of 0.72. The thing that struck me, if you think a figure or picture is worth a thousand words is that this shows that we have been overfishing for a long time, which is not what the previous assessments had shown, at least wile I was the Herring Committee Chair on the Council. We had a period in the 1990s to the early teens where we brought fishing mortality right down. We weren't overfishing until the latter part of the teens. What I saw from this is that yes, looking back and comparing, the reference points had dropped the F40% MSY. The values had dropped from 0.5 or 0.48 down to the current 2.72.

But I also noticed that fishing mortality under the WHAM model was generally higher than what it had been. I'm just trying to, is WHAM saying that we've been overfishing all along, or has it been a factor of the Fmsy 40% has been dropping that makes us looking like we've been overfishing all along?

DR. DEROBA: It's the latter. The way WHAM is calculating F40%, specifically for the mobile fleet is, it solves for a single value of F40% that then gets multiplied through selectivity curves for each fleet, and so on and so forth. You do some per recruit analyses. But what WHAM is calling selectivity for the purposes of the reference point, is it takes recent fishing mortalities at age for each fleet, and rescales them treating them as selectivity.

The implication there is that as the relative amount of catch from each fleet changes through time, the F40% will also change pretty dynamically through time. Let's say we go back 10, 15 years. The F40% would have been much, much higher for the mobile

fleet, because more catch was coming form the mobile fleet, so the F would have been much higher.

At the moment there is a great deal of catch coming from the Age 2 fixed fleet, which has the run on consequence of requiring a reduction in the mobile fleet F40%. That plot you are referencing, I think that actually came up during the review as well. It is not really fair to compare the current WHAM reference point to the F backwards in time.

Because if you were to say, start the model in 2012, the reference points would be completely different and there would be no evidence of overfishing. Yes, I don't like that plot, because that point gets missed. The reference points would also change because of life history traits being different backwards in time.

The long-term recruitment would be higher, which would have the effect of increasing the B40%. Long story short, that F reference point is going to be quite dynamic through time as the long-term recruitment changes, which is impacting the B40%. Then as the relative catch from each fleet changes that is also going to create quite a lot of a dynamic nature in the F40%.

CHAIR GROUT: Basically, this is appropriate reference points for this period of time, not so much for historically. Maybe, like you said, you didn't, I think like that graph in the future that we should say, F40% 272 is the reference point for now, but not for the dash line all the way back through the years with it.

DR. DEROBA: That is correct, yes. It is probably better to just go back 5, and certainly no more than 10 years. WHAM does produce plots of the dynamic reference points, but we don't use them. But I was going to try to just look up how dynamic the F reference point was, just to give you a sense of, I might not be able to find it in a sensible amount of time either.

CHAIR GROUT: Don't worry about it, I just offered a suggestion that in future assessments they put up a graph that makes that clear, as opposed to having a dotted line that goes back forever.

DR. DEROBA: Yes, that is a good suggestion, and just FYI. NOAA Fisheries Headquarters if pushing for a nationally standardized assessment reporting approach. Don't know what that is going to look like yet, but that will come online sometime in 2027. You might not ever see a plot that looks like that again, because we're working through a national assessment report sort of process. I don't know if that is good or bad, but we're doing it.

CHAIR GROUT: Thank you. Any other questions from the Board? Seeing none; thank you, John, very much for a very thorough and great explanations about how all these things work, and thank you again for your effort.

DR. DEROBA: Thanks, hopefully it wasn't too rambling or techy.

CHAIR GROUT: It was fine for me.

CONSIDER ACCEPTANCE OF NORTHEAST FISHERIES SCIENCE RESEARCH TRACK STOCK ASSESSMENT AND PEER REVIEW REPORT FOR MANAGEMENT USE

CHAIR GROUT: I believe we need to have a motion to accept the Management Track Stock Assessment and Peer Review Report for management use. Just the Research Track, okay. Is there anybody who would like to make that **motion to accept the Northeast Fisheries Science Center Research Track Stock Assessment and Peer Review for management use**?

MR. RAYMOND C. KANE: Ray Kane.

CHAIR GROUT: Makes the motion, is there a second? Dennis Abbott. Since I read it in, does Ray need to enter it? Okay. I'll try it the easy way first, **is there any objection to this motion? Seeing none; it passes by unanimous consent**.

CHAIR GROUT: Item 5, Update on the New England Fishery Management Council and Atlantic Herring activity. Emily, I believe you are on.

UPDATE FROM NEW ENGLAND FISHERY MANAGEMENT COUNCIL ON ATLANTIC HERRING ACTIVITY

MS. EMILY BODELL: Good morning, everyone, my name is Emily Bodell, I am on the New England Fishery Management Council staff and I support the Atlantic Herring Plan. I'm just here today to provide a few updates on what the Council has been working on with regards to Atlantic herring this year.

Just starting out with our Atlantic herring outlook by quarter. We have a few priorities that we are working on this year. The first is Atlantic herring specifications for 2027 to 2031. The next is an action which will include river herring and shad measures, as well as some additional management measures. I will elaborate on that in just a moment.

You also heard from Dr. Deroba about the Management Track Stock Assessment. The Council staff has been supporting that and following along. Then the Council will also establish 2027 priorities a little bit later in the year.

Originally, the Council set out to complete one action regarding Atlantic herring this year, which would have included the specifications as well as river herring and shad management measures and some additional measures. The Plan Development Team has been working on some analyses in support of this action. It's been presented to the Advisory Panel and the Committee, ultimately this information was brought to the Council, and they received a status update at our June 2026 Council meeting. It was decided at that point to split the action into two, which is why it is listed in two different categories on our work that I just reviewed.

The following motion was made in June, which was to set the Atlantic herring specifications for fishing years 2027 to 2031 as a standalone action for final action in September, and then in a separate action for April 2027, final action target date.

The Plan Development Team would continue working on modifying Atlantic herring management measures to avoid or minimize the catch of river herring and shad through time/area closures with and without the existing catch cap methodology, updating the Atlantic herring specifications process and modifying carryover provisions for unharvested catch.

I'll just go over the kind of two actions that we are developing, the first being the specifications action. We are anticipating this to be a really straightforward specifications action. It will include things like the overfishing limit, acceptable biological catch, management uncertainty, the ACL and subsequent management area sub-ACLs, river herring and shad catch caps, and there are some other components that are included in a typical herring specifications action.

I will note that the Council is considering making an adjustment to the fixed gear set-aside, which comes out of the Area 1A Sub-ACL. That will be discussed at upcoming meeting. Then on the right here we just have kind of a flow chart of how we reach our management area sub-ACLs. Just to go over some upcoming meetings.

As we discussed a little bit during John's presentation, the Scientific and Statistical Committee will be meeting August 11 and 12, so next Tuesday and Wednesday. That will be in New Beford, or you can attend via webinar. They will be discussing herring OFLs and ABCs. The documents should be posted for that meeting in the coming days, so if you're interested in reviewing what the Plan Development Team has proposed for that meeting, please feel free to take a look, also happy to point folks in that direction as needed.

This will be followed by a couple of herring AP and Committee meetings. They will first meet on August 18 via webinar, and then on September 2 we will be meeting in Boston as well as via webinar to discuss the specifications action. Then we are

anticipating final action at the New England Council meeting in September, that will be in Plymouth, and it's via webinar.

This is in support of a target implementation date for the specifications action of January 1, 2027, so the start of the fishing year for herring. I'll just go over a little bit more detail on river herring and shad and some of the other management measures. This will be in, again this other action anticipated for final action in 2027.

Right now, we're looking at this action including river herring and shad management measures, as well as updates to the Atlantic herring specifications process and carry over provisions for unharvested catch. At that June Council meeting the Council received an update on some recent activity, including that the Committee recommended developing two alternatives for carry over, as well as recommended continuing development on an alternative to update the specifications process.

The Herring Plan Development Team also completed some tasking that they received from the Council regarding river herring and shad, and the results of that were presented to the Council in June. Just briefly to go over these three main river herring and shad related tasks, and some of the PDT analyses that were competed.

The first was related to assessing data availability and analyzing and developing alternatives that would implement time and area closures, where aggregations of river herring and shad are overlapping with the Atlantic herring fishery. The Plan Development Team has been working to develop species distribution models for river herring, shad and Atlantic herring, as well as some hypothetical time and area closures.

This work is going to be peer reviewed by a sub panel of the New England Council's SSC. That will be coming up in the fall. The next task had to do with again, data availability and developing alternatives that would implement revisions to the basis of river herring and shad catch cap values.

The PDT worked to summarize some potential catch cap approaches, and we also discussed assembling some data using, as we're calling a CAMS modified approach. We can summarize river herring and shad catch data by kind of a series of qualifiers there. That data analysis is ongoing, so we're anticipating an update at a future meeting.

Then finally, the PDT also was tasked with analyzing and developing some recommendations for implementing improvements to the accuracy and precision of river herring and shad catch estimates in the directed Atlantic herring fishery. This task was completed, so the PDT developed four different analyses to compare some potential estimation methods.

Ultimately, they didn't recommend making any major change to the current estimation methods, but they did suggest using a gear specific global rate when that information is available. Just to wrap up finding a few upcoming meetings with regards to just river herring and shad in additional management measures action.

As I mentioned the SSC and an SSC Sub Panel will be reviewing the river herring and shad work. That will be occurring via webinar. We do not have a date for that peer review yet, but that information will be posted on the Council website when it is available. Then again, anticipating final action or targeting final action for April 2027.

The New England Council meeting, that will be in Mystic and held vis webinar. Then of course we'll be adding some additional meetings that will be scheduled as needed. We can definitely provide some of those updates, and those are always available on our Council website. That is about all I have for you this morning. Thank you so much for the time, and I am happy to take questions as time allows.

CHAIR GROUT: Any questions from the Board for Emily? Seeing none; thank you very much, Emily for that presentation, and we will be working with you folks over the next few months.

ADJOURNMENT

We are down to other business. Does anybody have any other business to bring up before the Board today? Seeing none; this meeting is adjourned. Thank you.

(Whereupon the meeting adjourned at 11:00 a.m. on Tuesday, August 4, 2026)

New England Fishery Management Council

FOR IMMEDIATE RELEASE
September 23, 2026

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Council Takes Action on Scallops, Herring, and Habitat; Elects Officers

The New England Fishery Management Council met from September 15-17, 2026, in Plymouth, Massachusetts. The following is a summary of actions taken, updates, and other business affecting multiple Fishery Management Plans. Meeting materials, motions, and the meeting audio recordings will be available on the September 2026 meeting page.

COUNCIL ELECTS LEADERSHIP; WELCOMES NEWEST MEMBER

The Council opened its September 2026 meeting with the annual election of officers. The Council reelected **Daniel Salerno** (New Hampshire) as Chair and **Melanie Griffin** (Massachusetts) as Vice Chair. The Council filled the three remaining Executive Committee seats by electing **Megan Ware** (Maine), **Michael Pierdinock** (Massachusetts), and **Jackie Odell** (Massachusetts) from a slate of five candidates.



Melanie Griffin and Daniel Salerno



Kirby Aarsheim

The Council also welcomed its newest voting member, **Kirby Aarsheim** (Massachusetts), who took the Oath of Office and committed to a three-year term. A partner at Farrell Smith O'Connell Aarsheim Aprans LLP, Aarsheim brings a lifetime of commercial fishing experience and expertise in fisheries management. She has served on the Council's Sea Scallop and Enforcement Advisory Panels and remains active in regional maritime policy, including leadership roles with the American Bar Association's Admiralty & Maritime Law Committee and the Propeller Club Port of Boston. She is also a commercial scallop vessel owner in New Bedford. Returning members **Daniel Salerno**, **Terry Alexander** (Maine) and **Jackie Odell** (Massachusetts) were also sworn in for new three-year terms. Council member bios are available here.

HERRING SPECIFICATIONS APPROVED; LEVELS REMAIN LOW

Atlantic Herring Specifications 2027–2031 (metric tons)		
OFL	**ABC**	**ACL**
13,165	10,532	6,926

The Council took final action to set Atlantic herring specifications for fishing years 2027–2031. The Council voted to set annual catch limits **(ACL) at 6,926 metric tons,** a 24% decrease from the 2026 level of 9,134 mt, and at a constant level for each year (2027-2031). The Council recognized the potential for continued negative economic impacts on the fishing industry. The decision factored in the results of the 2026 stock assessment and peer review, the Council's Risk Policy, recommendations from the Scientific and Statistical Committee (SSC) and the Herring Committee, with input from the Advisory Panel and Plan Development Team. The Council also discussed a separate action that would modify **River Herring and Shad Management** through an amendment as part of a multi-year priority. The current river herring and shad catch caps will remain at status quo levels while this work continues.

SCALLOP SURVEY AND WORK PLAN UPDATES

The Council received an update on the **2026 scallop surveys,** which indicate continued growth of a large scallop cohort in the southern Nantucket Lightship, strong signs of recruitment in eastern Closed Area II, and sustained growth and productivity in the Mid-Atlantic, while the Northern Gulf of Maine shows shifting biomass distribution and a small incoming year class. The Council reviewed these results and discussed implications on FY 2027 specifications, including Days-at-Sea and access area fishing in the Nantucket Lightship.

The Council also reviewed the Committee-approved, **Scallop Work Plan for 2027–2029**, highlighting its connection to the Council's Holistic Strategic Plan. This work plan serves as a tool to sequence work priorities that were identified in the Scallop Strategic Plan, focusing on building greater flexibility and adaptability into the Scallop Fishery Management Plan.

The Council affirmed the scope of **Framework 42**, which considers region-specific Scallop Days-at-Sea management and sub-area boundaries in the Northern Gulf of Maine. Work on this action will continue into 2027, with the Committee focusing on 2027-2028 specifications between now and December.

HABITAT FRAMEWORK APPROVED; SURFCLAM REPORT IS REVIEWED

The **2026 Essential Fish Habitat (EFH) Designation Framework** was approved by the Council. The framework updates EFH designations for 16 species using new survey and environmental data spanning from 2002–2022, based on predictive outputs of species distribution models. The Council reviewed the draft designations and feedback received during the development of the action on map boundaries, species biology, and EFH text descriptions. Updated EFH designations will be used to support future Council actions.

The Council also received a **Great South Channel Surfclam Exemption Evaluation Report**. The report compiles updated information since the program's 2020 inception and represents the first Council review of the program

and its objectives, including the dynamic and diverse habitats of the management area and the presence of multiple federally managed species.

SSC REPORTS ON DYNAMIC REFERENCE POINTS WORK

The Scientific and Statistical Committee (SSC) reported on its June workshop that examined dynamic reference points (DRPs) which are benchmarks that can be used to determine stock status, inform management measures such as ABCs, and define rebuilding targets. DRPs are time-varying reference points that can account for changes in stock productivity and persistent ecosystem changes. The workshop reviewed current regional and national approaches, evaluated when DRPs would be appropriate for use with NEFMC stocks, considered alternative methods and data requirements, and identified implementation challenges, and tradeoffs. The SSC recommended creating an SSC subgroup to further develop approaches for evaluating and implementing DRPs in the region. The Council will consider making the work a 2027 priority during the December 2026 meeting. The SSC report is available here.

STRATEGIC PLAN

The Council approved the Holistic Strategic Plan by unanimous consent, making it effective immediately. The Council will now begin implementation and tracking of Goal 1 which aims to "build flexibility and adaptability into Fishery Management Plans and streamline the process of developing management measures." The four major strategies to achieve this include:

1. Revise the annual priority setting process
2. Reduce redundancy in information sharing throughout action development
3. Set specifications through streamlined processes, decoupled from other management measures
4. Focus analyses and documentation on identified action objectives

The plan, which was developed with support from The Parnin Group, included a year-long effort with discovery, analysis, and strategy phases. Moving forward, plan progress will be guided and monitored using a series of actions and key performance indicators that are outlined in the staff presentation to Council.

PARTNER UPDATES

The **Northeast Trawl Advisory Panel (NTAP)** gave an update on the recent Regional Industry Based Trawl Survey (RIBTS) work which is using fishing vessels (F/V). While the 2025 government shutdown stalled the work for several weeks, the survey working group is looking to advance to a two-boat model, potentially in Fall of 2027.

The **Atlantic Large Whale Take Reduction Plan Team** presented on a 60-day public scoping period with the goal of gathering industry and public input on gear modifications and spatial closures in place to sustain the North Atlantic right whale recovery. Stakeholders are urged to participate in the public webinars or submit formal comments via www.regulations.gov using docket #NOAA-NMFS-2025-0041 by October 16, 2026. The team reported some good news citing an estimated population increase from 359 individuals in 2020 to roughly 380 today.

Northeast Fishery Science Cetner (NEFSC) Cooperative Research on Mackerel: The NEFSC reported on current work with industry vessels to advance understanding of Atlantic mackerel, updating data that in some cases are nearly 100 years old. The collaborative effort focuses on acoustic detection, egg surveys, spawning seasonality, movement and mixing, and ecosystem drivers to strengthen future stock assessments in support of management. Some of this collaborative research is underway and the NEFSC will be seeking industry partners for 2027 research, including an acoustic detection project, egg surveys, and more. The NEFSC also planted the seeds for similar, future cooperative research on Atlantic herring. For questions, please contact Anna Mercer at anna.mercer@noaa.gov. View the full report here.

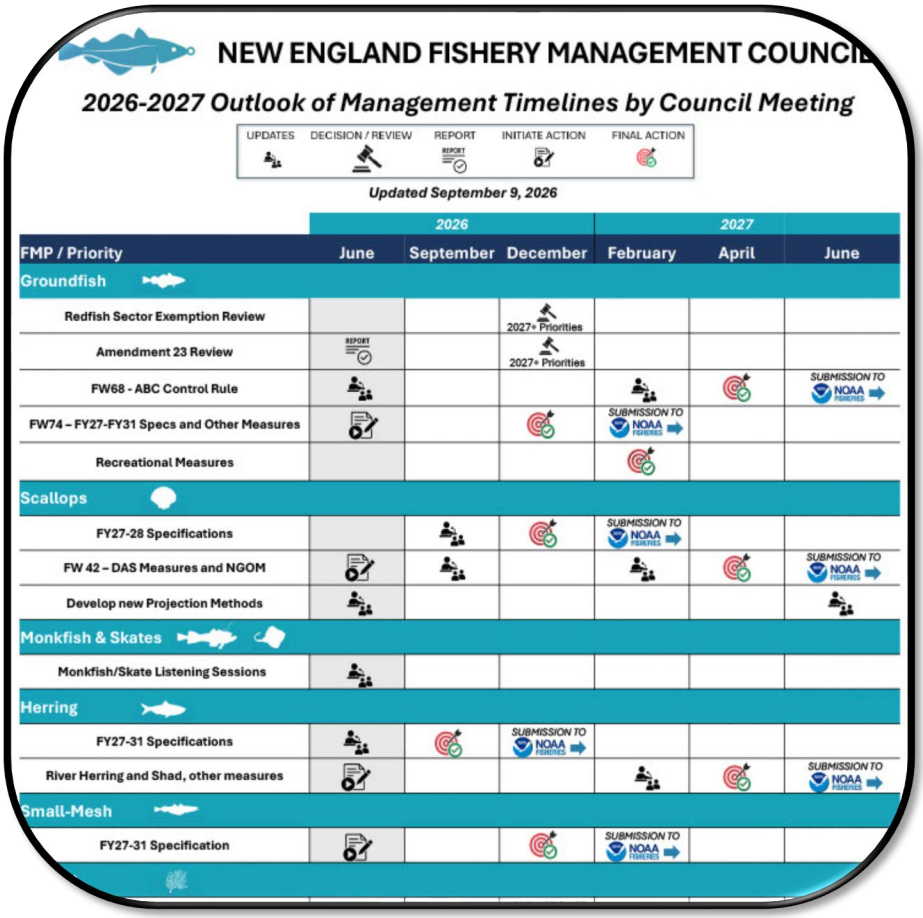
A **Draft Regional Offshore Wind Fisheries Compensation Framework** has been released by the Regional Fund Administrator (RFA) and is now open for public review and feedback. The *Draft Regional Offshore Wind Fisheries Compensation Framework* is open for public comment through November 3, 2026. Feedback can be submitted electronically through the RFA Contact Us page or by email at Contact@RFAInfo.com. The RFA will host a **public webinar on September 30, 2026**, to provide an overview of the Draft Framework and explain how stakeholders can participate in the public comment process. Register for the webinar.

LOOKING AHEAD

A **Management Timeline** can now be found on the Council's homepage. This new visual tool breaks down Council work by FMP/Priority across multiple meetings, giving a better visual tracker for major decisions and actions. The timeline document will be updated periodically, so please check back before and after each Council meeting.

The Council will hold its next meeting **December 8 – 10, 2026** in Newport, RI. An agenda and meeting materials will be posted on the meeting page as they become available. Some of the anticipated actions include specifications setting for:

- Atlantic scallops for FY27-28
- Groundfish for FY27-31
- Small-Mesh for FY27-31



New England Fishery Management Council
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Daniel Salerno, *Chair* | Cate O'Keefe, PhD, *Executive Director*

MEMORANDUM

DATE: August 30, 2026

TO: Cate O'Keefe, Ph.D., Executive Director

FROM: Scientific and Statistical Committee

SUBJECT: Report on 1) discussion of Risk Policy implementation, 2) updates from the Social Sciences Subcommittee, 3) overfishing limits and acceptable biological catches for Atlantic herring for FY2027 to FY2031, and 4) follow-up from workshop on dynamic reference points

The Scientific and Statistical Committee (SSC) met in person and via webinar on August 11-12, 2026, to discuss four topics. First, the SSC received an update on the Council's implementation plan for the Risk Policy and discussed how the SSC is expected to use the policy when recommending overfishing limits and acceptable biological catches. Second, the SSC received an update from the Social Sciences Subcommittee (SSS) and provided feedback to the SSS on forwarding its workplan. Third, the SSC addressed Terms of Reference (TOR) for recommending overfishing limits (OFL) and acceptable biological catches (ABC) for Atlantic herring for FY2027 to FY2031. Fourth, the SSS addressed TORs for following up from the SSC workshop on dynamic reference points held in June 2026.

SSC members in attendance: Dr. Conor McManus (Chair), Dr. Edward Camp (Vice-Chair), Dr. Anna Birkenbach, Dr. Lauran Brewster, Dr. Adam Delargy, Dr. Alex Hansell, Dr. Lisa Kerr, Dr. Gareth Lawson, Dr. Kai Lorenzen, Dr. Jason McNamee, Dr. Richard Merrick, Dr. Mateja Nenadovic, Dr. Kevin St. Martin, Dr. Fred Serchuk, Dr. Michelle Staudinger, Dr. Sam Truesdell, and Dr. John Wiedenman.

RISK POLICY IMPLEMENTATION

The SSC received a presentation from Council staff on the implementation plans for the Council's Risk Policy, as approved by the Council in June 2026. Primary updates since the SSC last discussed the Risk Policy in March 2026 included the addition of risk tolerance tiers derived from Z-scores and advice regarding how the SSC should consider using the Risk Policy to inform its recommendations in the near-term (e.g., 2026 matters). No changes have been made to how the SSC will implement ABC control rules pertaining to upcoming ABC decisions; however, risk policy matrices, Z-scores, risk probabilities, and resulting risk tolerance tiers should be considered qualitatively when formulating advice. Future applications of the Risk Policy may consider quantitative applications linked directly to ABCs.

SSC Comments on Implementation Plan

The SSC discussed some applications of qualitative risk tiers in decision-making. Tiers could impact the risk tolerance associated with out-year ABCs, inform research recommendation prioritization, or warrant recommending a stock's assessment or catch advice be revisited before other stocks. Drafters of the Policy indicated that stocks in the high or low risk tolerance categories are candidates for more frequent assessment. The NRCC's Assessment Working Group could consider the tiers assigned to each stock as an indicator of assessment priority as they develop an assessment schedule proposal. The risk tiers may have further downstream applications as well; for example, they could inform management decisions beyond specifications. The SSC specifically noted the three individual pieces of information that is now available to them through this implementation (tiers, Z-scores, and recommended probability) and can be considered moving forward.

An SSC member observed that a broad range of socioeconomic factors, some of which appear as factor scoring subcategories and some of which may not, are distilled down into a single "Commercial Fishery Characterization" factor in the risk policy matrix and it is unclear whether this factor is weighted appropriately relative to the other factors, or whether additional factors may be needed to represent the fishery. The SSC observed that one of the benefits of the functional relationship between the scoring and the recommended probability is that the number of factors could easily be adjusted in the future while still following the same methodology.

The SSC noted that the uncertainty associated with assessment quantities such as spawning stock biomass (SSB) and recruitment does not appear in the current formulation of the risk policy. The utility of the SSB and recruitment risk matrix factors depend on these metrics being well determined. The SSC should consider this and also recall that uncertainty in these quantities can vary across assessments. It was noted that although uncertainty was considered by the Risk Policy Working Group as an additional factor, it was ultimately removed for now given questions around defining uncertainty and that uncertainty is partially accounted for within the assessment (e.g., effort to avoid "double-counting" uncertainty). Incorporating uncertainty in the Risk Policy more explicitly in future iterations would be informative. Beyond the qualitative applications considered at present, a future Fishery Management Action Team could consider uncertainty in any quantitative advice that may be applied through the Risk Policy in coming years. Similarly, the Risk Policy Working Group also considered fish condition as an additional factor intended to incorporate some ecosystem conditions. However, this factor has been paused from inclusion given challenges in interpreting what changing fish condition means; future work could reconsider this or other possible indicators of ecosystem conditions.

The SSC's discussion was informed by public comment. A member of the public asked for clarification on how the Commercial Fishery Characterization factor is scored, and felt that for the Atlantic herring worked example, the fishery may be under more stress than the score indicates. NEFMC staff detailed the scoring method and noted that there will be some learning along the way as the new approaches get implemented. Another member of the public commented that scoring is backward-looking as opposed to forward-looking, noting that, for example, although Atlantic herring has not been a choke species for mackerel in the recent past, it may well constrain catch next year. This commenter also noted that in other regions, such scoring is an iterative process that multiple groups contribute to. Staff clarified that scoring is

intended to be as objective as possible, follow detailed guidelines, and the AP input component is forward-looking.

SOCIAL SCIENCES SUBCOMMITTEE

The SSC received a presentation from the SSS and the Social Science Branch (SSB) of the Northeast Fisheries Science Center (NEFSC) on updates from SSS meetings held in November 2025 and March 2026, and a workshop held in March 2026. The SSB presented updates on their work to enhance fisheries-dependent data and socioeconomic considerations for management. Key priorities include (1) standardizing fishery performance reporting into concise summaries, (2) improving socioeconomic data products used for Risk Policy evaluation, (3) improving the SSB indicators at the Fishery Management Plan (FMP) level, and (4) facilitating incorporation of social science information and Local Ecological Knowledge (LEK) into stock assessments through collaboration between industry and scientists. The workshop, supported through the Cooperative Institute for the North Atlantic Region (CINAR), focused on fishing industry generated information and highlighted that substantial industry information currently exists, but its use is constrained by inconsistent formats, its treatment is often considered as anecdotal or supplementary only, is incorporated late in the decision-making process. The workshop also noted challenges regarding mistrust and informant fatigue, institutional barriers, and reduced scientific capacity. Proposed solutions focused on standardizing existing data streams, integrating socioeconomic data directly and earlier into the process, using automated reporting and analytical tools to synthesize information, and strengthening coordination across the management system.

SSC Comments on SSS Activities

The SSC sought additional clarification regarding examples of industry-generated information, data standardization, communication, and information use in decision-making. The SSS noted that workshop participants identified several existing information sources, such as groundfish sector reports, vessel monitoring system and vessel trip report data, Study Fleet data, Advisory Panel (AP) input, and public comment, as valuable but often underutilized due to inconsistent formats, confidentiality constraints, and unclear pathways for incorporating them into the decision-making process. Participants also discussed how artificial intelligence (AI) and qualitative analysis tools could create new opportunities to extract, organize, and standardize information from heterogeneous sources, potentially enhancing their use without imposing additional burdens on industry.

The SSC further elaborated on how existing communication channels, including groundfish sectors, APs, and regular industry meetings could be strengthened through greater emphasis on communicating findings back to the industry and demonstrating how their information is being incorporated into analyses and decision-making processes. Participants also discussed continuing uncertainty regarding how socioeconomic information fits within the National Standards and broader management process. SSB's ongoing mapping effort should shed light on how National Standard 1 and FMP objectives relate to socioeconomic concepts, indicators, and metrics, which may help clarify these connections. Lastly, the Mid-Atlantic Fishery Management Council (MAFMC) use of structured AP questions was highlighted as a potentially useful model for generating consistent information over time, identifying emerging concerns, and evaluating whether and how industry observations are recognized and addressed before they become formally identified as management issues.

ATLANTIC HERRING OFLS AND ABCS

The SSC received a presentation from the NEFSC on the 2026 management track stock assessment for Atlantic herring, comments from the chair and a panelist of the assessment's peer review panel who are also SSC members, and a presentation from the Atlantic Herring Plan Development Team on the development of possible OFLs and ABCs for FY2027-FY2031. The SSC noted that the 2026 assessment was the first management track use of the Woods Hole Assessment Model (WHAM) for Atlantic herring which indicated that the stock continues to be overfished but overfishing is not occurring. Discussion focused on the substantial uncertainty in the stock projections, biological reference points, and the interaction of those quantities within the existing Atlantic herring ABC control rule. As part of their report, the peer review panel concluded that "the PDT and SSC should view the projections and sensitivity analysis as context for catch advice setting but that each has challenges that limit their utility." The SSC considered the management track assessment peer review conclusions, including that the projection TOR was only partially met, and that the projections and sensitivity analyses should be viewed as context for catch advice, rather than values to directly inform management.

Terms of Reference

A. Consider the information provided by the Council's Atlantic Herring Plan Development Team (PDT) and ASMFC's Technical Committee (TC) on the most recent stock assessment for Atlantic herring and its peer review, and information on stock projections.
B. Recommend OFLs and ABCs for Atlantic herring for fishing years (FY) 2027-2031 that will prevent overfishing, are consistent with the Council's Atlantic herring ABC control rule and rebuilding plan, and consider the Council's Risk Policy Statement and Concept.

TOR Findings

The SSC recommends an OFL of 13,165 mt and an ABC of 10,532 mt, held constant for FY 2027-2031, for the Atlantic herring stock. The recommended OFLs and ABCs aim to prevent overfishing, have connections to or informed by the Council's ABC control rules (though do not follow the control rule explicitly), and consider the Council's Risk Policy Statement.

For Atlantic herring TOR A, the SSC considered the 2026 WHAM assessment, the peer review findings, and projection analyses and sensitivities provided by the PDT/TC (though no recommendations were provided), and the Council's Risk Policy output. The SSC did not use the projections to directly inform catch advice due to issues associated with their estimation.

For Atlantic herring TOR B, the SSC adopted an interim constant catch approach rather than directly applying the existing herring ABC control rule. The SSC used the 2026 ABC of 13,165 mt as the OFL for FY2027-2031 and applied a 20% reduction to establish a constant ABC of 10,532 mt. Using only 80% of the OFL for the ABC provides a precautionary reduction consistent with the intent of the Risk Policy and also reflects the maximum 80% allowance embedded in the existing Atlantic herring ABC control rule, while recognizing that the current advice departs from a mechanical application of that control rule.

Rationale Including Significant Sources of Uncertainty

The stock remains in poor condition with persistent low recruitment and warrants a precautionary approach. The SSC found substantial uncertainty in the ability to characterize the rebuilding trajectory using the available projections. For example, the standard WHAM

projections assume a return toward long-term mean recruitment and do not carry recent negative NAA random effects forward, resulting in a quick, overly optimistic rebound in SSB, while sensitivities using recent recruitment or recent NAA random effect conditions are substantially more pessimistic. The more pessimistic projections include scenarios in which rebuilding does not occur. The divergence among these scenarios demonstrates that rebuilding conclusions are highly dependent on assumptions of future survival and recruitment. Due to these challenges in specifying projections and consistent with the peer review advice, the SSC treated the projections as context rather than values to be used in determining catch advice.

The SSC also identified a disconnect between the existing Atlantic herring ABC control rule and the new approach to assessment using WHAM. The control rule was developed and evaluated under the previous assessment framework (ASAP) and with the transition to WHAM, the estimation of assessment quantities and biological reference points have changed substantially. Notably, reference points are estimated in a different manner with WHAM estimating a global selectivity across U.S. and Canadian fisheries whereas ASAP ignored the Canadian fleet in these estimates. The large differences in selectivity between the two fleets had a significant impact on the F_{MSY} proxy (F40% was equal to 0.45 in 2024 and 0.27 in the 2026 assessment) and was considered by members of the SSC as an inappropriate modeling choice given the F/F_{MSY} ratio is used in the ABC control rule to inform the exploitation rate of the mobile fleet only (U.S. fleet). The 2026 management track assessment cautioned that ASAP and WHAM reference points are not directly comparable due these methodological differences, and the peer review identified concerns regarding the scaling of the WHAM reference points, recruitment assumptions underlying them, and whether F40% remains the appropriate F_{MSY} proxy. Many of the same unresolved assumptions affecting the projections also affect the reference points.

Given these uncertainties, the SSC concluded that a constant interim ABC provides a reasonable bridge until an updated assessment and/or additional technical work provides greater confidence in projections, reference points, and their interaction within the control rule. The Council's Risk Policy output indicated Low Risk Tolerance, supporting a precautionary reduction in OFLs and ABCs. The SSC discussed several reduction strategies, namely 80%, 75%, and 70% of the OFL for the uncertainty buffer. The SSC also considered using an ensemble approach with the projections (i.e., averaging the outcome OFLs and ABCs from the provided projections; see minority report below). Some members preferred a reduction greater than 20%, because they did not view 80% as sufficiently conservative; however, the SSC did not identify a scientific basis for the 75% or 70% alternatives that were proposed (see Appendix I). The ensemble approach was not preferred due to the SSC's lack of confidence in the projections, and the assessment's peer reviewers cautioned against using the projections directly for advice (which was also noted in the PDT/TC's report). The SSC majority therefore agreed to an ABC equal to 80% of the proposed OFL, or 10,532 mt. The ABC recommendation of a 20% reduction from the recommended OFL (the 2026-2027 ABC value) is intended to acknowledge a level of precaution outlined in the ABC control rule limiting fishing mortality at 80% of F_{MSY} when biomass is greater than 0.5 for the ratio of SSB/SSB_{MSY}). This recommendation is not intended to suggest the current SSB/SSB_{MSY} is greater than 0.5; the use of 80% is used to inform an additional level of precaution that acknowledges the ABC control rule. In this decision, the SSC also recognized the socioeconomic challenges that this industry has been experiencing for the past several years; the recommended 20% decrease also intended to align with these raised concerns.

The SSC believes it's recommended ABCs are not likely to result in overfishing for this stock as the 10,532 mt ABC is 20% below the recommended OFL, represents a precautionary reduction from the 2026 ABC, and was judged by the SSC to provide an appropriate interim level of catch given the stock's low biomass, the Council's Low Risk Tolerance, and the uncertainty in the information available such as the projections and reference points.

The treatment of Canadian catch in the assessment and management of Atlantic herring was discussed by the SSC. Canadian catch primarily comes from Southwest New Brunswick (SWNB) coastal waters (migrant juvenile weir fisheries). The Canadian catches in this region largely consist of "migrant juveniles". Previous tagging studies demonstrate that these juvenile fish originate from the Gulf of Maine and Georges Bank spawning components, meaning they are inherently part of the U.S. stock complex. This assumption needs to be revisited to understand the degree of stock mixing occurring in Canadian and US waters. Furthermore, the current approach to US allocation takes a recent average of Canadian catch from the ABC as part of the management uncertainty deductions. This is a projection as it is not known at the time of setting catch advice how much the Canadian fishery will actually catch. This approach has a more pronounced impact on available catch under smaller stock sizes. The SSC noted that there may be opportunities for the Council to make management adjustments to the treatment of Canadian catch and proportion of ABC available to the U.S. fishery as they broadly consider the treatment of Canadian catch in assessment and management.

The SSC's discussion and recommendations were informed by public comment (written and comments made during the meeting). Concerns from the herring fishery included the potential for some of the projections to only allow one trip or less per year by the herring vessels, that biomass shifts out of certain stock areas has prevented full quota utilization (among other reasons cited), and that state surveys should be included more directly in stock assessments to inform recruitment estimates. Other commenters asked how predator consumption is included in the assessment and about the impacts of the loss of the shrimp survey to the assessment. The assessment scientists clarified that diet data is used in the assessment, challenges persist with using some data sources, but that outcomes generally match external research; the pausing of the shrimp survey increases uncertainty.

In summary, the most important sources of uncertainty include continued poor recruitment; the treatment and interpretation of NAA random effects; the mismatch between recent conditions and conditions used for the assumptions from some projection and reference point calculations; uncertainty in WHAM biological reference points and their comparability with the former ASAP framework; and missing or limited recent survey information. The SSC also noted that survey indices remain low but have not shown a recent precipitous decline, adding to concern about the apparent disconnect between the control rule catch advice and the available empirical information.

Additional Comments and Research Recommendations

The SSC supports the peer review research recommendations and emphasizes several of those as top priorities: continued development of the vector autoregressive spatiotemporal (VAST) model to incorporate additional surveys which could improve information on age-1 herring; investigation of potential autocorrelation in annual recruitment and covariates that may be aliased in the NAA random effects; and improved treatment of NAA random effects in projections.

The SSC also recommends reevaluating the performance of the Atlantic herring ABC control rule in the context of changes associated with the new assessment framework (WHAM), further investigate potential spatial changes in stock distribution, reexamine stock structure, and reassess the appropriate treatment of Canadian catch and fleet selectivity informing the assessment model and biological reference points. The constant OFL and ABC recommendations should be viewed as an interim approach and revisited if an updated assessment or additional technical analyses become available during the specification period. As a final thought, the SSC believes the stock should be prioritized for assessment again as soon as possible.

This was the first application of the Council's new Risk Policy. The SSC discussed the Risk Policy approach and outcomes at length during their discussions, and voiced appreciation as it provided more pertinent information to the decision process than the previous risk policy did. Additionally, the enhanced risk policy matrix provided a good assemblage of really important information. Some SSC members felt that the outcome did not reflect the actual level of stress being experienced by the industry, and therefore note that there may be some additional scrutiny applied to the socioeconomic factor portions of the risk policy procedure to make sure it is functioning the way the Council intends. In total, the SSC felt the new Risk Policy was a positive step forward in the process.

Summary of Recommendations

1. The SSC recommends an OFL of 13,165 mt for FY2027-2031 for Atlantic herring.
2. The SSC recommends an ABC of 10,532 mt for FY2027-2031 for Atlantic herring.
3. The SSC recommends treating the constant OFL and ABC as an interim approach and revisiting the specifications when updated assessment information or additional technical work resolves key uncertainties in projections, reference points, and their interaction with the herring ABC control rule.
4. The SSC recommends the following research priorities:
    a. Prioritize work on age-1 survey information potentially using VAST to synthesize the different available trawl surveys,
    b. Investigate causes for the poor recruitment and negative NAA random effects,
    c. Examine best practices for NAA random effect treatment in projections,
    d. Reevaluate the performance of the Atlantic herring ABC control rule with the changes associated with WHAM, and
    e. Investigate potential spatial changes in Atlantic herring distribution.

Fishing Year	OFL (mt)	ABC (mt)
2027-2031	13,165	10,532

Minority Report

A minority of the SSC supported alternative approaches to setting the Atlantic herring OFL and ABC, as described in Appendix I.

DYNAMIC REFERENCE POINTS

The SSC received a presentation from the SSC Chair that summarized the outcomes of the SSC's workshop on dynamic reference points held on June 1-2, 2026. The SSC remains interested and committed to their recommendations documented in their SSC Dynamic Reference Point (DRP) Workshop report, with some slight modifications based on changes in the NEFMC-related science or activities since the DRP Workshop. Specifically, the SSC recommended altering the priority species of interest, developing a subcommittee to help with executing the concept mapping, and an additional factor to consider.

Terms of Reference

A. Consider the outcomes of the SSC workshop on dynamic reference points, and make any refinements to the recommendations for indicators, candidate stocks, and other recommendations for next steps.

TOR Findings

The SSC recommended modifying their original stock recommendations for carrying through the concept mapping process to evaluate the utility of dynamic reference points. First, the SSC recommended deprioritizing witch flounder. Though the stock is to be assessed within the next two years, and thus would be an opportunity to evaluate and implement some form of DRPs, the assessment framework is empirical and not an analytical framework. As such, the SSC recommended efforts be placed elsewhere. With this de-prioritization, the SSC noted that white hake and the four Atlantic cod stocks would be strong candidates to evaluate DRPs through the concept mapping exercise.

White Hake: The SSC recommended white hake be a prioritized species for DRP consideration, based research for this stock to-date. The SSC has reviewed multiple pieces of work on this topic, one that evaluated changes in recruitment using change point analyses (Cadrin 2023) and another that used dynamic linear modeling to understand changes in productivity via the stock-recruit relationship (Collie 2023). These works together showed that the method of which one uses can influence the detectability of changes in recruitment or productivity, and that the dynamic linear modeling exercise revealed a significant decline in white hake stock productivity in recent decades. White hake has continued to represent a stock where accounting for changes in stock productivity using dynamic reference points, accompanied with a time-varying harvest control rule, can be advantageous for stocks where productivity change signals are strong (Collie et al. 2026). White hake is scheduled to be assessed in 2027, and thus the SSC envisions that work conducted as part of this effort could be useful in the near future. Recent management track assessments and projections used in guiding catch advice have also highlighted the importance of better understanding recruitment for improved projections and understanding rebuilding plan probability.

Atlantic Cod Stocks: The SSC began their deliberations recommending specifically the Georges Bank (GB) and Southern New England (SNE) cod stocks, but later noted that all of these stocks could benefit from the concept mapping exercise. As part of the 2023 Atlantic Cod Research Track Stock Assessment, the cod stocks were evaluated for ecosystem or environmental influence on their vital rates (including recruitment), leveraging both empirical data and integrating fishers' ecosystem knowledge (the final stock assessment report can be found in the Stock Assessment Support Information

Portal, and additional examples of this effort can be found in Kerr et al. 2026). The development of these exercises and processes could provide a basis or starting place for further applying the concept mapping exercise to cod stocks. These stocks are to be assessed in 2027.

The SSC discussed at length the number of stocks to recommend for DRP evaluation given the level of effort required for this exercise, the number of stocks being suggested for consideration, and the unforeseen challenges likely to be encountered when working through the concept mapping process for the first time. While there was interest from the SSC in specifically picking individual cod stocks for evaluation to focus efforts, ultimately, the SSC opted to propose these five stocks based on their scientific merit as opposed to other logistical constraints. The SSC understands that these stocks may face other priorities as part of their next management track assessments that may preclude them from being tested with the DRP concept mapping exercise, but the SSC does believe these five stocks may benefit from stock productivity, recruitment, and DRP evaluation. Some members of the SSC expressed concern with proposing five stocks. Given the DRP Workshop envisaged a rigorous weight-of-evidence based analysis to establish whether a shift to DRPs is warranted, recommending this number of stocks may be overly ambitious (especially with these stocks all to be assessed in 2027), and could warrant testing a single stock.

The SSC also recommended that an SSC Subgroup be established to assist with the implementation or testing of the DRP concept mapping for the candidate stock(s). Strong support was expressed for creating an SSC subgroup to collaborate directly with NEFSC analysts, assist with scoping, and help establish a consistent, standardized approach across stocks.

Lastly, the SSC recommended including the addition of changes in natural mortality (*M*) as a factor to evaluate within the concept mapping exercise. While empirical data on *M* are largely lacking for stocks, information that could inform changes in *M* for a stock would be insightful for understanding stock productivity changes.

Summary of Recommendations

1. The SSC recommends considering White Hake and the Atlantic Cod stocks (GB, SNE, eGOM, wGOM) for consideration for the DRP concept mapping exercise.
2. The SSC recommends a subgroup of the SSC be formed to help partners with executing the concept mapping exercise for the recommended stocks.
3. The SSC recommends including potential natural mortality indicators in the biological indicator category for evaluation.

MEETING DOCUMENTS

Risk Policy

1. Presentation on Risk Policy Concept and implementation, J. Peros, NEFMC
2. Risk Policy Statement and Concept, August 4, 2026

Social Science Subcommittee

1. Presentation on SSS updates, SSS members
2. SSS report, November 21, 2025

3. SSS report, April 1, 2026
4. CINAR Workshop Report, July 31, 2026

Atlantic Herring

1. June 2026 Management Track Assessment*
    a. Assessment presentation
    b. Atlantic Herring 2026 Management Track Assessment Report, June 5, 2026
    c. 2026 Management Track Assessment Peer Review Report
2. Herring PDT information
    a. PDT presentation
    b. Atlantic Herring PDT and TC memo to the SSC on OFLs and ABCs for FY 2027-2031
    c. Risk Policy Report for Atlantic herring
3. Framework Adjustment 9 Affected Environment (Section 5.0, p. 25-75), February 11, 2022
4. Previous SSC recommendations
    a. July 2024 for FY2025-2027
        i. Meeting materials, July 30-31, 2024
        ii. SSC report, August 16, 2024
    b. April 2025, for FY 2025-2027
        i. Meeting materials, April 4, 2025
        ii. SSC report, April 10, 2025

Dynamic Reference Points

1. Presentation by SSC Chair
2. Workshop final report, July 30, 2026

Other Documents

1. Presentation on Other Business topics
2. NOAA/NEFSC State of the Ecosystem Reports for the Northeast U.S. Shelf

APPENDIX I - MINORITY REPORT FOR ATLANTIC HERRING OFLS AND ABCS

A minority of the SSC supported alternative approaches to setting the Atlantic herring OFL/ABC which are based on the projection runs of the assessment scientist and the herring PDT and also more closely honor the existing Atlantic herring harvest control rule.

Each of the seven projection runs produced a unique OFL and ABC by varying the assumptions for Numbers At Age (NAA), recruitment, and catch (see presentation by NEFMC PDT staff lead for details). We believe this approach honors the recommendation by the Atlantic herring management track assessment peer reviewers that the original two sets of projections and sensitivity analysis provide "context for catch advice setting" and that by developing the additional five sets of projections the PDT has extended the projections sufficiently that they are no longer limited in their utility.

Following this logic, we recommend that the seven sets of OFLs and ABCs be treated as an ensemble and averaged together. This yields for fishing year 2027 an OFL of 13,656 mt (CV = 20.2%) and an ABC of 5,162 mt (CV = 17.1%). The low CV suggests the projections produce relatively similar results despite varying NAAs, recruitment and catch assumptions. We further recommend that OFL and ABC be held constant at the same level for fishing years 2028-2031.

Recognizing concerns raised during the SSC discussions over the decreasing Fmsy and ramped portion of the control rule, we additionally recommend as an alternative a constant ABC based on 70% of the OFL, corresponding to 9,559 mt. The 80% value recommended by the majority reflects the maximum fraction from the control rule for when the stock is above 50% of SSB_{MSY} and was explicitly intended to account for the role of herring as forage (i.e., leaving 20% for the ecosystem). The control rule, notably including the ramped portion that decreases the ratio of F/Fmsy below the 80% maximum as biomass drops below 50% of SSB_{MSY}, was also accepted as the rebuilding plan for the stock. Given the overfished status and low biomass of the stock, it being in the fifth year of a rebuilding plan, and the strong scientific uncertainty associated with the assessment, we recommend the 70% as a lower and more cautious value than the 80% value that is intended for when the stock is in healthy status.

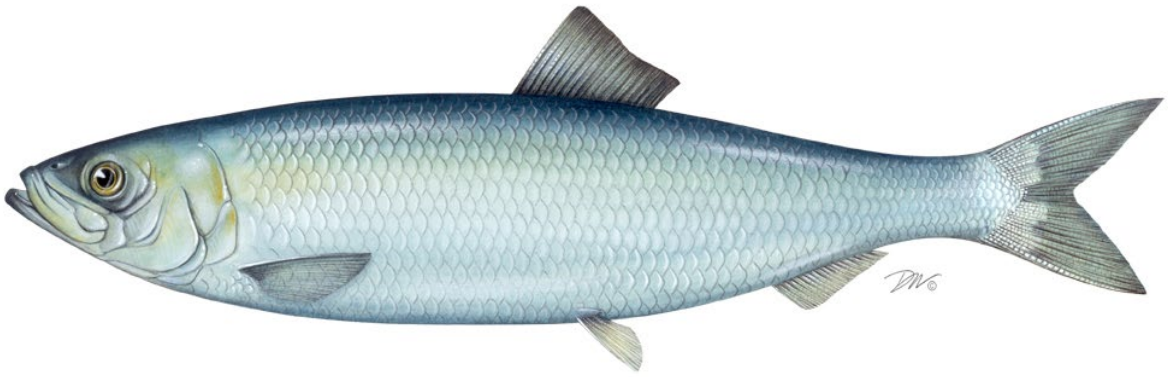
Finally, we believe that these approaches honor the low risk tolerance recommended for the stock by the NEFMC's new approach to assessing risk. From the PDT's factor scoring and Council weightings under the new risk policy, the calculated probability of management success is 94%, putting the stock well into the low risk tolerance category. Here the risk to management is of setting ABCs that lead to overfishing and failing to rebuild, and the risk policy would suggest targeting 6% likelihood of these outcomes. Under the set of 7 projections provided by the PDT, the probability there is overfishing in 2026 under the previously set catch limits ranges from 52 to 100%, with an average of 76%. The probability of being rebuilt by the 2031 target date ranges from 0 to 63%, with an average of 26%. Acknowledging that these numbers are based on uncertain projections, and that setting a constant ABC mitigates risk, these likelihoods nonetheless suggest a strong risk of failing to achieve management success. Our recommended approaches suggest the ABC for this declining stock should be set at a level below the current ABC, increasing the likelihood of management success in the form of avoiding overfishing and promoting rebuilding.

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

FOR ATLANTIC HERRING
(Clupea harengus)

2025 FISHING YEAR



Prepared by the Atlantic Herring Plan Review Team
Draft for Board Review
October 2026

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

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I. Status of Fishery Management Plan

Date of FMP Approval	November 1993
Amendments	Amendment 1 (February 1999) Amendment 2 (March 2006) Amendment 3 (February 2016)
Addenda	Addendum I to Amendment 1 (July 2000) Technical Addendum #1A to Amendment I (October 2001) Addendum II to Amendment I (February 2002) Technical Addendum 1 to Amendment 2 (August 2006) Addendum I to Amendment 2 (March 2009) Addendum II to Amendment 2 (December 2010) Addendum V to Amendment 2 (October 2012) Addendum VI to Amendment 2 (August 2013) Addendum I to Amendment 3 (May 2017) Addendum II to Amendment 3 (May 2019)
Management Unit	US waters of the northwest Atlantic Ocean from the shoreline to the seaward boundary of the Exclusive Economic Zone (East Coast of Maine), and from the US/Canadian border to the southern end of the species range (Cape Hatteras, North Carolina).
States With Declared Interest	Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, and New Jersey
Active Boards/Committees	Atlantic Herring Management Board (Since August 2018; previously Section), Advisory Panel, Technical Committee, Stock Assessment Subcommittee, and Plan Review Team

Atlantic herring (*Clupea harengus*), also known as sea herring, are an oceanic fish that occur in large schools and undergo seasonal inshore-offshore migrations. Herring are important to the Northwest Atlantic ecosystem as a forage species and to the fishing industry as bait for lobster, blue crab, and tuna. To a lesser degree this resource also serves as a food, typically canned, pickled, or smoked. The U.S. Atlantic herring fishery is currently managed as a single stock through complementary plans by the Atlantic States Marine Fisheries Commission (ASMFC) and the New England Fishery Management Council (NEFMC).

The stockwide annual catch limit (ACL) is divided amongst four distinct management areas (Figure 1): inshore Gulf of Maine (Area 1A), offshore Gulf of Maine (Area 1B), Southern New England/Mid- Atlantic (Area 2), and Georges Bank (Area 3). The Area 1A fishery is managed by ASMFC's Atlantic Herring Management Board (Board), which includes representatives from Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York and New Jersey.

Amendment 1 (February 1999) was developed in order to maintain consistency between the ASMFC and NEFMC FMPs. This amendment establishes the same overfishing definition and biological reference points as the NEFMC, which were created under guidelines stipulated in the revised Magnuson-Stevens Fishery Conservation and Management Act prior to the 2006 re-authorization. The overfishing and biological reference points are based on an estimate of maximum sustainable yield (MSY) for the entire stock complex.

Amendment 1 also establishes "days out" control measures which prohibit directed fishing on Friday and Saturday when 50% of the TAC is projected to be harvested, Friday through Sunday when 75% of the TAC is projected to be harvested, and Thursday through Sunday when 90% of the TAC is projected to be harvested.

Addendum I (July 2000)
The Section developed Addendum I (to Amendment 1) to re-address the protection of spawning areas because NOAA Fisheries rejected the spawning closures in federal waters for Management Area 1A (inshore Gulf of Maine). Specifically, Addendum I redefines the state waters spawning areas outlined in Amendment I. This addendum also changed the due date for annual state compliance reports to February 1st.

Technical Addendum 1a (October 2001)
The Section approved Technical Addendum #1a (to Amendment 1) to change the delineation of the Eastern Maine spawning boundary because the spawning aggregations were not adequately protected in 2000.

Addendum II (February 2002)
Addendum II (to Amendment 1) was developed in conjunction with the NEFMC's Framework Adjustment I to allocate the Management Area 1A Total Allowable Catch (TAC) on a seasonal basis. Addendum II also specifies the procedures for allocating the annual Internal Waters Processing (IWP) quota.

Amendment 2 (March 2006)
Amendment 2 was developed in close coordination with the NEFMC as they developed Amendment 1 to the Federal Fishery Management Plan for Atlantic Herring. The NEFMC's Amendment 1 is complementary to ASMFC Amendment 2 in that both documents' goal is optimum yield through coordinated management between state and federal waters. Amendment 2 altered the management boundaries, set biological reference points, expanded on the TAC specification setting process, established research set-asides, altered days out measures, removed any allowance for fishing during spawning closures, and granted exemptions for east of Cutler fixed gear fishermen.

Changes to the management boundaries were based on recommendations from the 2003 TRAC to better reflect spawning distributions and minimize reporting errors. The new boundaries result in a larger boundary for Area 3.

The biological reference points, based on MSY = 220,000 metric tons (mt), give a measurable criteria for overfishing and overfished and allow management to determine if rebuilding efforts are necessary. The TAC process only changed slightly with Amendment 2. Amendment 2 allows analytical approaches other than those defined in Amendment 1 to establish area-specific TACs. These changes allow the TC to use the best available science when recommending TACs rather than binding them to methods that were the best when Amendment 1 was created. Another change to the TAC process under Amendment 2 is that the Section will set the TACs for three years with the flexibility to adjust in interim years.

Research set asides were established under Amendment 2 allowing up to 3% of an area to be designated for and allocated to research.

In addition to establishing a number of new management measures, Amendment 2 altered several measures enacted in Amendment 1. Default percentages for setting days out were removed to allow states adjacent to an area to meet and agree on which days to take out as best meets the needs of the fishery for that given year. The 20% spawning tolerance for directed fishing during spawning closures was removed and a "Zero-Tolerance" measure was enacted. Amendment 2 also granted exemptions for east of Cutler fixed gear fishermen from days out and spawning closure restrictions established in Amendment 1. These exemptions were granted because the east of Cutler landings are part of a New Brunswick stock and have been insignificantly small historically. These herring do not often migrate inshore until after the Area 1A TAC is harvested making exemptions the only way to protect this historical fishery. These landings are counted against the overall Area 1A TAC.

Technical Addendum I (August 2006)

Technical Addendum I was developed to clarify the intent of the "Zero Tolerance" spawning provision of Amendment 2. Some states were interpreting the zero tolerance to mean that you could still fish in an area closed to spawning as long as no spawn herring were present in the area. This addendum makes it clear that *any vessel is prohibited to fish for, take, land, or possess herring from or within a restricted spawning area.*

Addendum I (February 2009)

Addendum I (to Amendment 2) was developed to control effort in Area 1A using a combination of quotas, additional days out restrictions, and weekly state reporting requirements to effectively manage quota. Specifically, Addendum I allows states adjacent to Area 1A to select bimonthly, trimester, or seasonal quotas as best meets the needs of the fishery. States also have the flexibility to save quota from January – May and distribute it to later in the year when price and demand are often higher. Fishermen are restricted to one landing per day and state-only fishermen must report weekly in order to effectively manage quota.

Addendum II (December 2010)

Addendum II was designed to mirror the NEFMC Amendment 4 and changes the specifications' definitions (and associated acronyms), modifies the process to set specifications, and establishes accountability measure (AM) paybacks. Under Addendum II, the overall quota is

now called an annual catch limit (ACL) and the quota allocated to each management area (Area 1A, 1B, 2, 3) is called a sub-ACL (previously TAC). In addition, if harvest in any area is exceeded, the sub-ACL will be reduced by an amount equal to the overage the first year after final landings are available.

NEFMC's Amendment 4 includes provisions to bring the Herring FMP into compliance with provisions of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. It changes the specification setting process and definitions to include an overfishing limit, acceptable biological catch, annual catch limits, and accountability measures, as well as involvement of a Science and Statistical Committee.

Addendum V (August 2012)
Addendum V refines and clarifies current spawning regulations without making significant changes. Specifically, Addendum V establishes when closures are triggered based on the percent of stage III – V spawn herring that are greater than or equal to 23 cm and increased the number of samples states are required to collect from 50 to 100 (states are currently sampling at this level). The Addendum replaces all spawning regulations in previous management documents to provide a single, clear document for states to use when complying with ASMFC spawning regulations.

Addendum VI (August 2013)
The Addendum improves alignment between state and federal Atlantic herring management by allowing the use of consistent tools across all four management areas of the species range. The Addendum's measures include (1) seasonal splitting of the annual catch limit sub-components (sub-ACLs) for Areas 1B, 2, and 3; (2) up to 10% carryover of a sub-ACL for all management areas; (3) the establishment of triggers to initiate the closing of directed fisheries; and (4) the use of the annual specification process to set triggers.

Amendment 3 (February 2016)
Amendment 3 refines the spawning closure system, modifies the fixed gear set-aside, and includes an empty fish hold provision contingent on federal adoption. The Amendment allows for the use of a modified GSI-based spawning monitoring system to track reproductive maturity in an effort to better align the timing of spawning area closures with the onset of spawning, which was tested and evaluated for effectiveness during the 2016 fishing season. Additionally, the fixed gear set-aside that was previously available to fixed gear fishermen exclusively only through November 1, is now accessible to them as long as the directed fishery is open. Amendment 3 consolidates prior amendments (and associated addenda) and recent management decisions into a single document; it is now the comprehensive document for Atlantic herring management in state waters.

Addendum I (May 2017)
Addendum I includes management measures intended to stabilize the rate of catch in the Area 1A fishery and distribute the seasonal quota throughout Trimester 2 (June through September), which has 72.8% of the season's allocation. For the 2017 fishing season, the addendum

established that the Section would separately address days out provisions for federal herring Category A vessels and small-mesh bottom trawl vessels with a federal herring Category C or D permit. In addition to landing restrictions associated with the days out program, Category A vessels are now prohibited from possessing herring caught from Area 1A during a day out of the fishery. Small-mesh bottom trawl vessels with a Category C or D permit must notify states of their intent to fish in Area 1A prior to June 1st. The addendum also implements a weekly harvester landing limit for vessels with a Category A permit for the 2017 fishing season. Forty-five days prior to the start of the fishing season, Category A vessels will notify states of their intent to fish in Area 1A, including a specification of gear type, to provide states with an estimate of effort to calculate the weekly landing limit. States may also either implement measures that herring caught in Area 1A can only be landed by the respective harvester vessel (i.e. no carrier vessels) or that herring carrier vessels are limited to receiving at-sea transfers from one harvester vessel per week and landing once per 24-hour period. Through the addendum, NOAA Fisheries granted access to vessel monitoring system-submitted daily catch report data for select staff in Maine, New Hampshire and Massachusetts to provide real-time data for the states to implement a weekly landing limit. The Section also approved continuing the use of the GSI30-based forecast system to determine spawning closures in Area 1A.

Addendum II (May 2019)

Addendum II strengthens spawning protections in Area 1A (inshore Gulf of Maine) by initiating a closure when a lower percentage of the population is spawning (from approximately 25% to 20%), and extending the closure for a longer time (from four to six weeks). The Addendum also modifies the trigger level necessary to reclose the fishery, with the fishery reclosing when 20% or more of the sampled herring are mature but have not yet spawned. These changes to spawning protections are in response to the results of the 2018 Benchmark Stock Assessment which showed reduced levels of recruitment and spawning stock biomass over the past five years, with 2016 recruitment levels the lowest on record.

II. Status of the Stock

A research track assessment was completed (NEFSC 2025) and underwent peer review in March 2025. The peer review determined that all terms of reference were adequately addressed. Notably, the research track assessment transitioned the stock to the Woods Hole Assessment Model (WHAM), a state space modeling approach, to allow for future consideration of environmental covariates and to estimate additional uncertainty for the stock.

The following 2026 Management Track Stock Assessment (NEFSC 2026) applied the new model to determine stock status and was completed by the Northeast Fisheries Science Center in June 2026. The management track assessment, which includes data through 2025, indicates the Atlantic herring stock is overfished but not experiencing overfishing based on the biological reference points for spawning stock biomass (SSB) and fishing mortality (*F*). This is the same stock status as determined by the 2024 management track assessment. SSB was estimated to be 35,528 metric tons in 2025, well below the SSB target of 188,214 metric tons. Fishing mortality was estimated to be 0.121 in 2025, also below the overfishing threshold of 0.272. The

assessment indicates continued poor recruitment and poor survival in recent years is driving stock status.

The management track peer review found all terms of reference were met except for the projections term of reference, which was considered partially met (Merrick et al. 2026). Similar to prior assessments, one of the continued concerns is that the projections are overly optimistic.

III. Status of the Fishery

There is an Atlantic herring fishery in the United States and Canada (Figure 3). Herring in the US are primarily caught using mobile gear (e.g., purse seines and mid-water trawls). Herring in Canada and a small portion of US-caught herring are caught using fixed gear (e.g., weir fishery).

The U.S. Atlantic herring fishery is controlled by annual catch limits (ACL) set by NOAA Fisheries. The stockwide ACL is distributed among the four management areas. Specifications are set every three years and adjusted annually to account for overages or underages from the previous fishing season. Once 92% of the sub-ACL for an area is reached, the respective fishery is closed. The stockwide fishery closes when 95% of the total ACL is projected to be reached. Following a closure, there is a 2,000 lb. trip limit to allow for incidental bycatch of Atlantic herring for the remainder of the fishing year. In addition to quota-based closures, the "days out" and spawning closure programs in Area 1A provide additional measures to control fishing effort.

For the 2025 fishing season, initial specifications were in place through early December when they were revised based on updated information from the previous stock assessment. The revised ACL was 4,556 metric tons (MT). The ACL is further subdivided into sub-ACLs by the Atlantic herring management areas as follows per the revised 2025 specifications: Area 1A = 1,317 MT; Area 1B = 196 MT; Area 2 = 1,267 MT; and Area 3 = 1,777 MT. The fixed gear set-aside was 30 MT. There was no research-set-aside for 2025. The Board established the following seasonal allocations for the 2025 Area 1A sub-ACL: 72.8% available from June 1 – September 30 and 27.2% available from October 1 – December 31.

The domestic Atlantic herring fishery is predominantly commercial; preliminary data indicate recreational harvest accounted for less than 1% of landings in 2025. For the past five years (2021-2025), recreational harvest has accounted for an average 1.0% of total landings each year.

Since 2000, annual commercial landings by the United States Atlantic herring fleet averaged roughly 133.6 million pounds (60,584 MT) (ACCSP, Figure 4). Since 2013, commercial landings have generally decreased and reached the lowest levels the time series in 2025 at 6.96 million pounds (3,158 MT) (Figures 3-4).

The Interstate FMP implements specific effort control measures for Area 1A (inshore Gulf of Maine). Catch, in metric tons, from Area 1A is shown in Table 1a. In 2025, 1,786 MT were caught in Area 1A, representing 77% of the final Area 1A sub-ACL. The initial Area 1A sub-ACL was 783 MT which was caught (and the area closed with a 2,000 pound possession limit) by August 5. Following the reallocation of 1,000 MT from the management uncertainty buffer based on New Brunswick weir landings, the additional quota was caught and the area closed with a 2,000 pound possession limit on November 24. After implementation of the revised, increased quota in early December, the states set one landing day for December 23. However, the quota was not caught that day due, at least in part, to poor fishing conditions.

Table 1a: Area 1A catch, sub-ACL, and associated directed fishery closures from 2016-2025. 2024 data are preliminary. Source of catch information: NOAA Fisheries.

Year	Area 1A Sub-ACL (mt)	Area 1A Catch (mt)	% Utilized	Area 1A Sub-ACL Closure
2016	30,524^	27,806	91%	Oct-18
2017	32,115^	28,682	89%	NA
2018	28,038	24,861	89%	NA
2019	5,223^	4,916	94%	Nov-27
2020	4,244^	4,353	103%	Nov-11 Nov-7 state waters
2021	2,609^	2,856	109%	Nov-11 Nov-8 state waters
2022	2,075^	2,325	116%	Nov-8 Nov-7 state waters
2023	4,345^	4,444	102%	Nov-8 Nov-6 state waters
2024	6,504^	6,112	94%	Nov-14 Nov-12 state waters
2025	2,317^	1,786	77%	Closed Aug-5 and Nov-24 under initial quotas; full quota not caught after revised quota implemented

^Area 1A sub-ACL increased by 1,000 mt from the management uncertainty buffer during the season as required when the New Brunswick weir fishery lands less than a specified amount through Oct 1.

For other areas in 2025, starting January 8, a 2,000 pound possession limit was implemented in Area 1B due to the quota being reached for that area.

Catch, in metric tons, from all management areas is shown in Table 1b for the last five years.

Table 1b: Catch and sub-ACL for all management areas 1A, 1B, 2, and 3 from 2021-2025. Source: NOAA Fisheries

Year	Area	Sub-ACL (mt)	Catch (mt)	% Utilized
2021	1A	2,609	2,856	109%
	1B	239	0	0%
	2	652	191	29%
	3	2,181	2,222	102%
	Overall	**5,128**	**5,268**	**103%**
2022	1A	2,075	2,325	112%
	1B	0	6	-
	2	1,300	79	6%
	3	1,824	1,825	100.1%
	Overall	**4,813**	**4,234**	**88%**
2023	1A	4,345	4,444	102%
	1B	555	199	36%
	2	3,589	465	13%
	3	4,806	5,120	107%
	Overall	**13,287**	**10,228**	**77%**
2024	1A	6,504	6,112	94%
	1B	819	82	10%
	2	5,449	66	1%
	3	7,484	4,179	56%
	Overall	**20,141**	**10,439**	**52%**
2025	1A	2,317	1,786	77%
	1B	196	215	110%
	2	1,267	77	6%
	3	1,777	1,093	61.5%
	Overall	**5,556**	**3,171.5**	**57%**

2025 Fishing Season

Coastwide landings in 2025 were approximately 6.96 million pounds, which is about a 68% decrease from 2024 landings. This aligns with the 72% decrease in quota in 2025 relative to 2024.

Maine and Massachusetts accounted for the majority (>98%) of the commercial Atlantic herring landings in 2025 (Table 2), similar to previous years. Landings in Maine decreased by over 70% relative to 2024 and landings in Massachusetts decreased by over 50% relative to 2024.

Rhode Island landings were about the same in 2025 as the previous year. Rhode Island landings decreased substantially from a high in 2023 of 1.6 million pounds back down to less than 150,000 pounds in 2024-2025, similar to the 2022 landings. Landings in Connecticut and New York remain very low at less than 1% each of the coastwide total. Connecticut noted the very low landings in recent years and are substantially less than landings in the early 2000s, and

noted the Atlantic herring fishery for bait component has diminished with the reduction in the number of active Connecticut commercial lobstermen in the last twenty years.

It is also important to note that some vessels regularly land herring in states outside of their homeport state (e.g., New Jersey vessels often land in other states).

The PRT noted that Atlantic herring landings can be variable in some states, particularly from Areas 2 and 3, dependent on the occurrence of mackerel trips. Additionally, Atlantic herring may overlap with other species in those areas in certain gears (e.g., small mesh bottom trawls and midwater trawls), which can be challenging for harvesters if possession limits are in place for some overlap species. For example, Atlantic mackerel trips limits have been restrictive to midwater trawl vessels targeting Atlantic herring.

A small portion of total Atlantic herring landings are from fixed gear, primarily in Maine state waters. Fixed gear harvesters in Maine utilized the entire 30 MT fixed gear set-aside in 2025 by early June. Over the past few years, anecdotal reports from Maine fixed gear harvesters indicate consistent sightings of adult Atlantic herring returning to state waters in early spring, as well as observations of a more mixed size range of fish. The ability of Maine's fixed gear harvesters to catch herring depends on several factors including the timing of herring availability relative to other species and associated bycatch limitations of species like river herring.

Fixed gear harvest in other states has been very low or zero in recent years. New Hampshire has had zero fixed gear landings for the past ten years. Massachusetts fixed gear landings have been less than 20,000 pounds each year for the past ten years (further details are confidential). Rhode Island fixed gear landings are inconsistent and confidential.

Table 2. 2025 commercial landings by state and percent of total harvest. Source: ACCSP Data Warehouse.

	Commercial Landings (lbs.)	**Percent of Total**
ME	3,489,533	50%
NH	0	0%
MA	3,350,790	48%
RI	120,073	<2%
CT	0	0%
NY	1,004	<1%
NJ	0	0%

Days Out Provisions for Area 1A

Table 3 outlines the 'days out' program and effort control measures which were implemented in Area 1A in 2025. The Board implemented seasonal allocations for the 2025 fishery which allocated the Area 1A sub-ACL between Season 1: June-September (72.8%) and Season 2: October-December (27.2%). Maine, New Hampshire, and Massachusetts delayed the start of

the fishery until July 27. Specifications for Season 1 established five (5) consecutive landing days a week for vessels with a Category A permit, and six (6) consecutive landing days a week for vessels with a Category C or D permit. Vessels with a Category A permit were also limited to a weekly landing limit of 240,000 pounds (6 trucks) per harvester vessel. The fishery moved to zero (0) landings days starting August 5 through September 30 as the harvest had exceeded the Area 1A sub-ACL under the initial quota.

Landing days were set at zero for Season 2 from October 1 through November 24. Following the reallocation of 1,000 MT from the management uncertainty buffer to the Area 1A sub-ACL based on catch information from the Canadian New Brunswick weir fishery, the fishery moved to two consecutive landing days per week starting November 24 at 12:01 a.m. and the fishery in state waters closed and landings were prohibited effective November 24 at 6:00 p.m. as 92% of the sub-ACL was projected to have been harvested. In early December, NOAA Fisheries implemented the revised, increased quotas. In response, the states set one landing day for December 23. However, the quota was not caught due, at least in part, to poor weather conditions.

Table 3: 2025 'days out' program for seasonal quota periods in Area 1A.

Seasonal quota periods	Date Effective	Consecutive Landing Days for Category A Permit	Weekly Landings Limit for Category A Permit	Consecutive Landing Days for Category C/D Permits	Poundage that can be Transferred to a Carrier Vessel
1	Jul 27*-Aug 5	5	240,000	6	0
	Aug 5-Sept 30	0	0	0	0
2	Oct 1-Nov 24	0	NA**	NA**	NA**
	Nov 24	2	NA**	NA**	NA**
	Nov 24-Dec 22	0	NA**	NA**	NA**
	Dec 23	1	NA**	NA**	NA**
	Dec 24-Dec 31	0	NA**	NA**	NA**

**Zero landings days were specified for June 1 until the start of the fishery. Fishery did not begin until July 27 in all three Area 1A states (Maine, New Hampshire, and Massachusetts).*

***Weekly Landing Limits, Landing Days for Category C/D Permits, and Carrier Vessel limits can only be specified through Sept 30*

Spawning Area Closures

The Atlantic Herring Area 1A (inshore Gulf of Maine) fishery regulations include seasonal spawning closures for portions of state and federal waters in Eastern Maine, Western Maine and Massachusetts/New Hampshire. In 2017, the Commission's Atlantic Herring Section permanently implemented the GSI_{30} Based Forecast System for spawning closures in Area 1A. This forecasting method relies upon at least three samples, each containing at least 25 female

herring in gonadal stages III-V, to trigger a spawning closure. If sufficient samples are not available, the spawning closure occurs on the default dates outlined in Amendment 3. As noted in the Status of the Fishery Management Plan section, Addendum II to Amendment 3 further modified the trigger for initiating a closure as well as the length of closures.

In 2025, the Eastern Maine spawning area closed on the default date of August 28th through October 8th, given there were no samples from the area at the time. The Western Maine and Massachusetts/New Hampshire spawning closed on the default date of September 23rd through November 3rd given there were insufficient samples for both areas.

IV. Status of Research and Monitoring

Under Amendment 3, states are not required to conduct monitoring for Atlantic herring. However, state survey programs designed to catch other species may encounter herring regularly, so some states do collect biological information on Atlantic herring. A summary of these surveys results from the state compliance reports follows.

Maine and New Hampshire: These states jointly operate an inshore bottom trawl survey in the spring and fall that is designed to catch groundfish, but regularly encounters adult Atlantic herring. In 2025, the survey reported Atlantic herring observations during both the Spring and Fall surveys. In the Spring 2025 survey, Atlantic Herring were caught in 86 of the 104 tows, and a maximum of 20,742 were caught in one tow (nearly three-fold increase from Spring 2024). In the Fall survey, Atlantic Herring were caught in 62 of the 82 tows, and a maximum of 16,423 were caught in one tow (a decrease from the maximum tow in Fall 2024).

Maine Department of Marine Resources also conducts commercial portside catch sampling. In 2025, a total of 9 biological sampling events occurred, covering purse seine and single mid-water trawl trips. The collection of samples in 2025 was a decrease from 2024 when 44 samples were collected. This reflects the decline in sub-ACLs and fishing activity.

New Hampshire Fish and Game Department also conducts a juvenile finfish seine survey in the Great Bay, its tributaries, and other coastal harbors. In 2025, 97,505 Atlantic herring were observed during the months of June, July, and September. This is much higher than the 2021-2024 observations.

Massachusetts Division of Marine Fisheries noted that along with Gloucester Marine Genomics Institute, Maine DMR, and Canada Department of Fisheries Oceans, were awarded a NOAA Saltonstall-Kennedy grant to investigate genetic stock structure of Atlantic herring. Collection of samples began in Spring 2024 and continued through 2025. Two commercial otter trawlers and one commercial tuna/lobster vessel were contracted, and they collected six 150-fish samples from punitive spawning grounds. These samples were processed, and biological information was collected in support of genetic analysis. Fisheries dependent samples were also collected in support of the grant and will be processed in 2026.

MA DMF conducts the seasonal Resource Assessment Program trawl survey each spring and fall in waters of the Commonwealth of Massachusetts. The spring survey ran from May 5 to May 21, caught 5,141 Atlantic herring on 33 out of 100 hauls (33%). The mean fork length was 5.52 cm with a standard deviation of 1.59. The fall survey operated from September 2 to September 18 caught 493 Atlantic herring on 6 out of 100 hauls (6%). The mean fork length was 26.46 cm with a standard deviation of 1.77.

Rhode Island Division of Marine Fisheries conducts a Seasonal Trawl Survey to develop abundance indices for Atlantic herring. The survey is conducted seasonally (spring/fall) in Rhode Island and Block Island Sound and monthly in Narragansett Bay. 2025 survey results will be added when available. Fishery-independent monitoring for 2024 revealed significantly contrasting signals between monthly and seasonal surveys. There was higher monthly biomass (3.9 kg/tow) and abundance (527.17 fish/tow) in 2024 when compared with the five-year average (2019-2023) of 81.46 fish/tow and 0.41 kg/tow. The seasonal spring survey trawls had a higher number of fish than the five-year spring average with 290.1 fish/tow, and less total biomass of 1.0 kg/tow in 2024, as compared to 2019-2023 with 115.73 fish/tow, and 1.23 kg/tow. Overall, the number of individuals and biomass of herring per tow in the monthly surveys continues to trend upward for 2023-2024. Additionally, Rhode Island occasionally sees a few Atlantic herring in winter-set fyke nets in the south coast salt ponds, less than 20 per winter, which may mean there is some Atlantic herring biomass staging in Rhode Island waters during winter, but not enough for small state vessels to target.

Connecticut Department of Energy and Environmental Protection monitors Atlantic herring through the Long Island Sound Trawl Survey (LISTS), which is conducted each spring and fall since 1984. All scheduled sampling for the Long Island Sound Trawl Survey was canceled in 2025 with no tows being completed during the spring or fall cruises. Operations are expected to resume during the spring of 2026. Over the last ten years, Atlantic herring abundance has been lower than the time-series average of 1.67 fish/tow. The 2024 spring index of 1.45 fish/tow increased substantially from the previous three years and from the 2015-2017 period of low catch (2017 at 0.11 fish/tow). Although more herring were observed in 2024, they were small herring—not the adults that were historically observed. Most of LISTS catches typically have occurred in the month of April, prior to herring leaving the Sound, however warming water temperatures in Long Island Sound particularly have affected the timing of Atlantic herring leaving, and this is likely one of the main drivers of recent low catches. Most Atlantic herring taken in LISTS spring survey are greater than 20 cm fork length, however, LISTS has seen numerous catches of smaller herring (<10cm) during the spring of 1997-1999 and 2004-2013 and again in the last two years. Typically few fish appear in the fall survey and those present are generally less than 15 cm.

New York has *de minimis* status and does not conduct directed monitoring of Atlantic herring.

New Jersey Division of Fish and Wildlife monitors Atlantic herring through the New Jersey Ocean Trawl Survey, which collects samples during five surveys conducted throughout the year

(January, April, June, August, October) between Sandy Hook, NJ and Cape Henlopen, Delaware. In October 2024 and all of 2025, the Ocean Trawl was not conducted due to vessel issues.

V. Status of Assessment Advice

Priority research recommendations from the 2025 Research Track Assessment are listed on pdf page 21 in the Research Track Peer Review Report. Additional discussion of research recommendations are on page 17 of the June 2026 Management Track Peer Review Report.

VI. Management Measures and Issues

Amendment 3 to the Interstate Fishery Management Plan for Atlantic Herring lists the following state regulatory requirements:

1. Each jurisdiction shall prohibit the landing of herring when the management area sub-ACL has been attained.
2. Vessels are prohibited from landing more than 2,000 lbs. of Atlantic herring from Area 1A when the fishery is closed, during a 'day out' or during spawning closures.
3. Jurisdictions will close the directed fishery when 92% of a management area's sub-ACL is projected to be harvested.
4. Each jurisdiction must enact spawning area restrictions that are at least as restrictive as those in Section 4.2.6.
5. States adjacent to Area 1A will implement days out restrictions as identified in Section 4.2.4.1.
6. States are required to implement weekly reporting by all non-federally permitted fishermen on Atlantic herring (including mobile and fixed gear).
7. Any herring vessel transiting a management area that is under a herring spawning closure or a 'day out' must have all of its fishing gear stowed.
8. The harvest of herring for the primary purpose of reduction to meal or meal-like product is prohibited.
9. Internal Water Processing operations will be prohibited from processing herring caught in all state waters.

VII. PRT Recommendations

State Compliance

All states with a declared interest in the management of Atlantic herring have submitted compliance reports and have regulations in place that meet the requirements of the Interstate Fisheries Management Plan for Atlantic Herring as described in Amendment 3.

Request for *De Minimis* Status

A state may be eligible for *de minimis* status if its combined average of the last three years of commercial landings (by weight) constitute less than 1% of the coastwide commercial landings for the same three-year period. **New York has requested *de minimis* status and meets the requirements.** New York's 2023-2025 combined average commercial landings is <0.1%.

PRT Recommendations
The PRT recognizes the decreasing capacity for fishery-dependent data collection over the past few years, due largely to limited resources and low quota and catch levels. It is important for the Board to recognize this challenge and discuss how to move forward with sampling the fishery in a low-capacity scenario, especially with the low quota levels for 2025 and 2026.

One challenge for fishery-dependent data collection is the current lack of funding to continue the Maine Department of Marine Resources' (ME DMR) Atlantic herring portside commercial sampling program, which is currently funded through 2025. ME DMR has been sampling the commercial herring fishery since the 1960s, and the sampling includes age, length, maturity, sex, and other important biological attributes. Without funding, ME DMR is unable to collect biological samples out of state and unable to conduct portside bycatch sampling. These samples have been and are being used in management for the inshore spawning closures and for documenting the effect of management action on the size and age of fish harvested. The commercial sampling program is a vital data source for the WHAM stock assessment model, which is fundamentally age structured. Without this sampling program, Atlantic herring would likely revert to an index, or biomass-based method of assessment, increasing uncertainty. If commercial sampling were halted, it would negatively impact the ability to effectively monitor the rebuilding program for Atlantic herring and severely curtail the ability to provide projections for sustainable quota development using the current harvest control rule.

In Progress: As previously recommended by the PRT, the states are coordinating a sampling plan moving forward for states to collect samples and send them to MEDMR for processing. The states are also coordinating with available NOAA portside sampling capacity.

Another challenge is the insufficient number of samples to inform the three Area 1A spawning closures in some recent years, which may be due, in part, to the timing of Area 1A fishery operation. The Area 1A fishery was at zero landing days from mid-late August through September during 2021-2023 due to the June-September seasonal allocation being reached in early-mid August. Spawning in Area 1A typically occurs in late summer/early fall during this break in directed harvest, and along with reduced effort from small mesh bottom trawl vessels, these factors have contributed to very few samples available to inform spawning closures.

Medium-term: The PRT recommends the Atlantic Herring Technical Committee review the spawning closure protocol in Addendum II and determine if there are any concerns with prolonged periods of insufficient samples and implementation of the default closure dates. In addition, the TC should discuss any recent data on the timing of spawning. The PRT recommends the TC conduct this review within the next five years. In August 2024, the Board noted this should not be a near-term priority for the Technical Committee given the very low quotas and limited new spawning samples in recent years. The PRT recommends this review still occur within the next five years to investigate any potential change in spawning timing and potential overlap with future harvest in Area 1A.

Finally, the PRT also discussed current fixed gear landings and factors impacting fixed gear harvest in Maine where the majority of fixed gear landings occur. Maine's fixed gear harvest was high in 2025 and 2026, which is a departure from the previous few years when fixed gear harvest was well below the 30 mt set-aside level. Over the past few years, anecdotal reports from Maine fixed gear harvesters indicate consistent sightings of adult Atlantic herring returning to state waters in early spring. This indicates that the opportunity for fixed gear harvest could be changing, and the Board should continue to monitor fixed gear landings closely. From a management perspective, the PRT notes the Interstate FMP defines Atlantic herring fixed gear as only stop seines and fish weirs; however, there are other fixed gears being used to harvest Atlantic herring like pound nets and anchored gill nets.

<u>Medium-term</u>: The PRT recommends the Board consider which gears are defined in the FMP as 'fixed gear' during the next management action for Atlantic herring.

IX. References

Merrick, R., Barrett, T., Kerr, L., & Kindsvater, H. 2026. June 2026 Management Track Peer Review Panel Report. 26p.

Northeast Fisheries Science Center (NEFSC). 2025. Atlantic Herring Research Track Stock Assessment Report. US Dept Commer, Northeast Fish Sci Tech Memo. 335; 91p.

NEFSC. 2026. Atlantic Herring 2026 Management Track Assessment Report (draft working paper for peer review only). US Dept Commer; 8p.

X. Figures

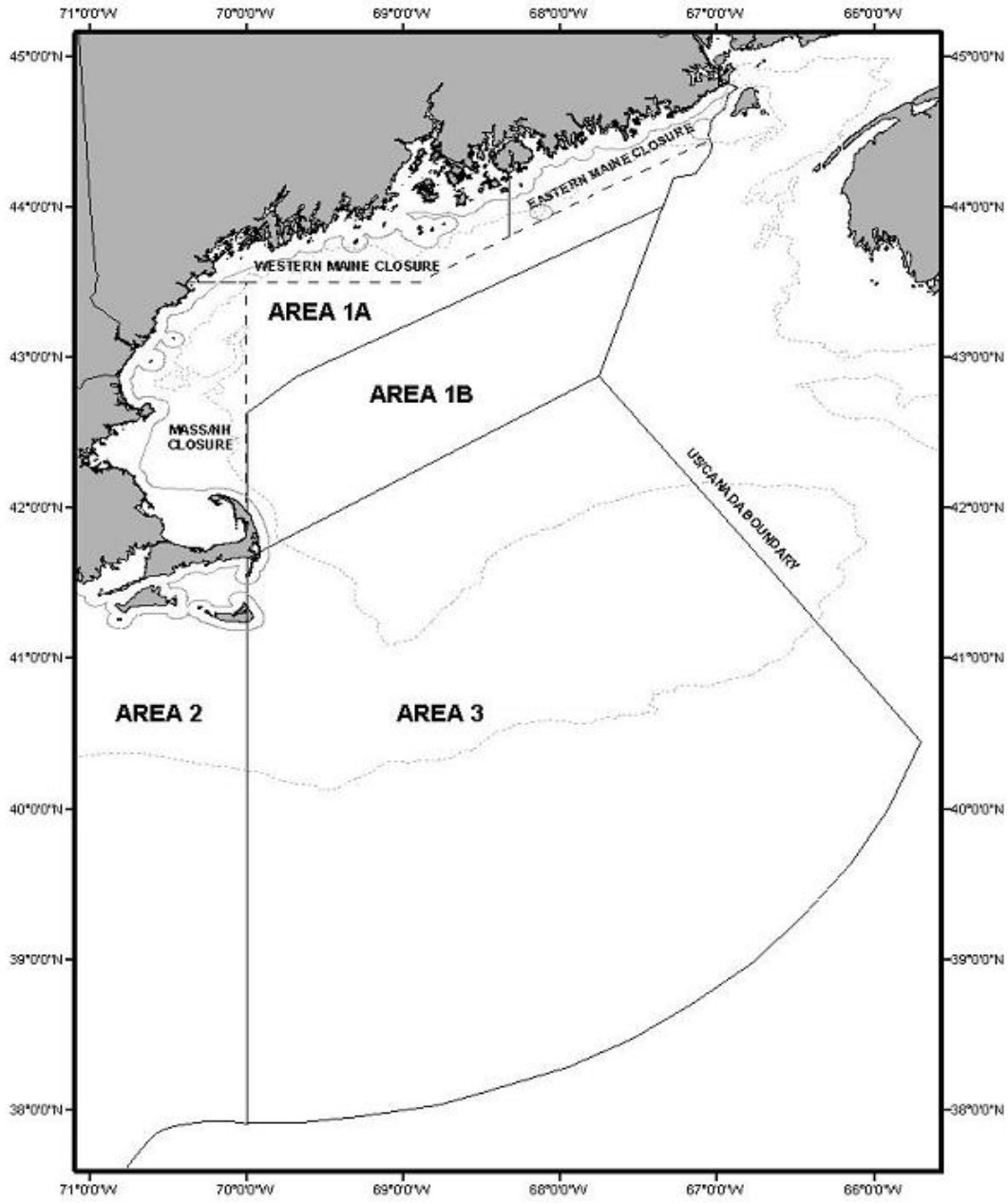


Figure 1. Map of Atlantic herring management areas with boundaries and the three spawning areas are within Area 1A, the inshore region of Gulf of Maine.

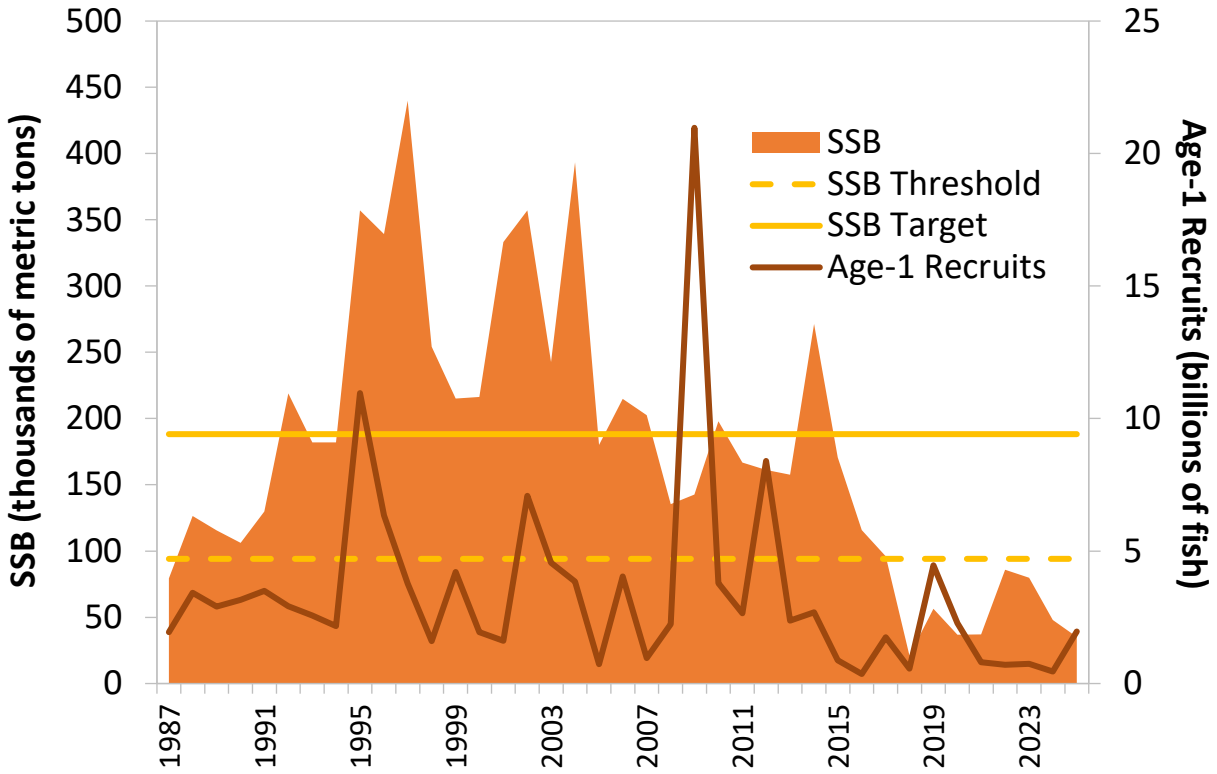


Figure 2. Spawning stock biomass and recruitment from 1987 to 2025. Source: 2026 Management Track Assessment

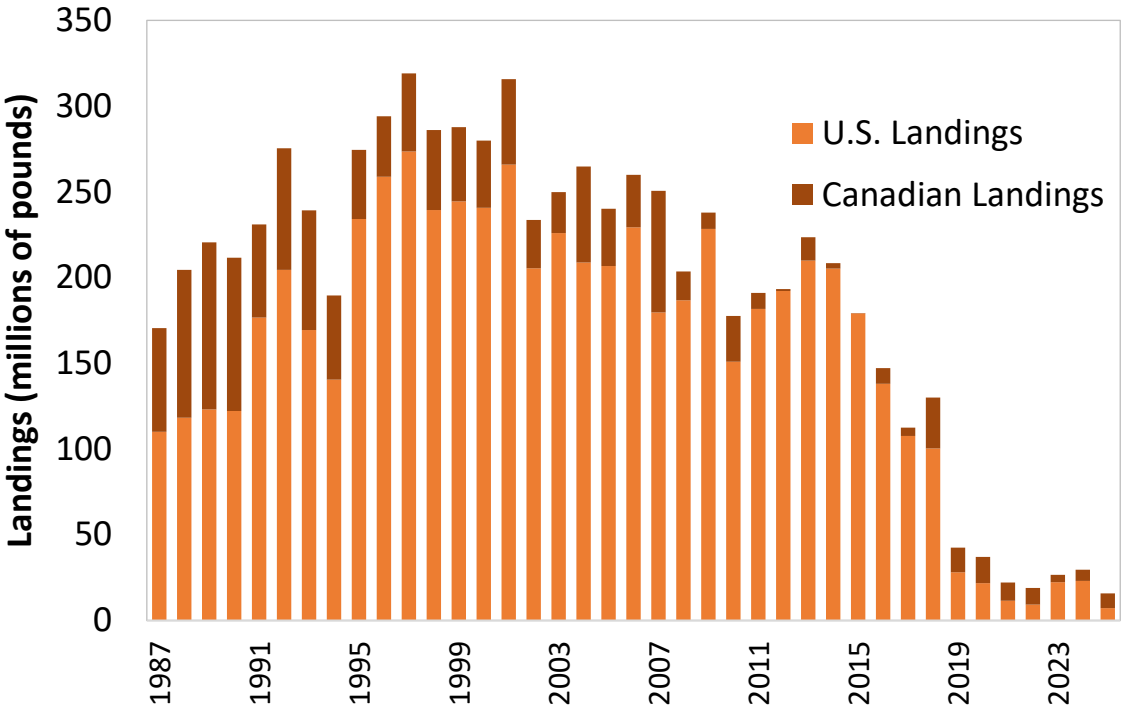


Figure 3. U.S. and Canadian commercial landings from 1987 to 2025. Source: 2026 Management Track Assessment

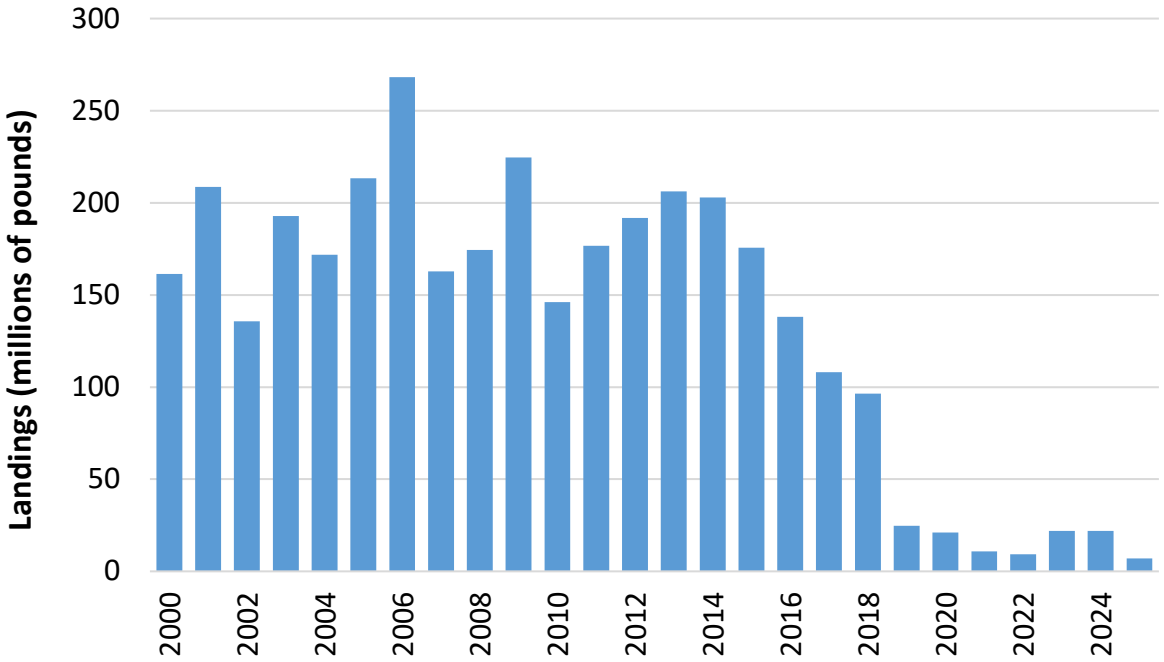


Figure 4. Commercial Atlantic herring landings (non-confidential landings only) by the U.S. fleet from 2000-2025. Source: ACCSP Data Warehouse Non-Confidential.

Appendix. Days Out and Spawning Closure Notices from 2025

2025 days out and spawning closure notices are enclosed in the following pages.

Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
703.842.0740 • asmfc.org

MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **May 15, 2025**

SUBJECT: **Area 1A 2025 Effort Controls**

The Atlantic States Marine Fisheries Commission's Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts set the effort control measures for the 2025 Area 1A (inshore Gulf of Maine) fishery for June 1 – September 30.

The Area 1A sub-annual catch limit (ACL) is 1,184 metric tons (mt) after adjusting for the 30 mt fixed gear set-aside and the fact that Area 1A closes at 92% of the sub-ACL. In October 2024, the Board established the following seasonal allocations for the 2025 Area 1A sub-ACL: 72.8% available for season 1 (June 1 – September 30) and 27.2% available for season 2 (October 1 – December 31).

2025 Atlantic Herring 1A Quota Allocation by Season

Season	Area 1A Quota
1. June 1-September 30	862 mt
2. October 1-December 31	322 mt

Days Out of the Fishery

- Landing days will be set at zero (0) from June 1 until the start of the fishery on July 27 at 6:00 p.m.
- Landing days begin on Sunday of each week at 6:00 p.m. starting July 27.
- Vessels with an Atlantic herring Limited Access Category A permit that have declared into the Area 1A fishery may land herring five (5) consecutive days a week. The week shall begin at 6:00 p.m. on Sundays and conclude at 6:00 p.m. on Fridays. One landing per 24 hour period. Vessels are prohibited from landing or possessing herring caught from Area 1A during a day out of the fishery.
- Small mesh bottom trawl vessels with an Atlantic herring Limited Access Category C or Open Access D permit that have declared into the fishery may land herring six (6) consecutive days a week. The week shall begin at 6:00 p.m. on Sundays and conclude at 6:00 p.m. on Saturdays.

Weekly Landing Limit

- Vessels with an Atlantic herring Category A permit may harvest up to 240,000 lbs. (6 trucks) per harvester vessel, per week starting July 27.

At-Sea Transfer and Carrier Restrictions

The following applies to harvester vessels with an Atlantic herring Category A permit and carrier vessels landing herring caught in Area 1A to a Maine, New Hampshire, or Massachusetts port.

- A harvester vessel may transfer herring at-sea to another harvester vessel.
- A harvester vessel may not make any at-sea transfers to a carrier vessel.
- Carrier vessels may not receive at-sea transfers from a harvester vessel.

Harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A until July 27, 2025 at 6:00 p.m. Landings will be closely monitored and the fishery will be adjusted to zero landing days when the season 1 quota is projected to be reached.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org or 703.842.0740 for more information.

Motions

Move to implement for the 2025 Area 1A herring fishery in Season 1:

- **Zero landing days before Sunday, July 27 at 6:00 pm;**
- **For Category A vessels, 5 landing days per week;**
- **For Category A vessels, a 6 truck (240,000 lbs.) weekly landing limit;**
- **Allow harvester-to-harvester transfers but not allow transfers to carriers;**
- **For Category C/D SMBT vessels, 6 landing days per week.**

Motion made by Ms. Ware, seconded by Mr. Abbott. Motion passes by unanimous consent.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **May 15, 2025 Revised July 23, 2025 with Quota Update**

SUBJECT: **Area 1A 2025 Effort Controls**

This updated memorandum reflects current Atlantic herring quotas given the final rule with revised 2025 Atlantic herring specifications has not been published yet. There are no changes to the start date, number of days out, or weekly landing limit in the Area 1A fishery at this time.

The Atlantic States Marine Fisheries Commission's Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts met on May 13, 2025 to set the effort control measures for the 2025 Area 1A (inshore Gulf of Maine) fishery for June 1 – September 30.

Quota levels for Area 1A have been updated to reflect the lower quotas that are still in place. Higher revised quotas were expected to be implemented by NOAA Fisheries in July, however, they have not yet been implemented and there is no estimated implementation date.

The Area 1A sub-annual catch limit (ACL) is 692 metric tons (mt) after adjusting for the 30 mt fixed gear set-aside and the fact that Area 1A closes at 92% of the sub-ACL. In October 2024, the Board established the following seasonal allocations for the 2025 Area 1A sub-ACL: 72.8% available for season 1 (June 1 – September 30) and 27.2% available for season 2 (October 1 – December 31).

2025 Atlantic Herring 1A Quota Allocation by Season

Season	Current Area 1A Quota	Revised Area 1A Quota yet to be Implemented by NOAA Fisheries
1. June 1-September 30	504 mt	862 mt
2. October 1-December 31	188 mt	322 mt

When landings are projected to reach the current Season 1 quota of 504 mt, the fishery will be adjusted to zero landing days. If NOAA Fisheries implements the revised quota before the fishery moves to zero landing days, then the fishery can operate to the revised 862 mt for Season 1. If the revised quota is implemented after the fishery moves to zero landing days, a

days out call will be scheduled as soon as possible to discuss potential re-opening of the Season 1 fishery and/or possible rollover to the Season 2 fishery.

The following Area 1A measures remain the same for June 1-September 30:

Days Out of the Fishery

- Landing days will be set at zero (0) from June 1 until the start of the fishery on July 27 at 6:00 p.m.
- Landing days begin on Sunday of each week at 6:00 p.m. starting July 27.
- Vessels with an Atlantic herring Limited Access Category A permit that have declared into the Area 1A fishery may land herring five (5) consecutive days a week. The week shall begin at 6:00 p.m. on Sundays and conclude at 6:00 p.m. on Fridays. One landing per 24 hour period. Vessels are prohibited from landing or possessing herring caught from Area 1A during a day out of the fishery.
- Small mesh bottom trawl vessels with an Atlantic herring Limited Access Category C or Open Access D permit that have declared into the fishery may land herring six (6) consecutive days a week. The week shall begin at 6:00 p.m. on Sundays and conclude at 6:00 p.m. on Saturdays.

Weekly Landing Limit

- Vessels with an Atlantic herring Category A permit may harvest up to 240,000 lbs. (6 trucks) per harvester vessel, per week starting July 27.

At-Sea Transfer and Carrier Restrictions

The following applies to harvester vessels with an Atlantic herring Category A permit and carrier vessels landing herring caught in Area 1A to a Maine, New Hampshire, or Massachusetts port.

- A harvester vessel may transfer herring at-sea to another harvester vessel.
- A harvester vessel may not make any at-sea transfers to a carrier vessel.
- Carrier vessels may not receive at-sea transfers from a harvester vessel.

Harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A until July 27, 2025 at 6:00 p.m. Landings will be closely monitored and the fishery will be adjusted to zero landing days when the season 1 quota is projected to be reached.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org or 703.842.0740 for more information.

Motions

Move to implement for the 2025 Area 1A herring fishery in Season 1:

- **Zero landing days before Sunday, July 27 at 6:00pm;**
- **For Category A vessels, 5 landing days per week;**
- **For Category A vessels, a 6 truck (240,000 lbs.) weekly landing limit;**
- **Allow harvester-to-harvester transfers but not allow transfers to carriers;**

- **For Category C/D SMBT vessels, 6 landing days per week.**

Motion made by Ms. Ware and seconded by Mr. Abbott. Motion passes by unanimous consent.

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MEMORANDUM

TO: **Atlantic Herring Management Board, Technical Committee, Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **August 5, 2025**

SUBJECT: **Atlantic Herring Area 1A Fishery Moves to Zero Landing Days on August 5 at 6:01 p.m.**

The Area 1A (inshore Gulf of Maine) Atlantic herring fishery is projected to have harvested 92% of the Season 1 (June 1 – September 30) allocation by August 5. Beginning at 6:01 p.m. on Tuesday, August 5, the Area 1A fishery will move to zero landing days through September 30, 2025, as specified in Amendment 3 to the Interstate Fishery Management Plan for Atlantic Herring. However, if NOAA Fisheries implements the anticipated revised 2025 quota which would increase the available quota for Area 1A, a Days Out Call will be scheduled as soon as possible to discuss potential re-opening of the Season 1 fishery and/or possible rollover to the Season 2 fishery (October 1 – December 31).

Vessels participating in other fisheries may not possess more than 2,000 pounds of Atlantic herring per trip per day harvested from Area 1A. In addition, all vessels traveling through Area 1A must have all seine and mid-water trawl gear stowed.

For more information, please contact Emilie Franke, Fishery Management Plan Coordinator, at 703.842.0740 or efranke@asmfc.org.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Technical Committee, Advisory Panel, , Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **August 21, 2025**

SUBJECT: **Atlantic Herring Eastern Maine Spawning Closure in Effect Starting August 28 through October 8, 2025**

The Atlantic herring Area 1A (inshore Gulf of Maine) fishery regulations include seasonal spawning closures for portions of state and federal waters in Eastern Maine, Western Maine, and Massachusetts/New Hampshire. The Commission's Atlantic Herring Management Board approved a forecasting method that relies upon at least three samples, each containing at least 25 female herring in gonadal stages III-V, to trigger a spawning closure. However, if sufficient samples are not available then closures will begin on predetermined dates.

There are currently no samples from the Eastern Maine spawning area to determine spawning condition. Therefore, per the Addendum II default closure dates, the Eastern Maine spawning area will be closed starting at 12:01 a.m. on August 28, 2025 extending through 11:59 p.m. on October 8, 2025. The Eastern Maine spawning area includes all waters bounded by the following coordinates:

Maine coast 68° 20' W
43° 48' N 68° 20' W
44° 25' N 67° 03' W
North along the US/Canada border

Vessels in the directed Atlantic herring fishery cannot take, land or possess Atlantic herring caught within the Eastern Maine spawning area during this time. The incidental bycatch allowance of up to 2,000 pounds of Atlantic herring per trip per day applies to vessels in non-directed fisheries that are fishing within the Eastern Maine spawning area. In addition, all vessels traveling through the Eastern Maine spawning area must have all seine and mid-water trawl gear stowed.

In addition to this spawning closure, the Area 1A fishery is currently at zero landing days. A days out call will be scheduled for September to discuss the Season 2 fishery (October 1 – December 31). Note this spawning closure extends into Season 2.

For more information, please contact Emilie Franke, Fishery Management Plan Coordinator, at 703.842.0740 or efranke@asmfc.org.

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **September 18, 2025**

SUBJECT: **Western Maine and Massachusetts/New Hampshire Spawning Closures in Effect Starting September 23 through November 3, 2025, and Days Out Measures for Season 2 of the 2025 Atlantic Herring Area 1A Fishery**

This memorandum announces closure dates for the Western Maine and Massachusetts/New Hampshire spawning areas; and days out measures for the 2025 Area 1A (inshore Gulf of Maine) Atlantic herring fishery for Season 2 (October 1 – December 31).

Spawning Area Closures

The Atlantic herring Area 1A fishery measures include seasonal spawning closures for portions of state and federal waters in Eastern Maine, Western Maine and Massachusetts/New Hampshire. The Commission's Atlantic Herring Management Board approved a forecasting method that relies upon at least three samples, each containing at least 25 female herring in gonadal stages III-V, to trigger a spawning closure. However, if sufficient samples are not available then closures will begin on predetermined dates.

There are currently insufficient samples from both the Western Maine and the Massachusetts/ New Hampshire spawning areas. Therefore, per Addendum II default closure dates, the Western Maine and Massachusetts/New Hampshire spawning areas will be closed starting at 12:01 a.m. on September 23 extending through 11:59 p.m. on November 3, 2025.

The Western Maine spawning area includes all waters bounded by the following coordinates:

43° 30' N Maine coast
43° 30' N 68° 54.5' W
43° 48' N 68° 20' W
North to Maine coast at 68° 20' W

The Massachusetts/New Hampshire spawning area includes all waters bounded by the Massachusetts, New Hampshire and Maine coasts, and 43° 30' N and 70° 00' W.

Vessels in the directed Atlantic herring fishery cannot take, land, or possess Atlantic herring caught in either the Western Maine or Massachusetts/New Hampshire spawning areas during this time and must have all fishing gear stowed when transiting through the area. The incidental

bycatch allowance of up to 2,000 pounds of Atlantic herring per trip per day applies to vessels in non-directed fisheries that are fishing within the Western Maine or Massachusetts/New Hampshire spawning areas.

Days Out Measures for Season 2

The Commission's Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts met September 18 via webinar to set effort control measures for the 2025 Area 1A fishery for Season 2 (October 1 – December 31). The 2025 Area 1A sub-annual catch limit (sub-ACL) is 783 metric tons (mt). This does not take into account the possible reallocation of 1,000 mt to the Area 1A sub-ACL based on catch information from the Canadian New Brunswick weir fishery, nor does it take into account potential revised quotas that may be implemented by NOAA Fisheries.

Landings from Area 1A have exceeded the current sub-ACL and are at an estimated 937 mt as of mid-September and, therefore, the fishery is currently closed. Without a change in the quota from one of the mechanisms listed above, the Area 1A fishery will remain closed with a 2,000-pound possession limit.

The days out measures for Season 2 are as follows:

- Landing days will be set at zero (0) from October 1 through November 4.
- If 1,000 mt is reallocated to Area 1A by October 31, the fishery will move to two (2) consecutive landing days starting at 12:01 a.m. on Wednesday, November 5 until 92% of the Area 1A sub-ACL has been caught. Landing days would be Wednesdays from 12:01 a.m. through Thursdays at 11:59 p.m., weekly.
- If the revised higher quotas have been implemented by October 31 but there has not been a 1,000 mt reallocation, the fishery will move to one (1) landing day starting at 12:01 a.m. Wednesday, November 5 until 92% of the Area 1A sub-ACL has been caught. The weekly landing day would be Wednesday.
- If the revised higher quotas have not been implemented and there has not been a 1,000 mt reallocation by October 31, landing days will remain at zero (0) from November 5 onward. If there is a subsequent change in available Area 1A quota, then another Days Out call will be scheduled.

While landing days are set at zero (0), harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A during Season 2. If quota becomes available as listed above, fishing for and possession of Atlantic herring may begin prior to landing days during Season 2 as long as fishing is not occurring in spawning areas during a spawning closure.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org or 703.842.0740 for more information.

Days Out Meeting Motions (September 18, 2025)

Main Motion

Move to set the following schedule for Area 1A Season 2:

- **Set zero landing days from October 1st through Tuesday, November 4th.**
- **If by October 31 there has been a 1000mt transfer from the Canadian weir fishery, move to 3 consecutive landing days per week starting Wednesday, November 5th at 12:01am until 92% of the Area 1A sub-ACL has been caught. Landing days would be Wednesday-Friday.**
- **If by October 31 higher herring quotas have been implemented but there has been no 1000mt transfer from the Canadian weir fishery, move to 1 consecutive landing day per week starting Wednesday, November 5th at 12:01am until 92% of the Area 1A sub-ACL has been caught. The landing day would be Wednesday.**
- **If by October 31 higher herring quotas have not been implemented and there is no 1000mt transfer, maintain zero landing days starting November 5th. A future Days Out call would be scheduled to set landing days if there is a subsequent change in available Area 1A quota.**

Motion made by Ms. Ware and second by Ms. Griffin. Motion amended.

Motion to Amend

Motion to amend to replace 'three landing days' with 'two landing days' (Wednesday – Thursday) for the second bullet.

Motion made by Mr. Abbott and seconded by Ms. Ware. Motion approved by unanimous consent.

Main Motion as Amended

Move to set the following schedule for Area 1A Season 2:

- **Set zero landing days from October 1st through Tuesday, November 4th.**
- **If by October 31 there has been a 1000mt transfer from the Canadian weir fishery, move to 2 consecutive landing days per week starting Wednesday, November 5th at 12:01am until 92% of the Area 1A sub-ACL has been caught. Landing days would be Wednesday-Thursday.**
- **If by October 31 higher herring quotas have been implemented but there has been no 1000mt transfer from the Canadian weir fishery, move to 1 consecutive landing day per week starting Wednesday, November 5th at 12:01am until 92% of the Area 1A sub-ACL has been caught. The landing day would be Wednesday.**
- **If by October 31 higher herring quotas have not been implemented and there is no 1000mt transfer, maintain zero landing days starting November 5th. A future Days Out call would be scheduled to set landing days if there is a subsequent change in available Area 1A quota.**

Motion passes by unanimous consent.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **October 31, 2025**

SUBJECT: **Zero Landing Days Continue for Season 2 of the 2025 Atlantic Herring Area 1A Fishery**

This is an update on Season 2 (October 1 – December 31) of the 2025 Area 1A fishery for Atlantic herring. In September 2025 (Memorandum 25-81), the Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts decided the fishery would be set at zero landing days from October 1 through November 4 and would only open for landing days on November 5 if one or both of the following quota adjustments occur: reallocation of 1,000 metric tons based on landings from the Canadian New Brunswick weir fishery and/or revised quotas implemented by NOAA Fisheries. Due to the lapse in federal government appropriations, neither of the above quota adjustments has been processed by NOAA Fisheries.

As a result, the Area 1A fishery remains at zero landing days for the foreseeable future. The fishery will not open in early November.

While landing days are set at zero (0), harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A during Season 2. If additional quota becomes available, a days out call will be scheduled.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org, or 703.842.0740 for more information.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **November 19, 2025**

SUBJECT: **2025 Atlantic Herring Area 1A Fishery Season 2 Days Out Measures**

The Atlantic States Marine Fisheries Commission's Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts met November 19 via webinar to set effort control measures for the 2025 Area 1A fishery for Season 2 (October 1 – December 31) following an increase in available quota for Area 1A. The 2025 Area 1A sub-annual catch limit (sub-ACL) is now 1,783 metric tons (mt) due to the reallocation of 1,000 mt to the Area 1A sub-ACL based on catch information from the Canadian New Brunswick weir fishery.

After accounting for the fixed gear set-aside, 2025 landings so far from Area 1A, and the 8% buffer (Area 1A closes at 92% of the sub-ACL), **there are an estimated 632 metric tons available for harvest.**

Currently, the Area 1A fishery is at zero landing days. The days out measures moving forward for Season 2 are as follows:

- Landing days will continue to be set at zero (0) through Sunday, November 23.
- The fishery will move to two (2) consecutive landing days starting at 12:01 a.m. on Monday, November 24 until 92% of the Area 1A sub-ACL has been caught. Landing days will be Mondays from 12:01 a.m. through Tuesdays at 11:59 p.m., weekly.

While landing days are set at zero (0), harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A. Fishing for and possession of Atlantic herring may begin prior to landing days during Season 2.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org or 703.842.0740 for more information.

Days Out Meeting Motions (November 19, 2025)
Move to set the following schedule for Area 1A Season 2:

- **Set zero landing days through Sunday, November 23.**

- **Starting 12:01AM on Monday, November 24, move to two consecutive landing days per week until 92% of the Area 1A sub-ACL has been caught. Landing days would be Monday-Tuesday.**

Motion made by Ms. Ware and seconded by Mr. Abbott. Motion passes by unanimous consent.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **November 24, 2025**

SUBJECT: **Directed Atlantic Herring Fishery Closure for Management Area 1A**

NOAA Fisheries and the states of Maine and New Hampshire, and the Commonwealth of Massachusetts project the Atlantic herring fishery will catch 92% of the Area 1A sub-ACL by November 24, 2025. The Area 1A directed fishery will close effective 6:00 p.m. on November 24, 2025 and remain closed until further notice. Vessels that have entered port before 6:00 p.m. on November 24, 2025 may land and sell, from that trip, greater than 2,000 pounds of herring from Area 1A.

During a closure, vessels participating in other fisheries may retain and land an incidental catch of herring that does not exceed 2,000 pounds per trip or calendar day. In addition, directed herring vessels traveling through Area 1A must have all fishing gear stowed.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at 703.842.0716 or efranke@asmfc.org for more information.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Toni Kerns, Fisheries Policy Director** TMK

DATE: **December 15, 2025**

SUBJECT: **December Update on 2025 Atlantic Herring Area 1A Fishery Season 2 Days Out Measures**

The Atlantic States Marine Fisheries Commission's Atlantic Herring Management Board members from Maine, New Hampshire, and Massachusetts met December 15 via webinar to set effort control measures for the 2025 Area 1A fishery for Season 2 (October 1 – December 31) following an increase in available quota for Area 1A. The 2025 Area 1A sub-annual catch limit (sub-ACL) is now 2,317 metric tons due to implementation of the new 2025-2027 specifications package.

After accounting for the fixed gear set-aside, 2025 landings so far from Area 1A, and the 8% buffer (Area 1A closes at 92% of the sub-ACL), **there are an estimated 289 metric tons available for harvest.**

Currently, the Area 1A fishery is at zero landing days. The Area 1A days out measures moving forward for Season 2 are as follows:

- Landing days will continue to be set at zero (0) through Monday, December 22.
- The fishery will move to one (1) landing day starting at 12:01 a.m. on Tuesday, December 23.
- The fishery will move to zero (0) landing days when 92% of the Area 1A sub-ACL has been caught or at 12:01 a.m. on Wednesday, December 24, whichever comes first. The fishery will remain at zero (0) landing days through the end of 2025.

While landing days are set at zero (0), harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A. Fishing for and possession of Atlantic herring may begin prior to landing days during Season 2.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at efranke@asmfc.org or 703.842.0740 for more information.

Days Out Meeting Motions (December 15, 2025)
Main Motion

Move to set the following schedule for Area 1A Season 2:

- **Set zero landing days through Sunday, December 21**
- **Starting 12:01AM on Monday, December 22, move to one landing day**
- **Move to zero landing days when 92% of the Area 1A sub-ACL has been caught or at 12:01 a.m. on Tuesday, December 23, whichever comes first, through the end of 2025.**

Motion by Ms. Ware, second by Ms. Griffin.

Motion to Amend

Move to amend to set the landing day to Tuesday, December 23.

Motion by Mr. Abbott, second by Ms. Ware. Motion passes by unanimous consent.

Main Motion as Amended

Move to set the following schedule for Area 1A Season 2:

- **Set zero landing days through Monday, December 22**
- **Starting 12:01AM on Tuesday, December 23, move to one landing day**
- **Move to zero landing days when 92% of the Area 1A sub-ACL has been caught or at 12:01 a.m. on Wednesday, December 24, whichever comes first, through the end of 2025.**

Motion passes by unanimous consent.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Herring Management Board, Atlantic Herring Technical Committee, Atlantic Herring Advisory Panel, Interested Parties**

FROM: **Emilie Franke, Fishery Management Plan Coordinator**

DATE: **December 23, 2025**

SUBJECT: **Atlantic Herring Area 1A Fishery Moves to Zero Landing Days on December 24 at 12:01 a.m.**

The Area 1A Atlantic herring fishery will move to zero landing days beginning at 12:01 a.m. on Wednesday, December 24 through December 31, 2025, as specified by the days out measures set for the Area 1A fishery this month.

While landing days are set at zero, harvesters are prohibited from landing more than 2,000 pounds of Atlantic herring per trip from Area 1A.

Please contact Emilie Franke, Fishery Management Plan Coordinator, at 703.842.0716 or efranke@asmfc.org for more information.

Atlantic States Marine Fisheries Commission

American Lobster Management Board

November 9, 2026
10:30 a.m. – 12:30 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary

1.	Welcome/Call to Order *(R. Zobel)*	10:30 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from August 2026	10:30 a.m.
3.	Public Comment	10:35 a.m.
4.	Report from Management Objectives Process Steering Committee *(C. Starks, J. Kipp)* **Possible Action**	10:45 a.m.
5.	Technical Committee Reports *(C. Truesdale)* • Annual Data Update of American Lobster Indicators • Progress on Lobster Technical Committee Tasks	11:30 a.m.
6.	Reports from Gulf of Maine States on Industry Surveys and Meetings *(C. Wilson, R. Zobel, R. Glenn)*	12:00 p.m.
7.	Consider American Lobster and Jonah Crab Fishery Management Plan Reviews and State Compliance for the 2025 Fishing Year *(C. Starks)* **Action**	12:05 p.m.
8.	Update on Request for Information for Alternative Gear Marking Framework (*A. Murphy)*	12:10 p.m.
9.	Other Business/Adjourn	12:15 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, Rhode Island; 401.847.3300) and via webinar; click here for details.

MEETING OVERVIEW

American Lobster Management Board
November 9, 2026
10:30 a.m. – 12:30 p.m.

Chair: Renee Zobel (NH) Assumed Chairmanship: 03/25	Lobster Technical Committee Chair: Corinne Truesdale (RI) Jonah Crab Technical Committee Chair: Corinne Truesdale (RI)	Law Enforcement Committee Rep: Rob Beal (ME)
Vice Chair: John Maniscalco (NY)	Lobster Advisory Panel Chair: Grant Moore (MA) Jonah Crab Advisory Panel Chair: Sonny Gwin (MD)	Previous Board Meeting: August 4, 2026
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NMFS, NEFMC (12 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2026

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Report from Management Objectives Process Steering Committee (10:45-11:30 a.m.) Possible Action

Background

- The Board formed a steering committee (SC) in May 2026 to 1) review existing management objectives, as outlined in Amendment #3 and subsequent addenda, relative to the current GOM/GBK stock status, and social/economic conditions facing the fishery today, and 2) develop a process that would clearly identify new management objectives (across all stakeholders), to better understand socioeconomic status and concerns, and to identify potential management tools.
- The SC includes representation from the Board, TC, Commission staff, the Commission's Committee on Economics and Social Sciences, industry stakeholders, and the Commission's Assessment and Science Committee or Management and Science Committee with past experience in MSE.
- The SC met three times in June through September to develop recommendations to the Board on a stakeholder management objectives process **(Briefing Materials).**

Presentations

- Steering Committee Recommendations on Management Objectives Process by C. Starks and J. Kipp

Board Actions for Consideration at the Meeting

- Consider initiating next steps to conduct a management objectives process

5. Technical Committee Reports (11:30 a.m.-12:00 p.m.)

Background

- An annual Data Update process between American lobster stock assessments was recommended during the 2020 stock assessment to more closely monitor changes in stock abundance. The objective of this process is to present information—including any potentially concerning trends—that could support additional research or consideration of changes to management. Data sets updated during this process are generally those that indicate exploitable lobster stock abundance conditions expected in subsequent years and include: young-of-year settlement indicators, trawl survey indicators, and ventless trap survey sex-specific abundance indices.
- This is the second Lobster Data Update after the 2025 Stock Assessment and includes the addition of 2025 data. Indicator status (negative, neutral, or positive) was determined relative to the percentiles of the stock assessment time series **(Briefing Materials).**
- At its February 2026 meeting, the Board discussed the possibility of adding environmental indicators into the annual data update process. The TC Chair and ASMFC staff met with staff within NOAA's Changing Ecosystems and Fisheries Initiative (CEFI) to discuss products developed for the State of the Ecosystem reports that may be relevant to lobster population trends, and the TC discussed possible indicators for further investigation **(Briefing Materials).**

Presentations

- Lobster Data Update by C. Truesdale

Board Actions for Consideration at the Meeting

- Provide guidance to TC on potential environmental indicators

6. Reports from Gulf of Maine States on Industry Surveys and Meetings (12:00-12:05 p.m.)

Background

- Concurrent with the implementation of Addendum XXXII, the Gulf of Maine states agreed to work with the lobster industry to develop management strategies to ensure the long-term health of the resource and the coastal communities it supports.
- The Board requested Maine and New Hampshire provide updates on industry meetings and possible alternative management measures to those of Addendum XXVII at each quarterly meeting.
- Maine, New Hampshire, and Massachusetts have completed industry meetings and surveys to gather input on management approaches.

Presentations

- Update from Gulf of Maine States on Industry Meetings by C. Wilson, R. Zobel, and B. Glenn

7. Consider American Lobster and Jonah Crab Fishery Management Plan Reviews and State Compliance for the 2025 Fishing Year (12:05-12:10 p.m.)

Background

- State compliance reports for American lobster and Jonah crab were due August 1, 2026.
- The Plan Review Teams reviewed state compliance reports and compiled the annual FMP Reviews for lobster and Jonah crab for the 2025 Fishing Year (**Briefing Materials**).
- Delaware, Maryland, and Virginia have requested and meet the requirements for *de minimis* in the lobster and Jonah crab fisheries.

Presentations

- FMP Reviews for American Lobster and Jonah Crab for the 2025 Fishing Year by C. Starks

Board Actions for Consideration at the Meeting

- Approve Fishery Management Plan Reviews and state compliance reports for American Lobster and Jonah Crab for the 2025 Fishing Year
- Approve *de minimis* requests

8. Update on Request for Information on Alternative Gear Marking Framework (12:05-12:15 p.m.)

Background

- The New England and Mid-Atlantic Fishery Management Council (Councils) are developing a joint alternative gear marking framework adjustment to provide alternative fixed gear surface marking requirements in all New England and Mid-Atlantic Fishery Management Council fishery management plans. This regulatory modification would allow for the use of fixed gears without a persistent buoy line (i.e., on-demand gear).
- The Councils met in September and October 2025 and each agreed to postpone further action on the Framework until additional information on ropeless gear and visualization technology, as solicited through a NMFS Request for Information (RFI), is available to inform stakeholder input and Council decision-making.
- An RFI on ropeless fishing was published in the federal register on July 16, 2026, and comments were accepted until October 14, 2026.

Presentations

- Update on Request for Information for Alternative Gear Marking Framework by A. Murphy

9. Other Business/Adjourn (12:30 p.m.)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

AMERICAN LOBSTER MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 4, 2026

These minutes are draft and subject to approval by the American Lobster Management Board.
The Board will review the minutes during its next meeting.

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INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 0).

2. **Approval of Proceedings of Monday May 4, 2026** by consent (Page 0).

3. **Main Motion**
   Move to approve the conservation equivalency (CE) proposal for LCMA 5 and that the Commission send a letter to NOAA Fisheries recommending the modification of the federal regulations for the LCMA 5 season closure to allow black sea bass fishermen that hold a lobster permit to set and haul gear to fish for black sea bass beginning on March 9 instead of March 24 while maintaining the prohibition on lobster harvest and possession from February 1 through March 31 (Page 4). Motion by John Clark; second by Mike Luisi. Motion to amend.

   Motion to Amend
   Move to amend to add "Jonah crab" after lobster (Page 4). Motion by Emerson Hasbrouck; seconded by Shanna Madsen. Motion approved by consent with one abstention (NOAA Fisheries) (Page 5).

   Main Motion as Amended
   Move to approve the CE proposal for LCMA 5 and that the Commission send a letter to NOAA Fisheries recommending the modification of the federal regulations for the LCMA 5 season closure to allow black sea bass fishermen that hold a lobster permit to set and haul gear to fish for black sea bass beginning on March 9 instead of March 24 while maintaining the prohibition on lobster and Jonah crab harvest and possession from February 1 through March 31. Motion carries by consent with one abstention (NOAA Fisheries) (Page 5).

4. **Motion to Adjourn** (Page 8).

ATTENDANCE

Board Members

Carl Wilson, ME (AA)
Rep. Allison Hepler, ME (LA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Bob Glenn, MA, proxy for D. McKiernan (AA)
Raymond Kane, ME (GA)
Rep. Sarah Peake, MA (LA)
Jason McNamee, RI (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Rep. Joseph Gresko, CT (LA)
John Maniscalco, NY, proxy for M. Gary (AA)
Emerson Hasbrouck, NY (GA)
Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
Jorden Zimmerman, NJ (AA)
John Clark, DE, proxy for R. Miller (AA)
Michael Luisi, MD (AA)
Ethan Simpson, VA, proxy for J. Grist (AA)
Del. Adele McClure, VA (GA)
Allison Murphy, NMFS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Tracy Pugh, Technical Committee Chair
Rob Beal, Law Enforcement Committee Rep.

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Tuesday, August 4, 2026, and was called to order at 11:15 a.m. by Chair Renee Zobel.

CALL TO ORDER

CHAIR RENEE ZOBEL: Welcome, I'm going to go ahead and call this meeting to order. First item that I would like to do is go to Toni for the Board members that are online today.

MS. TONI KERNS: Thank you, I have Alli Murphy, Sarah Peake, and Delegate Adele McClure.

APPROVAL OF AGENDA

CHAIR ZOBEL: Thank you, Toni, first item of business is to approve the agenda. Is there anyone that has any changes for the agenda today? Seeing no changes, we will approve the agenda by consent if anyone has no opposition to that. Okay, agenda is approved by consent.

APPROVAL OF PROCEEDINGS

CHAIR ZOBEL: Back to the proceedings from the May meeting. Are there any changes or amendments to the proceedings from May? Seeing no hands, we'll consider the proceedings approved by consent.

PUBLIC COMMENT

CHAIR ZOBEL: Next on the items is public comment on items that are not on the agenda today. Again, items not being covered by the agenda items today. We will allow for public comment as time allows. Anyone who would like to make public comment today in the room or online. Seeing no hands, we're moving right along.

UPDATE ON MANAGEMENT OBJECTIVES PROCESS STEERING COMMITTEE PROGRESS

CHAIR ZOBEL: Next is an update on the Management Objectives Process Steering Committee Progress. I'm going to go to Caitlin Starks for that presentation.

MS. CAITLIN STARKS: Thank you, Madam Chair. I just want to remind everyone quickly of the background on the Steering Committee. After the Board reviewed the 2025 Benchmark Stock Assessment last fall, it tasked the Technical Committee with updating previous guidance on the process for initiating Management Strategy Evaluation or MSE for the Gulf of Maine/Georges Bank stock.

Then at the winter meeting the TC provided its guidance and its first recommendation was that as a critical first step before considering a Management Strategy Evaluation for the Gulf of Maine/Georges Bank fishery that the Board should initiate a formal process to identify management goals and objectives for the future of the Gulf of Maine/Georges Bank lobster fisheries, possibly including a series of meetings at local and regional scales like by a third party facilitator.

Based on that TC recommendation in May, the Board formed a Steering Committee, tasked with developing the scope for such a process. The Steering Committee includes 17 members representing the Board, TC, Commission staff, the Commission's Committee of Economics and Social Sciences, and industry stakeholders.

The specific tasks for this Steering Committee as established by the Board are to review the current management objectives in the FMP relative to the current Gulf of Maine/Georges Bank stock status and social economic conditions facing the fishery today, and then to develop a process that was clearly identified in the Management Objectives across all stakeholders, to better understand socioeconomic status and concerns and identify potential management tools.

The Steering Committee met for the first time in June, and at that meeting they reviewed the existing management objectives, as well as a few other examples of management objectives processes from menhaden and horseshoe crab. They discussed gaps giving the current social and economic conditions of the fishery, and talked about how to incorporate those existing management objectives into a new management objectives process.

We have a second Steering Committee meeting scheduled for the end of August, which is the earliest we could get the majority of the Steering Committee members available. The goal for that meeting is to discuss the management objectives process in more detail, including identifying the universe of stakeholders to be involved, outlining the structure, schedule participants and objectives of the stakeholder meetings, and determining the roles of facilitator, as well as assigning tasks to the Steering Committee for writing a report and cost estimation.

Then we've also started working on the schedule for the final meeting in September or early October to wrap up the final details of the recommended process, and that would include the cost estimates and a final report for the Board. Our goal is still to have that Steering Committee Report out to the Board on the recommended management objectives process at the Annual Meeting. That is all I've got for an update and I can take any questions.

CHAIR ZOBEL: Are there any questions from the Board for Caitlin? Seeing no questions; thank you, Caitlin. Just a reminder to us, as she said 17 members. This is as very large group, and as anticipated it has been challenging to try to wrangle such a large group. For those who are a part of this Steering Committee, just a reminder to respond to Caitlin and John for doing a very good job trying to heard cats as quickly as possible. Next on the agenda will be Considering Lobster Conservation Management Team 5 Proposal to Modify Seasonal Closures. I'm going to go to John Clark first for that.

CONSIDER LOBSTER CONSERVATION MANAGEMENT TEAM 5 PROPOSAL TO MODIFY SEASON CLOSURE

MR. JOHN CLARK: Thank you, Madame Chair, there are some slides. Thank you to Caitlin for putting this together and all her help on this. I'll be brief. This item has come up to the Board a couple times already, but we were missing one critical component to move this along, which was we had not had a Lobster Conservation Management Team meeting.

The Lobster Conservation Management Team or LCMA 5, was reconstituted. They met two weeks ago, and asked us to submit this proposal to the Board. That is essentially to modify the season closure in LCMA 5 to allow earlier access to black sea bass. It's going to be a 15-day earlier season, open on March 9 instead of the 24th. Just to allow the pots to be hauled for harvesting black sea bass. The TC had reviewed this proposal. There was a memo before the spring meeting about that, and they suggested allowing the pots to be set and fished for black sea bass on March 9 instead of the 24th, while maintaining the closure dates for lobster, was not expected to increase lobster mortality.

The LCMT 5 at their meeting two weeks ago made the following recommendation to the Board. They request the Board that NOAA Fisheries, GARFO revise the LCMA 5 season to allow black sea bass pots to be set beginning on March 9 instead of March 24, while maintaining the current American lobster harvest closure, February 1 through March 31; as proposed by the TC in it's April 20 memo to the Board. That is all I have, so after any questions and discussion I have a motion, I would like to make.

CHAIR ZOBEL: I am going to go to Caitlin for some Plan Review Team and Law Enforcement Committee comments on the proposal.

MS. STARKS: I just wanted to go over the PRT and LECs comments. They reviewed the proposal and I just have a summary of those here. First, from the

PRT there was general support for Board consideration of the proposal from LCMT 5. There were a few issues they raised for the Board to consider, in its discussions.

First, the PRT members noted that it's not clear from the proposal whether it would allow for Jonah crabs to be retained and landed while the traps are being fished for black sea bass. They recommended that the Board discuss and clarify that point. Second, the proposal doesn't specify if the change would apply to all federal LCMA 5 lobster permit holders; that would be those with the LCMA 5 waiver and those with the regular permit.

The closure currently of 5 to all permit holders, so it makes sense for the change to also apply to both, but it would be good to make that point clear as well. Then third, the PRT noted that the current lobster closure is implemented in both state and federal regulations for LCMA 5 permit holders. The proposed change would need to be made across all of those regulations to be effective.

Then from the LEC comments on the proposal. Again, there was overall support for the changes. There was one concern raised by a member of the LEC, which was that they noted a concern about the potential of fishermen using black sea bass traps to pull lobsters during the closure, because there was a past incident of an LCMA 5 fisherman cutting lobster up in their black sea pots during the closed period, in anticipation of the lobster season opening back up.

That's why the LEC members were not concerned about the enforceability of proposed measures. They noted that generally closed seasons are highly enforceable, as described in the guidelines for resource managers on the enforceability of fishery management measures. Then one last point I wanted to bring up is that because the Southern New England stock status is depleted, according to the Commission's Conservation Equivalency Policy. There would need to be a two-thirds majority vote to approve this proposal.

CHAIR ZOBEL: Thank you, John and Caitlin. Go ahead and open it up to the Board for questions for John and Caitlin, and it looks like everyone is also looking for a little bit of clarification. Any questions? Jason McNamee.

DR. JASON McNAMEE: Just no issues at all, other than just curious as to why March 9 was the date. I even looked to see if it like started on a weekend or something, but it's like a Tuesday or something.

MR. CLARK: That was what was proposed. I think the two fishermen that first brought this to us thought that it was roughly two weeks earlier in the discussion the LCMT had. They thought that opening even earlier would be even better. But I think they figured two weeks would look like they were not asking for too much, just to fill in that timeframe. I don't know why 15 days instead of exactly two weeks, but it is roughly the same thing.

CHAIR ZOBEL: Any other questions? Okay, we did have a few points of clarification that Caitlain had asked for. I know some of these have been discussed in the background a little bit. Caitlin, refresh my memory here. The first one was on Jonah crab possession during this black sea bass season. Just looking for guidance from the Board on whether that was the intent, or whether that would be allowed during that period. John, go ahead.

MR. CLARK: If I could just say, as of right now our regulations for Delaware don't have a season for Jonah crab. It is an extremely small fishery in our part of, I think I could speak for all of LCMA 5. I don't think that is really an issue in our LCMA.

CHAIR ZOBEL: I'll go right along then, and probably keep questioning you, sir. The next one was, all LCMA 5 permit holders or the waiver versus the nonwaiver.

MR. CLARK: Yes, I had to go look u what the difference was. But yes, I think that our thinking is it would apply to all permits.

CHAIR ZOBEL: Then the final one for the Board was the proposed changed in both federal and state regulations.

MR. CLARK: I can speak for Delaware. Yes, we would have to change our season for lobster, but that is fairly simple. I think it is probably the same for Maryland, New Jersey and Virginia. But I think all four of our states we had great support on the LCMT call, and I think our states can work to get our state regulations changed quickly.

CHAIR ZOBEL: Again, for those online, I am seeing a lot of head nods in the room from the other states that might be involved as well. Thank you all for that feedback, any other questions? Are there any questions from the public on this? All right, seeing no questions from the public. I believe it's about time to entertain a motion, if anybody has a motion they would like to bring forward. John Clark.

MR. CLARK: Thanks again, Caitlin for writing up a motion that I think covers everything here, so I will read it into the record. **Move to approve the Conservation Equivalency Proposal for Lobster Conservation Management Area 5, and that the Commission send a letter to NOAA Fisheries recommending the modification of the federal regulations for LCMA 5 season closure, to allow black sea bass fishermen to hold a lobster permit to set and haul gear to fish for black sea bass beginning on March 9 instead of on March 24, while maintaining the prohibition on lobster harvest and possession from February 1 through March 31**.

CHAIR ZOBEL: Do we have a second for the motion? Mike Luisi, thank you. Any additional rationale? I know we've discussed this pretty extensively.

MR. CLARK: Yes, I would just say once again. This was a request made by our small fishery in the LCMA 5, and they think it will be helpful. It's tough time, as everybody knows for commercial fishermen. Giving them this extra time to fish for black sea bass should be a big help.

CHAIR ZOBEL: Mike, anything for you?

MR. MICHAEL LUISI: Nothing for me, Madam Chair, thanks.

CHAIR ZOBEL: Okay, any discussion by the Board? Toni.

MS. KERNS: Just for clarity purposes. Are Jonah crab going to be allowed to be harvested or not? While I recognize Delaware may not have a fishery, there are three other states that harvest from Area 5. I just want to have a better understanding. We need to know if they are allowed or not.

CHAIR ZOBEL: Ethan Simpson.

MR. ETHAN SIMPSON: Just like other states in LCMA 5, our fishery is so small that we would likely continue to allow that to be open, with no ill anticipated in that.

MS. KERNS: Right now, it should be closed not open during that timeframe. If you are going to do something different than it being closed during that timeframe, then it would need to be on the record.

MR. SIMPSON: Misunderstanding on my part, status quo.

CHAIR ZOBEL: Mike Luisi.

MR. LUISI: Toni, you said it's closed right now. In this area, in the Mid-Atlantic lower portion where we are, the DelMarVa. If Jonah crab is closed then my preference would be just to leave it closed. The request here was based on a need to harvest sea bass. The other species, there was no intent that they would be harvested through this. That is how I would see it moving forward.

CHAIR ZOBEL: Emerson Hasbrouck.

MR. EMERSON C. HASBROUCK: Just to clarify this and to get it on the record. I have a **motion to amend to add, Jonah crab after lobster in the second to the last line; or maintain a prohibition on lobster and Jonah crab harvest and possession**. That will formalize what the Board wants to do.

CHAIR ZOBEL: Do we have a second? Okay, go to Toni first.

MS. KERNS: Just to clarify. The reason why I bring it up is because the pots are not able to be fished at this time, so your regulations are silent on it, because your pots can't be fished. But if the pot can be fished, then you will need to add, you know within the regulation that lobster and Jonah crab cannot be possessed at that time. That is why we were clarifying.

MR. CLARK: Right now, as you said, it's silent about the core season for Jonah crab.

CHAIR ZOBEL: I've got a second from Shana Madsen. Any discussion on the motion to amend? Go ahead, Joe Cimino.

MR. JOE CIMINO: Yes, I apologize for doing the sound out for New Jersey. I was under the same impression that we would keep regulations status quo. Understanding Toni's concern, I can accept the motion, and we would be able to make that amendment along with our lobster change.

CHAIR ZOBEL: Because we need a two-thirds majority, then go ahead and do a roll call vote, for first the motion to amend, and then whether it passes or fails. I'll see if there is any objection to the motion to amend first, and then we'll do a roll call beyond that. **Is there any objection to this motion to amend? Okay, I am seeing no objection to the motion, so this now becomes the main motion.**

MS. ALLISON MURPHY: Pardon me, Madam Chair. This is Alli.

CHAIR ZOBEL: Yes, Alli.

MS. MURPHY: I just wanted to note my abstention.

CHAIR ZOBEL: Thank you very much, Alli, we've noted it. The motion carries with one abstention from NOAA Fisheries. This is now the main motion. Any further discussion on this as the main motion? Anything from the public, who would like to comment or has any questions on this before we vote?

Seeing no hands online or in the room, okay we are going to go ahead and do a roll call vote for this. If Toni or Caitlin can help me out with this, that would be wonderful. Getting some guidance on how to move forward here. We'll try this the easy way first despite the two-third. **Is there any objection to the motion on the board? Alli, I see your hand up, is that for an abstention?**

MS. MURPHY: Yes, that is correct, thank you, Madam Chair.

CHAIR ZOBEL: Okay, seeing no hands in objection, the motion carries with 1 abstention from NOAA Fisheries. Thank you.

REPORTS FROM GULF OF MAINE STATES ON INDUSTRY SURVEYS AND MEETINGS

CHAIR ZOBEL: That moves us on to the next item on the agenda, which is Reports from the Gulf of Maine States on Industry Surveys and Meetings. I think I went north to south last time, let's go south to north this time. Bob Glenn, you're up first.

MR. BOB GLENN: Just a quick update. We have not convened any meetings, but we have been working on reconstituting our LCMT list. Upon review it hadn't been updated since 2006, and many of the members had moved on in one capacity or another, so we're working internally and with some feedback from industry to reconstitute that list and to be in a better position to convene at a later date.

CHAIR ZOBEL: As far as New Hampshire, I have nothing to report. We'll move on to Carl Wilson and the state of Maine.

MR. CARL WILSON: We have had some activity up in Maine since our May Board meeting. We finished up a round of 7 lobster Zone Councils that straddled our meeting, and we have had 2 Lobster Advisory Councils, which are kind of Council of

Councils in May and June. Following our June Lobster Advisory Council meeting, which ended nearly a year of conversations following our survey that we sent out last summer.

The Lobster Advisory Council has voted to move forward with a modification to our biological escape panel, so not the escape vent but what we refer to as the bio panel, to increase that from an opening of 3 -3/4 by 3 -3/4 to now a proposed opening of 4.5 inches by 6 inches. This would allow a much lobster to escape when that panel degrades and opens up.

Our process would be that this would be taken out to our Zone Councils in our August/September meetings, and eventually put it out to rule making after the first of the year. We're not asking for any conservation equivalency or recognition from this body, other than saying that we feel that this is actually a small step, but it's a positive step to, if traps are lost that there is a better opportunity for lobsters that are in those traps to be able to over time get out.

This change would, as it is suggested right now, does not impact the attachment method of the panel. It's just speaking towards the size of that panel. Again, that was supported through the Lobster Advisory Council at the end of June. We also convened other LCMT members, as Bob said, first time probably in 15 years that we've done this.

It was as very short meeting, more of a meet and greet. I want to thank Caitlin Starks for participating in that meeting; giving us a nice short presentation on the role of LCMTs. Without any specific action needed from them or needed anticipated action from LCMTs, we agreed to meet after the first of the year and see where we go. I believe that is Maine's update.

CHAIR ZOBEL: Thanks, Carl. Are there any questions for either Bob, myself or Carl? Emerson Hasbrouck.

MR. HASBROUCK: Can I just ask Carl directly or should I bring my question to you?

CHAIR ZOBEL: You can ask the questions of Carl, thanks.

MR. HASBROUCK: I'm encouraged to hear about the change in the size of the panel. Is that Step 1? Are there further actions that are being considered, or you've got to that point and that is it for now?

MR. WILSON: There are additional conversations around support of lobster hatcheries. There has been a CDS request for the University of Maine to spearhead an initiative around lobster hatcheries. For now this is where we're at. My intention and our intention in the state is to continue the temporal conversations so that we're informed and ready to move with the next stock assessment coming forward.

CHAIR ZOBEL: Any other questions? Doug Grout.

MR. DOUGLAS E. GROUT: Just a quick one. Was there any rationale behind those particular dimensions and going bigger? How did you decide on that particular increase?

MR. WILSON: It was simply by; you could use the same escape vent and the method of attachment by simply clipping out one additional mesh. It was supposed to be a very simple, common-sense way to improve what happens to traps when they're lost. It is something that can be done at sea, and the intention was that it was going to have a two-year implementation point so people kind of can do this as they work through the gear over the next couple years.

CHAIR ZOBEL: Anything else? Seeing no other questions from the Board.

UPDATE ON REQUEST FOR INFORMATION FOR ALTERNATIVE GEAR MARKING FRAMEWORK

CHAIR ZOBEL: Moving on to Alli Murphy, who is going to give us an update on the Request for Information for Alternative Gear Marking Framework. On to you, Alli.

MS. MURPHY: I want to thank you and the Board for your patience and routinely maintaining some time on your agenda for this update, for when it finally published. I'm also really sorry that I wasn't able to rearrange my travel plans to be there in person with you all today. We'll dive in. As always, I'll start with a little background here. On demand and alternatively marked gear research has been conducted in the Greater Atlantic Region since 2019.

They are all recalled from past updates from my Science Center colleagues at NOAA Fisheries just working with industry, with states and other organizations to develop and test different gear designs with the goal of restoring fishing access to areas that currently function as fishery closures. The purpose of any of these tools is to provide a voluntary option that fishermen can use, or not, depending on whatever works best for them.

Such research unlocks various other tools, options like dynamically removing end lines if whales are present as well. Research really accelerated under the Consolidated Appropriations Act, which required NMFS to, and I'll quote, "in consultation with effected states and fishing industry participants, promote the innovation and adoption of gear technologies."

NOAA Fisheries has provided resources, and continues to work with fishermen, manufacturers, state agencies, fishery management organizations and other partners, to explore the benefits and limitations of these technologies. You'll also all recall that the New England and Mid Atlantic Councils initiated the Joint Alternative Gear Marking Framework, to consider whether to recommend to NOAA Fisheries to allow the use of fixed gear without physical surface markers in Council managed fisheries if an equivalent Alternative marking method was used.

NMFS was also considering whether to similarly modify the federal lobster regulations, along the lines of what the Council may have been considering. Council action was postponed, pending additional input from stakeholders, including the fishing industry. NMFS similarly postponed action with respect to the lobster/Jonah crab fisheries to gather additional input and to ensure consistency among actions.

Keep in mind, that regulations would need to be modified for other potential solutions such as fishing with only one end marked with surface markings, dynamic changes to surface markings like removing one end line. There could be value to this action moving forward, that action or a similar action moving forward as well.

Back to this request for information. This is a key step of the ongoing effort to comply with the mandates of the Consolidated Appropriations Act. But I'll also note that it does not limit NOAA Fisheries ability to consider other innovative gears or management activities, and various management options are being considered. With that I'll go on to more about this RFI.

This request for information seeks information specific to program design, utility, limitations, technical capabilities of alternatively marked gear. It contains questions and associated context that were developed with a focus on the Greater Atlantic Region and operational and management considerations.

However, we welcome feedback informed by experiences outside the region as well. It contains 52 questions organized under the 10 headings on the slide. But it also includes questions on other important considerations, including fishing with only one end using traditional surface markers, grappling, balancing cost versus complexity, potential need for future flexibility, et cetera.

Just quickly wanted to review how to comment. I've included the direct link that should bring you on the first bullet, it should bring you right to this request for information, and you should see on there the comment icon. You can also go to regulations.gov and type in the NOAA/NMFS 2026, 2080 in the search box, and that will bring you to the same place.

If you would like to submit a comment, you know click on that comment icon or some fields that are required to be filled out, so please check through those as appropriate. We're asking that you label your comments with the questions that you are responding to, just so we can kind of appropriately thin them.

Also wanted to note that both anonymous and non-anonymous comments will be accepted. The comment period closes on October 14, 2026; there is still a lot of time to think about this and submit responses. That's it. I am happy to answer any questions that you all might have. Thank you so much.

CHAIR ZOBEL: Thank you, very much, Alli. Out to the Board for any questions for Alli. Okay, no hands from the Board online or in the room. Go out to the public, since we have a few extra minutes here, if anybody has any questions for Alli. Okay, seeing no hands in the room or online for Alli. I guess I will just make one comment, since I have the mic here, Alli, and you said it yourself; 52 questions with 10 headings.

I got into the RFI in the Federal Register and I thought, whoa. If it overwhelmed me for a minute, it has definitely overwhelmed others. Just encouragement that if there is a way to summarize really important things, that NOAA Fisheries is really trying to get out of this as part of the outreach process. I think that would be valuable use of time.

ADJOURNMENT

CHAIR ZOBEL: That moves us on to Other Business for today. Is there any other business to come before the Board today? Seeing no other business; we are adjourned.

(Whereupon the meeting adjourned at 11:50 a.m. on Tuesday, August 4, 2026)

Atlantic States Marine Fisheries Commission

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American Lobster Management Objectives Process Steering Committee Report: *Recommendations for a Stakeholder Engagement Process to Identify Management Objectives for the Gulf of Maine/ Georges Bank Lobster Fishery*

November 2026

1 Introduction

The 2020 American Lobster Benchmark Stock Assessment results indicated that the Gulf of Maine/Georges Bank (GOM/GBK) stock abundance was at record high levels. However, during the assessment, the American Lobster Technical Committee (TC) cautioned that if abundance levels declined from these record highs, there could be adverse impacts to the lobster industry and communities that depend on it, even before reaching the Abundance Limit reference point. To advise the American Lobster Management Board (Board) of these impacts, the TC recommended a new abundance reference point for the GOM/GBK stock: the Fishery/Industry Target, which would represent a point where decreased abundance from the record highs seen at the end of the 2020 assessment had the potential for negative socioeconomic impacts to the fishery. The TC acknowledged uncertainty in this reference point due to the lack of socioeconomic expertise included in the stock assessment process, and uncertainty about what levels of abundance would be ideal for sustainable industry performance and how performance changes as abundance declines below these levels. Thus, the TC recommended socioeconomic analyses be conducted following the stock assessment to proactively refine the target reference point and provide guidance on appropriate management actions, such as through a management strategy evaluation (MSE).

General management objectives were adopted in Amendment 3 to the Lobster Fishery Management Plan (FMP) in 1997. Since then, the resource and fishery have experienced significant changes. The TC advised that the development of modern consensus objective statements by the Board with input from industry would be critical to evaluating performance of strategies included in an MSE framework. Following the 2020 assessment, the Board tasked the TC with providing guidance on a lobster MSE but ultimately chose not to pursue this process at that time due, in part, to other ongoing activities affecting the industry.

In May 2023, the Board approved Addendum XXVII, which established a trigger mechanism to proactively increase protection of the GOM/GBK spawning stock before abundance levels approached the Abundance Limit reference point. Under Addendum XXVII, scheduled gauge and vent size changes would be triggered by a recruitment index declining below an established threshold representative of a 35% decline below the stock condition at the conclusion of the 2020 assessment. In October 2023, with updated data through 2022, the recruitment index declined

below the threshold, triggering the implementation of more restrictive gauge and vent sizes in subsequent years. Ultimately, the Board repealed the gauge and vent size changes through Addendum XXXII in October 2024 in response to significant concern from lobster industry members in the states of Maine, New Hampshire, and Massachusetts regarding the potential economic impacts of increasing the minimum gauge size in LCMA 1 and about the uncertainty surrounding the implications for trade with Canada, which was not implementing similar management changes. No alternative management changes have been made in response to the recruitment index and states are currently discussing alternative conservation strategies to protect the long-term health of the resource.

Another benchmark stock assessment was published in October 2025 and found similar concerning patterns of declining abundance following time series highs at the end of the 2020 assessment. Specifically, GOM/GBK stock abundance had declined 34% since the terminal year of the 2020 stock assessment (2018) and fell below the Fishery/Industry Target from 2020-2022, indicating potential for degradation of economic conditions of the lobster industry. The TC strongly reiterated its recommendation for an MSE to better understand socioeconomic status and concerns and evaluate strategies that would have buy-in from industry, unlike those included in Addendum XXVII, to prevent further declines towards biological thresholds. Again, the TC highlighted the need to clearly identify management objectives across all stakeholders as a critical first step of a successful MSE. At the February 2026 Board meeting, the TC recommended the Board form a steering committee for scoping and coordinating all parts of an MSE process, including elicitation of management objectives as a first step. The TC emphasized that while a management objectives process (MOP) is a necessary precursor to initiating an MSE, it would not commit the Board to pursuing a full MSE process and would have beneficial outcomes regardless of whether an MSE is conducted.

In response to these TC recommendations, the Board formed a Steering Committee (SC) to:

1) Review existing management objectives, as outlined in Amendment 3 and subsequent addenda, relative to the current GOMGBK stock status, and social/economic conditions facing the fishery today.
2) Develop a process that would clearly identify new management objectives (across all stakeholders), to better understand socioeconomic status and concerns, and to identify potential management tools.

States nominated SC members following the Board meeting and membership was approved by the Board at its May 2026 meeting. Membership is provided in Appendix A. The SC met via webinar on June 8, August 31, and September 21, 2026. Over the course of these meetings, the SC reviewed management objective processes conducted for Atlantic menhaden and horseshoe crab as examples, types of objectives in structured decision-making processes, existing American lobster management objectives, and made recommendations on a MOP for American lobster. Types of objectives reviewed included fundamental objectives, means objectives, and operational objectives. Fundamental objectives are the high-level ends to achieve through management and describe what stakeholders intrinsically value. Means objectives describe the means by which fundamental objectives will be achieved. Operational objectives represent conversion of the above

conceptual objectives (fundamental and means objectives) to measurable objectives by pairing them with performance metrics that measure how well an action performs with respect to achieving an objective.

The SC reviewed existing American lobster management objectives, focusing on perpetual, high level objectives in Amendment 3 not inclusive of more tactical/reactive objectives established in later management documents. The SC identified gaps in these objectives including (but not necessarily inclusive of) socioeconomic and economic vision for the fishery, international relationships, fishery effort levels and controls, and spatial management measure consistency. The SC recommended a MOP start fresh with a blank slate for objectives but noted this preliminary recommendation should be evaluated with professional facilitators during planning of the process. Ultimately, the SC made recommendations for conducting a MOP that are described in the following report.

2 Process Goal

The overall goal of the MOP is identification of comprehensive objectives with broad support across stakeholders for future management of the GOM/GBK fishery, both at a local and stockwide spatial scale. Objectives should include those that describe the desired vision for the resource and industry (fundamental objectives) and those that guide management in achieving this vision (means objectives). Objectives should be categorized as those that are measurable with existing information and those that need new information collected to be measurable in the future, with the guidance of subject matter experts participating in the process. The objectives would be provided in a report to the Board at the conclusion of the process.

The Board may consider the adoption of new management objectives through an Amendment to the FMP. These objectives would provide a foundation for future management of the GOM/GBK lobster fishery and allow for the identification of appropriate management tools and actions. For evaluation of management tools and actions, performance metrics will need to be identified for operationalizing the conceptual objectives identified during the MOP to measure achievement of these objectives. Simulation analyses can then be used to test various agreed-upon management tools and determine what strategies are most effective for achieving desired fishery objectives with explicit consideration of the trade-offs and risks associated with these strategies.

3 Process Recommendations

3.1 Structure and Goal of Stakeholder Meetings

The SC recommends that the MOP be carried out through a series of structured stakeholder meetings, sequentially, at three different spatial scales. The purpose of conducting meetings at various scales is to gather stakeholder input from all factions of the GOM/GBK fishery, recognizing that the operation, values, and needs of the fishery vary widely across different geographic areas. The SC identified three spatial scales, defined as follows:

1. Tier 1: Local scale
2. Tier 2: LCMA scale
3. Tier 3: Stockwide scale

Tier 1 meetings would be conducted first and would aim to focus on smaller geographic areas within the larger GOM/GBK fishery. The SC recommended 14 meetings to fully capture variation in the fishery (Table 1). Meetings would be conducted in each of the Maine lobster fishery management zones, as well as local meetings in New Hampshire and Massachusetts. One meeting would be dedicated to those fishing in the GOM/GBK fishery from Rhode Island and Connecticut. At the Tier 1 level, the SC recommends that participation be open to interested stakeholders, such as lobster fishers, dealers, and associated businesses.

Tier 2 meetings would be conducted after Tier 1 meetings are completed, to allow for the input from the Tier 1 meetings to be compiled and presented at the Tier 2 meetings. The SC recommends three Tier 2 meetings, one each for LCMA 1, LCMA 3, and LCMA OCC. It is recommended that these meetings be limited to a smaller number of participants to allow for more focused discussion, development, and refinement of management objectives.

A single Tier 3 meeting would be conducted following completion of the Tier 2 meetings, which would focus on identifying management objectives at the stockwide level. Again, the SC recommended this meeting be limited to a smaller number of participants representative of the variation across the GOM/GBK fishery. Tier 2 and 3 meetings should still be considered public, with non-participants allowed to listen to discussions and with time provided for public comments.

The overarching goal of each stakeholder meeting, regardless of scale, would be to produce a list of management objectives that is ranked or prioritized by the group of participants. The process for developing this list would likely be different for each tier, as described later in the report, and the sequential nature of the meetings would allow for Tier 2 and Tier 3 meetings to build on the outcomes from the previous tier. For example, Tier 2 and 3 meetings could start by reviewing the lists of objectives from the previous tier, then recommending changes to improve clarity and remove redundancies. It is possible that some management objectives put forward at the Tier 1 meetings would be more locally relevant; the Tier 2 and 3 meetings could also sort these objectives into stockwide versus local objectives. The SC also discussed that it could be useful to identify “fundamental” versus means “objectives” at the two higher Tiers.

After management objectives are developed from the Tier 3 meeting, the SC recommends that additional meetings be held at the Tier 1 level to report back on the outcomes from the Tier 2 and 3 meetings and receive feedback on stockwide objectives, but condensed to fewer meetings. The SC suggested meetings by statistical area level for LCMA 1, and one meeting each for LCMA 3 and OCC objectives. Feedback provided at these meetings would be provided for the Board’s consideration but would not alter the outcomes of the Tier 2 and 3 meetings.

Table 1. Proposed Meeting Structure

Tier 1	Tier 2	Tier 3	Tier 1 Loopback
ME Zone A ME Zone B ME Zone C ME Zone D ME Zone E ME Zone F ME Zone G NH LCMA 1 MA OCC MA LCMA 1 North MA LCMA 1 South LCMA 3 – Location 1 LCMA 3 – Location 2	LCMA 1 LCMA 3 LCMA OCC	GOM/GBK Stock	LCMA 1 – SA 511 LCMA 1 – SA 512 LCMA 1 – SA 513 LCMA 1 – SA 514 LCMA 3 LCMA OCC

3.2 Meeting Participants and Roles

When considering who would be the target participants in the MOP, the SC agrees that the process should include broad representation of the GOM/GBK lobster fishery and related industry stakeholders. Stakeholders would include not only harvesters, but also dealers, processors, shoreside support, and related businesses with a vested interest in the fishery. The SC noted the MOP should include a diversity of age groups, but that it is especially important to get input from younger and fully active harvesters that will be continuing to participate in the lobster fishery into the future. The SC also noted that the MOP should seek perspectives from various fishery interests, such as owner/operator fishermen, the larger corporate fleet, different geographic areas, Jonah crab harvesters, etc.

The SC recommends that the Tier 1 meetings should provide an opportunity for any fishery stakeholder to participate in identifying and ranking objectives. Thus, these would be considered open meetings where participation is not limited to select individuals. For the Tier 2 and 3 meetings, the SC agreed that the meeting participants should be limited to a subset of stakeholders that would be selected to represent the various fishery interests. It was noted that limiting the group to 10-15 people is more effective for working meetings.

For the Tier 2 and 3 meetings, the SC suggests that the participants should be selected by their peers and the groups they represent as much as possible, as opposed to being selected by managers or the SC through an application process. In Maine, zone council members are elected, and thus may be good representatives of their local fisheries, but not all areas have similar elected roles. The SC discussed that Tier 2 and 3 participants could be identified by the Tier 1 participants. For example, one person from each Tier 1 meeting could be nominated to represent that group at the Tier 2 meeting level to represent views from others in their local area. Industry groups could also nominate individuals to participate in Tier 2 and 3 meetings. The SC does not recommend that

LCMT members become the default participants for Tier 2 meetings because they are selected by states and may not represent all areas within the LCMA. However, the SC noted it is likely that LMCT members will be involved because they are generally more familiar and engaged in management discussions. The SC recommends the participants in the Tier 3 meeting fully represent the diversity within the GOM/GBK fishery seen in the Tier 1 level.

The SC agrees that if participants are selected by their peers for the Tier 2 and 3 meetings, it would be beneficial to develop a participant agreement for the selected individuals. The purpose of the agreement would be to ensure the participants accept their role and responsibilities for these meetings, make a commitment to fully engage, and acknowledge that participating may require some in-kind contribution in terms of forgone fishing time.

Regarding the role of managers and technical staff in the MOP, the SC agrees that they should attend the Tier 1 meetings in an informational capacity. Their role would be to provide background and contextual information when needed, but not to provide personal views on the management objectives being discussed. The SC noted that subject matter experts outside those involved in traditional stock assessment and management processes (i.e., economists, social scientists) will need to be recruited and involved in the process to provide guidance on available information content to address objectives. The SC sees there being more of a role for managers during the Tier 2 and 3 meetings, where it may be beneficial for managers to participate in helping identify feasibility, conflicting ideas, challenges, etc. associated with various management objectives.

While the MOP would be addressing management objectives for the US lobster fishery, the SC recommends that the Canadian lobster industry and fishery management bodies be made aware that the process is occurring. Canadian counterparts should be provided notice of meetings or summaries of meeting outcomes so they can stay informed on how discussions in the US are progressing and any potential changes that may impact Canadian fisheries in the future.

3.3 Meeting Timing and Locations

When considering the timing and location of stakeholder meetings, the SC made several general recommendations but noted that it would be beneficial to get input from the facilitator and industry members before finalizing any meeting details.

First, the SC recommends that the Tier 1 meetings be held at local state agency or industry association facilities to reduce costs, but that the Tier 2 and 3 meetings could be held at “neutral” locations such as hotel meeting spaces. When selecting meeting locations, geographic accessibility for the participants should be prioritized.

The timing of meetings should also consider input from the facilitator and stakeholder participants. Accessibility for participants should again be prioritized, with meeting dates and times selected to minimize participants’ time away from fishing or other jobs. To maximize stakeholders’ ability to participate in the meetings, they should be scheduled at least three months in advance, but ideally four to six months in advance.

The SC suggested durations for the different Tiers of meetings but noted that these could change depending on input from the facilitator. Tier 1 meetings would likely be scheduled for several hours

to a half day. Tier 2 meetings may require two days, and Tier 3 meetings may require two to three days.

The SC recommends holding virtual sessions before the in-person meetings occur, during which participants would become familiar with the meeting goals, process, and expectations. This would allow for in-person meeting time to focus on productive discussions.

3.4 Facilitation Needs

The SC strongly recommends that a professional third-party facilitator or facilitators be contracted to conduct meetings and help design the MOP process. A third-party facilitator would provide a neutral environment and effective conduct of the meetings to achieve objectives. The SC recommends contracting with a team of two facilitators as opposed to one individual to balance personal dynamics and manage large plenary or breakout groups at meetings.

It is recommended that the responsibilities of the facilitator(s) would include:

- Development of outreach materials and presentations to inform the public about the MOP purpose and objectives and pre-meeting information for participants
- Development of meeting format and approach for identifying new management objectives and incorporating existing management objectives into the process
- Facilitation of all stakeholder meetings. The SC acknowledges the cost of facilitation for all meetings but believes this is critical to the success of the MOP.
- Development and presentation of a final report on the MOP to the Board

Ideally, the facilitator(s) for this MOP would have the following qualifications:

- Experience with structured decision making and/or consensus-based decision making
- Experience in the realm of fisheries management
- Knowledge of the diversity of the lobster industry

The recommended process for selecting and hiring a facilitator would be to develop and release a request for proposals (RFP). The RFP could be developed using information from this report. The RFP should be sent in a general press release and directly to known facilitation groups. The SC would be responsible for developing criteria and evaluating the received proposals. Based on these evaluations a proposal would be selected.

To better understand and evaluate costs, the SC noted that it may be helpful to request that proposals include cost estimates for two scenarios: one including the facilitation of all three tiers of stakeholder meetings, and one with facilitation of Tier 2 and 3 only.

3.5 Outreach and Preparation for Meetings

The SC discussed what types of outreach and preparation should be conducted before beginning the MOP. As a first step, and as early as possible after a decision is made to pursue the MOP, the SC recommends that general outreach be conducted with the goal of raising awareness among lobster fishery stakeholders about the MOP. Outreach efforts would aim to inform all industry stakeholders about the process the Board and states are planning to undertake, the approximate

timeline, how people can participate, and expected outcomes. Providing ample notice about the MOP will allow the greatest opportunity for stakeholders to participate in meetings and contribute to the MOP.

Outreach should be a collaborative effort between ASMFC, NOAA, state agencies, and industry associations. All parties should take responsibility for informing their respective stakeholders and encouraging participation. Outreach could occur via webinar sessions, presentations at management and industry meetings, and press releases.

Leading up to Tier 1 meetings, a notice should be provided to target participants to inform them about the upcoming stakeholder meeting, the meeting objectives, and the expectations of participants. Once participants have been determined for the Tier 2 and 3 meetings, the SC recommends holding educational webinars for selected participants to go over the objectives and goals of the workshop, expectations of participants, review of existing lobster management objectives, some general structured decision-making terminology (e.g., fundamental objectives, means objectives, performance metrics), and the expected outcomes of the process and how it will be used to inform future management. The session would also allow participants to ask questions about the process in advance of the meetings. The SC recommends that attending the educational webinar or viewing a recording, as well as reviewing background materials, should be required as a condition of participation in the Tier 2 and 3. This could be included in the participant agreement described previously.

4 Additional Considerations

Through the course of the SC meetings, several topics were raised that should be considered by the Board and facilitators if the Board decides to proceed with an MOP:

- ***Professional facilitators***: The SC does not believe elicitation of stakeholder input will be as effective if meeting leaders are not trained in facilitation and strongly recommends professional facilitators for meetings at all spatial levels despite the trade-off of high costs.
- ***Avoid surveys***: SC members described industry burnout with surveys eliciting feedback and recommend survey use in the MOP be minimized or avoided, if possible. The SC recommended participation at local meetings be open to all stakeholders to provide equal opportunity for providing input on management objectives.
- ***Decision processes***: Some SC members did not favor use of the terminology “consensus” in the decision-making process. There is a belief true consensus is unlikely to be reached in many situations and often only represents a majority opinion without acknowledgment of the minority opinion. The SC favored ranking or voting processes as more transparent representation of stakeholder input and characterization of support.
- ***Stakeholder engagement***: SC members suggested stakeholder engagement may suffer without clear communication in advance of how the MOP and its outcomes may affect the industry in the future. The industry tends to engage more readily with management actions that present a pending, tangible impact to the industry.
- ***Process conflicts***: The SC identified at least two major processes including overlapping participants that pose potential conflicts with the proposed MOP. The next benchmark

stock assessment is scheduled to begin in 2028 and conclude in 2030. Additionally, the ongoing Atlantic Large Whales Take Reduction Team process is expected to meet for deliberations on take reduction measures affecting the lobster fishery in late 2026 and 2027.

5 Cost Estimation

The SC considered the potential costs associated with an MOP and attempted to estimate total costs based on the recommendations developed in this report. However, the SC acknowledges the possibility for higher realized costs and recommends the Board account for this by identifying a contingency fund. Major direct costs anticipated for the process are professional facilitator fees, meeting space costs, travel reimbursements, and food and beverage for meeting participants. Indirect costs not included in cost estimates include staff salary (Commission, state and federal resource agencies).

The estimated meeting costs (space and travel) are $112,859 (Table 2). Meeting costs are estimated based on average FY 2027 Federal per diem rates for Northeast locations. States are confident that no-cost meeting spaces can be secured for Tier 1 and Tier 1 loopback meetings, so meeting space costs (inclusive of meeting beverage service) would only pertain to Tier 2 and Tier 3 meetings. The SC recommended food and beverage be provided to participants during Tier 1 and Tier 1 loopback meetings. The estimated cost for professional facilitators is $110,400 and includes 552 total work hours (Table 3). Average hourly rates for a professional facilitator were estimated at $200 based on proposals submitted for other recent facilitation-based RFPs in Commission and Council activities.

Table 2. Estimated meeting costs for the lobster MOP.

Meetings	# Reimbursed Participants per Meeting	# Reimbursed Drivers	# Reimbursed Fliers	# Meetings	#Days per Meeting	Travel Reimbursements	Meeting Space Costs	Food and Beverage Costs	Total Costs
Tier 1	3	0	3	13	1	$15,733	$0	$1,300	$17,033
Tier 2	23	20	3	3	2	$45,844	$12,000	$0	$57,844
Tier 3	28	25	3	1	3	$25,118	$6,750	$0	$31,868
Tier 1 Loopback	2	0	2	6	1	$5,514	$0	$600	$6,114
									$112,859

*Assumes no state agency staff travel costs.
**Travel costs assume multiple meetings conducted during each travel event

Table 3. Estimated professional facilitator costs and proposed distribution of work hours according to example process timeline in Appendix B.

Task	Hours	# Facilitators	Spring 2027	Summer 2027	Fall 2027	Winter 2027/2028	Spring 2028	Summer 2028	Fall 2028	Winter 2028/2029	Costs
1. Process planning	24	2	24								$ 9,600
2. Outreach	12	2	12								$ 4,800
3. Local meeting planning	12	2		12							$ 4,800
4. Local meeting facilitation	52	2			52						$ 20,800
5. Regional meeting planning	12	2				12					$ 4,800
6. Regional meeting facilitation	48	2				48					$ 19,200
7. Stockwide meeting planning	12	2					12				$ 4,800
8. Stockwide meeting facilitation	24	2					24				$ 9,600
9. Local loopback meeting planning	12	2						12			$ 4,800
10. Local loopback meeting facilitation	24	1							24		$ 4,800
11. Documentation	48	2				16	8	8		16	$ 19,200
12. Dissemination	8	1								8	$ 1,600
Totals	544		36	12	52	76	44	20	24	24	$ 108,800

6 Next Steps

If the Board decides to move forward with an MOP considering the recommendations in this report, the immediate next step would be to search for and identify possible funding sources for the MOP. If a grant application is required, the SC could assist with developing proposals for funding opportunities.

Once funding has been identified, the next step would be to develop an RFP to identify possible contractors for the facilitation of the process.

An example timeline for the recommended process is provided in Appendix B, which is meant to provide a sense of the time the full process will require. However, it is likely the schedule would be adjusted with input from the selected facilitator.

Appendix A. Steering Committee Membership

Name	Role	Affiliation
Carl Wilson	American Lobster Management Board (ME)	ME DMR
Renee Zobel	American Lobster Management Board (NH)	NHFG
Bob Glenn	American Lobster Management Board (MA)	MA DMF
Jason McNamee	American Lobster Management Board (RI)	RI DEM
Kathleen Reardon	American Lobster Technical Committee (ME)	ME DMR
Tracy Pugh	American Lobster Technical Committee (MA)	MA DMF
Burton Shank	American Lobster Technical Committee (NMFS)	NMFS NEFSC
Todd Guilfoos	Committee on Economics and Social Sciences	URI
John Drouin	ME Zone A Industry	New England Fishermen's Stewardship Association
Richard Howland	ME Zones B, C, D Industry	Maine Lobstermen’s Association
John Jordan Jr.	ME Zones E, F, G Industry	Maine Lobster Industry
Michael Flanigan	NH LMA 1 Industry	Seaview Lobster Company
Beth Casoni	MA LMA 1 Industry	Massachusetts Lobstermen’s Association
Brendan Adams	MA Outer Cape Cod Industry	Outer Cape Lobstermen’s Association
Hank Soule	Offshore LMA 3 Industry	Atlantic Offshore Lobstermen’s Association
Jeff Kipp	ASMFC Science Staff	ASMFC
Caitlin Starks	ASMFC Policy Staff	ASMFC

Appendix B. Example Process Timeline

November 2026	Develop RFP for Facilitator
December 2026	Release RFP
January 2027	Review facilitator proposals
February 2027	Hire facilitator(s)
February-March 2027	Initial meetings with facilitator(s) to plan out the process
April 2027	Begin initial outreach (presentations at board meetings, industry meetings, state councils, etc.)
June 2027	Identify local meetings and conduct outreach
July 2027	Schedule Tier 1 meetings
October 2027	Educational sessions for participants
November-December 2027	Conduct Tier 1 meetings
December 2027	Develop meeting summaries from Tier 1 meetings
December 2027	Select participants for Tier 2 meetings
December 2027	Schedule Tier 2 meetings
February 2028	Conduct Tier 2 meetings
February 2028	Develop meeting summaries from Tier 2 meetings
March 2028	Select participants for Tier 3 meeting
March 2028	Schedule Tier 3 meeting
May 2028	Conduct Tier 3 meeting
May 2028	Develop meeting summary from Tier 3 meeting
June 2028	Local loopback meeting planning
November 2028	Conduct local loopback meetings
December 2029	Develop final report
February 2029	Present results to American Lobster Management Board

Atlantic States Marine Fisheries Commission

American Lobster Management Objectives Process Steering Committee Meeting 1 Summary

Monday, June 8, 2026
2:00 - 5:00 p.m.

The Americal Lobster Management Objectives Process (MOP) Steering Committee (SC) met for its first meeting to begin addressing the items tasked by the American Lobster Management Board in its February 2026 motion:

> *Move to form a Steering Committee (SC) to:*
> *1. Review existing management objectives, as outlined in Amendment #3 and subsequent addenda, relative to the current GOMGBK stock status, and social/economic conditions facing the fishery today.*
> *2. Develop a process that would clearly identify new management objectives (across all stakeholders), to better understand socioeconomic status and concerns, and to identify potential management tools.*
> *Representation on the SC shall follow recommendations outlined in the January 20, 2026, Technical Committee memo. The SC will recommend a process for both tasks for the August 2026 Lobster Management Board.*

The meeting discussions are summarized below in the order of the agenda:

1. Welcome & Introductions

To start the meeting the members of the SC introduced themselves to the group. Staff provided guidelines for participating in the virtual meeting. All SC members were in attendance for the meeting, along with several other attendees (Appendix 1).

2. Steering Committee Purpose and Expected Products

Jeff Kipp provided an overview of the purpose and objectives of the SC, as outlined in the Board motion, along with expected products to be developed for the Board. The presentation also described the typical process for a Management Strategy Evaluation (MSE), which includes three general steps: 1) definition of management objectives; 2) conducting an MSE to determine relative performance of possible management strategies; 3) possibility for subsequent iterative process(es) to refine objectives. It was emphasized that the scope of work for this SC is to recommend a process for the completion of step 1, but not to provide recommendations or perform work related to the subsequent steps. The SC tasks are to review the existing management objectives, as outlined in Amendment 3 to the Lobster Fishery Management Plan (FMP), and to develop a process that would clearly identify new management objectives. It was clarified that this process is focused on the Gulf of Maine/Georges Bank (GOMGBK) stock region and will not include the Southern New England region.

The SC discussed that the present task will not address the identification of management strategies, but the SC may recommend the timing during the MOP for discussing possible management approaches and getting stakeholder input.

3. Review Existing American Lobster Fishery Management Objectives

Caitlin Starks presented the management goal and objectives currently in Amendment 3 to the FMP. The SC discussed whether the recommended MOP should aim for the same level of specificity of these objectives. It was noted that objectives could be classified as "conceptual" or "means" objectives, with conceptual objectives being overarching objectives and means objectives being more specific and quantifiable statements of how conceptual objectives will be achieved. It was agreed that examples could be provided during the next meeting to provide the group with a better sense of the goal for this process, but that the SC should strive to address both of these objective types through this process to streamline a potential MSE later on. Jason McNamee noted it could be beneficial to separate objectives that can be quantifiably tested in an MSE and those that cannot. Bob Glen noted that some of the existing objectives conflict, and there is a lack of socioeconomic context in existing objectives that would need to be addressed.

4. Review of Other Management Objectives Process Examples

Ecosystem Management Objectives Workshop (EMOW)

Shanna Madsen presented on the EMOW that was conducted for Atlantic Menhaden in 2015. This process included convening stakeholders to define management objectives and associated measures of performance. The stakeholders met for an in-person workshop and provided input on fundamental (i.e., conceptual) and means objectives, as well as the performance measures that should be used to evaluate whether the objectives are achieved by management strategies. She noted that there has not been a full MSE for menhaden, but the objectives developed were helpful for guiding management.

Lessons learned from this process that could be helpful for the SC to consider included:

- The group size should be limited to a number that a facilitator can manage in a workshop, but there needs to be representation of important groups and perspectives.
- It can be challenging for the group to understand the purpose and scope of the workshop and stay focused on that.
- In advance of the workshop, the facilitator met with the stakeholders specifically to clearly identify goals and expected outcomes of workshop, which was very helpful.
- Meeting in-person versus over webinar is critical.
- It was very valuable to establish a strong timeline for project milestones and deliverables.

Additional materials from the EMOW process and development will be shared with the SC for reference after the call.

Horseshoe Crab Management Objectives Workshop

Caitlin Starks presented on recent stakeholder engagement processes carried out by the Horseshoe Crab Management Board: 1) a management objectives workshop in July 2024, and 2) a longer engagement process from September 2025 to May 2026, which was focused on developing recommendations to revise the values-based components of the Adaptive Resource Management model to better align with current stakeholder values.

Lessons learned from this process that could be helpful for the SC to consider were:

- It was beneficial to have the participants, as part of the application to be involved, sign an agreement to commit to participation guidelines, including attending all meetings and reviewing all background materials.
- Third-party facilitators bring fresh perspectives and could build trust with stakeholders when they do not have historical involvement with fishery and associated biases.
- Meeting location(s) and timing should consider accessibility for all stakeholders and accommodate their availability as much as possible.
- Trade-offs between group size and depth of discussion must be considered and weighed based on the goals of the meeting. Larger groups are very difficult to bring to consensus.
- It was beneficial for the facilitator to meet with some participants in small groups or individually before the workshop to better understand their specific perspectives and concerns.
- Establishing clear meeting objectives and preparing the participants in advance for the discussions and goals of the workshop was critical to success.

It was noted that the format and structure of this process for lobster management objectives may be very different from the menhaden and horseshoe crab examples. The Lobster Technical Committee suggestion for this process was to start with a series of meetings at smaller localized scales (e.g., state management zones) to capture as much input as possible, then have meetings with smaller groups of representatives across larger areas to refine that input.

Jason McNamee noted that in the Atlantic herring MSE process, he observed that there was a lack of continuity in participants across meetings, which created challenges for merging different ideas that emerged from each meeting.

Several SC members noted that it would be important to get input and guidance from a facilitator on developing the framework for this process.

5. Discussion: Identifying gaps in existing management objectives given social and economic conditions facing the fishery today

The SC discussed the current management objectives and noted several gaps that are not addressed. Below are the main topic areas identified by the SC as current gaps in the objectives:

- Socioeconomic vision for the fishery, including an improved understanding of baseline, current, and ideal conditions, and differences at local scales.

- Economics of the fishery
- Understanding relationships between the US and Canadian fisheries and trade, and how this should be addressed in objectives
- Consideration of trade-offs between uniformity and flexibility in management measures across areas.
- Fishery effort, including mechanisms for controlling it and current levels
- Consideration of different spatial scales for management (i.e., smaller scales than stock or LCMA)
- Objectives around communities (e.g., thinking about how whole communities are impacted by management, considering fishery reliance, equity, stability, etc.)

The SC suggested that objectives could be categorized into groups based on the focus and what they are intended to achieve, such as effort, fishing mortality, economics, etc. The SC noted that it seems like there is a critical need for individuals with expertise in lobster trade (e.g., dealers, wholesalers, etc.) and an understanding of trade impacts and interactions with Canada to be part of this process. It was suggested that the SC could look into other examples of fishery management in the US where Canada is involved, such as Pacific halibut and northeast groundfish.

6. Discussion: How to incorporate existing management objectives into current management objectives process

The SC discussed possible approaches for incorporating the current management objectives into a process to identify new objectives for management. Two approaches were suggested, but it was noted there may be other options: 1) a "blank slate" approach where the current management objectives are not presented, and stakeholders provide new objectives, or 2) presenting the current management objectives as a starting point and discussing how they should be modified.

Several SC members supported the blank slate approach and felt that it would allow for more valuable input and fresh ideas. The SC generally agreed that it would prefer to determine the best approach with guidance from a facilitator. It was noted that the SC providing a facilitator with a vision of where we are and where we want to get to would help support a facilitator get us to our end goal.

One SC member suggested using the results of the recent industry survey in Maine to frame discussions. It was also noted that it seems like the timeframe for this process could overlap with the timeframe for the upcoming Atlantic Large Whale Take Reduction Team (ALWTRT) process, and that it may create challenges if these two processes are happing simultaneously.

7. Next Steps and Other Business

The SC discussed agenda items for next meeting, including a deeper dive into the difference between fundamental and means objectives with examples, and how to involve LCMTs in this process. Several SC members felt strongly that the LCMTs need to be reconstituted and involved early on in the MOP.

The SC also reviewed a draft list of questions to guide the development of its recommendations (Appendix 2). These questions are meant to identify the information the SC should gather and provide to the Board in its report. The group added additional questions to the list related to appropriate meeting duration for participant learning curves, LCMT involvement, participant preparation, and ways to get input before meetings.

Before the next meeting, ASMFC staff will provide draft meeting minutes to the SC, create a Sharefile account for sharing meeting materials, and poll for the next meeting date.

Atlantic States Marine Fisheries Commission

American Lobster Management Objectives Process Steering Committee Meeting 2 Summary

Monday, August 31, 2026
2:00 - 5:00 p.m.

The Americal Lobster Management Objectives Process (MOP) Steering Committee (SC) met for its second meeting to address the items tasked by the American Lobster Management Board in its February 2026. The Board motion was to form a Steering Committee to review existing management objectives relative to the current GOMGBK stock status, and social/economic conditions facing the fishery today, and to develop a process that would clearly identify new management objectives (across all stakeholders) to better understand socioeconomic status and concerns, and to identify potential management tools. The meeting discussions are summarized below in the order of the agenda:

1. Welcome & Introductions

To start the meeting the members of the SC introduced themselves to the group. Staff provided guidelines for participating in the virtual meeting. Most SC members were in attendance for the meeting, along with several other attendees (Appendix 1).

2. Understanding Fundamental Versus Means Objectives

As requested during the first SC meeting, Jeff Kipp provided an overview of the differences between two types of objectives used in structured decision making: fundamental and means objectives. Fundamental objectives are those that reflect the ultimate ends we are trying to achieve. Means objectives address the possible ways of achieving fundamental objectives. It is possible to have many layers of means objectives addressing a fundamental objective, and it is possible for one means objective to serve multiple fundamental objectives. This information will be important to provide to meeting participants to develop management objectives for the lobster fishery.

3. Review Strawman Recommendations for Management Objectives Process (MOP)

Caitlin Starks reviewed a document developed by ASMFC staff containing a set of strawman recommendations for the SC's consideration to facilitate discussion and development of MOP recommendations. The strawman recommendations expanded on the list of questions to guide the development of recommendations developed for the previous meeting. The document included suggestions related to the proposed meeting spatial scale and format, meeting objectives, stakeholder representation, meeting participants and roles, facilitator role and expertise, and outreach and preparation for meetings. These served as a starting point for the SC to further refine recommendations to the Lobster Board.

4. Refine recommendations for MOP

SC members discussed their vision and recommendations for an effective MOP for the GOMGBK lobster fishery. These will be incorporated into the final report. Several important

takeaways from this discussion that will impact the MOP recommendations are summarized here:

- The SC recommended three tiers of sequential meetings: Tier 1: Local level meetings, Tier 2: LCMA-level meetings, and Tier 3: One stock level meeting. It was agreed that there should be a follow-up round of meetings at the local level to review the resulting management objective recommendations.
- The SC emphasized the importance of professional, third-party facilitation for all of the stakeholder meetings to provide a neutral environment and effective conduct of the meetings to achieve objectives. The group acknowledged the cost but agreed that this is critical to the success of the MOP.
- While the group recognized the challenges associated with large meeting sizes, the SC generally agreed that the Tier 1 meetings should be open to anyone who wishes to participate. Tier 2 and 3 meetings could be limited to a smaller group of participants nominated by the stakeholders.
- When framing meeting objectives with stakeholders, industry participants on the SC advised that the term "consensus" should be avoided because of its negative association with previous management processes.
- The SC agreed that it will be critical to clearly communicate the purpose of this process, meeting objectives, and how the outcomes will be used by management to participants in advance of stakeholder meetings. Pre-process outreach webinars are recommended.
- The SC discussed the role that the Lobster Conservation Management Teams (LCMTs) could play in the MOP. They suggested that LCMT members will participate in the MOP, but that the LCMT bodies do not need to serve a specific role, and that it would be more appropriate for LCMTs to advise during the consideration of management measures, which could follow the MOP.
- The SC previously considered whether a survey could be used to gather information from full breadth of stakeholders. However, industry participants on the SC advised that stakeholders have been asked to participate in too many surveys in recent years and would be unlikely to respond to another.

5. Next Steps

The SC discussed that it should address the following items at the next meeting:

- Revisit the strawman document to finish discussions on remaining items
- Review a draft outline of the final report prepared by ASMFC staff and assign writing tasks to SC members
- Review data from previous facilitation project proposals and state meeting costs to develop cost estimates for the recommended MOP

The next meeting will be scheduled for Monday, September 21, from 2-5 pm.

Atlantic States Marine Fisheries Commission

Appendix 1.

August 31, 2026 Meeting Attendance

Steering Committee:
Beth Casoni
Bob Glenn
Brendan Adams
Carl Wilson
Hank Soule
Jason McNamee
Jeff Kipp
John Drouin
John Jordan
Kathleen Reardon
Renee Zobel
Richard Howland
Todd Guilfoos
Tracy Pugh

Additional Attendees:
Allison Murphy
Lorraine Morris
Raymond Kane

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **American Lobster Management Board**

FROM: **American Lobster Technical Committee**

DATE: **September 16, 2026**

SUBJECT: **American Lobster Data Update through 2025**

An annual Data Update process between American lobster stock assessments was recommended during the 2020 stock assessment to more closely monitor changes in stock abundance. The objective of this process is to present information—including any potentially concerning trends—that could support additional research or consideration of changes to management. Data sets updated during this process are generally those that indicate exploitable lobster stock abundance conditions expected in subsequent years and include:

- Young-of-year (YOY) settlement indicators
- Trawl survey indicators, including recruit abundance (71-80 mm carapace length lobsters) and survey encounter rate
- Ventless trap survey (VTS) sex-specific abundance indices (53 mm+ carapace length lobsters)
- Combined recruit abundance (71-80 mm carapace length lobsters) from Gulf of Maine (GOM) state spring and fall trawl surveys and VTS

VTS abundance indices are presented here in addition to several abundance indicators used in the stock assessment. During its October 2025 meeting, the American Lobster Management Board tasked the Technical Committee (TC) to include a combined recruit index for the GOM/GBK stock, similar to what was used in Addendum XXVII, as a part of future Data Updates to the Board. The combined recruit index presented in this update is consistent with the recruit index established in Addendum XXVII and averages relative recruit abundance across: 1) a combined Maine/New Hampshire and Massachusetts spring trawl survey three-year running average index, 2) a combined Maine/New Hampshire and Massachusetts fall trawl survey three-year running average index, and 3) a model-based VTS three-year running average index. As determined when developing the index for Addendum XXVII, individual survey indices are scaled to their 2017 values so indices are on a consistent scale before combining into the combined recruit index. All data are from the Gulf of Maine sub-stock, so this index is presented with the Gulf of Maine sub-stock indicators.

For all indicators other than the combined recruit index, an updated status based on the mean value over the most recent five years (2021-2025) is provided for each time series, for comparison to the five-year means provided at the end of the most recent stock assessment (2019-2023). Indicator status (negative, neutral, or positive – see table below) was determined relative to the percentiles of the stock assessment time series excluding the final five years used to determine status in the stock assessment (i.e., 1st year of the data set through 2018). Annual data points are presented in figures as shapes that indicate the status of the annual data point. A dashed red vertical line separates new data added in the current Data Update from data previously presented. A solid red horizontal line indicates the current five-year mean used as status for comparison to the assessment status. This line is broken where

missing data points occur during the five-year period. See Section 5 in the 2025 stock assessment report for more detail on indicator calculations.

Indicator	< 25th percentile	Between 25th and 75th percentile	> 75th percentile
YOY settlement (larval or YOY)	Negative	Neutral	Positive
Trawl survey recruit abundance	Negative	Neutral	Positive
Trawl survey encounter rate	Negative	Neutral	Positive
Ventless trap survey abundance	Negative	Neutral	Positive

For the combined recruit index, the annual index values represent proportional change of the running three-year average from the peak three-year average (2015-2017). For example, the 2025 index value represents proportional change of the 2023-2025 average from the 2015-2017 average. The proportional changes in the combined index are expected to approximate comparable changes in overall future abundance of the stock. For more details on the combined recruit index calculations, see Addendum XXVII.

Note that updated five-year means during the 2025 assessment for several trawl survey-based indicators remain impacted by COVID-19 survey terminations. Updated five-year means during the 2025 assessment and updated in this Data Update are also impacted by additional (unrelated to COVID-19) survey terminations for the NEFSC trawl survey in spring 2023 and fall 2025 and the CT trawl survey in spring and fall 2025. See the appendix for details on data changes throughout previous Data Update. Below are the results of updates by sub-stock.

Gulf of Maine (GOM)

Overall, Gulf of Maine indicators show a mix of conditions that are primarily neutral with marginal changes and variability since the stock assessment. Some brief improvements observed in the previous update reverted with this update, while the combined recruit index increased above the value in the terminal year of the stock assessment (2023).

- YOY conditions are unchanged since the stock assessment (Table 1 and Figure 1).
    - All updated five-year means are neutral, including ME statistical area (SA) 512 which had briefly improved to positive during last year's update.
    - All available annual ME indicators declined in 2025.
    - Delays to the start of the ME survey in 2025 followed by poor weather and vessel and staffing issues led to reduced sampling and no samples collected from SA 511.
    - It is important to note that changes in YOY indicators are not expected to be detected in the recruit indicators for several years.
- Trawl survey recruit abundance indicators are unchanged since the stock assessment (Table 2 and Figure 2).
    - Three of the five-year means remain neutral and three remain positive.
    - Three annual indicators in 2025 were the highest since at least 2019 (NEFSC spring and MA spring and fall).
    - Five of six annual values are not available for 2020 due to COVID-19 sampling restrictions and the NEFSC survey value is not available for spring 2023 due to vessel issues or fall 2025 due to a lapse in appropriations.

- Trawl survey encounter rates show marginal deterioration, with one of six indicators changing to a poorer condition since the stock assessment (Table 3 and Figure 3).
    - One of the inshore updated five-year means changed from neutral to negative since the stock assessment. Both offshore means remain positive while the other three, all inshore, remain neutral.
    - The MA spring survey values have been negative in three of the four last years, the first negative observations across indicators since 2008.
    - Note that the ME/NH survey encounter rates (spring and fall) are still high within a narrow range relative to other surveys.
    - Five of six annual values are not available for 2020 due to COVID-19 sampling restrictions and the NEFSC survey value is not available for spring 2023 due to vessel issues and fall 2025 due to a lapse in appropriations.
- Ventless trap survey indicators are unchanged since the stock assessment (Table 4 and Figure 4).
    - Four updated five-year means are negative and four are neutral, including males in SA 513 which had briefly improved to positive during last year's update.
    - Statuses are variable across the stock with no clear latitudinal pattern.
    - The indicators for SA 513 have been more stable through time than the indicators for the other three areas.
- The combined recruit index increased slightly from lower values the previous two years (Figure 5).
    - The 2025 combined index value (2023-2025 average) is 0.61 which represents a 39% decline from the index peak in 2017 (2015-2017 average abundance of 1.00).
    - All individual indices contributing to the combined index show similar patterns across years.

Georges Bank (GBK)

Overall, Georges Bank indicators show a mix of positive and neutral conditions that are unchanged since the stock assessment. Note that there are no YOY or VTS indicators for this sub-stock area.

- Trawl survey recruit abundance indicators are unchanged since the stock assessment (Table 5 and Figure 6).
    - Both updated five-year means remain neutral.
    - Both indicators have been increasing since 2021.
    - No values are available for 2020 due to COVID-19 sampling restrictions, the spring value is not available for 2023 due to vessel issues, and the fall value for 2025 is not available due to a lapse in appropriations.
- Trawl survey encounter rates are unchanged since the stock assessment (Table 6 and Figure 7).
    - Both of the updated means remain positive.
    - The terminal annual values are at time series highs for both seasons (2025 in spring and 2024 in fall).
    - No values are available for 2020 due to COVID-19 sampling restrictions, the spring value is not available for 2023 due to vessel issues, and the fall value for 2025 is not available due to a lapse in appropriations.

Southern New England (SNE)

Overall, Southern New England indicators show continued negative conditions since the stock assessment. There were slight but consistent increases across RI indicators in 2025. However, most updated indicators are at or near time series lows.

- YOY conditions are unchanged since the stock assessment (Table 7 and Figure 8).
    - Updated status for the five-year means both remain negative.
    - No YOY have been caught during the MA survey for the last eleven years.
- Trawl survey recruit abundance indicators are unchanged since the stock assessment (Table 8 and Figure 9).
    - Updated status for the five-year means all remain negative.
    - The MA survey observed no recruit lobsters throughout 2025.
    - Six of eight annual values are not available for 2020 due to COVID-19 sampling restrictions, the NEFSC survey value is not available for spring 2023 due to vessel issues and fall 2025 due to a lapse in appropriations, and neither season value is available for the CT survey in 2025 due to boat operation obstacles.
- Trawl survey encounter rates are unchanged since the stock assessment (Table 9 and Figure 10).
    - Updated status for the five-year means all remain negative.
    - Six of eight annual values are not available for 2020 due to COVID-19 sampling restrictions, the NEFSC survey value is not available for spring 2023 due to vessel issues and fall 2025 due to a lapse in appropriations, and neither season value is available for the CT survey in 2025 due to boat operation obstacles.
- Ventless trap survey indices show slight deterioration, with one of four indicators changing to a poorer condition since the stock assessment (Table 10 and Figure 11).
    - Updated status for one five-year mean deteriorated from neutral to negative, while three remain negative.
    - It is important to note that the ventless trap survey has only taken place during depleted stock conditions coinciding with an adverse environmental regime, so interannual variability can be misleading without the context of a longer time series encompassing varying stock conditions.

Tables and Figures

Table 1. GOM abundance indicators: YOY indices.

YOUNG-OF-YEAR INDICES					
Survey	*ME*				*MA*
	511	*512*	*513 East*	*513 West*	*514*
1981					
1982					
1983					
1984					
1985					
1986					
1987					
1988					
1989			1.64		
1990			0.77		
1991			1.54		
1992			1.30		
1993			0.45		
1994			1.61		
1995		0.02	0.66		0.91
1996		0.05	0.47		
1997		0.05	0.46		0.10
1998		0.00	0.14		0.03
1999		0.04	0.65		0.43
2000	0.00	0.10	0.13	0.17	0.07
2001	0.24	0.43	2.08	1.17	0.39
2002	0.13	0.29	1.38	0.85	1.00
2003	0.22	0.27	1.75	1.22	0.75
2004	0.18	0.36	1.75	0.67	1.02
2005	1.42	1.25	2.40	1.12	1.06
2006	0.49	1.06	1.57	1.08	0.45
2007	0.59	1.11	2.23	1.30	1.27
2008	0.32	0.59	1.27	1.10	0.33
2009	0.66	0.33	1.51	0.48	0.17
2010	0.16	0.64	1.25	0.63	0.44
2011	0.41	0.98	2.33	0.90	0.58
2012	0.44	0.62	1.27	0.30	0.08
2013	0.09	0.22	0.34	0.12	0.00
2014	0.16	0.47	1.04	0.42	0.11
2015	0.15	0.22	0.42	0.03	0.00
2016	0.13	0.21	0.42	0.14	0.08
2017	0.21	0.36	0.65	0.23	0.08
2018	0.27	0.34	0.62	0.22	0.03
2019	0.43	0.64	0.94	0.45	0.06
2020	0.29	0.51	1.06	0.33	0.19
2021	0.06	0.12	0.38	0.28	0.28
2022	0.13	0.59	0.71	0.42	0.11
2023	0.44	0.95	1.43	0.57	0.22
2019-2023 mean	0.27	0.56	0.90	0.41	0.17
2024	0.50	0.82	1.15	0.59	0.08
2025		0.36	0.15	0.13	0.08
2021-2025 mean	0.28	0.57	0.76	0.40	0.15
25th	0.16	0.18	0.51	0.23	0.08
median	0.22	0.34	1.26	0.63	0.33
75th	0.43	0.60	1.60	1.09	0.67

Figure 1. GOM abundance indicators: YOY indices.

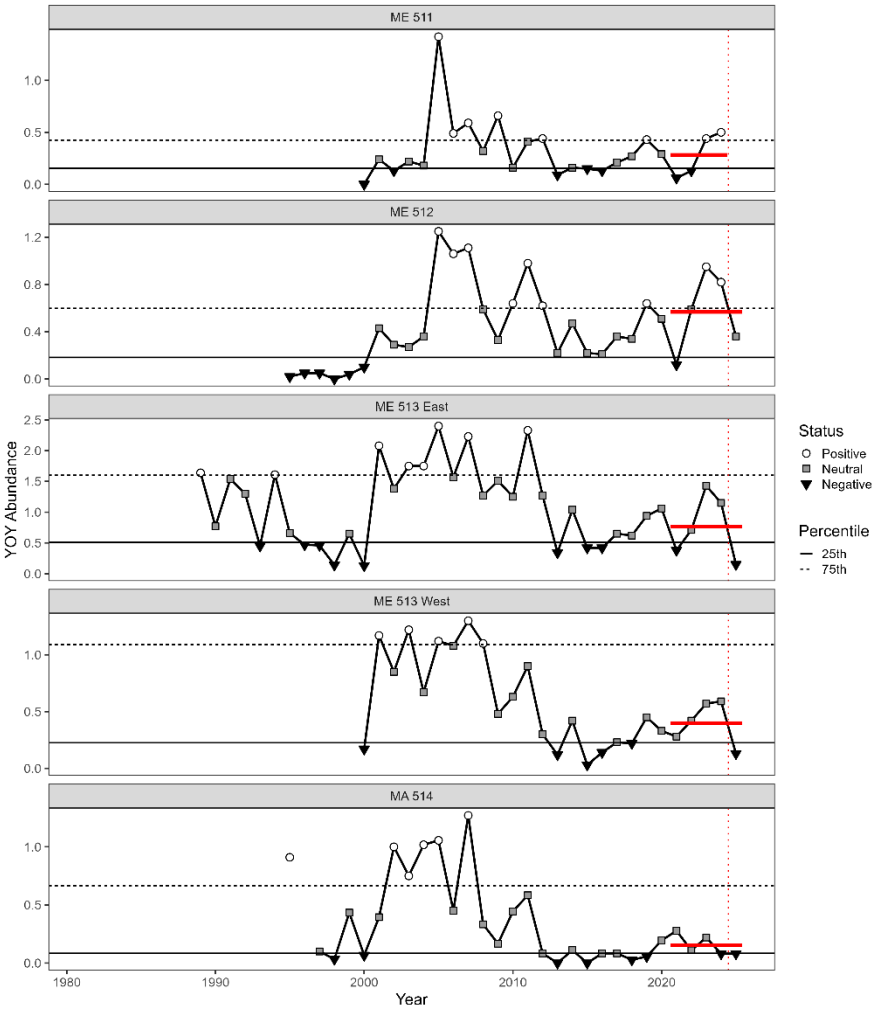


Table 2. GOM abundance indicators: trawl survey recruit abundance.

RECRUIT ABUNDANCE (SURVEY)						
Abundance of lobsters 71 - 80 mm CL (sexes combined)						
Survey	*NEFSC*		*ME/NH*		*MA 514*	
	Spring	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*
1981	0.17	0.23			6.38	4.84
1982	0.29	0.43			2.74	3.85
1983	0.31	2.57			1.76	9.76
1984	0.22	2.57			2.15	6.13
1985	0.16	1.42			4.48	9.60
1986	0.29	3.33			3.01	3.80
1987	0.78	0.59			2.47	1.16
1988	0.78	2.94			2.52	4.12
1989	0.52	2.56			4.48	7.51
1990	0.37	2.88			6.11	15.36
1991	0.64	1.45			2.73	7.55
1992	0.54	1.39			4.31	8.95
1993	0.39	1.98			5.12	3.19
1994	0.17	5.39			7.59	13.77
1995	1.50	3.73			4.54	12.12
1996	0.78	4.74			3.09	12.10
1997	2.07	3.85			4.59	6.46
1998	1.64	2.66			4.50	7.47
1999	1.51	3.11			4.29	8.73
2000	4.84	3.10		24.09	4.24	8.87
2001	1.09	1.55	9.28	17.81	4.32	1.58
2002	1.14	1.97	22.00	22.41	3.43	5.00
2003	1.45	0.78	10.65	18.32	1.96	0.66
2004	0.87	2.75	7.55	12.29	2.46	1.30
2005	0.35	0.95	18.51	25.90	4.35	2.11
2006	2.23	1.29	18.07	18.30	6.09	5.30
2007	1.66	0.65	15.91	16.82	0.77	1.61
2008	1.01	2.47	17.88	31.61	2.54	6.12
2009	2.22	2.25	24.72	32.67	3.19	8.88
2010	1.38	2.46	17.66	37.35	2.22	9.39
2011	4.67	5.43	39.25	46.09	5.24	15.04
2012	5.12	3.10	36.55	37.12	3.03	11.30
2013	4.89	8.17	34.50	37.86	4.83	12.20
2014	5.20	9.70	50.79	41.95	3.35	7.06
2015	6.54	8.18	38.51	67.99	7.05	17.91
2016	6.04	10.21	50.83	60.07	13.61	17.41
2017	7.04	6.02	48.53	48.13	7.85	13.58
2018	6.35	6.25	42.77	55.84	5.25	25.69
2019	7.52	3.52	46.37	50.85	10.69	14.59
2020				34.65		
2021	4.64	3.69	32.86	32.19	6.39	10.16
2022	5.35	3.79	22.78	24.86	8.61	6.27
2023		7.62	25.08	32.09	4.51	8.78
2019-2023 mean	5.84	4.65	31.77	34.93	7.55	9.95
2024	4.06	5.80	33.11	40.73	2.65	6.28
2025	6.54		30.06	34.68	9.28	16.21
2021-2025 mean	5.15	5.22	28.78	32.91	6.29	9.54
25th	0.42	1.47	17.72	20.37	2.73	4.30
median	1.11	2.61	23.36	32.67	4.30	7.53
75th	2.23	3.82	39.07	44.02	5.05	11.90

Figure 2. GOM abundance indicators: trawl survey recruit abundance.

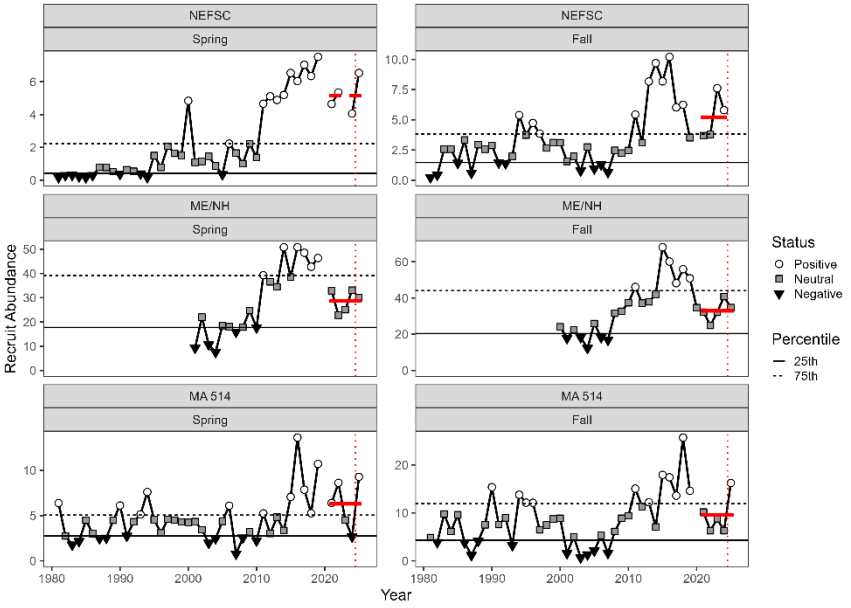


Table 3. GOM abundance indicators: trawl survey encounter rate.

SURVEY LOBSTER ENCOUNTER RATE						
Proportion of postive tows						
Survey	NEFSC		ME/NH		MA 514	
	Spring	Fall	Spring	Fall	Spring	Fall
1981	0.45	0.28			0.86	0.73
1982	0.35	0.24			0.50	0.70
1983	0.30	0.38			0.76	0.76
1984	0.30	0.41			0.76	0.76
1985	0.38	0.49			0.71	0.67
1986	0.34	0.49			0.68	0.83
1987	0.42	0.24			0.85	0.54
1988	0.38	0.38			0.76	0.58
1989	0.37	0.43			0.78	0.95
1990	0.45	0.34			0.86	0.95
1991	0.41	0.32			0.87	0.94
1992	0.44	0.24			0.93	0.77
1993	0.44	0.41			0.97	0.82
1994	0.45	0.42			1.00	0.93
1995	0.43	0.44			0.93	0.93
1996	0.54	0.54			0.91	0.95
1997	0.64	0.38			0.93	0.86
1998	0.52	0.41			0.76	0.69
1999	0.52	0.42			0.73	0.91
2000	0.64	0.44		0.94	0.93	0.98
2001	0.56	0.42	0.88	0.86	0.93	0.72
2002	0.76	0.53	0.94	0.95	0.91	0.73
2003	0.69	0.49	0.92	0.85	0.82	0.55
2004	0.86	0.36	0.89	0.86	0.84	0.56
2005	0.77	0.38	0.95	0.91	0.95	0.67
2006	0.72	0.60	0.93	0.93	0.91	0.88
2007	0.72	0.43	0.97	0.85	0.51	0.54
2008	0.84	0.49	0.92	0.86	0.83	0.75
2009	0.82	0.63	0.98	0.92	0.89	0.87
2010	0.85	0.78	0.98	0.96	0.87	0.98
2011	0.83	0.74	0.99	0.96	0.89	0.85
2012	0.86	0.78	0.98	0.98	0.91	0.95
2013	0.87	0.73	1.00	0.93	0.96	0.95
2014	0.90	0.71	1.00	0.99	0.79	0.96
2015	0.93	0.69	1.00	0.96	0.98	0.95
2016	0.94	0.75	1.00	0.96	0.96	0.97
2017	0.86	0.82	0.99	0.94	0.84	0.98
2018	0.86	0.77	0.98	0.96	0.84	0.90
2019	0.83	0.71	0.99	0.95	0.85	0.93
2020				0.96		
2021	0.90	0.75	1.00	0.91	0.86	0.90
2022	0.79	0.76	0.98	0.90	0.78	0.85
2023		0.80	0.96	0.91	0.85	0.83
2019-2023 mean	0.84	0.75	0.98	0.93	0.84	0.88
2024	0.88	0.75	0.98	0.95	0.62	0.95
2025	0.87		0.98	0.93	0.71	0.91
2021-2025 mean	0.86	0.77	0.98	0.92	0.76	0.89
25th	0.43	0.38	0.93	0.89	0.78	0.72
median	0.60	0.44	0.98	0.94	0.86	0.86
75th	0.84	0.62	0.99	0.96	0.93	0.95

Figure 3. GOM abundance indicators: trawl survey encounter rate.

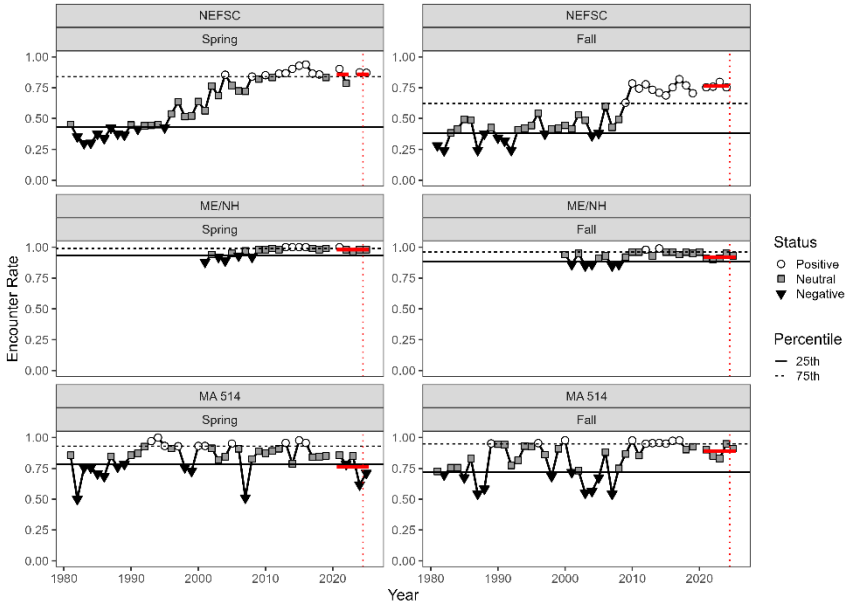


Table 4. GOM abundance indicators: ventless trap survey abundance.

VENTLESS TRAP ABUNDANCE								
Abundance of lobsters ≥ 53 mm CL								
Survey	*511*		*512*		*513*		*514*	
	Female	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*	*Male*
1981								
1982								
1983								
1984								
1985								
1986								
1987								
1988								
1989								
1990								
1991								
1992								
1993								
1994								
1995								
1996								
1997								
1998								
1999								
2000								
2001								
2002								
2003								
2004								
2005								
2006	7.66	5.35	6.87	5.36	5.71	4.33	3.08	3.38
2007	5.07	3.92	3.95	3.81	5.79	4.29	1.85	1.83
2008	4.94	3.87	5.79	4.93	5.73	4.91	2.75	2.50
2009	3.60	2.65	6.30	5.33	6.86	5.48	2.69	2.63
2010	5.66	3.89	6.96	5.67	6.59	5.22	2.48	2.20
2011	8.70	6.52	11.12	8.46	7.29	5.54	3.46	2.59
2012	10.94	7.63	12.06	9.43	11.43	7.70	5.21	4.51
2013	11.17	7.95	11.91	8.64	9.35	6.45		
2014	10.41	6.63	11.95	8.03	7.74	4.94	3.15	2.34
2015	8.50	4.64	10.41	7.67	8.56	5.45	4.00	3.14
2016	14.61	9.15	14.39	10.72	10.77	7.49	4.78	3.55
2017	11.71	7.07	11.64	8.50	8.46	5.52	3.38	2.45
2018	15.12	9.43	11.30	8.21	9.58	6.34	3.47	2.42
2019	12.96	8.28	8.24	5.93	8.66	5.20	2.85	1.92
2020	7.68	5.48	7.94	5.95	9.26	6.55	2.50	1.68
2021	7.35	5.44	5.97	5.23	8.25	5.90	1.76	1.37
2022	6.70	4.96	4.86	4.21	7.84	6.19	1.62	0.96
2023	4.95	3.86	5.17	4.56	8.35	6.31	1.80	1.49
2019-2023 mean	7.93	5.60	6.44	5.18	8.47	6.03	2.10	1.48
2024	5.99	4.36	6.02	4.73	9.48	7.38	1.58	0.99
2025	7.22	4.88	6.05	5.13	7.38	5.31	1.73	1.19
2021-2025 mean	6.44	4.70	5.61	4.77	8.26	6.22	1.70	1.20

25th	5.66	3.92	6.87	5.36	6.59	4.94	2.74	2.40
median	8.70	6.52	11.12	8.03	7.74	5.48	3.26	2.54
75th	11.17	7.63	11.91	8.50	9.35	6.34	3.60	3.20

Figure 4. GOM abundance indicators: ventless trap survey abundance.

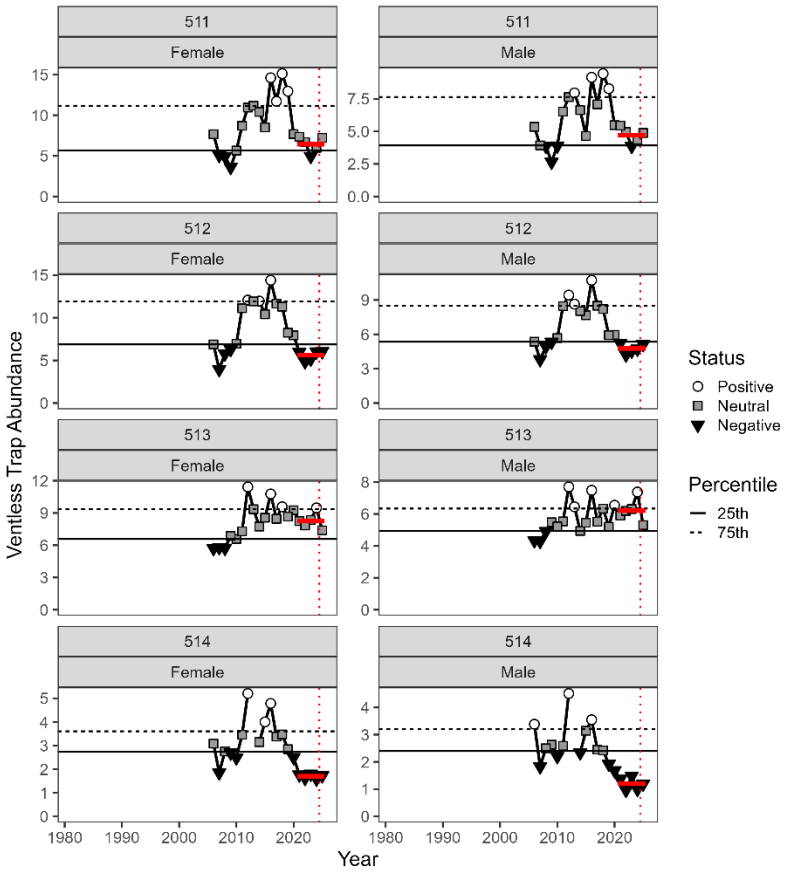


Figure 5. GOM recruit abundance indices aggregated into a combined index (top) and presented individually.

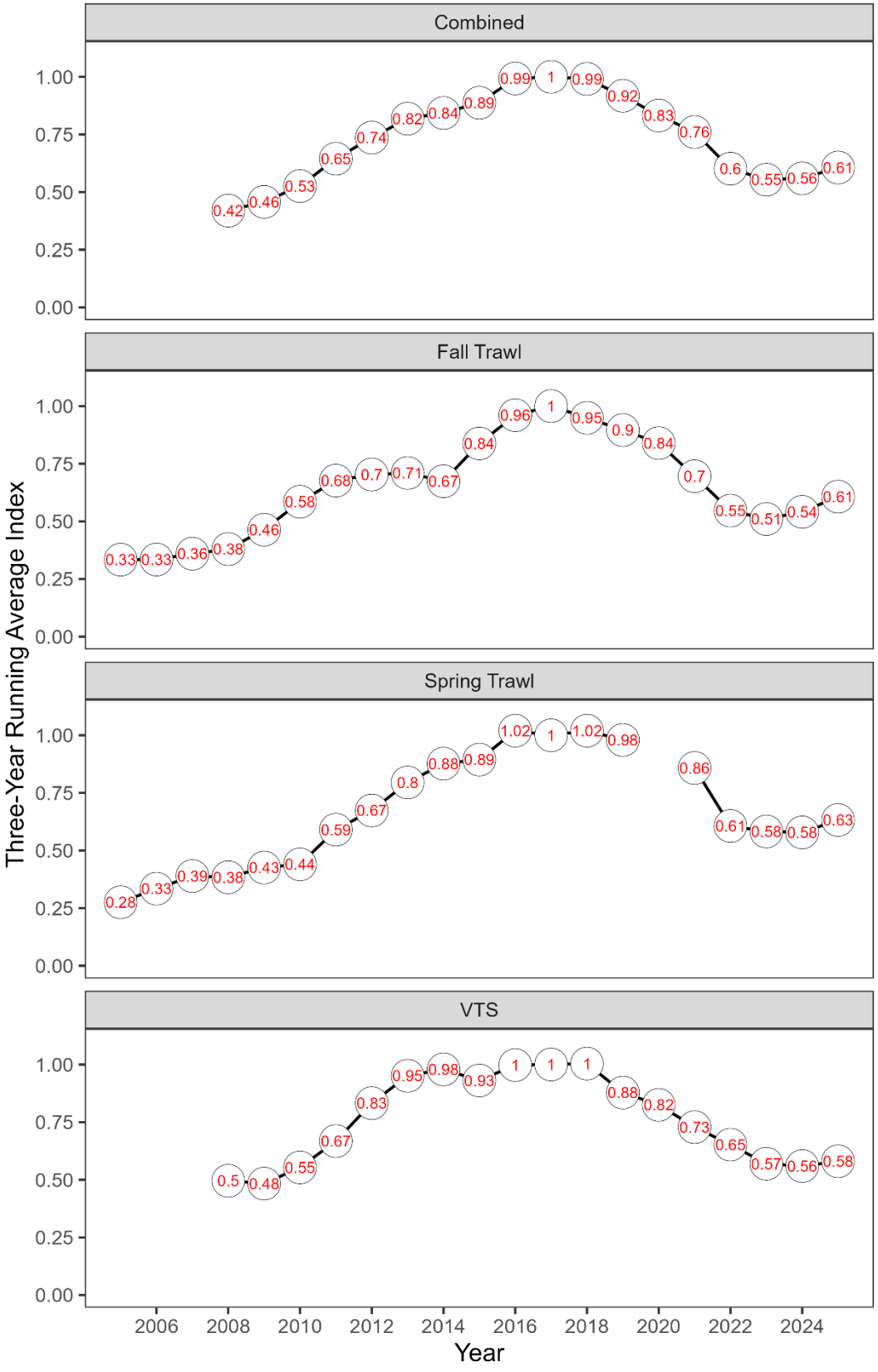


Table 5. GBK abundance indicators: trawl survey recruit abundance.

RECRUIT ABUNDANCE (SURVEY)		
Abundance of lobsters 71 - 80 mm CL (sexes combined)		
Survey	*NEFSC*	
	Spring	*Fall*
1981	0.07	0.30
1982	0.19	0.42
1983	0.17	0.19
1984	0.01	0.33
1985	0.12	0.06
1986	0.56	0.67
1987	0.45	0.57
1988	0.09	0.40
1989	0.04	0.14
1990	0.46	0.33
1991	0.08	0.31
1992	0.16	0.64
1993	0.49	0.23
1994	0.68	0.12
1995	0.00	0.22
1996	0.66	0.16
1997	0.76	0.92
1998	0.72	0.12
1999	0.60	0.29
2000	0.31	0.24
2001	1.26	0.37
2002	0.79	0.64
2003	0.32	0.18
2004	0.11	0.20
2005	0.05	0.14
2006	0.23	0.18
2007	0.03	0.13
2008	0.06	0.17
2009	0.13	0.17
2010	0.13	0.08
2011	0.04	0.16
2012	0.07	0.08
2013	0.07	0.14
2014	0.07	0.09
2015	0.03	0.19
2016	0.07	0.06
2017	0.16	0.19
2018	0.02	0.10
2019	0.07	0.06
2020		
2021	0.18	0.20
2022	0.19	0.27
2023		0.36
2019-2023 mean	0.15	0.22
2024	0.25	0.45
2025	0.25	
2021-2025 mean	0.22	0.32

25th	0.07	0.14
median	0.13	0.19
75th	0.45	0.32

Figure 6. GBK abundance indicators: trawl survey recruit abundance.

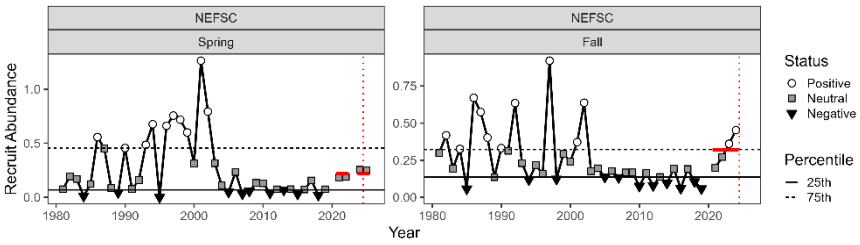


Table 6. GBK abundance indicators: trawl survey encounter rate.

SURVEY LOBSTER ENCOUNTER RATE		
Proportion of postive tows		
Survey	***NEFSC***	
	Spring	***Fall***
1981	0.26	0.52
1982	0.23	0.43
1983	0.20	0.38
1984	0.12	0.36
1985	0.21	0.38
1986	0.25	0.36
1987	0.19	0.34
1988	0.34	0.39
1989	0.19	0.39
1990	0.20	0.41
1991	0.20	0.42
1992	0.28	0.47
1993	0.22	0.36
1994	0.14	0.39
1995	0.13	0.42
1996	0.18	0.37
1997	0.13	0.49
1998	0.13	0.38
1999	0.19	0.56
2000	0.24	0.38
2001	0.26	0.47
2002	0.28	0.57
2003	0.26	0.43
2004	0.19	0.51
2005	0.17	0.56
2006	0.26	0.57
2007	0.25	0.46
2008	0.30	0.52
2009	0.33	0.55
2010	0.36	0.63
2011	0.30	0.69
2012	0.35	0.58
2013	0.33	0.66
2014	0.37	0.61
2015	0.27	0.59
2016	0.45	0.55
2017	0.40	0.56
2018	0.29	0.59
2019	0.36	0.57
2020		
2021	0.41	0.48
2022	0.34	0.62
2023		0.73
2019-2023 mean	0.37	0.60
2024	0.46	0.76
2025	0.50	
2021-2025 mean	0.43	0.65

25th	0.19	0.39
median	0.25	0.47
75th	0.30	0.56

Figure 7. GBK abundance indicators: trawl survey encounter rate.

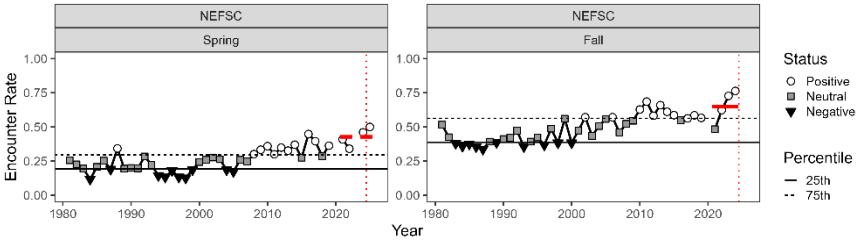


Table 7. SNE abundance indicators: YOY indices.

YOUNG-OF-YEAR INDICES		
Survey	***MA***	***RI***
1981		
1982		
1983		
1984		
1985		
1986		
1987		
1988		
1989		
1990		1.13
1991		1.45
1992		0.63
1993		0.51
1994		1.21
1995	0.17	0.34
1996	0.00	0.15
1997	0.08	0.96
1998	0.28	0.54
1999	0.06	0.91
2000	0.33	0.28
2001	0.11	0.72
2002	0.11	0.25
2003	0.00	0.70
2004	0.06	0.40
2005	0.17	0.54
2006	0.22	0.44
2007	0.17	0.54
2008	0.00	0.14
2009	0.06	0.06
2010	0.00	0.08
2011	0.00	0.00
2012	0.00	0.09
2013	0.17	0.19
2014	0.11	0.22
2015	0.00	0.17
2016	0.00	0.03
2017	0.00	0.03
2018	0.00	0.03
2019	0.00	0.03
2020	0.00	0.14
2021	0.00	0.08
2022	0.00	0.03
2023	0.00	0.01
2019-2023 mean	0.00	0.06
2024	0.00	0.04
2025	0.00	0.06
2021-2025 mean	0.00	0.04

25th	0.00	0.14
median	0.06	0.34
75th	0.17	0.63

Figure 8. SNE abundance indicators: YOY indices.

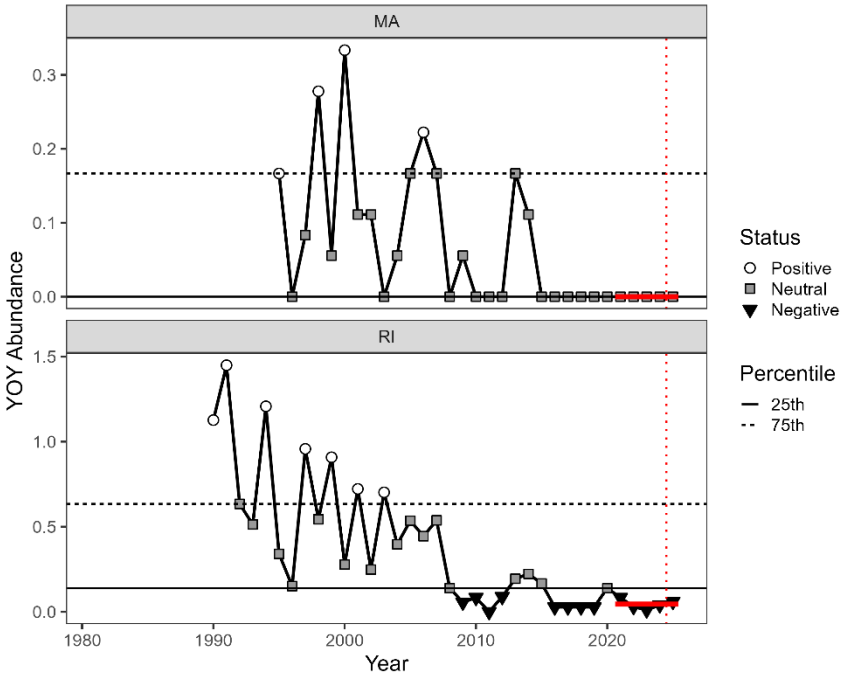


Table 8. SNE abundance indicators: trawl survey recruit abundance.

RECRUIT ABUNDANCE (SURVEY)								
Abundance of lobsters 71 - 80 mm CL (sexes combined)								
Survey	*NEFSC*		*MA*		*RI*		*CT*	
	Spring	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*
1981	0.17	1.40	0.65	0.07	0.89	1.31		
1982	1.13	1.15	0.10	0.04	0.26	0.64		
1983	0.61	1.12	0.09	0.04	0.94	0.43		
1984	0.15	1.31	0.42	0.01	1.03	1.36	10.09	6.80
1985	3.05	1.65	0.34	0.09	0.28	0.97	3.08	3.93
1986	0.28	0.92	0.17	0.20	0.91	1.28	2.77	5.76
1987	1.54	0.96	0.26	0.17	0.79	3.14	2.93	6.86
1988	1.23	1.00	0.24	0.16	0.47	4.05	1.85	4.88
1989	0.15	2.57	0.14	0.43	0.91	3.26	4.86	5.28
1990	1.06	1.63	2.29	0.31	2.17	2.69	6.89	7.74
1991	0.47	0.98	1.18	0.87	4.77	3.10	10.83	10.32
1992	0.30	1.57	0.10	0.57	0.62	1.97	10.31	10.65
1993	1.02	0.61	0.25	0.52	7.81	8.29	7.78	15.18
1994	0.33	0.69	0.95	0.42	1.00	3.88	5.07	11.51
1995	0.13	0.93	1.14	0.03	1.33	4.50	12.13	11.20
1996	0.62	3.76	0.40	0.32	1.60	6.55	11.37	11.08
1997	2.62	2.49	1.45	0.12	2.58	6.10	15.42	24.99
1998	1.22	1.84	1.09	0.11	1.63	3.24	24.06	12.72
1999	3.74	1.21	0.75	0.19	1.71	2.07	24.57	12.96
2000	1.12	2.17	0.56	0.13	1.54	1.83	13.37	8.27
2001	0.60	0.86	0.18	0.03	2.97	2.17	10.77	7.41
2002	2.48	0.65	0.34	0.00	2.68	0.73	8.07	2.75
2003	0.55	0.67	0.07	0.00	0.29	0.93	3.52	4.08
2004	0.43	0.56	0.05	0.00	1.87	1.48	2.38	3.37
2005	0.22	0.51	0.08	0.00	1.07	2.53	2.26	1.54
2006	0.29	0.49	0.08	0.03	3.63	2.24	2.02	1.38
2007	0.30	0.55	0.08	0.00	0.68	2.68	2.65	1.12
2008	0.32	0.53	0.16	0.01	0.64	2.95	2.20	1.27
2009	0.10	0.24	0.16	0.05	1.14	1.36	1.20	1.33
2010	0.16	0.49	0.06	0.18	0.44	1.21	1.26	
2011	0.03	0.46	0.18	0.00	0.42	1.02	0.43	0.18
2012	0.07	0.70	0.07	0.21	0.30	0.18	0.44	0.08
2013	0.08	0.32	0.11	0.04	0.16	0.02	0.23	0.06
2014	1.47	0.49	0.04	0.00	0.02	0.14	0.15	0.05
2015	0.00	0.17	0.07	0.30	0.05	0.37	0.15	0.06
2016	0.57	0.47	0.05	0.14	0.57	0.25	0.16	0.00
2017	0.05		0.13	0.16	0.14	0.41	0.03	0.00
2018	0.05	0.27	0.02	0.01	0.18	0.68	0.00	0.01
2019	0.04	0.29	0.01	0.02	0.52	0.50	0.03	0.00
2020					0.23	0.32		
2021	0.00	0.43	0.01	0.00	0.27	0.07	0.03	0.00
2022	0.05	0.16	0.00	0.00	0.09	0.16	0.00	0.01
2023		0.14	0.00	0.01	0.07	0.05	0.00	0.00
2019-2023 mean	0.03	0.25	0.01	0.01	0.24	0.22	0.01	0.00
2024	0.10	0.07	0.05	0.00	0.02	0.07	0.01	0.00
2025	0.02		0.00	0.00	0.09	0.18		
2021-2025 mean	0.04	0.20	0.01	0.00	0.11	0.11	0.01	0.00
25th	0.15	0.51	0.08	0.02	0.42	0.78	1.23	1.16
median	0.38	0.86	0.16	0.10	0.91	1.65	2.93	4.48
75th	1.11	1.31	0.41	0.19	1.62	3.07	10.20	9.81

Figure 9. SNE abundance indicators: trawl survey recruit abundance.

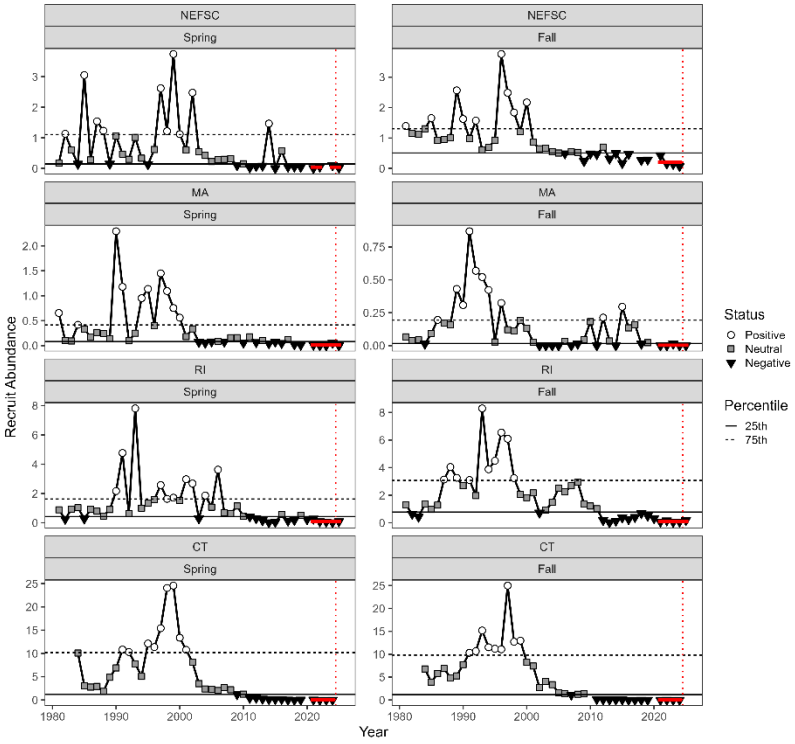


Table 9. SNE abundance indicators: trawl survey encounter rate.

SURVEY LOBSTER ENCOUNTER RATE								
Proportion of postive tows								
Survey	*NEFSC*		*MA*		*RI*		*CT*	
	Spring	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*	*Spring*	*Fall*
1981	0.26	0.67	0.38	0.15	0.49	0.41		
1982	0.35	0.52	0.28	0.21	0.30	0.44		
1983	0.18	0.43	0.21	0.16	0.47	0.37		
1984	0.10	0.44	0.40	0.18	0.59	0.44	0.63	0.76
1985	0.29	0.47	0.51	0.22	0.31	0.50	0.57	0.69
1986	0.22	0.40	0.39	0.38	0.64	0.46	0.67	0.61
1987	0.19	0.41	0.28	0.18	0.35	0.47	0.63	0.76
1988	0.17	0.46	0.39	0.21	0.49	0.55	0.65	0.66
1989	0.18	0.53	0.50	0.33	0.52	0.57	0.75	0.63
1990	0.18	0.63	0.66	0.44	0.64	0.53	0.73	0.76
1991	0.20	0.56	0.41	0.39	0.77	0.69	0.81	0.77
1992	0.29	0.48	0.51	0.23	0.41	0.57	0.77	0.68
1993	0.20	0.40	0.54	0.26	0.50	0.71	0.73	0.75
1994	0.17	0.41	0.51	0.20	0.58	0.57	0.73	0.74
1995	0.09	0.51	0.44	0.13	0.55	0.67	0.77	0.68
1996	0.16	0.57	0.30	0.16	0.79	0.76	0.66	0.78
1997	0.39	0.43	0.45	0.21	0.75	0.71	0.71	0.81
1998	0.16	0.54	0.54	0.13	0.59	0.55	0.83	0.71
1999	0.29	0.44	0.41	0.21	0.76	0.59	0.78	0.79
2000	0.23	0.49	0.45	0.15	0.68	0.63	0.81	0.73
2001	0.29	0.39	0.28	0.18	0.65	0.60	0.77	0.58
2002	0.25	0.38	0.28	0.03	0.61	0.45	0.73	0.59
2003	0.17	0.44	0.14	0.03	0.51	0.41	0.71	0.64
2004	0.17	0.29	0.28	0.03	0.54	0.50	0.61	0.66
2005	0.14	0.32	0.34	0.15	0.49	0.45	0.63	0.54
2006	0.21	0.35	0.43	0.03	0.79	0.62	0.61	0.51
2007	0.19	0.33	0.34	0.10	0.44	0.54	0.70	0.53
2008	0.15	0.41	0.33	0.10	0.55	0.52	0.63	0.65
2009	0.24	0.46	0.50	0.05	0.57	0.41	0.49	0.55
2010	0.19	0.52	0.23	0.24	0.47	0.45	0.54	
2011	0.17	0.56	0.18	0.05	0.30	0.23	0.46	0.28
2012	0.19	0.56	0.18	0.15	0.27	0.16	0.43	0.20
2013	0.09	0.47	0.18	0.08	0.21	0.09	0.28	0.15
2014	0.22	0.41	0.13	0.08	0.07	0.23	0.26	0.10
2015	0.08	0.40	0.10	0.05	0.12	0.16	0.27	0.10
2016	0.21	0.38	0.08	0.11	0.30	0.14	0.25	0.03
2017	0.09		0.08	0.16	0.16	0.23	0.08	0.03
2018	0.12	0.42	0.11	0.06	0.09	0.18	0.09	0.01
2019	0.10	0.41	0.05	0.11	0.16	0.11	0.09	0.00
2020					0.16	0.16		
2021	0.04	0.29	0.08	0.00	0.20	0.12	0.06	0.03
2022	0.10	0.29	0.00	0.00	0.14	0.09	0.01	0.04
2023		0.29	0.00	0.03	0.18	0.05	0.00	0.01
2019-2023 mean	0.08	0.32	0.03	0.03	0.17	0.11	0.04	0.02
2024	0.15	0.25	0.03	0.00	0.02	0.07	0.03	0.01
2025	0.09		0.00	0.05	0.05	0.11		
2021-2025 mean	0.10	0.28	0.02	0.02	0.12	0.09	0.02	0.02
25th	0.17	0.40	0.21	0.08	0.32	0.41	0.52	0.52
median	0.19	0.44	0.34	0.16	0.51	0.49	0.65	0.64
75th	0.23	0.52	0.44	0.21	0.60	0.57	0.73	0.74

Figure 10. SNE abundance indicators: trawl survey encounter rate.

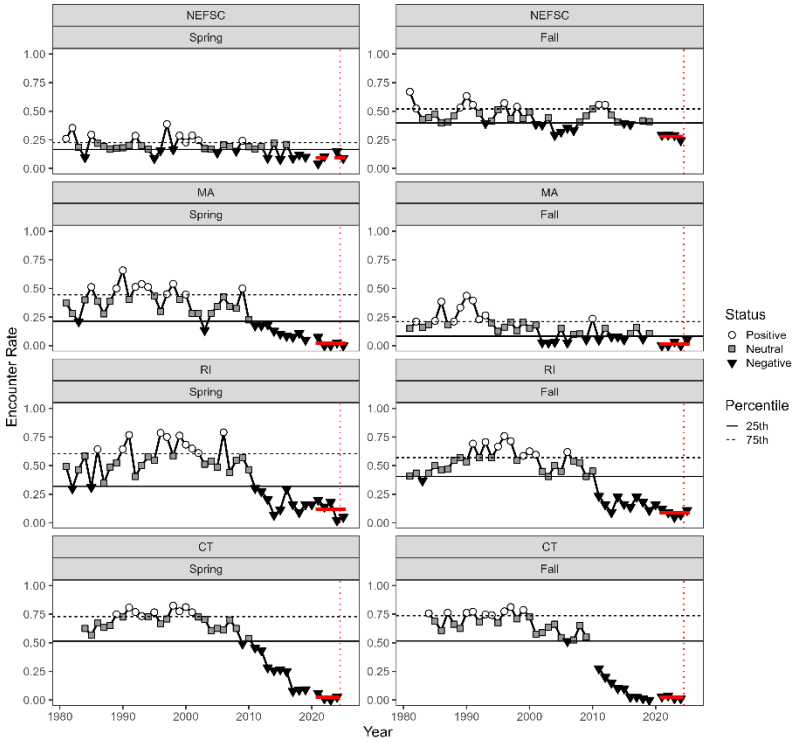
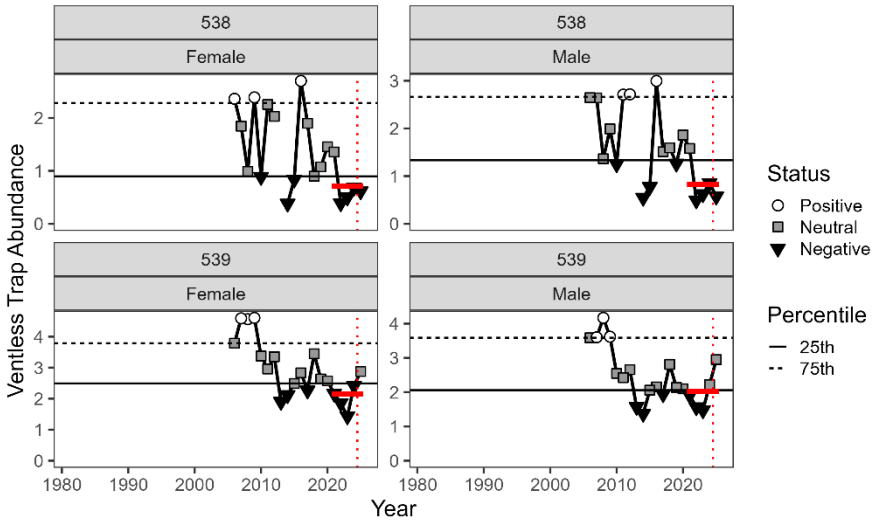


Table 10. SNE abundance indicators: ventless trap survey abundance.

VENTLESS TRAP ABUNDANCE Abundance of lobsters ≥ 53 mm CL				
Survey	*538*		*539*	
	Female	*Male*	*Female*	*Male*
1981				
1982				
1983				
1984				
1985				
1986				
1987				
1988				
1989				
1990				
1991				
1992				
1993				
1994				
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				
2004				
2005				
2006	2.36	2.64	3.79	3.59
2007	1.84	2.64	4.59	3.60
2008	0.99	1.36	4.56	4.17
2009	2.39	1.99	4.61	3.62
2010	0.89	1.25	3.37	2.55
2011	2.25	2.71	2.96	2.43
2012	2.03	2.71	3.35	2.66
2013			1.90	1.57
2014	0.38	0.55	2.12	1.37
2015	0.84	0.77	2.49	2.06
2016	2.70	3.00	2.83	2.15
2017	1.90	1.51	2.27	1.94
2018	0.90	1.59	3.45	2.81
2019	1.08	1.26	2.63	2.14
2020	1.46	1.86	2.57	2.10
2021	1.36	1.58	2.17	1.91
2022	0.39	0.49	1.86	1.56
2023	0.50	0.62	1.43	1.47
2019-2023 mean	0.96	1.16	2.13	1.84
2024	0.68	0.85	2.41	2.22
2025	0.62	0.57	2.88	2.95
2021-2025 mean	0.71	0.82	2.15	2.02

25th	0.90	1.33	2.49	2.06
median	1.87	1.79	3.35	2.55
75th	2.28	2.66	3.79	3.59

Figure 11. SNE abundance indicators: ventless trap survey abundance.



Appendix: Data Update Data Changes

Ventless Trap Survey (Update through 2024)

Strata areas used to calculate ventless trap survey abundance indicators from the stratified random survey design as well as to weight observations in the model-based index used in the GOM combined recruit index changed marginally since the previous Data Update. This change was due to the transition from the retired *rgdal* R package to the modern replacement *sf* R package to calculate strata areas from shapefiles with strata spatial polygons. The transition resulted in similar trends over time within each time series, and less than 2% change from index values in the previous Data Update for areas with no data changes (see Rhode Island data changes below).

Northeast Fisheries Science Center (Update through 2024)

Updated indicators presented here for the NEFSC trawl survey are based on changes to the treatment of survey data developed during the 2025 stock assessment. This includes the removal of many survey strata in SNE that rarely captured lobster over the entire time series, removal of one strata in GBK that is no longer surveyed by the new survey vessel, and the use of gap-filling techniques to address cases where individual strata were unsampled in an otherwise mostly complete survey. Details of these changes are included in the 2025 stock assessment.

Additionally, as a general caveat, we recognize that the vessel change in 2009 for the federal trawl survey creates a bias in the trawl survey encounter rates across all regions. The NEFSC calibration study indicated that the new trawl vessel and gear catch more lobsters than previously. By extension, it is also more probable for lobsters to be present in a trawl than previously. While a calibration is applied to the recruit abundance to account for this, a similar calibration for encounter rates has not been developed. Thus, we expect encounter rates for the federal trawl survey are biased high, relative to the earlier time period, starting in 2009.

Rhode Island (Update through 2024)

The 2023 settlement survey abundance index value for Rhode Island has been modified to account for a calculation discrepancy between the state database and the coastwide data warehouse. The trajectory of the index remains the same, with recent values being the lowest in the time series. Additionally, minor QA/QC adjustments were made in the database to identify traps that should be excluded from analyses. Any index value adjustments were minor and produced no change in the indicator status throughout the time series.

Rhode Island (Update through 2023)

A slightly more conservative method for identifying traps to exclude from the VTS data set was adopted during the 2024 Data Update (terminal data year of 2023). For example, some traps with a hole in the funnel or side head were excluded whereas they were not in previous years. The table below compares the number of traps retained for index calculation between the 2024 Data Update and 2023 Data Update.

Year	2023 Data Update	2024 Data Update
2006	852	851
2007	848	848
2008	864	864
2009	804	804

2010	858	857
2011	858	858
2012	834	830
2013	839	836
2014	832	825
2015	854	846
2016	831	817
2017	833	831
2018	846	839
2019	858	850
2020	836	826
2021	864	851
2022	861	815

The only change in conditions the data change causes is for 2019 and 2020 annual values for both sexes which change from negative conditions during the 2023 Data Update to neutral conditions during the 2024 Data Update. The terminal five-year means are negative for both sexes during both Data Updates.

Maine (Update through 2022)

During the 2023 Data Update (terminal data year of 2022), a few errors were found in the upload process where data was not uploaded correctly and treated in a consistent manner as the assessment. For the Fall 2021 ME/NH Trawl Survey, the sex of sampled lobsters did not upload correctly, leading to 7 tows being excluded in error. These data have now been corrected and included. During the 2020 assessment, the stock assessment team, in consultation with survey staff, determined that a very large outlier tow in the Spring 2014 ME/NH Trawl Survey should be excluded from the assessment. However, this outlier tow was not excluded in the 2022 Data Update. It was excluded for the 2023 Data Update, consistent with the stock assessment. For the Maine settlement survey, data for 2013 was not uploaded completely and this has now been corrected.

Massachusetts (Update through 2022)

Following the 2022 Data Update (terminal year of 2021), an error was discovered in the data pull for the SNE VTS index that did not filter the frequency of trawl hauls per month in historical data to match the reduced sampling frequency in data since the footprint reduction (see below; reduced to 1 haul/month). This error was corrected in the data pull for the 2023 Data Update.

Massachusetts (Update through 2021)

Following the 2021 Data Update (terminal data year of 2020), there was a reduction in the spatial coverage of the SNE VTS (Statistical Area 538) due to reduced participation. This change necessitates dropping out data collected during earlier years from areas no longer sampled to calculate an index from a consistent survey footprint, resulting in changes to the indices. Note that the updated index increased slightly in scale (the reduced footprint excludes most of the interior of Buzzards Bay), but the pattern over time is generally consistent with the previous index.

Rhode Island (Update through 2021)

Some changes to the SNE VTS Statistical Area 539 (RI) data occurred between the 2021 Data Update (terminal data year of 2020) and 2022 Data Update (terminal data year of 2021). Upon further QA/QC in site or sample location, strata classification for select stations over time were rectified. Data as such were updated to reflect these changes during the 2022 Data Update.

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **American Lobster Management Board**

FROM: **American Lobster Technical Committee**

DATE: **October 22, 2026**

SUBJECT: **Possible Annual Environmental Indicators**

The American Lobster Technical Committee (TC) met via webinar on August 27, 2026 to discuss environmental and ecosystem indicators that could be updated annually to provide additional information on conditions affecting American lobster. At its February 2026 meeting, the American Lobster Board (Board) discussed the possibility of adding environmental indicators into the annual data update process, and the potential to coordinate with NOAA Fisheries to identify relevant data sets that may already be available.

After the February Board meeting the TC Chair and ASMFC staff met with staff within NOAA's Changing Ecosystems and Fisheries Initiative (CEFI) to discuss products developed for the State of the Ecosystem reports that may be relevant to lobster population trends. Some examples of possible indicators discussed included indicators of zooplankton abundance, temperatures, ocean acidification, oceanographic processes, as well as port-level economic indicators. However, further coordination between the TC and CEFI staff and development and refinement of datasets would be required for them to be useful as part of the annual lobster data update.

The TC identified several possible indicators that may be suitable for further investigation, if the Board desires:

1. Empirical bottom temperatures from state and federal trawl surveys for additional context on potential catchability changes in existing trawl survey-based catch indicators.
2. Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS) ocean climatology. This data set includes comparison of current sub-surface temperatures at a single buoy location relative to long-term averages.
3. Temperatures and molt timing prediction based on Gulf of Maine Research Institute research.
4. Zooplankton time series produced for NOAA State of the Ecosystem reports for context on food availability changes for larval lobsters. Note that there is a delay in availability for these time series of one to two or more years due to data processing (e.g., 2026 zooplankton update includes data through 2023).
5. Long-term modeled temperature time series from oceanographic modeling products used by CEFI. Similar to the buoy data, these would provide comparison of current conditions to historical conditions but would use model-estimated bottom temperatures spanning broader spatial scales instead of empirical temperatures from small spatial scales.

If the Board wishes to pursue the addition of environmental indicators to the annual data update of American lobster indices, the TC will need additional clarification of the Board's intent. The TC requests guidance from the Board on the following questions:

1. Environmental indicators/effects have been a major focus of the past two Assessments, and work will continue in subsequent Assessments to better understand how the environment may be influencing the population and survey catchability. With this in mind, which of the indicators the TC identified above are of interest for the Board to see on an annual basis, and which may be more appropriate for the next Assessment? How would updating these environmental indicator(s) on an annual basis better inform the Board?
2. The purpose of the current data update process is to better understand exploitable lobster stock abundance conditions expected in subsequent years. Is the Board more interested in reviewing annual indicators that would provide qualitative information related to environmental conditions experienced by the lobster stock (e.g., a simple time series of a temperature indicator), or is there a desire to estimate quantitative impact to lobster population dynamics and how it may impact future recruitment (e.g., modeling a linkage between temperature and lobster stock trends)? The TC notes that there is a significant difference in the workload that would be required for these two types of use. The latter would require additional analyses and likely iterative development and testing of indicators. Additionally, successfully modeling a meaningful linkage between the environment/ecosystem and lobster population dynamics cannot be guaranteed and is more feasible during the formal stock assessment process and peer review.
3. Is the Board interested in environmental indicators for one or both lobster stocks?

The TC also emphasized that there should be careful consideration of how pursuing annual environmental indicators would interact with other ongoing and upcoming activities to affect the TC's workload. These include the ongoing Board task to develop and evaluate candidate biological reference points that account for non-stationarity of environmental conditions/productivity, as well as the proposed stakeholder process to identify lobster management objectives.

Draft for Board Review

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

FOR AMERICAN LOBSTER
(*Homarus americanus*)

2025 FISHING YEAR



Prepared by the Plan Review Team

October 2026

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft for Board Review

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Draft for Board Review

1.0 Status of the Fishery Management Plan

Year of ASMFC Plan's Adoption: Amendment 3 (1997)

Plan Addenda:

Addendum II (2001)
Addendum III (2002)
Addendum IV (2003)
Addendum V (2004)
Addendum VI (2005)
Addendum VII (2005)
Addendum VIII (2006)
Addendum IX (2006)
Addendum X (2007)
Addendum XI (2007)
Addendum XII (2008)
Addendum XIII (2008)
Addendum XIV (2009)
Addendum XV (2009)
Addendum XVI (2010)
Addendum XVII (2012)
Addendum XVIII (2012)
Addendum XIX (2013)
Addendum XX (2013)
Addendum XXI (2013)
Addendum XXII (2013)
Addendum XXIII (2014)
Addendum XXIV (2015)
Addendum XXVI (2018)
Addendum XXIX (2022)
Addendum XXVII (2023)
Addendum XXX (2024)
Addendum XXXI (2025)
Addendum XXXII (2025)

Management Unit: Maine through North Carolina

States with a Declared Interest: Maine through Virginia (Excluding Pennsylvania and DC)

Active Committees: American Lobster Management Board, Technical Committee, Lobster Conservation Management Teams, Plan Development Team, Plan Review Team, Advisory Panel, Stock Assessment Subcommittee

2.0 Status of the Fishery

2.1 Commercial Fishery

The lobster fishery has seen incredible expansion in landings over the last 40 years. Between 1950 and 1975, landings were fairly stable around 30 million pounds; however, from 1976 to 2008 the average coastwide landings tripled, exceeding 98 million pounds in 2006. Landings continued to increase until reaching a high of 159 million pounds in 2016 but have been trending downward since then (Table 1). In 2025, coastwide commercial landings were approximately 108.5 million pounds, a 4% decrease from 2024 landings of 113.5 million pounds. The largest contributors to the 2025 fishery were Maine and Massachusetts with 74% and 17% of landings, respectively. The ex-vessel value for all lobster landings in 2025 was approximately $656 million, which is a 9% decrease from 2024.

Historically, Lobster Conservation Management Area (LCMA) 1 has had the highest landings and accounted for 80% of total harvest between 1981 and 2012. This is followed by LCMA 3, which accounted for 9% of total landings during the same time period. In general, landings have increased in LCMA 1 and have decreased in LCMAs 2, 4, and 6. According to state compliance reports, in 2025,

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approximately 90% of the total landings came from LCMA 1, while the remaining 10% were contributed by the other LCMAs[1]. A map of the LCMAs is found in Figure 1.

Landings trends between the two biological stocks have also changed, as a greater percentage of lobster are harvested from the Gulf of Maine/Georges Bank (GOM/GBK) stock. In 1997, 26.3% of coastwide landings came from the Southern New England (SNE) stock. However, as the southern stock declined and abundance in the Gulf of Maine increased, proportional harvest has significantly changed. In 2000, only 15.6% of landings came from the SNE stock and by 2006, this declined to 7%. In 2025, only about 2% of coastwide landings came from the SNE stock[1].

2.2 Recreational Fishery

Lobster is also taken recreationally with pots, and in some states, by hand while SCUBA diving. While not all states collect recreational harvest data, some do report the number of pounds landed recreationally and/or the number of recreational permits issued. In 2025, New Hampshire reported 7,290 pounds of lobster harvested recreationally, Massachusetts estimated 145,331 pounds, and New York reported 1,119 pounds. Maine, Rhode Island, and Connecticut do not collect information on the number of pounds recreationally harvested. In 2025, Rhode Island issued 497 lobster licenses, and 213 lobster licenses were sold in Connecticut. In general, recreational activity appears to be declining in recent years.

3.0 Status of the Stock

The 2025 American Lobster Benchmark Stock Assessment and Peer Review Report describes contrasting conditions for the two American lobster stocks. The results indicate the Gulf of Maine and Georges Bank (GOM/GBK) stock is not depleted but has declined 34% since peak levels in 2018, and overfishing is occurring with recent exploitation just above the exploitation threshold. Conversely, the Southern New England (SNE) stock remains significantly depleted with record low abundances for all life stages in recent years.

Extensive research has highlighted the influence of the environment on American lobster life history and population dynamics, with temperature standing out as the primary driver among the critical environmental variables. Environmental data were analyzed for regime shifts, which indicate a significant difference in the lobster's environment and population dynamics from one time period to another, which can impact a stock's productivity, recruitment levels, and ability to support different levels of fishing pressure.

Model-estimated abundance time series were also analyzed for shifts that may be attributed to changing environmental conditions and new baselines for stock productivity. The GOM/GBK stock shifted from a low abundance regime encompassing the early 1980s through 1995 to a moderate abundance regime from 1996-2008 and shifted once again to a high abundance regime from 2009-2023. The SNE stock shifted from a high abundance regime during the early 1980s through 2002 to a

[1] These values do not include data from Massachusetts, which were not provided.

low abundance regime during 2003-2023. These results were used to structure trend-based reference points, consistent with the 2020 assessment.

Three reference points are used to characterize stock abundance (Table 2). The abundance threshold is calculated as the average of the three highest abundance years during the low abundance regime, and stock abundance level below this threshold is considered significantly depleted and in danger of stock collapse. The abundance limit is calculated as the median abundance during the moderate abundance regime, and stock abundance below this limit is considered depleted because the stock's ability to replenish itself is diminished. The fishery/industry target is calculated as the 25th percentile of the abundance during the high abundance regime. When abundance falls below this target, the stock's ability to replenish itself is not jeopardized, but it may indicate a degrading of economic conditions for the lobster fishery. Two reference points are used to evaluate the fishing mortality condition of the stocks. The exploitation threshold (calculated as the 75th percentile of exploitation during the current abundance regime) and the exploitation target (calculated as the 25th percentile of exploitation during the current abundance regime). The stock is considered to be experiencing overfishing if exploitation exceeds the exploitation threshold, and fishing mortality levels are considered favorable if the three-year average exploitation is less than or equal to the target.

Based on the abundance reference points, the GOM/GBK stock condition is favorable. The average abundance from 2021-2023 (202 million lobsters) has declined below the fishery/industry target (229 million lobsters) but remains above the abundance limit (143 million lobsters) and abundance threshold (89 million lobsters) (Figure 2). Recruitment and spawning stock biomass estimates have declined in recent years from record highs. The average exploitation from 2021-2023 (0.465) was just above the exploitation threshold (0.464), indicating overfishing is occurring.

SNE stock abundance increased from the early 1980s, peaked during the late 1990s, then declined steeply through the early 2000s to a record low in 2023. The 2025 Assessment indicates the SNE stock is significantly depleted and overfishing is not occurring. The average abundance from 2021-2023 (6 million lobsters) was well below the abundance threshold (18 million lobsters). The average exploitation from 2021-2023 (0.258) fell below the exploitation threshold (0.286) and exploitation target (0.267) (Table 2, Figure 3).

4.0 Status of Management Measures

4.1 Implemented Regulations

Amendment 3 established regulations which require coastwide and area specific measures applicable to commercial fishing (Table 3). The coastwide requirements from Amendment 3 are summarized below; additional requirements were established through subsequent Addenda.

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Coastwide Requirements and Prohibited Actions

- Prohibition on possession of berried or scrubbed lobsters
- Prohibition on possession of lobster meats, detached tails, claws, or other parts of lobsters by fishermen
- Prohibition on spearing lobsters
- Prohibition on possession of v-notched female lobsters
- Requirement for biodegradable "ghost" panel for traps
- Minimum gauge size of 3-1/4"
- Limits on landings by fishermen using gear or methods other than traps to 100 lobsters per day or 500 lobsters per trip for trips 5 days or longer
- Requirements for permits and licensing
- All lobster traps must contain at least one escape vent with a minimum size of 1-15/16" by 5-3/4"
- Maximum trap size of 22,950 cubic inches in all areas except area 3, where traps may not exceed a volume of 30,100 cubic inches.

Amendment 3 to the Interstate Fishery Management Plan for American Lobster (December 1997)
American lobster is managed under Amendment 3 to the Interstate FMP for American Lobster. Amendment 3 establishes seven lobster management areas. These areas include the: Inshore Gulf of Maine (LCMA 1), Inshore Southern New England (LCMA 2), Offshore Waters (LCMA 3), Inshore Northern Mid-Atlantic (LCMA 4), Inshore Southern Mid-Atlantic (LCMA 5), New York and Connecticut State Waters (LCMA 6), and Outer Cape Cod (OCC). Lobster Conservation Management Teams (LCMTs) comprised of industry representatives were formed for each management area. The LCMTs are charged with advising the Lobster Board and recommending changes to the management plan within their areas.

Amendment 3 also provides the flexibility to respond to current conditions of the resource and fishery by making changes to the management program through addenda. The commercial fishery is primarily controlled through minimum/maximum size limits, trap limits, and v-notching of egg-bearing females.

Addendum I (August 1999)
Establishes trap limits in the seven LCMAs.

Addendum II (February 2001)
Establishes regulations for increasing egg production through a variety of LCMT proposed management measures including, but not limited to, increased minimum gauge sizes in LCMAs 2, 3, 4, 5, and the Outer Cape.

Addendum III (February 2002)
Revises management measures for all seven LCMAs in order to meet the revised egg-rebuilding schedule.

Technical Addendum 1 (August 2002)
Eradicates the vessel upgrade provision for LCMA 5.

Addendum IV (January 2004)
Changes vent size requirements; applies the most restrictive rule on an area trap cap basis without regard to the individual's allocation; establishes LCMA 3 sliding scale trap reduction plan and transferable trap program to increase active trap reductions by 10%; and establishes an effort control program and gauge increases for LCMA 2; and a desire to change the interpretation of the most restrictive rule.

Addendum V (March 2004)
Amends Addendum IV transferability program for LCMA 3. It establishes a trap cap of 2200 with a conservation tax of 50% when the purchaser owns 1800 to 2200 traps and 10% for all others.

Addendum VI (February 2005)
Replaces two effort control measures for LCMA 2 – permits an eligibility period.
Addendum VII (November 2005)
Revises LCMA 2 effort control plan to include capping traps fished at recent levels and maintaining 3 3/8" minimum size limit.

Addendum VIII (May 2006)
Establishes new biological reference points to determine the stock status of the American lobster resource (fishing mortality and abundance targets and thresholds for the three stock assessment areas) and enhances data collection requirements.

Addendum IX (October 2006)
Establishes a 10% conservation tax under the LCMA 2 trap transfer program.

Addendum X (February 2007)
Establishes a coastwide reporting and data collection program that includes dealer and harvester reporting, at-sea sampling, port sampling, and fishery-independent data collection replacing the requirements in Addendum VIII.

Addendum XI (May 2007)
Establishes measures to rebuild the SNE stock, including a 15-year rebuilding timeline (ending in 2022) with a provision to end overfishing immediately. The Addendum also establishes measures to discourage delayed implementation of required management measures.

Addendum XII (February 2009)
Addresses issues which arise when fishing privileges are transferred, either when whole businesses are transferred, when dual state/federal permits are split, or when individual trap allocations are transferred as part of a trap transferability program. In order to ensure the various LCMA-specific effort control plans remain cohesive and viable, this addendum does three things. First, it clarifies certain foundational principles present in the Commission's overall history-based trap allocation

effort control plan. Second, it redefines the most restrictive rule. Third, it establishes management measures to ensure history-based trap allocation effort control plans in the various LCMAs are implemented without undermining resource conservation efforts of neighboring jurisdictions or LCMAs.

Addendum XIII (May 2008)
Solidifies the transfer program for OCC and stops the current trap reductions.

Addendum XIV (May 2009)
Alters two aspects of the LCMA 3 trap transfer program. It lowers the maximum trap cap to 2000 for an individual that transfers traps. It changes the conservation tax on full business sales to 10% and for partial trap transfers to 20%.

Addendum XV (November 2009)
Establishes a limited entry program and criteria for Federal waters of LCMA 1.

Addendum XVI: Reference Points (May 2010)
Establishes new biological reference points to determine the stock status of the American lobster resource (fishing mortality and abundance targets and thresholds for the three stock assessment areas). The addendum also modifies the procedures for adopting reference points to allow the Board to take action on advice following a peer reviewed assessment.

Addendum XVII (February 2012)
Institutes a 10% reduction in exploitation for LCMAs within Southern New England (2, 3, 4, 5, and 6). Regulations are LCMA specific but include v-notch programs, closed seasons, and size limit changes.

Addendum XVIII (August 2012)
Reduces traps allocations by 50% for LCMA 2 and 25% for LCMA 3.

Addendum XIX (February 2013)
Modifies the conservation tax for LCMA 3 to a single transfer tax of 10% for full or partial business sales.

Addendum XX (May 2013)
Prohibits lobstermen from setting or storing lobster traps in Closed Area II from November 1 to June 15 annually. Any gear set in this area during this time will be considered derelict gear. This addendum represents an agreement between the lobster industry and the groundfish sector.

Addendum XXI (August 2013)
Addresses changes in the transferability program for LCMAs 2 and 3. Specific measures include the transfer of multi-LCMA trap allocations and trap caps.

Addendum XXII (November 2013)
Implements Single Ownership and Aggregate Ownership caps in LCMA 3. Specifically, it allows LCMA

3 permit holders to purchase lobster traps above the cap of 2000 traps; however, these traps cannot be fished until approved by the permit holder's regulating agency or once trap reductions commence. The Aggregate Ownership Cap limits LCMA fishermen or companies from owning more traps than five times the Single Ownership Cap.

Addendum XXIII (August 2014)
Updates Amendment 3's habitat section to include information on the habitat requirements and tolerances of American lobster by life stage.

Addendum XXIV (May 2015)
Aligns state and federal measure for trap transfer in LCMA's 2, 3, and the Outer Cape Cod regarding the conservation tax when whole businesses are transferred, trap transfer increments, and restrictions on trap transfers among dual permit holders.

Addendum XXVI (February 2018)
Advances the collection of harvester and biological data in the lobster fishery by improving the spatial resolution of data collection, requiring harvesters to report additional data elements, and establishing a deadline that within five years, states are required to implement 100% harvester reporting. The Addendum also improves the biological sampling requirements by establishing a baseline of ten sampling trips per year, and encourages states with more than 10% of coastwide landings to conduct additional sampling trips. Required reporting of additional data elements went into effect on January 1, 2019. The Addendum XXVI requirement for commercial harvesters to report their fishing location by 10 minute longitudinal/latitudinal square was implemented in 2021.

Addendum XXIX (2022)
Implements electronic tracking requirements for federally-permitted vessels in the American lobster and Jonah crab fisheries to collect high resolution spatial and temporal effort data. Specifically, electronic tracking devices will be required for vessels with commercial trap gear area permits for LCMAs 1, 2, 3, 4, 5, and Outer Cape Cod. Requirements will become effective in 2023.

Addendum XXVII (2023)
Establishes a trigger mechanism to implement management measures (gauge and escape vent sizes) to provide additional protection of the GOM/GBK spawning stock biomass (SSB). It also implements changes to management measures for LCMAs 1, 3, and Outer Cape Cod to improve the consistency of measures across the GOM/GBK stock.

Addendum XXX (2024)
Clarifies the Commission's recommendation to NOAA Fisheries that the increased minimum gauge size in LCMA 1 triggered under Addendum XXVII would also apply to foreign imports of American lobster.

Addendum XXXI (February 2025)
Postponed implementation of the Addendum XXVII gauge and vent size measures to July 1, 2025 to reduce negative impacts to the US and Canadian lobster industries in 2025 and allow Canada more

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time to consider implementing complementary management measures.

Addendum XXXII (May 2025)
Repeals all gauge and escape vent size measures from Addendum XXVII to address continued economic concerns and provide the Gulf of Maine states the opportunity to collaborate with the lobster industry to identify alternative conservation approaches.

4.2 Conservation Equivalency Plans
Amendment 3 to the FMP for American Lobster outlines the adaptive management limitations for lobster management, including measures that can or cannot be substituted using conservation equivalency (CE). The following conservation CE plans have been adopted under the American lobster FMP.

- New Hampshire: In 1999, the Board approved a CE plan that allowed New Hampshire to allocate a portion of their Area 1 fishermen 1,200 traps and the rest 600 traps in a two-tiered system, as an alternative to the 800-trap allocation system as specified in Amendment III.
- New Jersey: Addendum I required initial trap allocations to be based on the number of traps fished in any one calendar year during the period from January 1, 1994 through September 15, 1998. In 2001, the Board approved a CE plan for New Jersey allowing the state to allocate traps to its fishermen based upon the LCMT criteria established for areas 3, 4 and 5 but with a modification of the historical time period to 1980. The CE plan also allowed New Jersey to allocate up to 500 traps to fishermen holding federal permits and using otter trawl gear.
- Massachusetts: In 2003, the Board approved a CE proposal for the OCC management area, specific to section 2.1.7.2 and 2.1.7.3 of Addendum III. The CE plan uses 1999 through 2001 as qualifying years to identify potential participants and allocates traps based on fishing performance during 2000 - 2002 with pounds as the qualifying parameter.
- Connecticut: In 2007, the Board approved a CE plan for Connecticut as an alternative to the Addendum XI measures to end overfishing and rebuild the SNE stock. The CE plan allowed for a v-notching program as an alternative to the minimum size increase to 3-3/8 inch required by Addendum XI for LCMA 6.
- Massachusetts: In 2008, the Board approved a CE plan to the Addendum X requirement that dealers buying lobster from harvesters must report NMFS Statistical Areas for each transaction with harvesters. The CE plan allowed Massachusetts to not require dealers to collect “Area Fished” on a transaction basis and instead rely on the annual recall log’s attribution of monthly effort and landings to statistical area.
- Maine: In 2008, the Board approved a CE plan to the Addendum X requirement that dealers buying lobster from harvesters must report NMFS Statistical Areas for each transaction with harvesters. The CE plan allowed Maine to instead assign Statistical Areas to landings from dealers based on the dealer port location.
- Maine: in 2016, the Board approved a CE plan for Maine to allow the transfer of trap tags between traps using hog rings. The American lobster FMP does not allow for trap tags to be moved between traps.

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- LCMA 5: In 2026, the Board approved a CE plan to modify the LCMA 5 season closure regulations to allow black sea bass fishermen that hold a lobster permit to set and haul gear to fish for black sea bass beginning on March 9 instead of March 24 while maintaining the prohibition on lobster and Jonah crab harvest and possession from February 1 through March 31.

5.0 Fishery Dependent Monitoring

The following provisions of Addendum XXVI went into effect January 1, 2019:

- Required reporting of additional data elements;
- Requirement to implement 100% harvester reporting within five years;
- Baseline biological sampling requirement of ten sea and/or port sampling trips per year.

The Addendum XXVI requirement for commercial harvesters to report their fishing location by 10 minute longitudinal/latitudinal square was implemented in 2021. Table 4 describes the level of reporting and monitoring programs by each state. *De minimis* states are not required to conduct biological sampling of their lobster fishery.

In recent years it has been a challenge for the states whose lobster fisheries primarily occur in SNE to complete the required ten required sea and/or port sampling trips for fishery dependent monitoring. In 2025, Connecticut and New Jersey were unable to meet the requirement. New Jersey completed zero trips and continues to have difficulty with vessel Captains accommodating an observer aboard. No fishery dependent sampling has been conducted by Connecticut since 2014 due to reductions in funding and staffing levels. Table 5 provides data on the amount of sampling performed by states.

6.0 Status of Fishery Independent Monitoring

Addendum XXVI also requires fishery independent data collection by requiring statistical areas be sampled through one of the following methods: annual trawl survey, ventless trap survey, or young-of-year survey.

6.1 Young of Year Index

Several states conduct young-of-year (YOY) surveys to detect trends in abundance of newly-settled and juvenile lobster populations. These surveys attempt to provide an accurate picture of the spatial pattern of lobster settlement. States hope to track juvenile populations and generate predictive models of future landings.

Maine: There are currently 40 fixed stations along the Maine coast. Sites were selected based on orientation to surface winds, position in bays, water temperature during settlement period (for eastern Maine sites) and presence of suitable habitat. Of these 40 stations 38 have been sampled consistently since 2001 with two additional sites added to zone D in 2005 and one site swapped years due to its proximity to storm/sewage overflow with an historical site in Zone A/SA 511 beginning in 2023. This historical replacement site was sampled in the 1990's but dropped because the water temperatures were deemed too low for good lobster settlement but is currently experiencing warmer water temperatures suitable for settlement.

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The start of sampling for the 2025 settlement season was delayed late into October based on results from lobster larval tows indicating a peak in larval abundance much later than expected. This delay was then followed by particularly poor weather through the end of year and a number of vessel and staff logistical problems. These issues led to only 26 out of 40 sites being sampled, some being visited in January-February, and with no coverage in SA 511. Data from the historical site swapped in SA 511 to replace the site that that was affected by a nearby sewage outfall active after rain events, will be incorporated into the MARVIN database but is not included in the 2025 data pull (Figure 4).

New Hampshire: New Hampshire Fish and Game conducted a portion of the coastwide American Lobster Settlement Index (ALSI). In 2025, a total of 28 juvenile lobsters were sampled from three sites; 23 older juveniles, two young-of-year (YOY) lobster, and three one-year-old (Y+). Figure 5 depicts the CPUE (#/m2) of YOY lobsters for all New Hampshire sites combined from 2008 through 2025. The abundance index shows a general increasing trend to a time series high in 2011, followed by sustained low to moderate levels from 2012 through 2025 (Figure 5).

Massachusetts: Annual sampling for early benthic phase/juvenile (EBP) lobsters was conducted using SCUBA and airlift suction sampling equipment during August and September, 2025. As of 2025, suction sampling is conducted in the GOM stock unit at 12 sites from Cape Ann to the South Shore area, and in the SNE stock unit at 4 sites in Buzzards Bay. In 2025, densities of YOY lobsters in the GOM remained below time series means in means in Cape Ann, Salem Sound, and Boston, but were above the mean for South Shore. In SNE there were no YOY lobsters found in the Buzzards Bay sampling locations in 2025 (Figure 6).

Rhode Island: In 2025, the RI DEM DMF YOY Settlement Survey (Suction Sampling) was conducted at six fixed stations with twelve randomly selected 0.5 m2 quadrats sampled at each survey station. The survey stations are located outside of Narragansett Bay along the southern Rhode Island coast, from Sachuest Point (east) to Point Judith (west). The index presented represents the average annual densities for YOY (≤ 13mm) and total lobsters caught. The 2025 YOY Settlement Survey index was 0.08 lobsters/m2, and with all lobsters was 0.22 lobsters/m2 (Figure 7).

Connecticut: The CT DEEP Larval Lobster Survey in western Long Island Sound (LIS) was discontinued after 2012. Alternative monitoring data are available for the eastern Sound from the Millstone Power Station entrainment estimates of all stages of lobster larvae. Abundance indices in both programs are delta mean density of larvae per 1000 cubic meters of water, entrained into the power plant in the case of the Millstone program and stage 4 only captured in surface plankton samples in the CT DEEP program. Both programs show a protracted decline in recruitment following the 1999 die-off through 2012. The eastern LIS larval index has remained at low levels in the years following the 1999 die-off. The 2025 value (0.537 Δ-mean density) represents thirty-six lobster observed larvae, thirty-three stage I, two individuals at stage II, and I individual at stage III. Although the highest since 2006, the 2025 value is determined from a low sample size of six tows. Important to note, the lobster larvae entrainment sample schedule was modified in 2022. The samples were reduced from six per week (3 day and 3 night) to three samples per week collected during the daytime only (Figure 8).

6.2 Ventless Trap Survey

To address a need for a reliable index of lobster recruitment, a cooperative random stratified ventless trap survey was designed to generate accurate estimates of the spatial distribution of lobster length frequency and relative abundance while attempting to limit the biases identified in conventional fishery dependent surveys.

Maine: The Maine Ventless Trap Survey changed strategies in 2015 to cover more area by eliminating the vented traps at each site. This change allowed the survey to double the number of sites with ventless traps and increase the sampling coverage spatially to 276 sites. Traps were set during the months of June, July, and August. The stratified mean was calculated for each area using depth and statistical area for ventless traps only. Compared to previous years, in 2025 the number of sublegal (<83 mm CL) lobsters caught decreased in area 513 and increased slightly in 512 and 511. The number of legal sized (≥ 83 mm CL) lobsters caught decreased in area 513 and increased very slightly in 512 and 511 (Figure 9).

New Hampshire: Since 2009, NHF&G has been conducting the coastwide Random Stratified Ventless Trap Survey in state waters (statistical area 513). A total of six sites were surveyed twice a month from June through August in 2025. Annual stratified mean catch per trap haul values varied without significant positive or negative trend throughout the fifteen-year time series (Figure 10).

Massachusetts: The coastwide ventless trap survey was initiated in 2006 and expanded in 2007 with the intention of establishing a standardized fishery-independent survey designed specifically to monitor lobster relative abundance and distribution. The survey was not conducted in 2013 due to a lack of funding; however, starting in 2014 the survey has been funded with lobster license revenues and will continue as a long-term survey.

The time series of relative abundance for sublegal (< 83 mm CL) and legal-sized (≥ 83 mm CL) lobsters for Area 514 (part of LMA 1) is shown in Figure 11 as the stratified mean CPUE (± S.E.). Note that the MA index includes data from both vented and non-vented traps, and includes all four survey months (June – Sept). The average catch of sublegal lobsters is much higher than the catch of legal-sized lobsters and generally increased from 2006 through 2016 but has been declining since. The rate of decline slowed considerably over the last five years (2021-2025), and values from the last five years all fall below the time series average of 4.19 sublegal lobsters/trap. The stratified mean catch per trap of legal-sized lobsters in 2025 was 0.49 (± 0.01), and was below the time series average of 0.56.

The time series of relative abundance (stratified mean CPUE ± S.E.) for sublegal (<86 mm CL) and legal-sized (≥ 86 mm CL) lobsters in the Area 538 (MA SNE survey area) is shown in Figure 12. Note that due to survey changes for the MA SNE survey region in 2021, the entire MA SNE time series now represents June – August only, first haul of the month, and only those stations that occurred in the reduced survey footprint. The mean sublegal CPUE in 2025 was 0.66 (± 0.11), well below the time series average of 1.68 sublegal lobsters/trap haul. The CPUE of legal-sized lobsters in 2025 was 0.26 (±0.05), below the time series average of 0.32 legal lobsters/trap haul.

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Rhode Island: Rhode Island conducted the 2025 ventless trap survey in June, July, and August at a total of 27 stations divided between Block Island Sound, Rhode Island Sound, and Narragansett Bay. Generally, the abundance index of sublegal lobsters in the survey has been below the time series mean, with a declining trend. The depth-stratified abundance index of sublegal lobsters in the 2025 survey, 3.25 lobsters per ventless trap, remains below the time series mean of 5.45 lobsters per ventless trap. The abundance index for legal-sized lobsters, at 0.75 lobsters per ventless trap, is above the time series mean of 0.41 lobsters per ventless trap (Figure 13).

New Jersey: A ventless trap survey has been conducted since 2016 during the months of April, July, and October to coincide with NJ's Ocean Trawl Survey. CPUE data for American lobster captured on and off reef sites is collected (Figure 14).

Delaware: A pilot study was initiated in 2018 to assess the population structure of structure-oriented fish in the lower Delaware Bay and nearshore Atlantic Ocean. Sampling was conducted in the lower Delaware Bay and the nearshore Atlantic Ocean using commercial-sized ventless fish pots during April through December 2024. Eighteen American Lobsters were caught in lower Delaware Bay and 471 American Lobsters in the nearshore Atlantic Ocean with a ratio of 46% males, 51% female and 2% egg laden. The sampled Atlantic Ocean American Lobsters ranged in length from 50 mm to 130 mm.

6.3 Trawl Surveys

Maine and New Hampshire: The Maine-New Hampshire Inshore Trawl survey conducted by Maine Department of Marine Resources began in 2000 and covers approximately two-thirds of the inshore portion of Gulf of Maine. The spring survey began on April 28th, 2025, off Portland, ME, and finished May 30th, 2025, off Lubec, Maine. Due to weather and gear conflicts, 104 out of the 120 scheduled tows were completed leading to an 87% completion rate for the survey. A total of 13,182 lobsters were caught and sampled, with 6,340 females, 6,840 males, and 2 of unknown sex (Figure 15). The fall survey began on September 22nd, 2025, beginning in Portland, ME, and finished on October 24th, 2025, off Lubec, Maine. Due to adverse weather and gear conflicts, 82 out of the 120 scheduled tows were completed leading to a 68% completion rate for the survey. A total of 15,369 lobsters were caught and sampled, with 7,612 females, 7,750 males, and 7 lobsters of unknown sex (Figure 16).

Massachusetts: Since 1978, the Division of Marine Fisheries has conducted spring and autumn bottom trawl surveys in the territorial waters of Massachusetts. This survey has run continuously since 1978, with the sole exception of 2020, when neither the spring nor fall survey took place due to Covid-19 restrictions. After low levels observed in the GOM during the early to mid-2000s, relative abundance indices have increased over the last decade but have declined in recent years. Over the last few years, the index for legal sizes has exhibited relatively large interannual variations. The 2025 value for sublegal-sized abundance was above the median. Legal abundance has remained above the time series median since 2011. In SNE, relative abundance from the spring and fall surveys remains low. There were no lobsters observed in the SNE spring survey in 2025 (Figure 17).

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Rhode Island: The Rhode Island DFW Trawl Survey program conducted seasonal surveys in the spring and fall, as well as a monthly survey. In 2025, 44 trawls were conducted in the spring and 44 in the fall. The monthly survey occurs at fixed stations throughout Narragansett Bay. There were 143 trawls performed as part of the monthly program in 2025. Below are figures depicting the annual mean catch per tow. Spring 2025 mean CPUEs were 0.00 and 0.14 for legal and sub legal lobsters (respectively), where Fall 2025 CPUEs were 0.05 for legal lobsters and 0.50 for sublegal lobsters. The 2025 mean Monthly trawl CPUEs were 0.07 and 0.36 per-tow for legal and sublegal lobsters, respectively (Figure 18).

Connecticut and New York: Juvenile and adult abundance are monitored through the Long Island Sound Trawl Survey during the spring (April, May, June) and the fall (September, October) cruises all within NMFS statistical area 611. Mechanical breakdown of the research vessel prevented sampling in fall 2010; an estimated index is shown as the average of 2009 and 2011 values. Similarly, due to the COVID-19 pandemic, the spring and fall 2020 Long Island Sound Trawl Surveys were not conducted, an estimated index is shown as the average of 2019 and 2021. Additionally, Connecticut DEEP Marine Fisheries Program did not conduct the Long Island Sound Trawl Survey in 2025 due to boat operation obstacles that lasted the entire year. Spring abundance in the last twelve years (2011-2024) remains less than 1.0. All indices from 2008-2024 are below the time series median of 2.74. The fall time series median of 2.86 has not been exceeded since 2004 (Figure 19). Both legal and sublegal-size lobster abundance have declined with similar trajectory.

New York: New York initiated a stratified random trawl survey in the near shore ocean waters off the south shore of Long Island in 2018 from the Rockaways to Montauk Point and the New York waters of Block Island Sound. There are no survey data for 2025 because the survey was not completed. Only 8 out of 30 stations were sampled in the fall before work was halted due to weather, and all remaining surveys were cancelled due to vessel repairs.

New Jersey: An independent Ocean Trawl Survey is conducted from Sandy Hook, NJ to Cape May, NJ each year. The survey stratifies sampling in three depth gradients, inshore (18'-30'), mid-shore (30'-60'), offshore (60'-90'). The mean CPUE is calculated as the sum of the mean number of lobsters per size class collected in each sampling area weighted by the stratum area. The 2024 indices increased from 2023 values (Figure 20). No 2025 survey was conducted due to vessel repair.

Delaware, Maryland, and Virginia conduct bottom trawl surveys but lobster catch is very rare.

7.0 State Compliance

The Plan Review Team (PRT) notes a few inconsistencies with the requirements of the Lobster FMP during the 2025 fishing year. Connecticut and New Jersey did not conduct sea/port sampling in 2025, as required by Addendum XXVI. Connecticut is currently in the regulatory process to implement electronic tracking device requirements for federally permitted lobster and Jonah crab vessels with commercial trap gear area permits, as required by Addendum XXIX. All other states have fully implemented the measures required by the FMP.

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8.0 De Minimis Requests

The states of Virginia, Maryland, and Delaware have requested *de minimis* status. According to Addendum I, states may qualify for *de minimis* status if their commercial landings in the two most recent years for which data are available do not exceed an average of 40,000 pounds. Delaware, Maryland, and Virginia meet the *de minimis* requirement.

9.0 Regulatory Changes

Massachusetts

- 1/3/25 – Stopped the issuance of extra trap tags for LMA1 and LMA3. Adopted a standard 1/8" v-notch possession definition for OCCLCMA fishers. Allowed use of fully formed red weak rope with MASS Lobster tracer throughout to comply with buoy line marking requirements in body of buoy line for MA Mixed Species Pot/Trap Fisheries.

New Hampshire

- Changes were made to Fis. 602.16 (g) as follows: Replacement tags shall be available to a lobster licensee by exchanging trap tags with the fish and game department on a one-for-one basis to allow for the necessary rotation and maintenance of lobster traps.

Connecticut

- Connecticut is currently in the regulatory process to implement electronic tracking device requirements for federally permitted lobster and Jonah crab vessels with commercial trap gear area permits.

New York

- On July 10, 2024, NY implemented new regulations requiring all federally permitted vessels holding commercial lobster trap allocations have an approved electronic tracking device installed onboard.

10.0 Enforcement Concerns

Maine

- In 2025, Maine Marine Patrol Officers documented 348 lobster-related violations, with 98 being summonses. Marine Patrol's most notable cases in 2025 were: 3 individuals being charged with molesting lobster gear, 1 harvester found in possession of 94 short lobsters, 1 harvester found in possession on 5 oversized lobsters, 1 harvester found in possession of 12 v-notched lobsters, and 3 individuals were found to be fishing lobster traps beyond the Area 1 limit of 800 – the most egregious lobster trap limit violation was 950 lobster traps being fished by a license holder. 43 individuals were issued violations for fishing untagged lobster traps with the most serious violation being 150 improperly tagged lobster traps.

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Massachusetts

- DMF Adjudicatory proceeding: Matter of Schneider — due to non-compliance with vessel tracker requirements for federal lobster trap permit holders and abandoning of gear. This matter concluded in 2026 with an allowance for the permit holder to renew their Coastal Lobster Permit under certain circumstances. Their Offshore Lobster Permit was revoked.

New Jersey

- One summons was issued for deploying lobster pots within a reef site, and an additional three summonses were issued for failing to notify enforcement prior to deploying lobster gear on a reef.

11.0 Research Recommendations

The full list of research recommendations can be found in the 2025 Stock Assessment Report. Below is a summarized list of the high-priority research recommendations from the 2025 Stock Assessment that were compiled by the Lobster Technical Committee (TC) and Stock Assessment Subcommittee (SAS).

Port and Sea Sampling - Temporally and spatially explicit landings data, and complementary data to characterize the sex ratio and size distribution of landings, are the principal data needed to assess the impact of fishing on lobster populations. Limited funding, and in some cases, elimination of sea sampling and port sampling programs, will negatively affect the ability to characterize catch and conservation discards, limiting the ability of the model to accurately describe landings and stock conditions. It is imperative that funding for critical monitoring programs continues, particularly for offshore areas from which a large portion of current landings originate in SNE. Even if SNE modeling efforts are discontinued, the need for data describing catch and discards in the SNE fishery remains critical to understanding the resource. The CFRF Lobster and Jonah Crab Research Fleet has improved data availability and will continue to be imperative in describing landings for future stock assessments. At-sea sampling efforts directed at the SAs in federal waters fished by the LCMA 3 fleet need to be increased, via a NOAA Fisheries-implemented lobster-targeted sea sampling program. These fishery-dependent programs are essential for accurate lobster assessments and must have dedicated funding.

Commercial Data Spatial Resolution and Quality Control – Lack of fine scale spatial resolution and issues with reporting accuracy have made it a challenge to understand how commercial harvest and effort have varied through time. While improvements have been made with 10-minute square resolution reporting, the requirement to report the number of traps fished and vertical lines both in a SA and overall, 100% lobster harvester reporting, and vessel tracking, there are several major challenges relative to access, quality control, and integration with existing time series that need to be addressed. The implementation of these new data streams necessitates additional support to ensure compliance with requirements and assist harvesters to understand and accurately complete the various data elements requested of them. Time and effort will also be required to integrate the new data sources with existing time series of landings and effort.

Time Varying Growth - Growth of American lobster has been found to change through time

(McMahan et al. 2016). Although the newly developed RTMB assessment model can accommodate any number of growth transition matrices within and among years, the currently available tagging data used to estimate growth parameters and generate growth transition matrices are not comprehensive enough to detect time-varying growth. The SAS recommends a simulation study be conducted to examine the performance of the current base and alternative growth models and determine sample sizes and spatiotemporal coverage necessary to detect and adequately characterize time-varying growth, and that the study results inform development and implementation of a long-term, coordinated tagging program across both stock units to better monitor and characterize changes in American lobster growth.

Expansion of Growth Matrices - Exploration of expanding the model size structure to smaller sizes could allow the SAS to better capture changes in recruitment for the population by incorporating < 53mm lobster abundances from the surveys currently used, as well as incorporating additional surveys that currently are not model inputs for the assessment, such as those from the young of year settlement surveys. Due to decreased recruitment in SNE and some areas in GOMGBK, available survey data should be evaluated to determine whether current data sources for small sizes are sufficient for expanding the size structure and growth matrices.

Temperature-Molt Dynamics - Understanding how the timing for molting, molt increments, and probability by size vary with temperature for all stocks would allow for more accurate and realistic depictions of growth via updated annual growth matrices. The development of field-based approaches are also needed to compare and identify reliable predictors of molting to improve future seasonal monitoring of molt phenology in response to environmental change. The work of Groner et al. (2018) should be expanded by using the Millstone data to analyze how molt frequency and increment has changed seasonally and interannually.

Larval Ecology - Spatial expansion of larval surveys and further testing is warranted, particularly in areas like the eastern GOM and GBK that lack any studies of this nature. Studies that explore greater spatial coverage of larval sampling and examine lobster larval diets, *in situ* development time in current conditions, larval interactions with well-mixed versus stratified water columns, and varying growth and mortality with temperature would allow for greater context on these variables' influence on recruitment.

Deepwater Settlement - There is a need to determine settlement success in habitat not currently sampled and its contribution to overall stock productivity. Research needs to explore the levels of detectability, impact of stratification, and interannual temperature effects on the indices. Additionally, it will be important to understand whether there are differences in growth and survival in these deeper habitats, particularly relative to the desire to expand the growth matrix into smaller size ranges for modeling purposes.

Expansion of in situ Temperature Monitoring - Model-estimated bottom temperatures can be problematic given the prevalence of strong stratification across a large portion of nearshore waters in the GOM region. Strategic site location and deployment of fixed-station continuously logging temperature monitors throughout the nearshore range (at least) should be a high priority.

Assessment Model Platform - Based on the progress made in the 2025 assessment with Template Model Builder (TMB), the SAS prioritizes transitioning the assessment model from ADMB to TMB between now and the next assessment to ensure diagnostics are fully reviewed and the transition is successful.

Recruitment Index - Recent changes in GOMGBK recruitment observed during this assessment highlighted that the model can no longer rely on the monotonic trend it has in the past for describing recruitment changes through time. Future research should focus on exploring whether settlement data from outside traditional settlement surveys (i.e., deepwater settlement data or early benthic phase data) can be incorporated into settlement indices, and examining and incorporating variables that explain variation in recruitment.

Stock Structure Working Group - The SAS recommends that a workshop on stock boundaries be convened prior to the initiation of the next assessment to review results of any new research and re-evaluate appropriate stock boundaries. Inclusion of Canadian researchers at this workshop would be beneficial to share data and knowledge on this shared resource.

Spatial Analyses of Fisheries-Independent Data – Northeast Fisheries Science Center (NEFSC) trawl survey data remains one of the richest data sources to understand abundance and distribution patterns through time for lobsters by size and sex. Formal analyses of NEFSC trawl survey and the ME/NH trawl survey should be performed. The Ecosystem Monitoring (EcoMon) Program's larval lobster information should also be considered.

Reevaluate Baseline Natural Mortality Rate - Intensive hypothesis-driven sensitivity analyses should be conducted to evaluate the base mortality rate for both stocks by season and year. Canadian tagging data should be examined to determine how natural mortality rates derived from these data compare to the assumptions used currently in the model and sensitivity analyses. Exploration of additional time series representing natural mortality hypotheses (e.g. sea temperature, shell disease prevalence, predators) should be continued to either inform time-varying natural mortality or correlate to rates produced in sensitivity analyses. If the assessment model platform is moved to TMB, interannual natural mortality should be explored using random effects.

Management Strategy Evaluation - Developing a true management strategy evaluation tool that can iteratively project and refit the operating model would best inform future management discussions on rebuilding the SNE stock or providing resiliency for the GOM stock and fishery. Development of clearly defined goals and consensus statements by the Board with input from industry about management objectives will be a critical aspect to the MSE and future management of this fishery.

Economic Reference Points - Economic analyses considering landings, ex-vessel value, costs, associated economic multipliers, number of active participants, and other factors are imperative to truly discern how declines in the population would impact the GOMGBK industry. The SAS strongly recommends a thorough economics analysis be conducted by a panel of experts to more properly

inform economic-based reference points and ultimately provide resiliency to both the GOMGBK stock and fishery.

12.0 Plan Review Team Recommendations

During its review of the state compliance reports, the PRT noted the following issues:

- Massachusetts was unable to provide a compliance report including all required data by the August 1 deadline[2].
- In 2025, Connecticut and New Jersey did not meet the Addendum XXVI minimum requirement of ten sea/port sampling trips. Given persistent issues with states being unable to meet the sampling requirement, the Board should consider how to address this issue moving forward.

The PRT Recommends the Board approve the *de minimis* requests of DE, MD, and VA. Other than the issues noted above, all states appear to be in compliance with the requirements of the FMP.

The following are general recommendations the PRT would like to raise to the Board:

- The PRT recommends the Board consider reviewing the monitoring requirements in SNE given the status of the stock and the difficulty obtaining sea sampling trips in a fishery with reduced effort. The TC has discussed the need for additional sampling trips in federal waters as the fishery has shifted offshore. The Board could consider reducing required sea/port sampling trips for SNE areas or revising the *de minimis* policy.

[2] Data for Massachusetts that were not available for this report will be added at a later date.

13.0 Tables

Table 1. Landings (in pounds) of American Lobster by the states of Maine through Virginia. Source: ACCSP Data Warehouse for 1990-2024 landings; state compliance reports for 2025 landings. *C= confidential data.*

	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	Total Lbs
1990	28,068,238	1,658,200	16,572,172	7,258,175	2,645,951	3,431,111	2,198,867	68,300	24,941	58,260	**61,984,215**
1991	30,788,646	1,802,035	15,998,463	7,445,172	2,673,674	3,128,246	1,673,031	54,700	26,445	7,914	**63,598,326**
1992	26,830,448	1,529,292	14,969,350	6,763,087	2,534,161	2,651,067	1,213,255	21,000	27,279	753	**56,539,692**
1993	29,926,464	1,693,347	14,350,595	6,228,470	2,177,022	2,667,107	906,498	24,000	46,650	2,940	**58,023,093**
1994	38,948,867	1,650,751	16,176,551	6,474,399	2,146,339	3,954,634	581,396	8,400	7,992	460	**69,949,789**
1995	37,208,324	1,834,794	15,903,241	5,362,084	2,541,140	6,653,780	606,011	25,100	26,955	5,210	**70,166,639**
1996	36,083,443	1,632,829	15,312,826	5,295,797	2,888,683	9,408,519	640,198	20,496	28,726	C	**71,311,517**
1997	47,023,271	1,414,133	15,010,532	5,798,529	3,468,051	8,878,395	858,426	C	34,208	2,240	**82,487,785**
1998	47,036,836	1,194,653	13,167,803	5,617,873	3,715,310	7,896,803	721,811	1,359	19,266	1,306	**79,373,020**
1999	53,494,418	1,380,360	15,875,031	8,155,947	2,595,764	6,452,472	931,064	C	41,954	6,916	**88,933,926**
2000	57,215,406	1,709,746	14,988,031	6,907,504	1,393,565	2,883,468	891,183	C	62,416	C	**86,051,319**
2001	48,617,693	2,027,725	11,976,487	4,452,358	1,329,707	2,052,741	579,753	C	31,114	C	**71,067,578**
2002	63,625,745	2,029,887	13,437,109	3,835,050	1,067,121	1,440,483	264,425	C	20,489	C	**85,720,309**
2003	54,970,948	1,958,817	11,321,324	3,561,391	C	946,449	209,956	C	22,778	C	**72,991,663**
2004	71,574,344	4,076,845	11,675,852	3,059,319	646,994	996,109	370,536	13,322	14,931	27,039	**92,455,291**
2005	68,729,813	C	11,291,145	3,174,852	713,901	1,154,470	369,003	C	39,173	21,988	**85,494,345**
2006	75,420,639	2,612,389	12,102,232	4,355,690	806,135	1,252,146	470,878	3,706	26,349	28,160	**97,078,324**
2007	63,987,476	2,468,811	10,046,445	2,299,744	568,696	911,761	334,097	C	26,804	C	**80,643,834**
2008	69,911,680	2,568,088	10,606,534	2,782,000	427,168	712,075	304,479	C	32,932	C	**87,344,955**
2009	81,124,149	2,986,981	11,789,758	2,842,088	412,468	731,811	C	6,064	30,618	21,472	**99,945,409**
2010	96,247,042	3,648,004	12,772,983	2,928,688	441,622	813,513	692,910	C	29,149	16,345	**117,590,257**
2011	104,957,000	3,919,195	13,385,902	2,754,067	198,928	344,232	698,205	8,879	41,057	12,879	**126,320,344**
2012	127,464,536	4,229,227	14,486,428	2,706,384	247,857	550,441	919,351	C	65,579	10,823	**150,680,627**
2013	128,015,530	3,817,707	15,259,573	2,155,762	127,420	496,535	660,367	C	62,601	9,061	**150,604,556**
2014	124,941,344	4,374,656	15,312,852	2,412,875	127,409	222,843	526,368	26,330	57,414	11,099	**148,013,190**
2015	122,685,783	4,721,826	16,450,853	2,316,458	205,099	147,414	445,060	22,894	29,284	9,474	**147,034,145**
2016	132,749,768	5,782,098	17,784,921	2,260,335	254,346	218,846	349,880	C	29,254	2,854	**159,432,301**
2017	112,153,095	5,645,434	16,493,125	2,031,143	130,015	150,317	409,062	32,364	29,136	1,630	**137,075,319**
2018	121,226,471	6,199,365	17,697,243	1,905,689	110,580	112,685	344,547	C	24,893	2,727	**147,624,201**
2019	102,232,748	6,093,615	17,029,462	1,795,212	111,573	112,107	291,072	C	11,831	1,840	**127,679,459**
2020	97,916,077	5,014,169	15,711,853	1,695,279	159,173	111,678	309,197	11,098	10,176	C	**120,938,700**
2021	110,718,783	5,712,222	16,826,952	1,351,415	148,758	109,117	290,981	6,193	12,827	3,099	**135,180,348**
2022	99,020,181	5,264,476	14,907,099	1,189,045	88,654	81,950	266,612	C	13,336	C	**120,831,354**
2023	97,356,466	6,090,731	15,886,108	1,116,746	126,729	104,899	266,734	C	8,518	4,203	**120,961,134**
2024	87,535,403	7,629,847	16,521,672	1,147,499	188,270	143,770	315,667	C	C	2,954	**113,485,081**
2025	80,408,665	7,740,424	18,007,400	1,539,455	284,264	141,619	405,631	C	C	C	**108,527,458**

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Table 2. Top: Current (2021-2023) reference abundance estimates (millions), fishery/industry target, abundance limit and threshold (millions), and 2020 Assessment abundance reference points for both stocks. Bottom: Current (2021-2023) exploitation, current target and threshold exploitation, and 2020 Assessment target and threshold exploitation for both stocks.

	Quantity	GOMGBK	SNE
Abundance Reference Points	Current Reference Abundance (2021-2023 average)	202	6
	Current Fishery/Industry Target	229	NA
	Current Limit	143	NA
	Current Threshold	89	18
	2020 Assessment Fishery/Industry Target	212	NA
	2020 Assessment Limit	125	NA
	2020 Assessment Threshold	89	20
Exploitation Reference Points	Current Exploitation (2021-2023 average)	0.465	0.26
	Current Target	0.430	0.267
	Current Threshold	0.464	0.286
	2020 Assessment Target	0.461	0.257
	2020 Assessment Current Threshold	0.475	0.290

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Table 3. 2025 LCMA specific management measures.

Management Measure	LCMA 1	LCMA 2	LCMA 3	LCMA 4	LCMA 5	LCMA 6	OCC
Min Gauge Size	3 1/4"	3 3/8"	3 17/32"	3 3/8"	3 3/8"	3 3/8"	3 3/8"
Vent Rect.	1 15/16 x 5 3/4"	2 x 5 3/4"	2 1/16 x 5 3/4"	2 x 5 3/4"	2 x 5 3/4"	2 x 5 3/4"	2 x 5 3/4"
Vent Cir.	2 7/16"	2 5/8"	2 11/16"	2 5/8"	2 5/8"	2 5/8"	2 5/8"
V-notch requirement	Mandatory for all eggers	Mandatory for all legal size eggers	Mandatory for all eggers above 42°30'	Mandatory for all eggers in federal waters. No v-notching in state waters.	Mandatory for all eggers	None	None
V-Notch Definition[1] (possession)	Zero Tolerance	1/8" with or w/out setal hairs[1]	1/8" with or w/out setal hairs[1]	1/8" with or w/out setal hairs[1]	1/8" with or w/out setal hairs[1]	1/8" with or w/out setal hairs[1]	1/8" with or w/out setal hairs[1]
Max. Gauge (male & female)	5"	5 ¼"	6 3/4"	5 ¼"	5 ¼"	5 ¼"	State Waters: none Federal waters: 6 3/4"
Season Closure				April 30-May 31[2]	February 1-March 31[3]	Sept 8-Nov 28[4]	February 1-April 30
Trap Limit	800	Permit Specific, not to exceed 800	Permit Specific, not to exceed 1,945	Permit Specific, not to exceed 1,440	Permit Specific, not to exceed 1,440	Based on historical traps fished	Permit specific, not to exceed 800

[1] A v-notched lobster is defined as any female lobster that bears a notch or indentation in the base of the flipper that is at least as deep as 1/8", with or without setal hairs. It also means any female which is mutilated in a manner that could hide, obscure, or obliterate such a mark.

[2] Pots must be removed from the water by April 30 and un-baited lobster traps may be set one week prior to the season reopening.

[3] During the February 1 – March 31 closure, trap fishermen will have a two week period to remove lobster traps from the water and may set lobster traps one week prior to the end of the closed season.

[4] Two week gear removal and a 2 week grace period for gear removal at beginning of closure. No lobster traps may be baited more than 1 week prior to season reopening.

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Table 4. 2025 sampling requirements and state implementation. All states have 100% active harvester reporting. Sufficient sea sampling can replace port sampling. *De minimis* states (denoted by *) are not required to conduct biological sampling of their lobster fishery.

State	100% Dealer Reporting	10% Harvester Reporting	Sea Sampling	Port Sampling	Ventless Trap Survey	Settlement Survey	Trawl Survey
ME	✓	✓ (10%)	✓		✓	✓	✓
NH	✓	✓	✓	✓	✓	✓	✓
MA	✓	✓	✓		✓	✓	✓
RI	✓	✓	✓	✓	✓	✓	✓
CT	✓	✓	No[a]	No[a]		✓[b]	✓
NY	✓	✓		✓			✓
NJ	✓	✓	No	No	✓		✓
DE*	✓	✓			✓		✓
MD*	✓	✓					✓
VA*	✓	✓					✓

[a] No fishery dependent sampling has been conducted by CT since 2014 due to reductions in funding and staffing levels.

[b] Larval data are available for the eastern Sound (ELIS) from the Millstone Power Station entrainment estimates of all stages of lobster larvae.

Table 5. 2025 sea and port sampling trips and samples by state. *De minimis* states (denoted by *) are not required to conduct biological sampling of their lobster fishery.

State	Sea Sampling			Port Sampling		Totals	
	Trips	Samples	Traps	Trips	Samples	Trips	Samples
ME	200	225,703	49,521	0	0	200	225,703
NH	14	8,872	NR	12	1,048	26	9,920
MA	66	37,761	15,956	0	0	66	37,761
RI	4	1,240	1,109	9	2,315	13	3,555
CT	0	0	0	0	0	0	0
NY	0	0	0	18	1,827	18	1,827
NJ	0	0	0	0	0	0	0
DE*	0	0	0	0	0	0	0
MD*	0	0	0	0	0	0	0
VA*	0	0	0	0	0	0	0
Total	284	273,576	66,586	39	5,190	323	278,766

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14.0 Figures

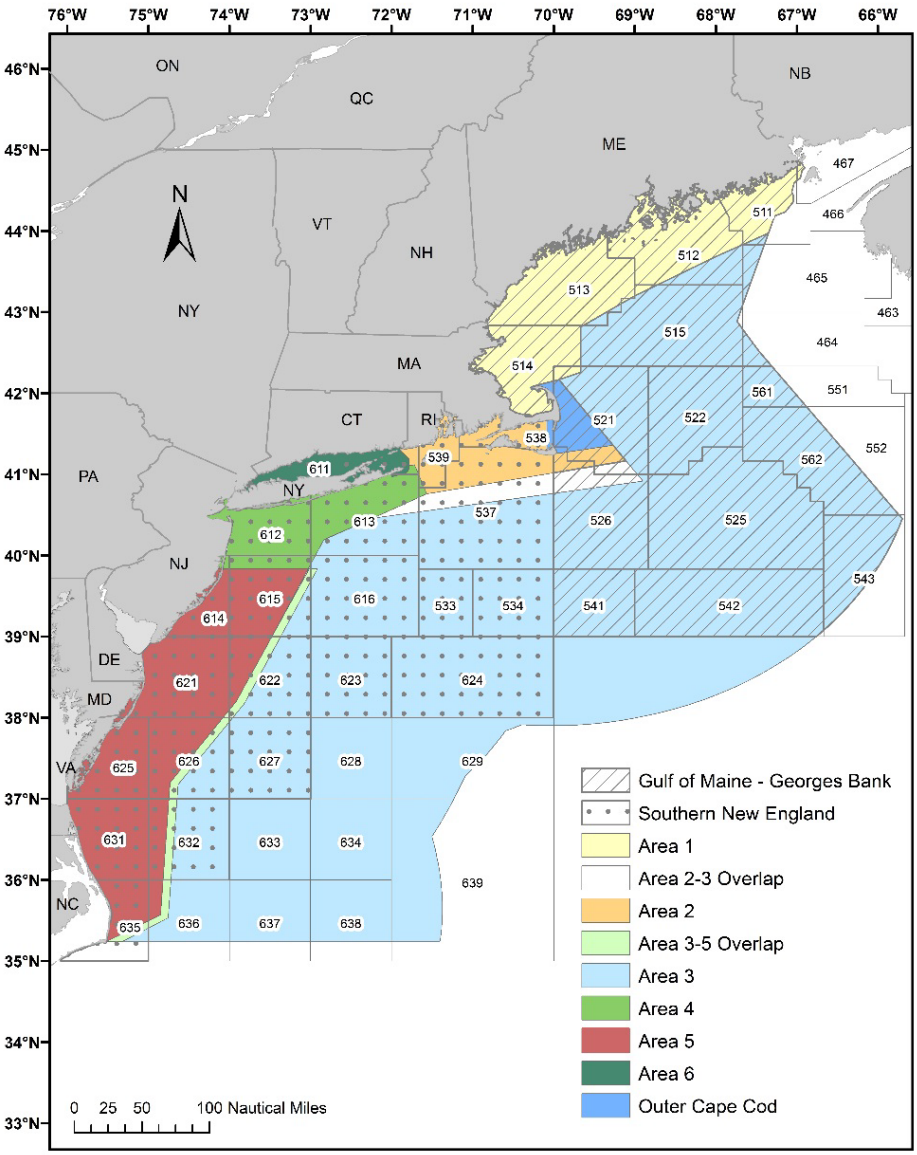


Figure 1. Lobster Conservation Management Areas (LCMAs) and stock boundaries for American lobster.

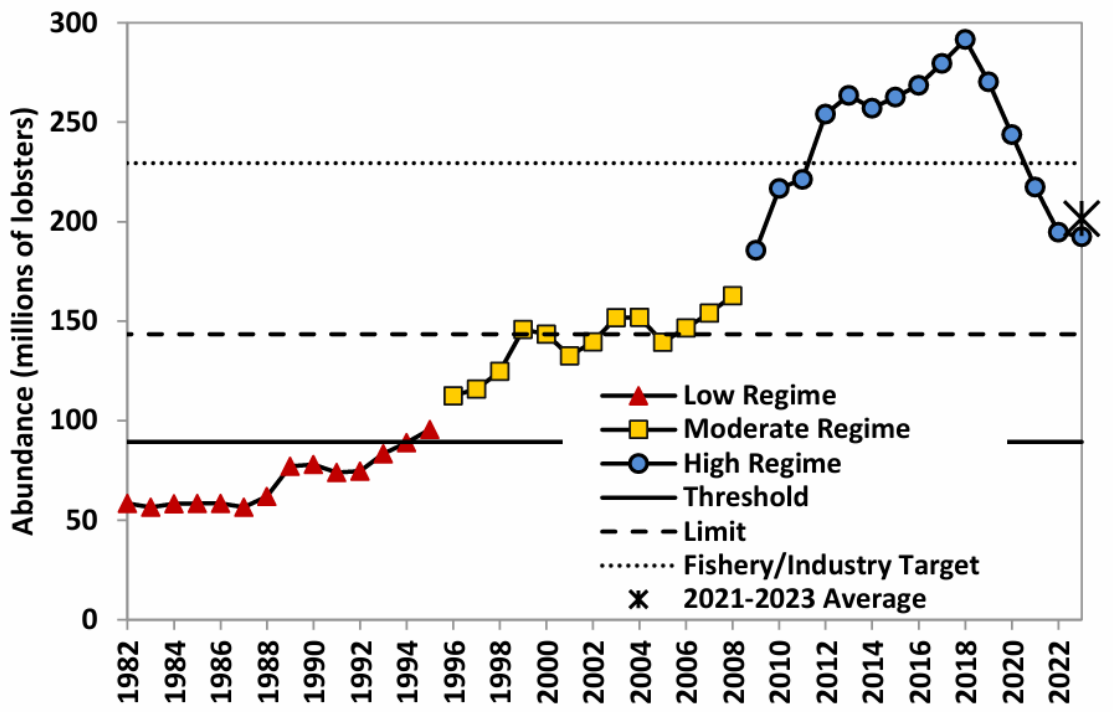


Figure 2. Abundance for GOM/GBK Relative to Reference Points. Source: 2025 Benchmark Stock Assessment for American Lobster.

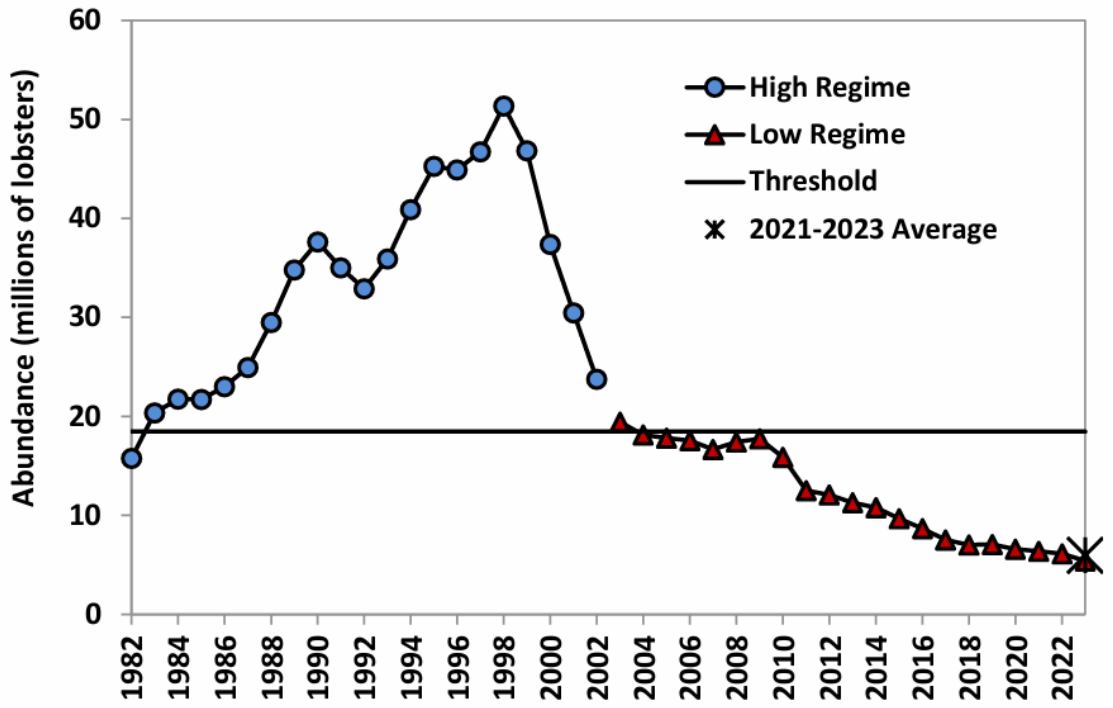


Figure 3. Abundance for SNE Relative to Reference Points. Source: 2025 Benchmark Stock Assessment for American Lobster.

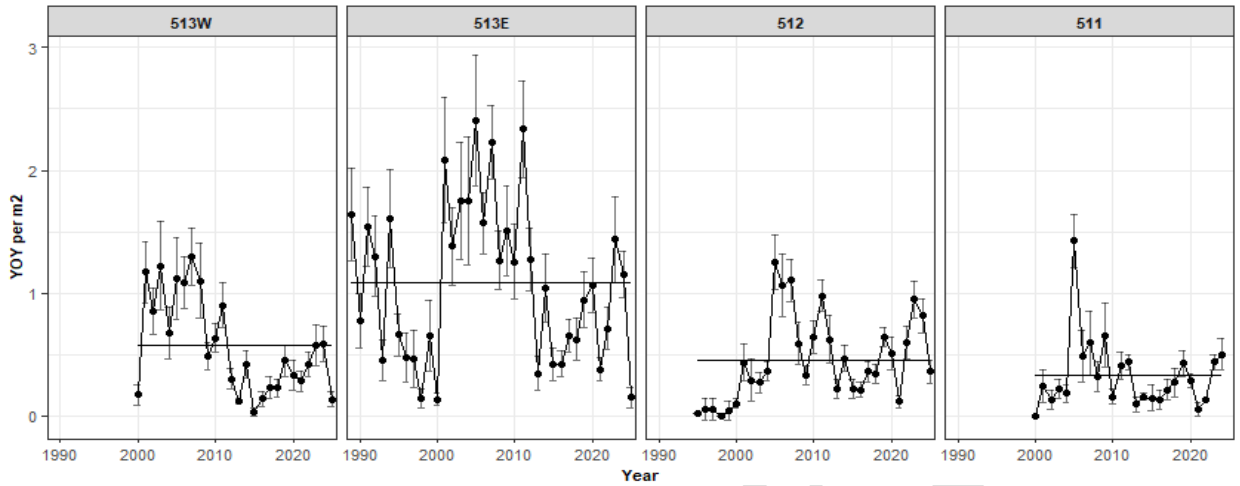


Figure 4. Maine Lobster Settlement Survey Index 1989-2025 for each statistical area with series average (solid horizonal line) for each region with standard error bars. The cut-off sizes for YOY vary by year and are based on the annual size frequency distribution and range from 11 to 14.5mm CL.

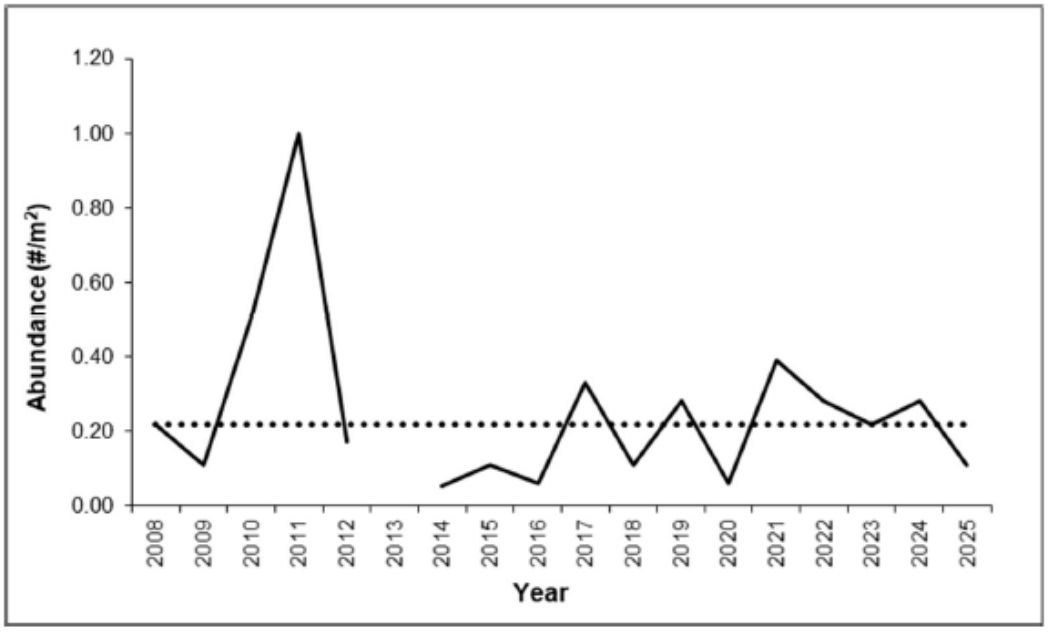


Figure 5. Catch per unit effort (#/m2) of young-of-year (YOY), one-year-olds (Y+), YOY and Y+ combined, and all lobsters during the American Lobster Settlement Index, by location, in New Hampshire, from 2008 through 2025.

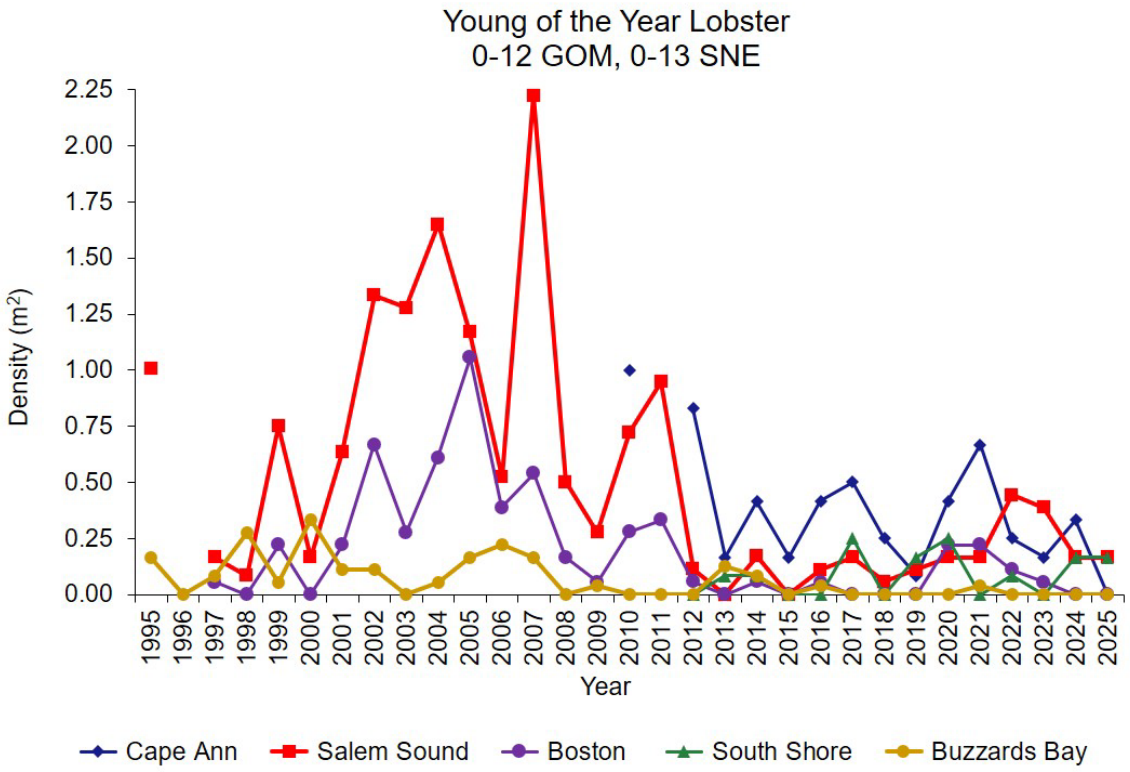


Figure 6. Young-of-year lobster density in four regions within the GOM stock unit – Cape Ann, Salem Sound, Boston, and South Shore, and one region in the SNE stock unit - Buzzards Bay. In GOM locations, lobsters ≤ 12 mm CL are considered YOY, while in SNE locations YOYs are ≤ 13 mm CL.

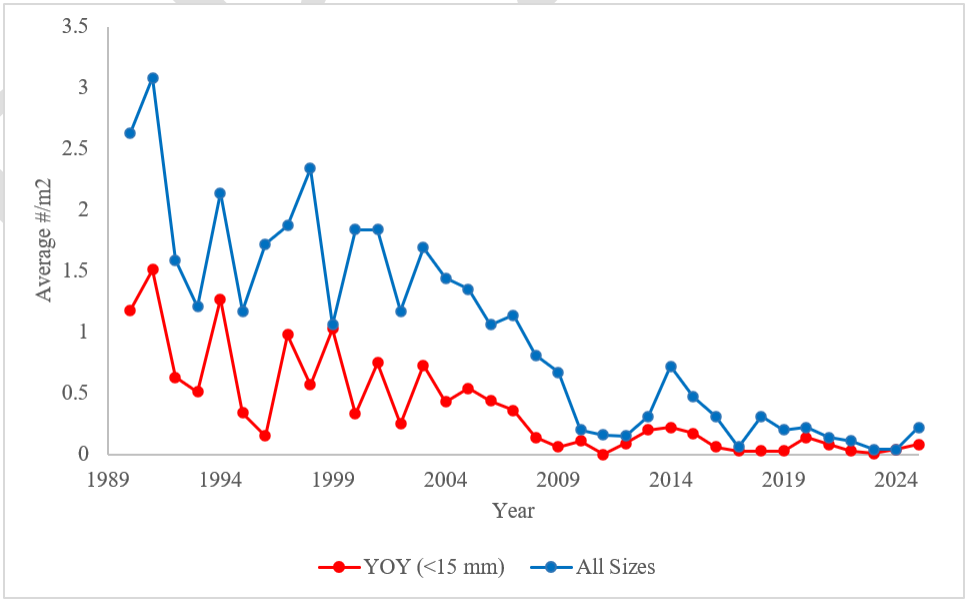


Figure 7. Average abundance of American lobster in Rhode Island suction sampling sites. Abundances are presented for YOY lobsters 13 mm or smaller (red line) and all sizes (blue line).

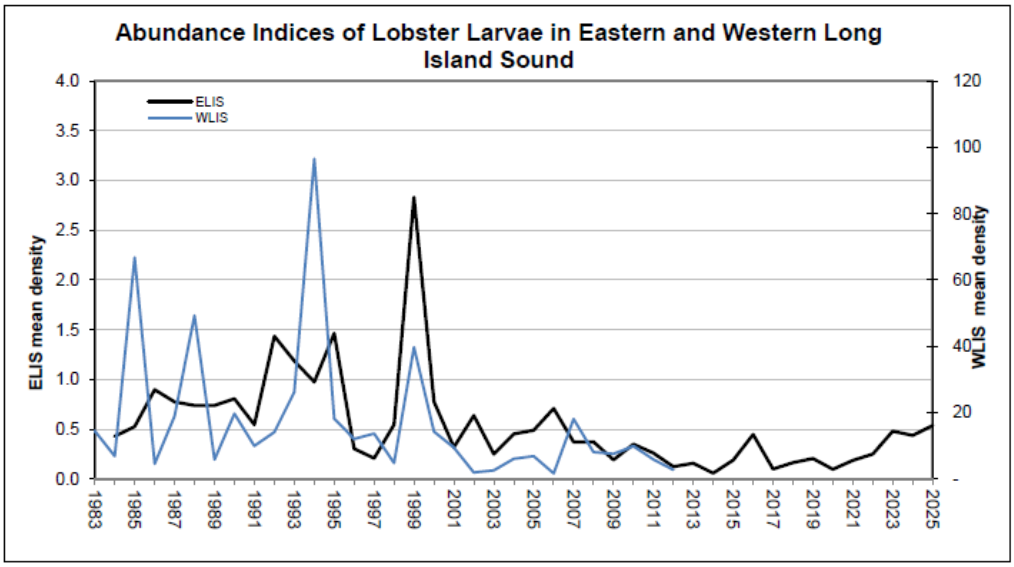


Figure 8. Abundance indices of lobster larvae from the Connecticut DEEP Larval Lobster Survey in western Long Island Sound (discontinued in 2013) and from the Millstone Power Station entrainment estimates in eastern Long Island Sound.

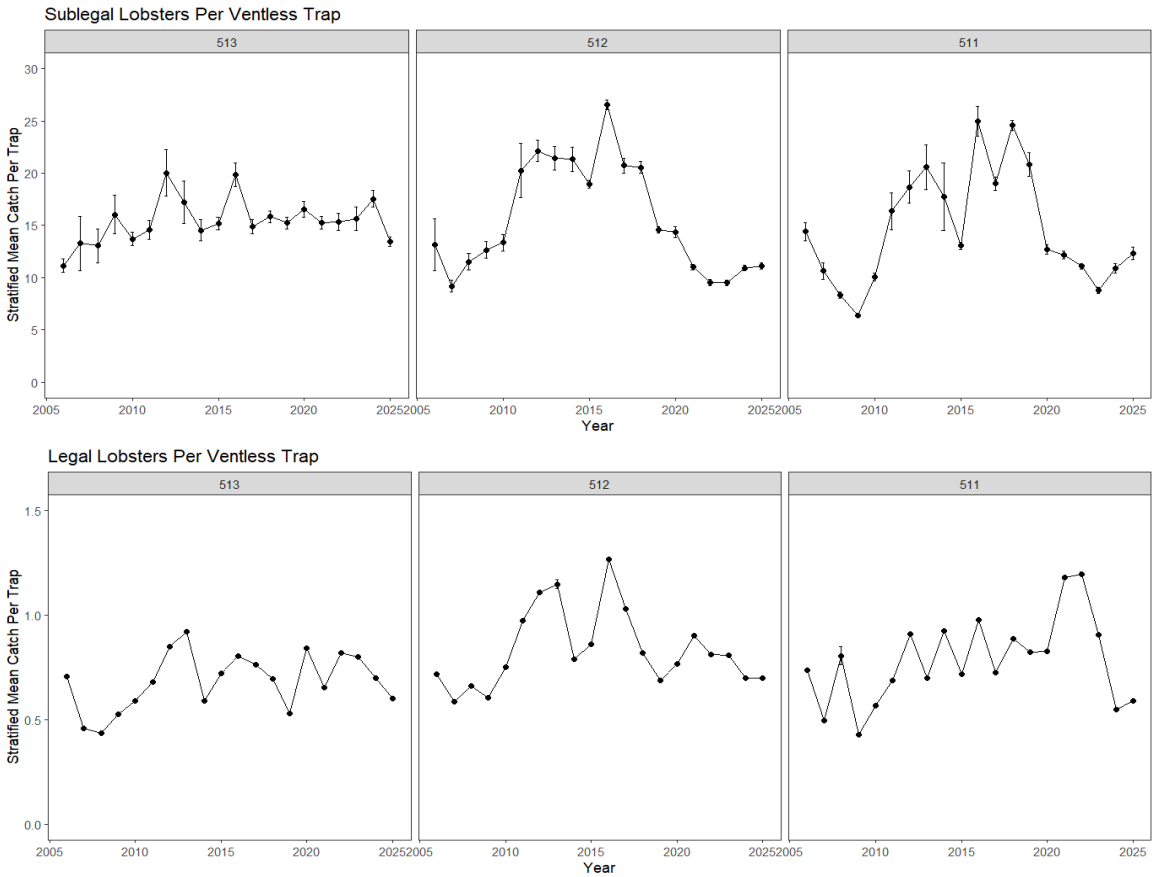


Figure 9. Stratified mean catch per trap for sublegal (top) and legal (bottom) sized lobsters from Maine's Ventless Trap Survey 2006-2024 by statistical area from ventless traps only. Standard error is shown.

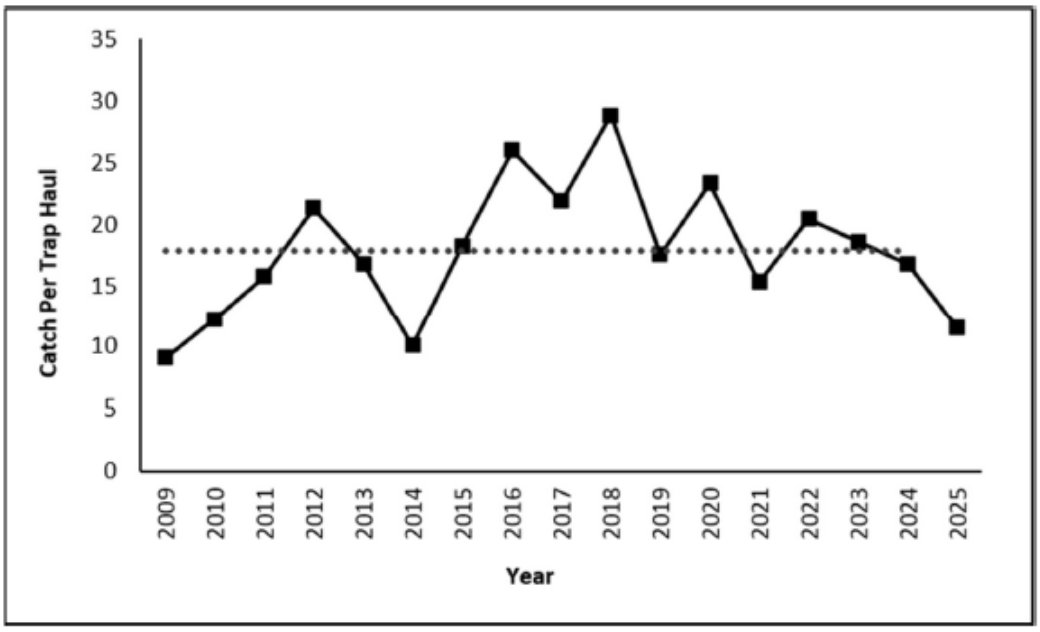


Figure 10. Stratified mean catch per trap haul (ventless traps only) for all lobsters captured during the coastwide random stratified Ventless Trap Survey in New Hampshire state waters.

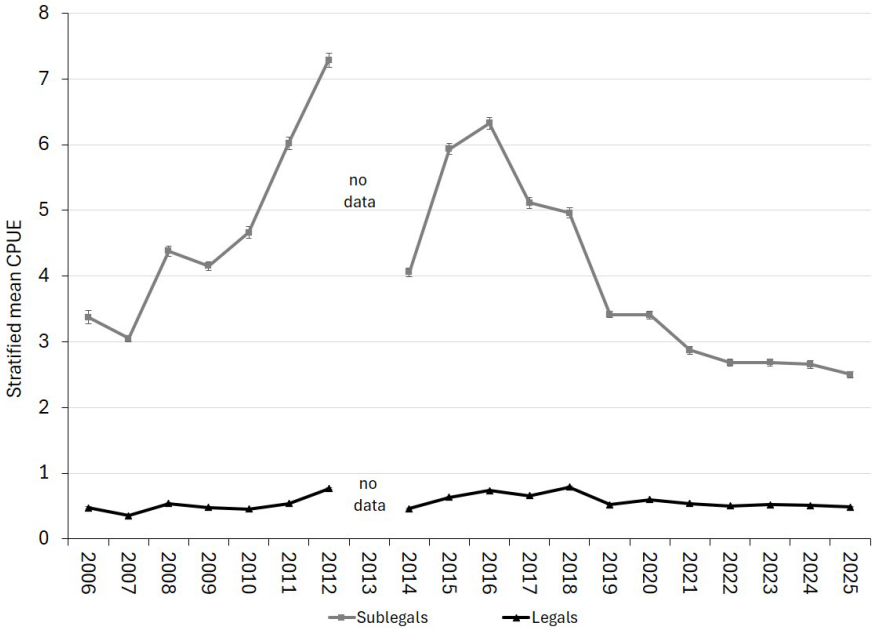


Figure 11. Stratified mean catch per trap haul (±S.E.) of sublegal (< 83 mm, grey line) and legal (≥ 83 mm, black line) lobsters in NMFS Area 514 from MADMF ventless trap survey from.

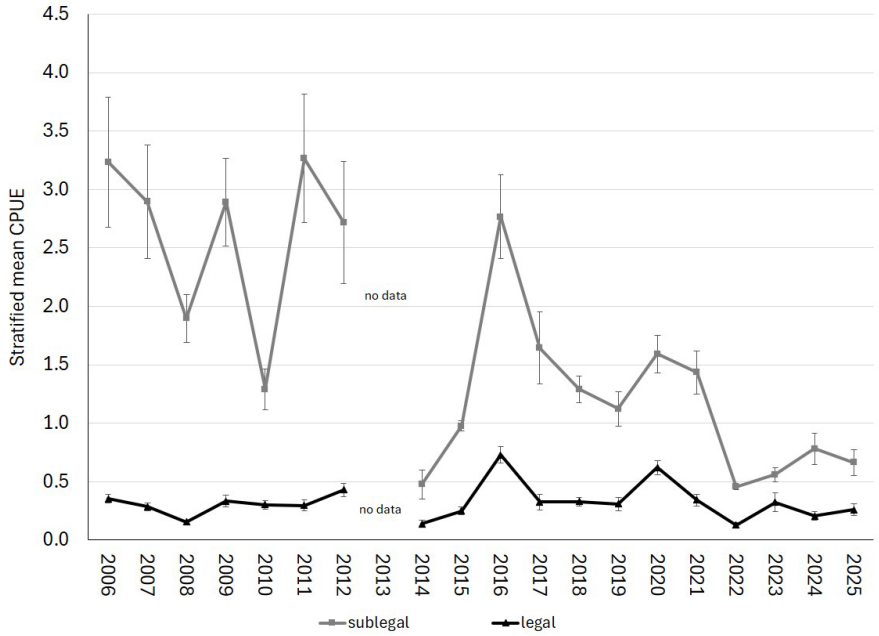


Figure 12. Stratified mean catch per trap haul (±S.E.) of sublegal (< 86 mm, grey line) and legal (≥ 86 mm, black line) lobsters in the reduced MA SNE survey area, Area 538.

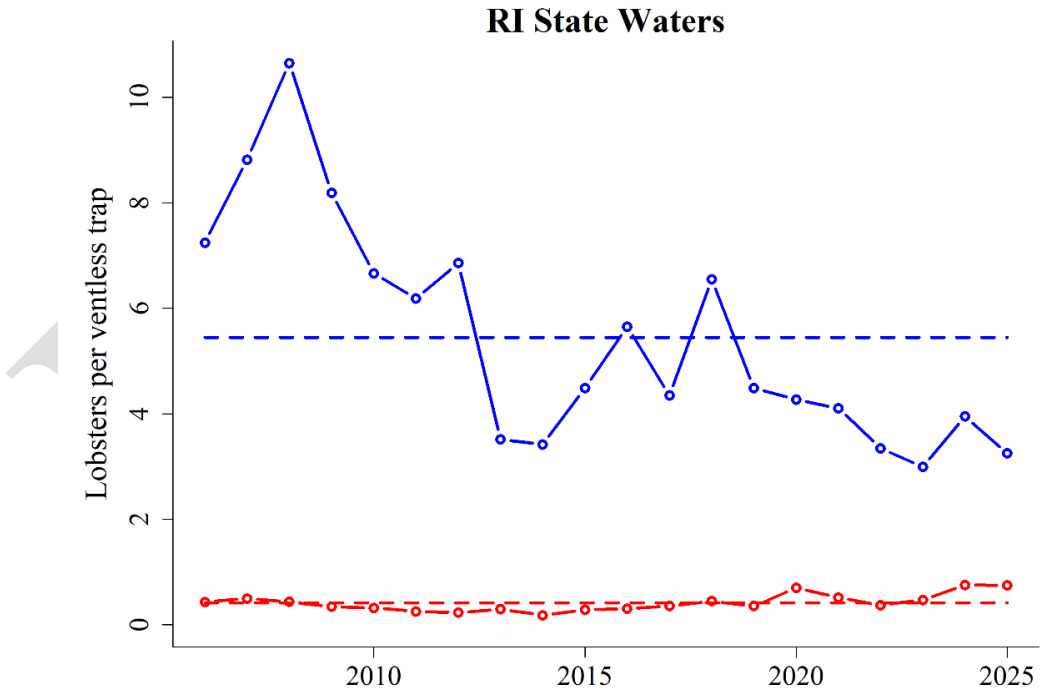


Figure 13. Depth-stratified mean catch of sublegal lobsters in the RIDEM DMF ventless trap survey.

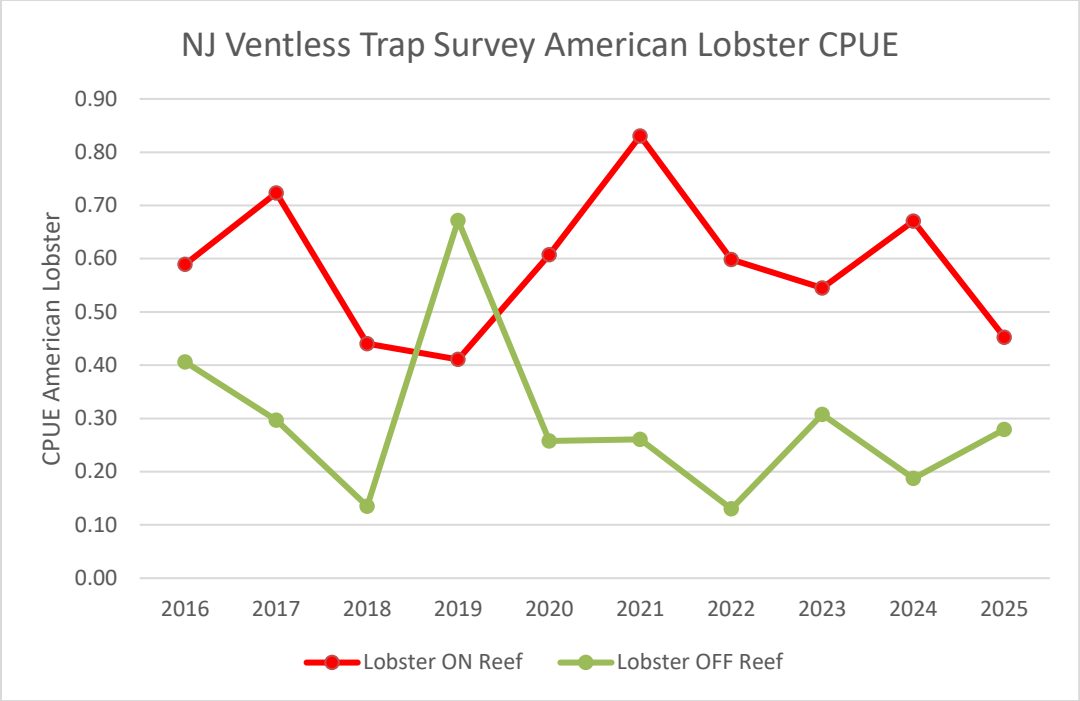


Figure 14. CPUE of American lobster captured on and off reef sites from NJ Ventless Trap Survey. Sampling is conducted during the months of April, July, and October to coincide with NJ's Ocean Trawl Survey.

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Figure 15. Stratified mean catch and recruit abundance for American lobster on the Spring ME/NH Inshore Trawl Survey (2000-2025). Top: Mean catch of sublegals (<83). Middle: Mean catch of legal sized lobsters (>82). Bottom: Recruit abundance (71-80 mm lobsters).

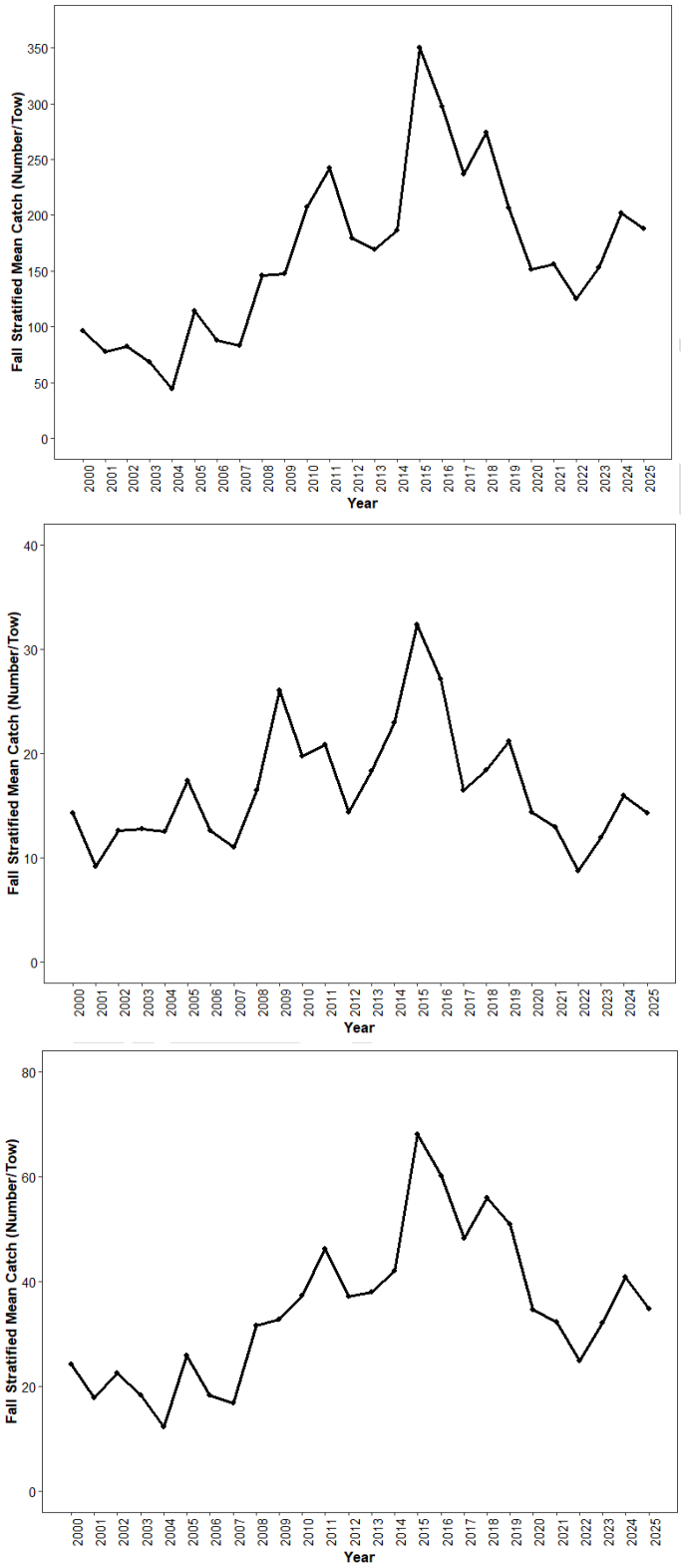


Figure 16. Stratified mean catch and recruit abundance for American lobster on the Fall ME/NH Inshore Trawl Survey (2000-2025). Top: Mean catch of sublegals (<83). Middle: Mean catch of legal sized lobsters (>82). Bottom: Recruit abundance (71-80 mm lobsters).

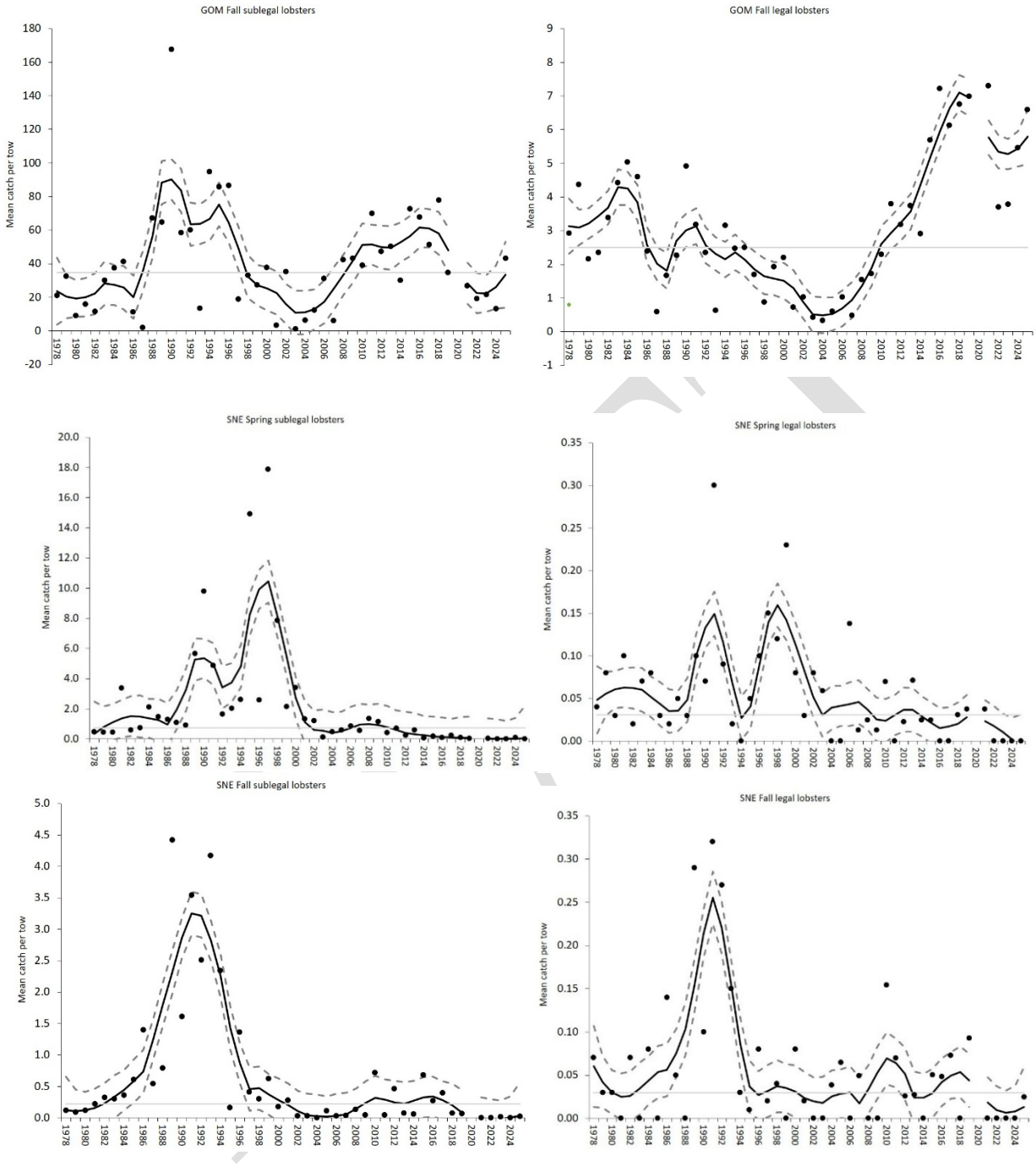


Figure 17. MADMF Fall Trawl Survey sublegal (left) and legal (right) indices from 1978-2025 sexes combined. No survey conducted in 2020 (spring or fall) due to the Covid-19 pandemic. The top two charts are from Gulf of Maine and the bottom four charts are from Southern New England. Black line represents a LOESS fit to the data (span = 0.25) and dashed grey lines are upper and lower standard errors of the model fit. The horizontal grey line is the time series median.

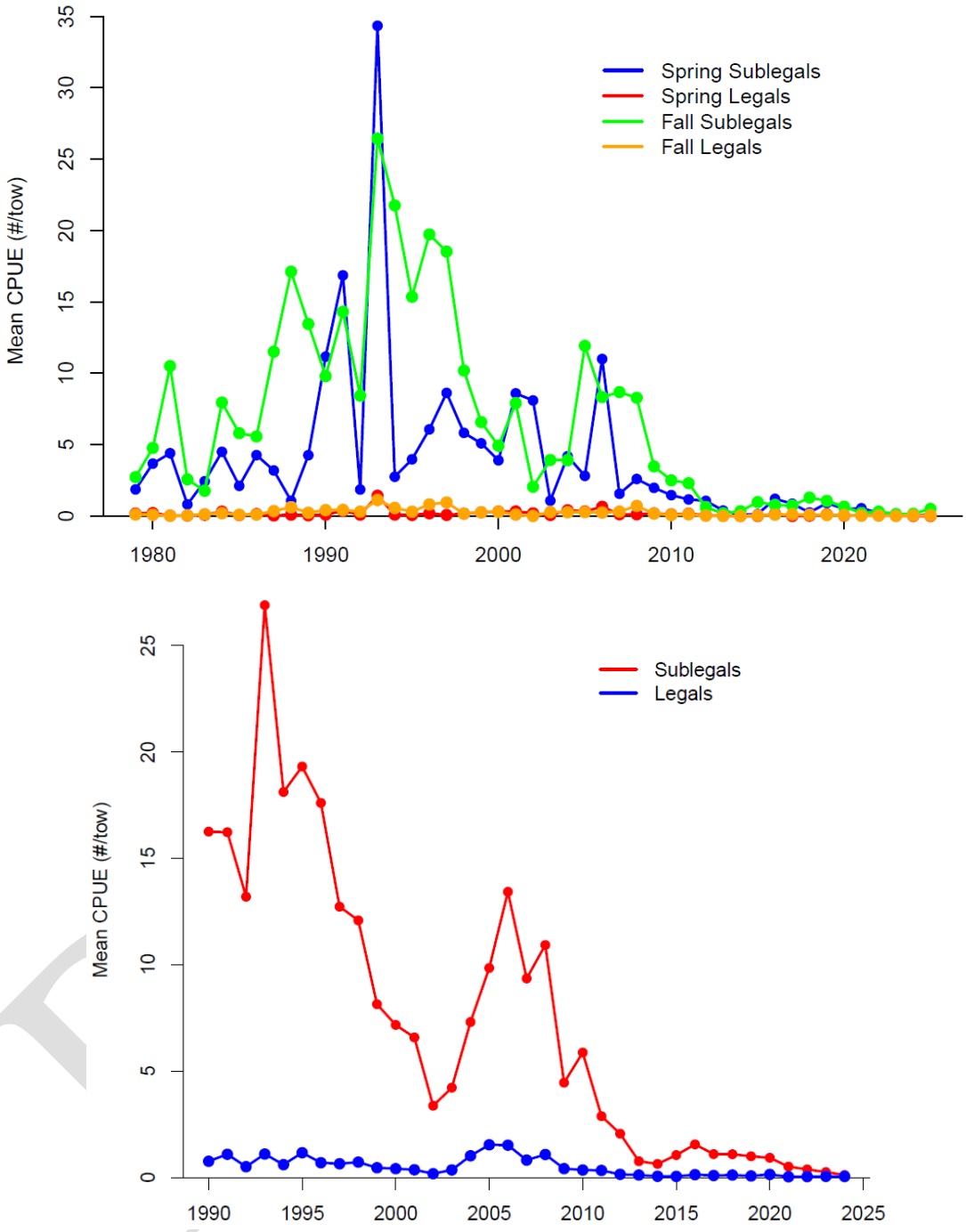


Figure 18. RIDFW Seasonal (spring and fall) Trawl lobster abundances (top) and Monthly Trawl lobster abundances (bottom). CPUE is expressed as the annual mean number per tow for sub-legal (<85.725mm CL) and legal sized (>=85.725mm CL) lobsters.

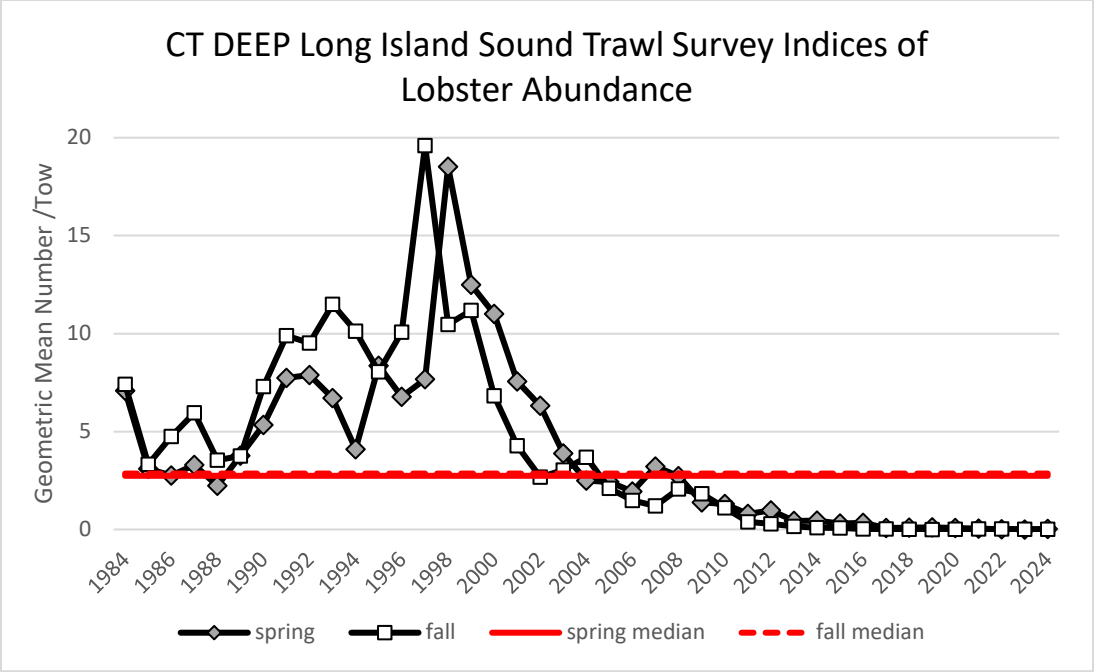


Figure 19. Results of the Long Island Sound Trawl Survey during spring (April-June) and fall (September-October) within NMFS statistical area 611.

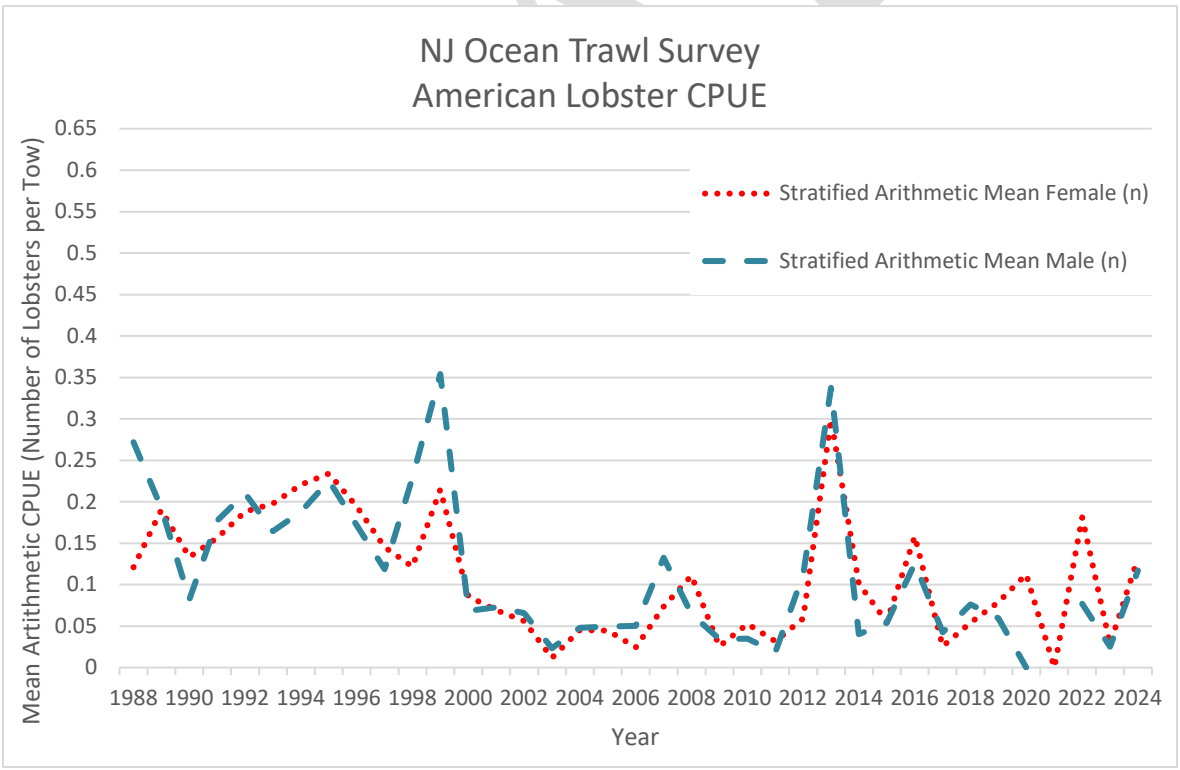


Figure 20. Stratified mean CPUE of all lobsters collected aboard the NJDFW Ocean Trawl Survey. No 2025 survey was conducted due to vessel repair.

Draft for Board Review

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

For Jonah Crab
(*Cancer borealis*)

2025 FISHING YEAR



Prepared by the Plan Review Team

October 2026

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft for Board Review

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Draft for Board Review

REVIEW OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY MANAGEMENT PLAN FOR JONAH CRAB (*Cancer borealis*)

2025 FISHING YEAR

1.0 Status of the Fishery Management Plan

Year of ASMFC Plan's Adoption:	FMP (2015)
Framework Adjustments:	Addendum I (2016) Addendum II (2017) Addendum III (2018) Addendum IV (2022)
Management Unit:	Maine through North Carolina
States with a Declared Interest:	Maine through Virginia (Excluding Pennsylvania and DC)
Active Committees:	American Lobster Management Board, Technical Committee, Plan Review Team, Advisory Panel, Electronic Reporting Subcommittee, Electronic Tracking Subcommittee

2.0 Status of the Fishery

2.1 Commercial Fishery

Historically, Jonah crab was taken as bycatch in the lobster fishery; however, in the mid-2000s a directed fishery began to emerge, causing landings to rapidly increase. Throughout the 1990s, landings fluctuated between approximately 2 and 3 million pounds, and the overall value of the fishery was low. In the early 2000s landings began to increase, with over 7 million pounds landed in 2005. By 2014, landings had almost tripled to 17 million pounds and a value of nearly $13 million. Peak landings occurred in 2018 at 20,173,884 pounds. This rapid increase in landings can be attributed to an increase in the price of other crab (such as Dungeness, *Metacarcinus magister*), creating a substitute market for Jonah crab, as well as a decrease in the abundance of lobster in Southern New England, causing fishermen to redirect effort on Jonah crab. It should be noted that there is some uncertainty in the landings data—especially prior to 2008—due to species misidentification issues as well as underreporting of landings before the implementation of reporting requirements. Despite the uncertainty, the overall trend in landings is likely accurate.

Today, Jonah crab and lobster are harvested in a mixed crustacean fishery in which fishermen can target lobster or crab at different times of the year based on slight gear modifications and small shifts in the areas in which the traps are fished. While the majority of Jonah crab landings is harvested as whole crabs, fishermen from several states, including New York, Maryland and Virginia, land claws. Jonah crab claws are relatively large and can be an inexpensive substitute for stone crab claws (*Menippe mercenaria*). As a result, they can provide an important source of

income for fishermen. Along the Delmarva Peninsula, small boat fishermen have historically harvested Jonah crab claws because they do not have seawater storage tanks on board to store whole crabs.

In 2025, landings along the Atlantic Coast totaled approximately 14.7 million pounds of Jonah crab, representing $13 million in ex-vessel value. Landings increased 22.6% from 2024 landings of 12 million pounds, while ex-vessel value increased 33.7% from the 2024 value ($9.8 mil). Anecdotal information from the industry suggests that Jonah crab landings and price are highly dependent on market conditions, which have affected recent fishery trends. Almost all coastwide landings came from trap gear. The states of Massachusetts (47%), Rhode Island (24%), and Maine (23%) were the largest contributors to landings. While landings from Southern New England still comprise the majority of the total, landings from the Gulf of Maine have been increasing in the last few years (Figure 1).

2.2 Recreational Fishery

The magnitude of the Jonah crab recreational fishery is unknown at this time; however, it is believed to be quite small in comparison to the size of the commercial fishery. Only New Hampshire and Massachusetts have recreational landings reports.

3.0 Status of the Stock

The 2023 Jonah Crab Benchmark Stock Assessment and Peer Review Report, released in October 2023, indicates the range-wide population of Jonah crab remains above historic lows of the 1980s and 1990s. However, evidence of declining catch per unit effort (CPUE) in the fishery presents concern and uncertainty for the status of the stock.

Based on life history and fishery characteristics, the assessment divided the population into four stocks: offshore Gulf of Maine (OGOM), inshore GOM (IGOM); offshore Southern New England (OSNE) and inshore SNE (ISNE). According to the stock indicators, IGOM, OGOM, and OSNE recruit, exploitable, and spawning abundance conditions from 2019-2021 were neutral or positive relative to historical periods. Indicators generally agree across these stocks that abundance has not been depleted compared to the historic low abundance observed in the 1980s and 1990s. There are no reliable abundance indicators for the ISNE stock so no determination about the condition of this stock's abundance could be made. Young-of-the-year (YOY) settlement indicators generally show neutral conditions and do not indicate that recruitment in the GOM stocks will decline to historical lows in the near future. Settlement conditions are unknown for SNE stocks.

According to the Peer Review Panel, "Despite the limited availability of current data, there is considerable urgency for the assessment due to a very steep, three-year, decline in landings. Commercial landings have declined 51% in three years, after an unprecedented 30-fold rise in landings. Although the recent decline is not well-detected in fishery-independent stock indicators, there is some evidence of declining CPUE in the fishery, creating concern and uncertainty for the status of the stock. Given the mixed signals, the status of the Jonah crab

stock is highly uncertain. The Panel strongly recommended close monitoring of annual stock indicators in the next few years.

In response to the assessment findings and peer review panel recommendations, the American Lobster Management Board accepted the Benchmark Stock Assessment and Peer Review Report for management use. The Board also tasked the Technical Committee (TC) with recommending possible measures or actions to address the concerns about stock status and recent fishery trends. The TC did not recommend any management action, but recommended that indicator data for the OSNE stock, where the majority of the fishery occurs, be updated annually, while data for the other three stock areas should be updated every five years.

4.0 Status of Management Measures

Interstate Fishery Management Plan for Jonah Crab (2015)

Jonah crab is managed under the Interstate Fishery Management Plan (FMP) which was approved by the American Lobster Management Board in August 2015. The goal of the FMP is to promote conservation, reduce the possibility of recruitment failure, and allow for the full utilization of the resource by the industry. The FMP lays out specific management measures in the commercial fishery. These include a 4.75" minimum size and a prohibition on the retention of egg-bearing females. To prevent the fishery from being open access, the FMP states that participation in the directed trap fishery is limited to lobster permit holders or those who can prove a history of crab-only pot fishing. All others must obtain an incidental permit. In the recreational fishery, the FMP sets a possession limit of 50 whole crabs per person per day and prohibits the retention of egg-bearing females. Due to the lack of data on the Jonah crab fishery, the FMP implements a fishery-dependent data collection program. The FMP also requires harvester and dealer reporting along with port and/or sea sampling.

Addendum I (2016)

Addendum I establishes a bycatch limit of 1,000 crabs per trip for non-trap gear (e.g., otter trawls, gillnets) and non-lobster trap gear (e.g., fish, crab, and whelk pots). In doing so, the Addendum caps incidental landings of Jonah crab across all non-directed gear types with a uniform bycatch allowance. While the gear types in Addendum I make minimal contributions to total landings in the fishery, the 1,000 crab limit provides a cap to potential increases in effort and trap proliferation.

Addendum II (2017)

Addendum II establishes a coastwide standard for claw harvest. Specifically, it permits Jonah crab fishermen to detach and harvest claws at sea, with a required minimum claw length (measured along the forearm of the claw) of 2.75" if the volume of claws landed is greater than five gallons. Claw landings less than five gallons do not have to meet the minimum claw length standard. The Addendum also establishes a definition of bycatch in the Jonah crab fishery, whereby the total pounds of Jonah crab caught as bycatch must weigh less than the total amount of the targeted species at all times during a fishing trip. The intent of this definition is to address concerns regarding the expansion of a small-scale fishery under the bycatch limit.

Addendum III (2018)

Addendum III improves the collection of harvester and biological data in the Jonah crab fishery. Specifically, the Addendum improves the spatial resolution of harvester data collection by requiring fishermen to report via 10-minute squares. It also expands the required harvester reporting data elements to collect greater information on gear configurations and effort. In addition, the Addendum established a deadline that within five years, states are required to implement 100% harvester reporting, with the prioritization of electronic harvester reporting development during that time. Finally, the Addendum improves the biological sampling requirements by establishing a baseline of ten sampling trips/year, and encourages states with more than 10% of coastwide landings to conduct additional sampling trips.

Addendum IV (2022)

Addendum IV expands on reporting improvements by establishing electronic tracking requirements for federally-permitted vessels in the American lobster and Jonah crab fisheries. Specifically, electronic tracking devices will be required for vessels with commercial trap gear area permits for Lobster Conservation Management Areas (LCMAs) 1, 2, 3, 4, 5, and Outer Cape Cod to collect high resolution spatial and temporal effort data.

5.0 Fishery Monitoring

The provisions of Addendum III went into effect January 1, 2019. Specifically, Addendum III requires reporting of additional data elements, the implementation of 100% harvester reporting within five years, and the completion of a minimum of ten sea and/or port sampling trips per year for biological sampling of the lobster/Jonah crab fishery. The Addendum III requirement for commercial harvesters to report their fishing location by 10 minute longitudinal/latitudinal square was implemented in 2021. Types of information collected vary by state, but can include shell width, sex, discards, egg bearing status, cull status, shell hardness, shell disease, and whether landings are whole crabs or parts. *De minimis* states are not required to conduct fishery-independent sampling or port/sea sampling. Data on the states' port and sea sampling in 2025 is summarized in Table 2.

6.0 Status of Fishery-Independent Surveys

The FMP for Jonah crab encourages states to expand current lobster surveys (i.e., trawl surveys, ventless trap surveys, settlement surveys) to collect biological information on Jonah crab. The following outlines the fishery-independent surveys conducted by each state.

Maine

A. Settlement Survey

The Maine settlement survey was primarily designed to quantify lobster young-of-year (YOY) but has also collected Jonah crab data from the sites throughout the survey. Jonah crab information collected includes carapace width, sex (when large enough), ovigerous condition, claw status, shell hardness, and location. Indications of a late start to the 2025 settlement season pushed the start of sampling late into October. After the delayed start to sampling, poor weather and numerous logistical problems led to only 26 out of 40 sites being visited and some being visited in January-February 2026. The density of YOY Jonah crab increased over the past

two decades with high values in 2012 and 2016, then declined slightly in recent years (Figure 2). In 2025, density of YOY Jonah crab increased in Statistical Area (SA) 513 and decreased slightly in SA 512 compared to 2024. There was no sampling in SA 511 in 2025. All areas remain at lower levels.

B. Ventless Trap Survey

Maine began its Juvenile Lobster Ventless Trap Survey in 2006. Since the beginning of the survey, Jonah crab counts were recorded by the contracted fishermen, but the confidence in early years of this data is low because of the confusion between the two *Cancer* crabs (Jonah crab vs. rock crab) and similar common names. In 2016, the survey began collecting biological data for Jonah crab including carapace width, sex, ovigerous condition, claw status, shell hardness, and location. Since 2016, the survey has sampled 276 sites coast wide using a stratified random design using depth and statitsical area (SA). From south to north: SA 513 covers Friendship to the New Hampshire border, SA 512 Schoodic Point to Friendship, and SA 511 Cutler to Schoodic Point. In 2025, Jonah crab catch in the survey decreased in SA 512 and 513, and increased in SA 511 compared to 2024. Concentrations of Jonah crab were highest in SA 511 and lowest in 513 (Figure 3).

C. State Trawl Survey

The ME/NH Inshore Trawl Survey began in 2000 and is conducted biannually (spring and fall) through a random stratified sampling scheme. Jonah crab data has been collected since 2003. The 2025 spring survey ran from April 28 to May 30 and completed 104 out of 120 scheduled tows. A total of 394 Jonah crab were caught and sampled, with 203 females, 190 males, and 1 unsexed crab caught and measured. The 2025 fall survey ran from September 22 through October 24 and completed 82 out of 120 scheduled tows. A total of 403 Jonah crab were caught and sampled, with 215 females and 188 males. Abundance indices for Jonah crab decreased compared to 2024 after increasing for the previous 3 years (Figure 4 and Figure 5).

New Hampshire

A. Settlement Survey

Since 2009, species information has been collected on Jonah crab in the New Hampshire Fish and Game portion of the American Lobster Settlement Index. The time series of CPUE (#/m^2) of Jonah crab for all NH sites combined shows a general upward trend from 2009 through 2022 followed by declining catch in subsequent years to median levels in the terminal year (Figure 6).

B. Ventless Trap Survey

Since 2009, New Hampshire Fish and Game has been conducting the coastwide Random Stratified Ventless Trap Survey in state waters (SA 513). A total of six sites were surveyed twice a month from June through September in 2025. Beginning in 2016, all Jonah crabs were evaluated for sex, carapace width (mm), cull condition, and molt stage. In 2025, a total of 17 Jonah crab over 6 trips were measured during the sampling season.

Massachusetts

A. Settlement Survey

The Juvenile Lobster Suction Survey has consistently identified *Cancer* crabs to genus level since 1995, and Jonah crab have been consistently identified to species since 2011. The mean number of Jonah crab observed in the MA DMF Settlement Survey in the GOM region has been relatively stable from 2011 through 2025 with a couple of higher values in 2018 and 2021 (Figure 7).

B. Ventless Trap Survey

The Massachusetts Division of Marine Fisheries (MA DMF) Ventless Trap Survey is conducted in MA territorial waters of NMFS SAs 514 and 538. Stratified mean catch per trawl haul (CPUE) for the survey is standardized to a six-pot trawl with three vented and three ventless traps. The index produced from the MA DMF Ventless Trap Survey from area 514 increased from 2018 to 2023 and declined slightly in 2024 and 2025 (Figure 8). Jonah crab are infrequently captured in the area 538 portion of the survey, likely because water temperatures in this region frequently exceed the Jonah crab thermal preference.

C. Trawl Survey

While Jonah crab are common in the deeper, cooler, Federal waters portion of SNE, they are rare in Massachusetts state waters south of Cape Cod and therefore are infrequently captured by the MA DMF Trawl Survey in this area. The fall survey in the GOM generally has a declining trend over the last decade. But there are several positive outliers, including the 2025 data point which was the third highest of the time series. The spring survey is showing a slightly increasing trend in the GOM (Figure 9).

Rhode Island

A. Settlement Survey

The RI DEM lobster YOY Settlement Survey (Suction Sampling) intercepts Jonah crabs. Jonah crab catches in this survey are generally low. In 2025, the Jonah Crab Index was 0.8 crabs per m^2, compared with the time series (1990-2025) mean of 0.17 crabs per m^2.

B. Ventless Trap Survey

Since its inception in 2006, the RI Ventless Trap Survey (VTS) has recorded counts of Jonah crab per pot. Carapace width, sex, ovigerous condition, and location data have been collected for all Jonah crabs encountered in the survey since 2015; prior to this, only counts of Jonah crab were recorded. In 2025, the stratified abundance index of Jonah crabs was 0.74 crabs per ventless trap, lower than the time series mean of 1.45 crabs per ventless trap (Figure 10).

B. Trawl Survey

RI DEM has conducted spring and fall trawl surveys since 1979, and a monthly trawl survey since 1990. However, the survey did not begin counting Jonah crab specifically until 2015. Jonah crabs are rarely encountered in this survey, and abundance indices are variable yet low, averaging 0.04 crabs per tow over the time series.

Connecticut

A. Trawl Survey

Jonah crab abundance is monitored through the Long Island Sound Trawl Survey (LISTS) during the spring (April, May, June) and fall (September and October) cruises, all within NMFS SA 611. The survey documents the number of individuals caught and total weight per haul by survey site in Long Island Sound. The LISTS caught one Jonah crab in the fall 2007 survey and two in the fall 2008 survey. Both observations occurred in October at the same trawl site in eastern Long Island Sound. The fall 2018 trawl survey documented a total of 0.4 kg of Jonah crab, with crabs observed in one site in the central basin and one site in the eastern basin of Long Island Sound. No Jonah crabs were observed in the 2019 spring or fall surveys. No trawl survey sampling was conducted in 2020 due to the global COVID-19 pandemic. No Jonah crabs were observed in the 2021, 2022 or 2023 spring or fall surveys. The Spring 2024 Long Island Sound Trawl Survey documented a total of 0.05 kg of Jonah crab. Two crabs were observed in April at the same trawl site in eastern Long Island Sound.

New York

A. Trawl Survey

New York initiated a stratified random trawl survey in the near shore ocean waters off the south shore of Long Island in 2018 from the Rockaways to Montauk Point and the New York waters of Block Island Sound. There are no survey data for 2025 because the survey was not completed. Only 8 out of 30 stations were sampled in the fall before work was halted due to weather, and all remaining surveys were cancelled due to vessel repairs.

New Jersey

A. Ventless Trap Survey

Since 2016, New Jersey has conducted reef monitoring through a Ventless Trap Survey. Ventless traps (measuring 43 ¾" L x 22 ½" W x 15" H) are randomly placed throughout four reef sites off the coast of New Jersey onto different substrates. Sampling is conducted during the months of April, July, and October to coincide with NJ's Ocean Trawl Survey, and an index of Jonah crab CPUE captured on and off reef sites is provided. CPUE for Jonah crab CPUE captured on and off reef sites in 2025 decreased compared to time series high values in 2024.

B. Trawl Survey

A fishery-independent Ocean Trawl Survey is conducted from Sandy Hook, NJ to Cape May, NJ each year. The survey stratifies sampling in three depth gradients, inshore (18'-30'), mid-shore (30'-60'), and offshore (60'-90'). The mean CPUE, which is calculated as the sum of the mean weight of Jonah crab collected in each sampling area weighted by the stratum area, has remained low throughout the time series, but increased in 2022 and 2023, which are the last two years of data available. 2024 indices are still being analyzed and currently not available and the 2025 survey was not conducted due to vessel repair (Figure 11).

Delaware

A. Ventless Trap Survey

Delaware initiated a study in 2018 to assess the population structure of structure-oriented fish in the lower Delaware Bay and nearshore Atlantic Ocean. Sampling was conducted with commercial sized ventless fish pots. In 2025, Delaware encountered 945 Jonah Crabs in the nearshore Atlantic Ocean with a ratio of 68% males and 32% female. The survey ran from April to December. The sampled Jonah Crabs ranged in length from 30 mm to 175 mm. Mean CPUE was 0.55 with CPUE calculated based on soak days (Figure 12).

7.0 Recent and On-Going Research Projects

A. CFRF Research Fleet

The Commercial Fisheries Research Foundation (CFRF) has expanded its lobster commercial research fleet to sample Jonah crab. Biological data collected include carapace width, sex, shell hardness, egg status, and disposition. To date 162,969 Jonah crabs have been sampled through the program[1].

8.0 State Compliance

The implementation deadline for the Jonah Crab FMP was June 1, 2016; the implementation deadline for Addendum I was January 1, 2017; the implementation deadline for Addendum II was January 1, 2018; and the implementation deadline for Addendum III was January 1, 2019 (with the exception of the 10-minute square reporting requirement). Reporting at the 10-minute square level was implemented in 2021. Addendum IV required states to implement electronic tracking requirements for federally-permitted vessels in the American lobster and Jonah crab fisheries by December 15, 2023.

The PRT notes that Connecticut is in the process of implementing regulations consistent with the Addendum IV requirements. All other states have implemented the provisions of the Jonah Crab FMP and associated addenda.

9.0 De Minimis Requests

The states of Delaware, Maryland, and Virginia, have requested *de minimis* status. According to the Jonah crab FMP, states may qualify for *de minimis* status if, for the preceding three years for which data are available, their average commercial landings (by weight) constitute less than 1% of the average coastwide commercial catch. Delaware, Maryland, and Virginia meet the *de minimis* requirement.

10.0 Research Recommendations

Research recommendations made by the Stock Assessment Subcommittee and Peer Review Panel in the 2023 Jonah crab benchmark stock assessment are summarized below.

High Priority

[1] https://www.cfrfoundation.org/jonah-crab-lobster-research-fleet

- Surveys to track abundance in SNE during all life stages (e.g., settlement, recruitment, abundance) for future stock assessments and potential management advice.
- Research to provide a more comprehensive understanding of recruitment dynamics, including tracking of spatiotemporal settlement dynamics and the source of recruitment to offshore SNE, to inform development of Jonah crab settlement surveys.
- Appropriate survey methodologies need to be researched to track abundance of Jonah crab. Behavioral interactions with survey gear need to be better understood. Video surveys are recommended to examine these interactions. Video surveys could also be used for snapshot estimates of total stock size (i.e., swept-area biomass) that could be used to gain a better understanding on exploitation levels.
- Female migration pathways/seasonality and distribution needs to be researched to help understand movement and inform connectivity. Ventless trap surveys (state-run and windfarm impact) offer a potential data set to explore interannual variability in distribution.
- Information on larval duration in the field, mortality, and dispersal are needed to better understand possible connectivity. Spawning female distribution information would supplement efforts to model these processes. Evaluate larval data sets for species identification and to explore abundance, seasonality, and interannual variability.
- Inter-molt duration of adult crabs is currently unknown and growth increment data for mature crabs is limited. There are no growth data from offshore SNE where the bulk of the fishery occurs and differences in growth between regions are unknown.
- Research growth mechanisms for both sexes (e.g., potential for terminal molt, lack of growth associated with molting, high natural mortality for adults) to explain lack of exploitation signal (i.e., lack of size structure change) in available data sets.
- Increase and improve consistency of fisheries-dependent monitoring and biosampling. Sampling intensity by statistical area should be based on landings.
- Continue to improve accuracy of commercial reporting to improve quantification of effort in the directed and mixed-crustacean fisheries. Evaluate new spatial to better understand spatial dynamics of the fishery.
- Study the effect of temperature on Jonah crab behavior/activity.
- Studies should be done to identify and understand drivers of ecosystem/environmental drivers of Jonah crab population dynamics.
- Determine how to interpret fisheries-dependent data considering interactions between fishery response to abundance, economic drivers, and lobster fishery dynamics.

Moderate Priority

- Explore historical data sets from the scallop dredge survey and video surveys like HabCam to understand habitat use/suitability, abundance, distribution, and to inform potential covariates for catchability effects.
- Analyze food habits data, with an emphasis on offshore areas, to better understand predation of Jonah crab and as a potential measure of abundance and distribution.
- Evaluate evidence for a defined stock-recruit relationship or lack thereof. If lack of evidence, identify recruitment drivers and mechanisms of population abundance change.

Low Priority

- Information should be collected to help delineate stock boundaries and understand possible connectivity, with an emphasis on the GOM/SNE boundary.
- Reproductive studies pertaining to male-female spawning size ratios, the possibility of successful spawning by physiologically mature but morphometrically immature male crabs, and potential for sperm limitations should be conducted.
- If improved abundance data with higher encounter rates becomes available, cohort tracking analyses should be conducted across and within surveys to better understand if surveys are tracking true abundance signals and provide information on growth, mortality, and other demographic factors.
- The development of aging methods or determination of the mechanism responsible for the suspected annuli formation found in the gastric mill should be explored.

11.0 Plan Review Team Recommendations

The following are recommendations and comments from the Plan Review Team:

- The PRT recommends the Board approve the *de minimis* requests of DE, MD, and VA.
- The PRT notes that MA has been unable to meet the August 1 deadline for compliance reports for the last several years.
- Connecticut and New Jersey were not able to complete the sea and/or port sampling required by the FMP. These states have noted concerns with staff availability, funding, and lack of agreement by fishermen, which have contributed to the inability to complete the required sampling trips.
- The 2023 Benchmark Stock Assessment recommended that fisheries-dependent monitoring and biosampling be increased and improved, with sampling intensity by statistical area based on landings. The PRT recommends the TC provide recommendations on adequate sampling numbers by statistical area.
- The PRT notes that while more fishery-dependent monitoring could improve the stock assessment, some states do not appear to have the capacity to increase sampling. The PRT recommends appropriate sampling levels for each state be determined based on landings and capacity.

12.0 Tables

Table 1. Landings (in pounds) of Jonah crab by the states of Maine through Virginia. 2010-2024 landings were provided by ACCSP based on state data submissions. 2025 landings were submitted by the states as a part of the compliance reports and should be considered preliminary. *C= confidential data*

	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	Total
2010	1,154,564	C	5,689,431	3,899,239	C	995,059	84,645	C	23,909	C	11,846,847
2011	1,152,651	C	5,381,140	3,221,119	C	69,440	71,632	C	104,838	C	10,000,820
2012	586,449	C	7,540,545	3,865,978	2,349	468,364	86,736	C	C	C	12,550,421
2013	391,690	340,751	10,117,595	4,665,489	51,462	407,755	16,425	C	C	C	15,991,166
2014	361,500	404,703	11,904,649	4,568,400	49,998	95,855	48,008	C	154,764	C	17,587,878
2015	312,063	C	9,128,876	4,298,894	C	215,140	88,283	C	88,467	C	14,131,722
2016	625,240	150,971	10,661,416	4,232,785	C	177,425	279,249	C	64,552	9,658	16,201,295
2017	1,169,474	114,155	11,698,447	4,111,281	C	176,424	447,048	C	75,991	C	17,792,819
2018	1,061,799	22,434	13,250,803	4,665,701	320	231,705	880,192	C	60,932	C	20,173,884
2019	763,807	70,818	9,698,145	4,222,305	C	125,391	1,061,194	C	47,829	C	15,989,489
2020	696,314	31,658	8,605,007	3,331,552	C	105,841	975,522	C	35,606	C	13,781,500
2021	1,427,245	123,729	6,539,131	2,157,071	C	72,066	976,248	C	34,327	C	11,329,815
2022	2,107,544	295,529	7,803,736	2,504,895	C	41,816	493,179	C	C	C	13,246,700
2023	1,596,023	359,695	5,382,873	2,496,661	28	202,218	909,167	C	1,745	C	10,948,410
2024	2,603,485	123,583	5,407,248	2,730,169	C	326,967	795,201	C	C	C	11,986,653
2025	3,352,584	87,129	6,940,968	3,572,753	C	143,072	603,040	C	C	C	14,699,546

Table 2. Fishery-dependent sampling (port/sea) by state in 2025. Delaware, Maryland, and Virginia are not required to complete fishery-dependent monitoring.

	Sea Sampling Trips	# of Samples	Port Sampling Trips	# of Samples
ME	5	195	0	0
NH	14	144	4	302
MA	0	0	12	6,982
RI	0	0	8	1,654
CT	0	0	0	0
NY	0	0	19	954
NJ	0	0	0	0
DE	None	None	None	None
MD				
VA				
Total	**19**	**339**	**43**	**9,892**

13.0 Figures

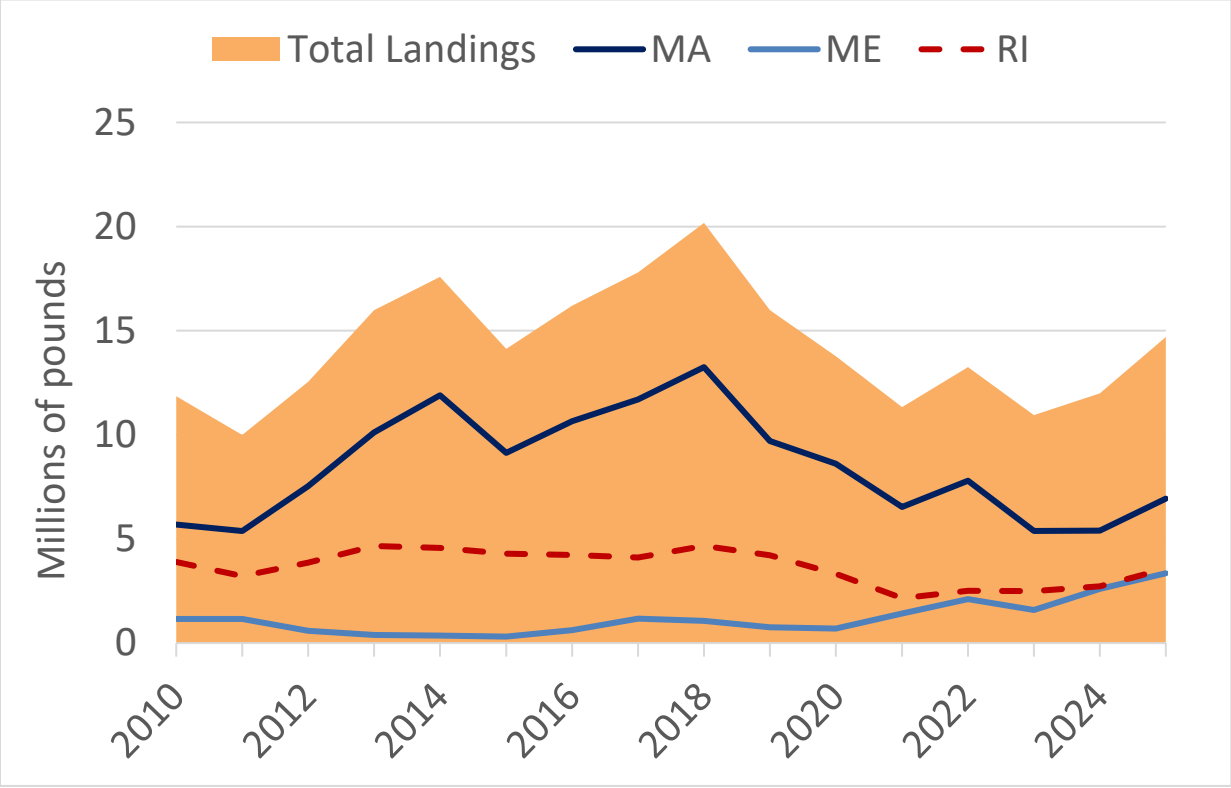


Figure 1. Coastwide commercial Jonah crab landings, 2010-2025. Data from 2010-2024 are from the ACCSP Data Warehouse, and 2025 landings are based on state compliance reports.

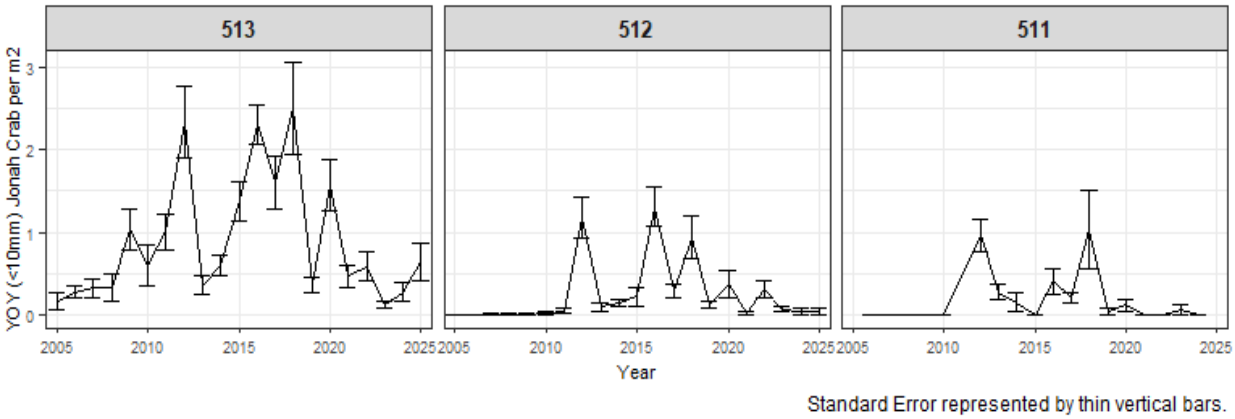


Figure 2. Density of YOY (<10mm carapace width) Jonah crab over time in the Maine Settlement Survey by statistical area.

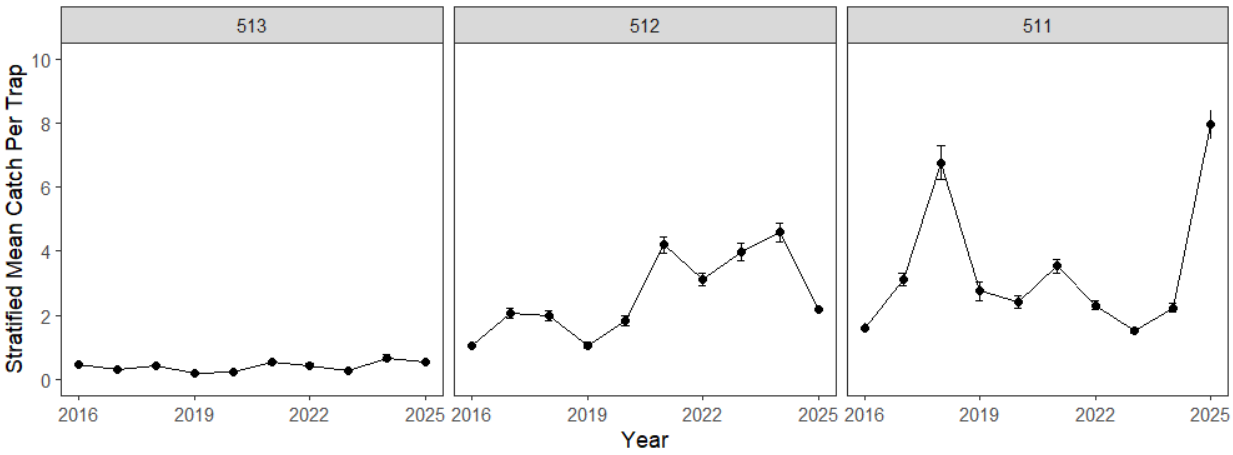


Figure 3. Stratified mean of Jonah crab from Maine Ventless Trap Survey 2016-2025. Standard error is represented by vertical bars.



Figure 4. Stratified mean weight (kg/tow) of Jonah crab for Spring Maine-New Hampshire Inshore Trawl Survey 2001-2025.



Figure 5. Stratified mean weight (kg/tow) of Jonah crab for Fall Maine-New Hampshire Inshore Trawl Survey 2000-2025.

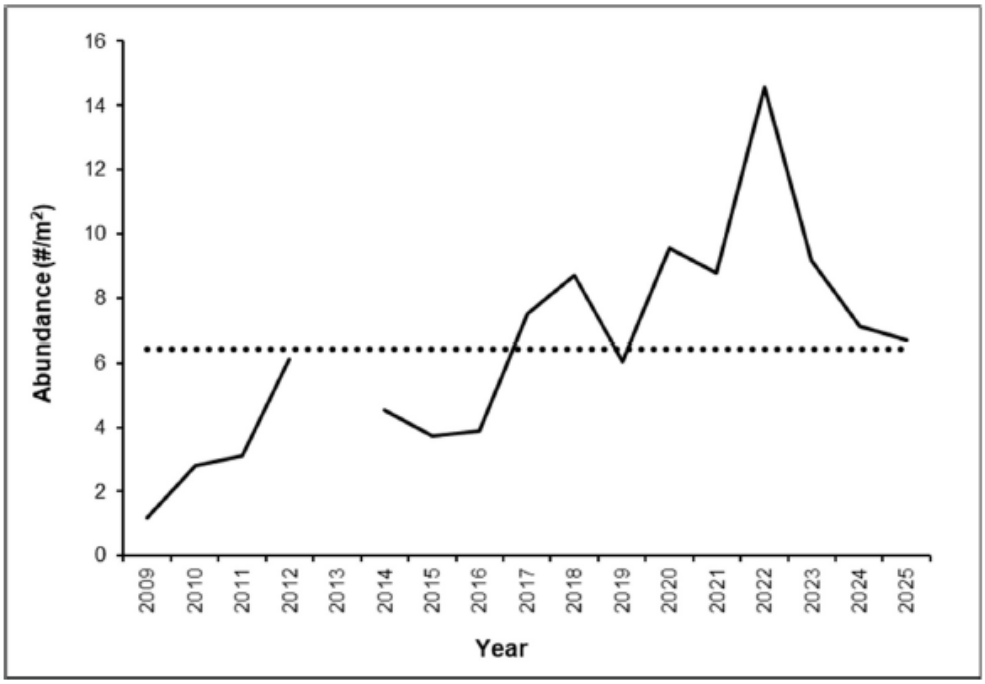


Figure 6. Catch per unit effort (#/m^2) of Jonah crab during the American Lobster Settlement Index Survey, in New Hampshire, from 2009 through 2025.

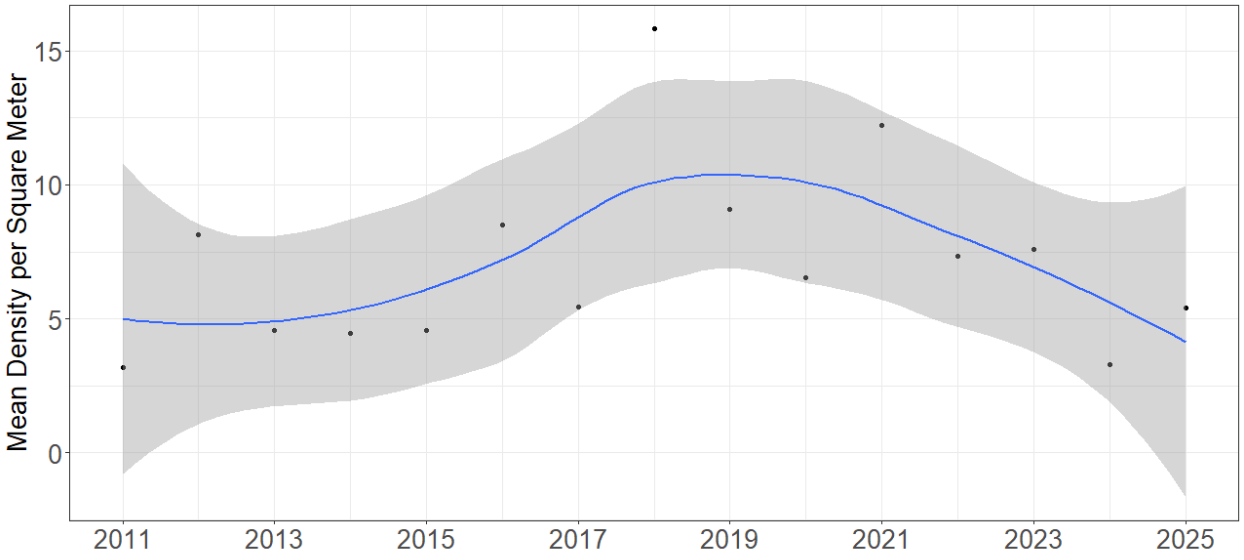


Figure 7. Mean number of Jonah crab per square meter from the MA DMF Settlement Survey from the Gulf of Maine (GOM) region. Black dots are annual means, blue line is a Loess soother, gray area is confidence interval around the Loess smoother.

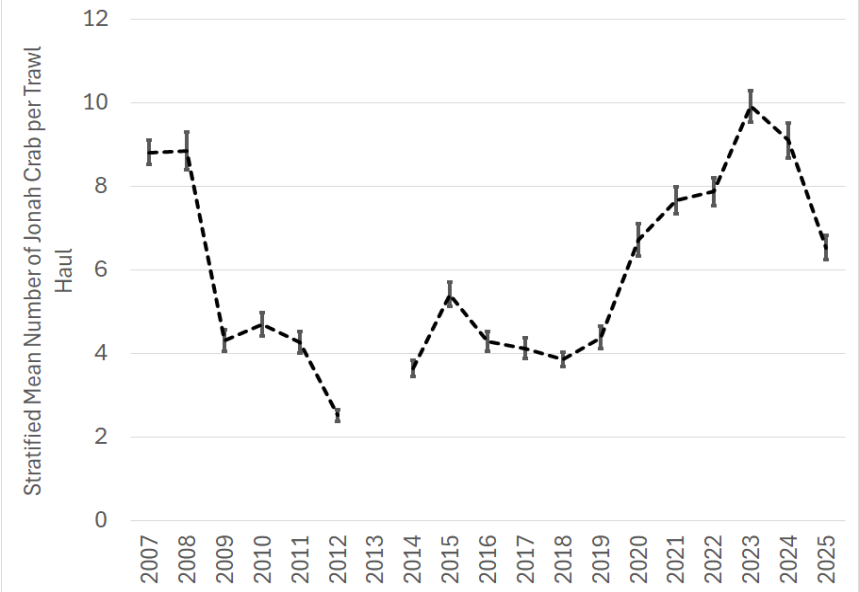


Figure 8. Mean number of Jonah crabs per trawl haul from ventless traps from GOM region of the MA DMF Ventless Trap Survey (standardized to a 6-pot trawl with three vented and three ventless traps). Error bars are two times the standard error. The survey was not conducted in 2013 due to a gap in funding.

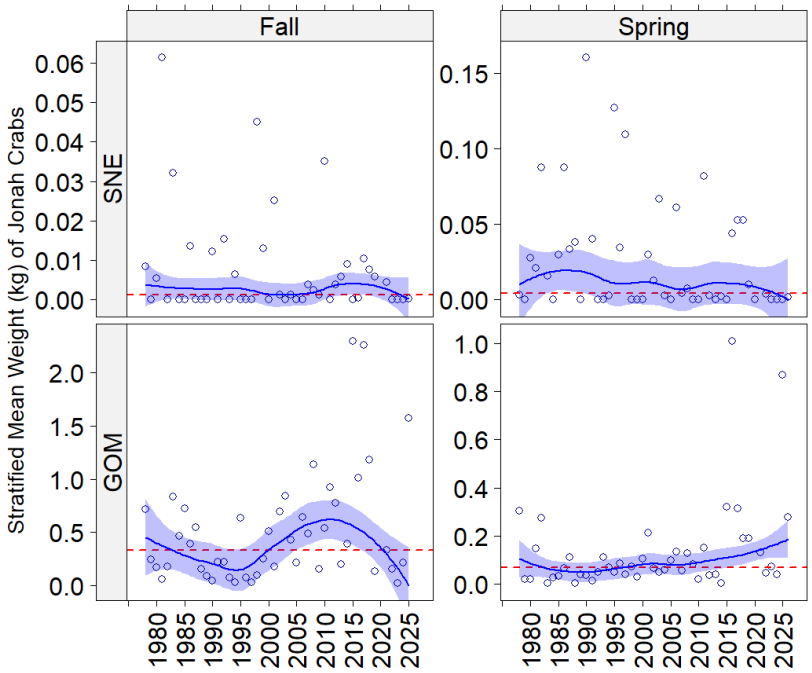


Figure 9. Stratified mean weight (kg) of Jonah crab from the MA DMF Trawl Survey. The left column shows the fall surveys, the right columns show the spring surveys. Southern New England (SNE) is on the top row, Gulf of Maine (GOM) is on the bottom. Red dashed line is the time series median. Blue line is a trend line (Loess smoother), and the blue shaded area is the confidence interval around the trend line.

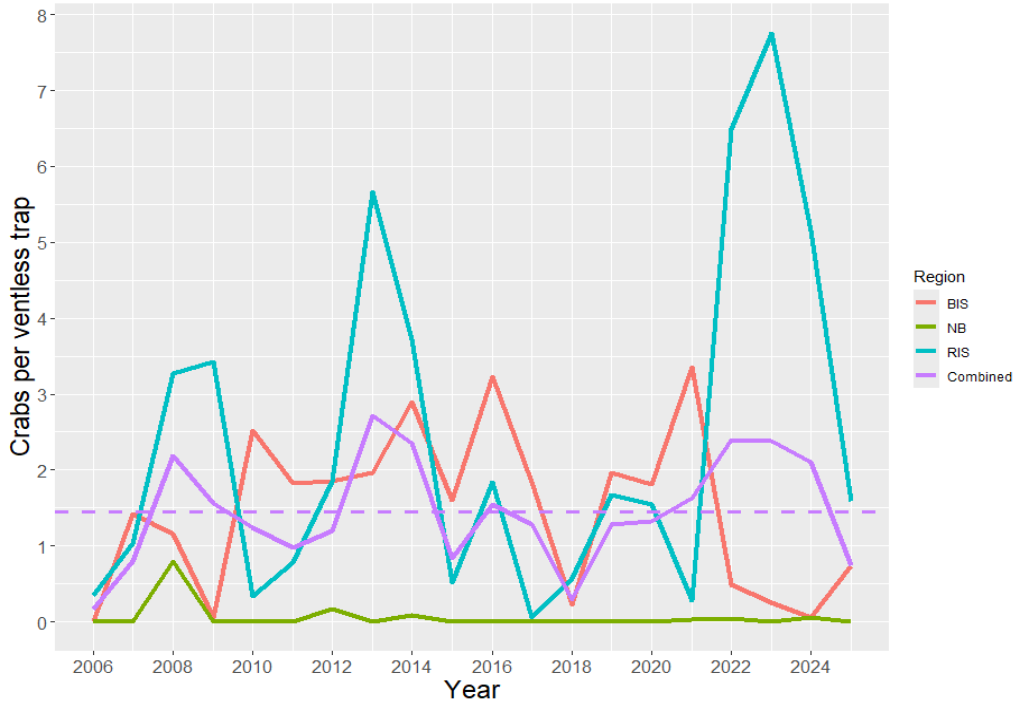


Figure 10. Rhode Island ventless trap survey index of Jonah crab abundance by region: Narragansett Bay (NB), Rhode Island Sound (RIS), and Block Island Sound (BIS). Time series mean for the combined region is presented as a dashed purple line.

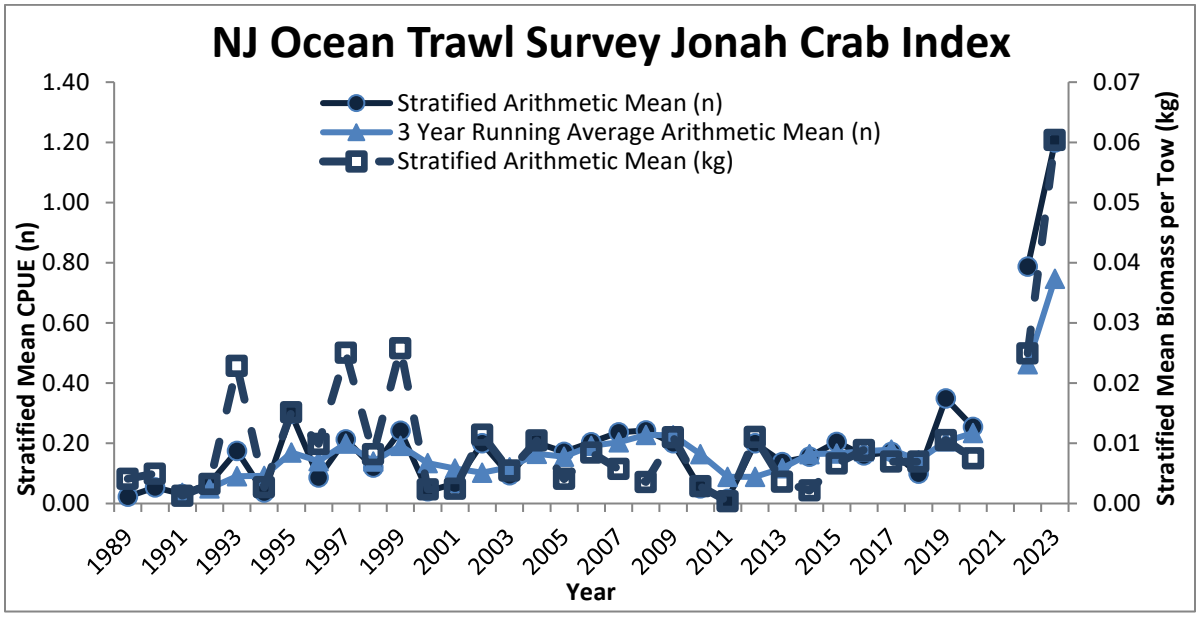


Figure 11. Stratified mean CPUE of all Jonah crab collected aboard the NJDFW Ocean Trawl Survey. The survey stratifies sampling in three depth gradients, inshore (18'-30'), mid-shore (30'-60'), offshore (60'-90'). The mean CPUE was calculated as the sum of the mean weight (in kg) of Jonah crab per size class collected in each sampling area weighted by the stratum area. *NOTE: No April 2019 Survey was conducted due to Research vessel mechanical issues. Due to the COVID-19 pandemic, Apr-Oct 2020 and 2021 CPUE and indices were not obtained.

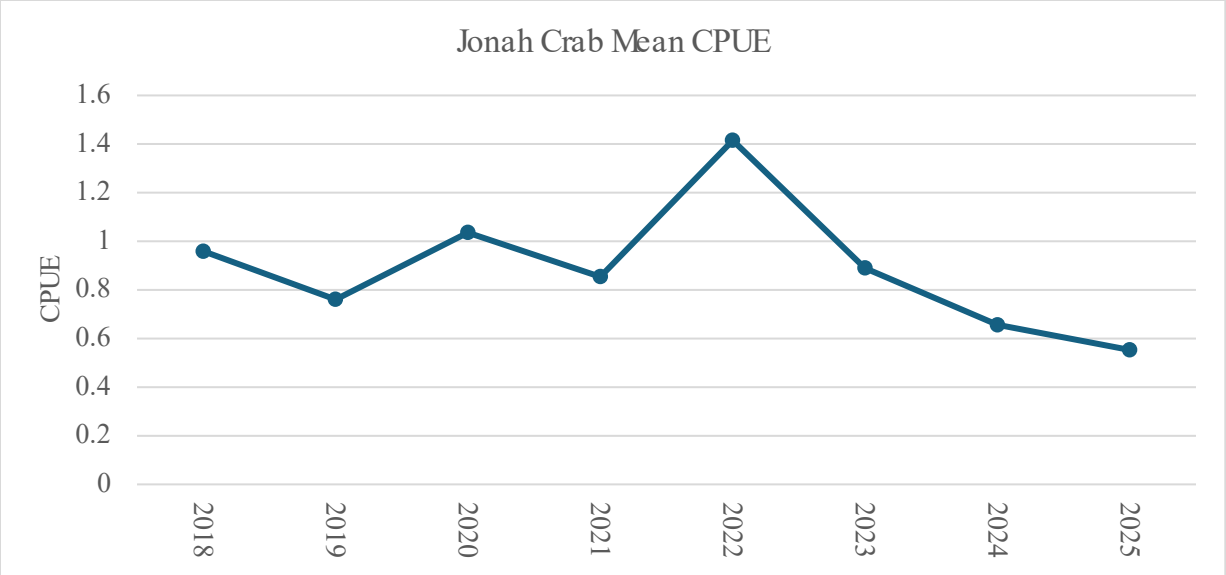


Figure 12. Jonah Crab mean CPUE in Delaware's Ventless Trap Survey from 2018 to 2025.

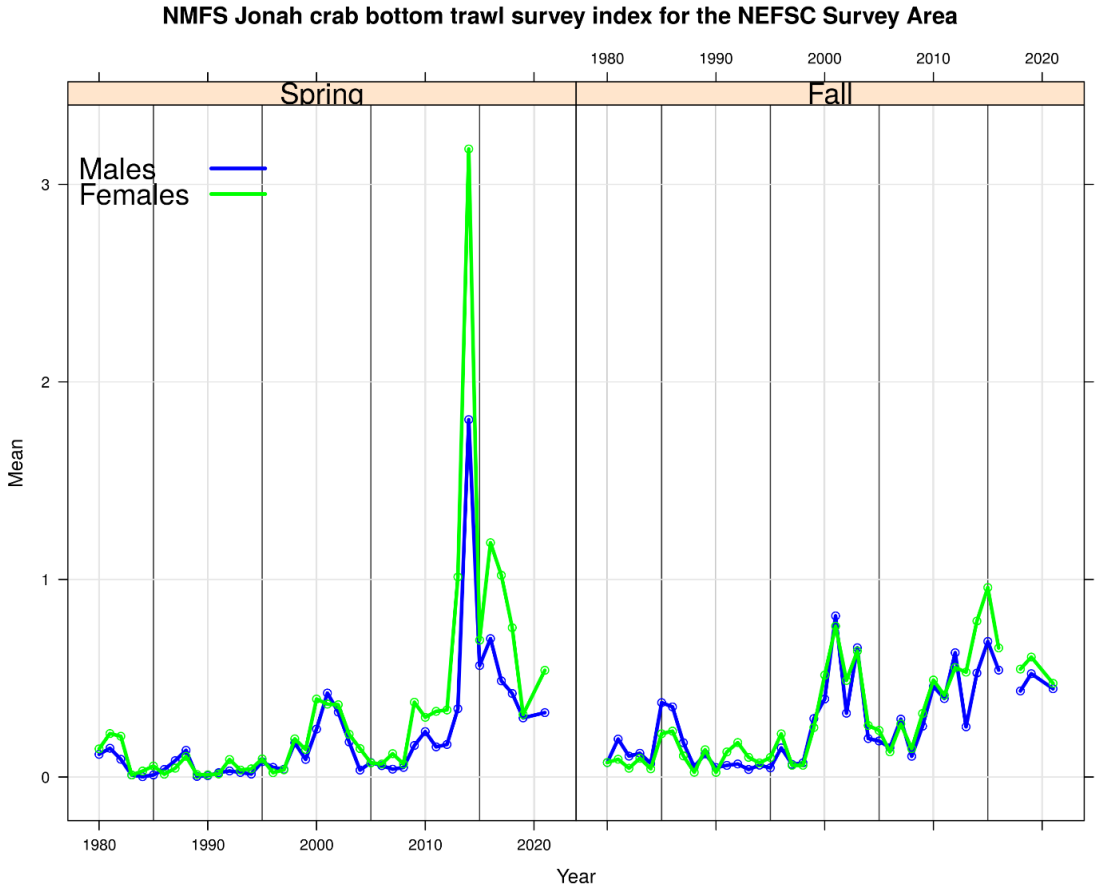


Figure 13. NMFS Jonah Crab index (mean number per tow) from the bottom trawl survey for the NEFSC Survey Area, through fall 2021. There was no survey conducted in 2020 due to the COVID-19 pandemic. Data for 2022-2025 are not yet available.

Atlantic States Marine Fisheries Commission

Coastal Sharks Management Board

November 9, 2026
1:45 – 3:00 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary

1.	Welcome/Call to Order *(M. Luisi)*	1:45 p.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from May 2026	1:45 p.m.
3.	Public Comment	1:50 p.m.
4.	Updates from NOAA Fisheries on Ongoing Management Actions *(K. Brewster-Geisz)*	2:00 p.m.
5.	Set Specifications for the 2027 Fishing Year and Beyond, Up to Five Years *(C. Starks)* **Final Action**	2:10 p.m.
6.	Presentation on Shore-based Fishing in North Carolina *(S. Dowd)*	2:20 p.m.
7.	Discuss Drone Use in Shark Fishing *(E. Burgess)*	2:35 p.m.
8.	Consider Approval of Fishery Management Plan Review and State Compliance for the 2025 Fishing Year *(C. Starks)* **Action**	2:50 p.m.
9.	Other Business/Adjourn	3:00 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, Rhode Island; 401.847.3300) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Coastal Sharks Management Board
November 9, 2026
1:45 – 3:00 p.m.

Chair: Mike Luisi (MD) Assumed Chairmanship: 05/25	Technical Committee Chair: Angel Willey (MD)	Law Enforcement Committee Rep: Michael Thomas (SC)
Vice Chair: Ben Dyar (SC)	Advisory Panel Chair: VACANT	Previous Board Meeting: May 5, 2026
Voting Members: MA, RI, CT, NY, NJ, PA, DE, MD, VA, NC, SC, GA, FL, NMFS (13 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 2026

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Updates from NOAA Fisheries on Ongoing Management Actions (2:00-2:10 p.m.)

Background

- NOAA Fisheries has updates on several issues relating to coastal sharks and the Highly Migratory Species (HMS) FMP:
    - HMS Priorities Request Regarding Executive Order 14276
    - Ongoing Regulatory Actions and Timing
    - SEDAR 101 Progress
    - Shark Depredation Action Plan
    - CITES Implementation for Atlantic Smoothhound Sharks

Presentations

- Update on Ongoing Atlantic HMS Management Actions by K. Brewster-Geisz

5. Set Specifications for the 2027 Fishing Year (2:10-2:20 p.m.)

Background

- Effective January 1, 2024, NOAA Fisheries changed the federal regulations for Atlantic shark fisheries for the 2024 and future fishing years to automatically open the commercial fishing year on January 1 of each year under the base quotas and default retention limits.

- The Board annually sets coastal shark specifications for state waters and has typically set complementary coastal shark specifications matching the default season start date and retention limits as specified by the NOAA Fisheries **(Briefing Materials)**.

Presentations

- Proposed 2027 Specifications by C. Starks

Board Actions for Consideration at this Meeting

- Set the 2027 coastal shark specifications including commercial opening dates and commercial possession limits by management group.

6. Presentation on Shore-based Fishing in North Carolina (2:20-2:35 p.m.)

Background

- A study led by a PhD candidate at the University of North Carolina at Chapel Hill in which land-based shark fishers were interviewed to characterize the land-based shark fishery in North Carolina, define angler perception of environmental drivers, identify how anglers learn to fish and how they share information, and gather opinions and recommendations on local fisheries management.

Presentations

- Community-driven insights into the dynamics of coastal sharks and a rising land-based recreational fishery by S. Dowd

7. Discuss Drone Use in Shark Fishing (2:35-2:50 p.m.)

Background

- Several Board members have noted an emergence of the use of drones in shark fishing and requested to discuss this topic.

8. Consider Approval of Fishery Management Plan Review and State Compliance for Coastal Sharks for the 2025 Fishing Year (2:50-3:00 p.m.) Action

Background

- State Compliance Reports are due annually on August 1st.
- The Plan Review Team reviewed state reports and compiled the annual FMP Review for the 2025 fishing year.
- Massachusetts has requested continued *de minimis* status.

Presentations

- Overview of the Coastal Sharks FMP Review of the 2025 Fishing Year by C. Starks

Board actions for consideration at this meeting

- Approve 2025 FMP Review and State Compliance Report
- Approve *de minimis* requests from Massachusetts

9. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

COASTAL SHARKS MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

May 5, 2026

These minutes are draft and subject to approval by the Coastal Sharks Management Board.
The Board will review the minutes during its next meeting.

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INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of May 2024** by consent (Page 1).

3. **Move to approve the Fishery Management Plan Review and state compliance for coastal sharks for the 2024 fishing year, and approve *de minimis* status for Massachusetts** (Page 18). Motion by Dan McKiernan; second by Doug Haymans. Motion approved by consent (Page 18).

4. **Move to elect Ben Dyar as Vice Chair of the Coastal Sharks Board** (Page 18). Motion by Chris Batsavage; second by Malcolm Rhodes. Motion approved by consent (Page 18).

5. **Move to adjourn** by consent (Page 19).

ATTENDANCE

Board Members

Dan McKiernan, MA (AA)
Raymond Kane, ME (GA)
Rep. Sarah Peake, MA, proxy for Rep. Armini (LA)
Jason McNamee, RI (AA)
David Borden, RI (GA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Robert LaFrance, CT proxy for Rep. Gresko, CT (LA)
John Maniscalco, NY, proxy for M. Gary (AA)
Emerson Hasbrouck, NY (GA)
Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalksy, NJ, proxy for Sen. Gopal (LA)
John Clark, DE (AA)
Roy Miller, DE (GA)
Craig Pugh, DE, proxy for Rep. Carson (LA)
Michael Luisi, MD, proxy for K. Charbonneau (AA)
Russel Dize, MD (GA)
Ethan Simpson, VA, proxy for J. Grist (Acting AA)
Chris Batsavage, NC, proxy for K. Rawls (AA)
Ben Dyar, SC, proxy for B. Keppler (AA)
Malcolm Rhodes, SC (GA)
Chris McDonough, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Erika Burgess, FL, proxy for J. McCawley (AA)
Gary Jennings, FL (GA)
Karyl Brewster-Geisz, NMFS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Caitlin Starks
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Coastal Sharks Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Tuesday, May 5, 2026, and was called to order at 2:30 p.m. by Chair Michael Luisi.

CALL TO ORDER

CHAIR MICHAEL LUISI: I would like to take this time to call the Coastal Sharks Management Board to order. My name is Mike Luisi; I am the Administrative Seat for the state of Maryland, and I'll be chairing today's meeting.

APPROVAL OF AGENDA

CHAIR LUISI: We have a number of items on our agenda today. First is to start with approval of the agenda. Are there any changes or modifications to the agenda? Chris Batsavage.

MR. CHRIS BATSAVAGE: No changes or modifications, but I would like to during Other Business bring up a future item for the shark board to consider for a future meeting.

CHAIR LUISI: Thanks, Chris, so noted. We'll come to you at the end. Any other items to add to the agenda, modifications to the agenda? Seeing none; we'll consider the agenda approved.

APPROVAL OF PROCEEDINGS

CHAIR LUISI: The next item on the agenda today is the approval of the proceedings from May, 2024. If there is anybody out there that can remember what you said, to correct the record from two years ago, you're a much better person than I am. I'll look around the room, I don't see any hands on changes or modifications to the proceedings, so consider those proceedings approved.

PUBLIC COMMENT

CHAIR LUISI: Next, we will move into our public comment period. Public comment at this time is set aside for items that are not on today's agenda. Is there anyone from the audience that would like to make any public comment? You hold tight; I'm checking online. No one on line at this time. Toni Kerns.

MS. TONI KERNS: Thank you, Mr. Chair. Just to note the Commissioners that are online. We have John Maniscalco and Monica Martinez from New York, and Adam Nowalsky from New Jersey.

CHAIR LUISI: Okay, thank you for that, Toni. While we get going with the presentations, I'll get the participants list up so I can call on folks after the presentation is done.

UPDATES ON HIGHLY MIGRATORY SPECIES FEDERAL RULEMAKING

CHAIR LUISI: Moving on to our next item on the agenda. We're going to receive Updates on the Highly Migratory Species Federal Rulemaking. Guy DuBeck is with me to my left, with NOAAs HMS program, and I'm going to turn things over to Guy.

MR. GUY DuBECK: Well, thank you very much, so I'm here to talk about the proposed rulemaking to revise the commercial Atlantic blacknose shark and recreational fishery management measures. This is kind of just a quick overview of what we're going to talk about and spend more time on what the action is.

The purpose of this rulemaking is to kind of increase management flexibility to react to the different additional factors affecting the Atlantic shark fisheries. We want to try and optimize the ability of the commercial and recreational fishermen to harvest available quotas to the extent possible. But we're also kind of being responsive to the framework for implementing some of the management measures we established in Amendment 14 a couple years ago.

The findings from our Atlantic shark fishery review or share document, where we did kind of wholeheartedly look of the shark fishery looking at some of the management measures that are working, not working or too restrictive for the

commercial/recreational fishery, looked at the shark depravation issue, and also looked at kind of other factors affecting the shark fishery.

Also, we had public comment for scoping Amendment 16, and then also looking at recent domestic laws and international agreements having direct and indirect effects on the commercial fishery. We'll start with the commercial background. Blacknose sharks we assessed in 2010. The Atlantic stock was determined to be overfished with overfishing occurring, and the Gulf stock is an unknown status.

Based on the stock status results in Amendment 5a, we implemented some management measures. The first was we created regional blacknose and non-blacknose shark quotas, and then also we established regional quota linkages between managed groups. What we mean by quota linkages is that the blacknose and non-blacknose small coastal, they are linked where whether either quota was reached then both quotas were closing down. Fortunately, because the blacknose quota was much smaller than non-blacknose small coastal, that was the one being reached first and closing down the small coastal fishery. Because of that, we then a couple years later in Amendment 6 we made some other management measures for those issues, where we established a management boundary line.

Anyone who caught blacknose sharks north of that line had to discard them, and we created that line because blacknose sharks were not migrating at the time north of that line or rarely interacted with by small coastal fishermen above that line. We prohibited blacknose sharks above that line, so then when the fishery would stay open, the non-blacknose fishery would stay open pretty much year-round.

But then south of that line we kept the quota linkages so when the blacknose quota was reached the non-blacknose quota was also closed down. That continued a couple more years, and then based on public comment we created another rulemaking where we established a smaller retention limit to slow down the harvest of blacknose sharks to ensure that the non-blacknose small coastal quota would stay open year-round.

Then jumping to the recreational fishery, so the '99 FMP we established a recreational minimum size limit for most of the shark species of 54 inches, and that is based on the size at maturity of sandbar sharks. Then we reduced the recreational retention limits for all sharks to be one shark per vessel per trip.

In 2008, Amendment 2, we expanded the sharks that are authorized for recreational retention and modified some of the retention limits, where we allowed 1 sharpnose and 1 bonnethead per person per trip with no minimum size, and also 1 per vessel per-trip for all of the other authorized shark species greater than 54 inches.

Based on the scalloped hammerhead assessment we established a minimum size limit recreationally of 78 inches for all hammerhead species. Then after the smoothhound shark assessment we established that there was no minimum size limit or retention limit for smoothhound sharks. Now we're going to jump into the commercial alternatives.

The first up is a blacknose shark management boundary line. We had besides the status quo alternative, the preferred alternative we just wanted to remove that line. We're noticing now that blacknose sharks are migrating north of that line and fishermen are discarding a good number of blacknose sharks, so we feel that it is not appropriate at this point.

Instead, we are going to allow them to land their blacknose sharks based on the retention limit. Speaking of retention limit, we're looking at revising that too. Besides the status quo alternative, we looked at creating a flexible commercial retention limit, similar to what we have for the large coastal fishery where we have 0 to 65 for the large coastal.

For the blacknose sharks we have a 0 to 60 limit, but with a default of 25 blacknose sharks per vessel per trip. Then the fishing season every year will

start at 25, and then we could adjust that limit up or down, depending on the catch rates, and how the season's gone. Then the other alternative we looked at was to remove the commercial retention limits for blacknose sharks.

Moving on to the recreational. Moving on to kind of repeating what I mentioned earlier, but the current retention minimum size limits for sharks are 54 inches for most of the shark species, 78 inches for the hammerheads, and there are no size limits for Atlantic sharpnose, bonnethead or smoothhound sharks.

We want to show this where these are the 17 authorized shark species. You see here is the female size at maturity. You can see on the table here each shark species size at maturity is very different. Some of them are similar, some are very different. You've got such a large range. You've got the smaller coastals being very small, below the 54 inches that are currently in place. Some that are much higher above the 54 inches that are currently for some of these species.

As I mentioned, some of them are kind of similar and they are together too. For the minimum size limits, we looked at five different alternatives. We looked at the no action, the status quo alternative. Alternative C2 is to establish a recreational minimum size limit for sharks based on female size at maturity. That would be establishing 17 different size limits that fishermen have to remember, based on the table I showed earlier. That was Alternative C2. C3 is to establish the minimum size limits but group the species together, and establish a number based on the female size at maturity. What we looked at was grouping some of the shark species that are either have similar size at maturity. They either look very similar or are misidentified quite often together, or they are caught in similar trips or using similar gear types in areas together.

That was Alternative C3. Alternative C4 the third one is pretty much the same thing, but instead of setting one number we create a flexible number that can be adjusted, not in season, but adjusted based on catch rates from previous years, so the beginning of the fishing season we establish those and have flexibility of moving those if needed.

Then Alternative C5 is to remove all recreational minimum size limits. Also, just want to point out that this action does not consider any regulation changes to prohibited shark species or mako sharks. This slide goes; the table goes in more detail of the preferred alternative C4. As I mentioned, we're looking at grouping the sharks together.

Then on the left-hand side and then you've got the minimum size limits, but we have a range and then default limits. The default limit is what the limit would be for the fishing season. We're not looking at changing it mid-season. It would be kind of set in the beginning of the year and then be set for the whole year kind of thing.

But we grouped some of them together like I mentioned because of different factors, like the sharpnose, bonnethead and smoothhound. There is no size limit for those species, so we group those together. We're defaulting at no size limit for those species, but we did create a range for that species, for that groupage that could be adjusted. But right now, we're staying with no limits.

Blacknose and Finetooth. Again, we're creating a range where you could go up to 54 inches, which is currently what it is right now for those species. But based on the size at maturity for those species together, we're going to lower that down to 38 inches. For spinner/blacktip, we have a little higher range based on the size at maturity for this species, up to 70 inches.

But we're going to default and move those below the 54 inches that is currently for those species to 48 inches. Hammerhead species, again we have a range for that species, because they are much larger and the species is slightly different. But we're going to default and stay consistent with what it currently is now at 78 inches.

For Bull, lemon, nurse and tiger, the other large coastals; again, a high range for those species because of the size of maturity of those. But also,

we're just staying at default of 54 for those. Similar for the other pelagic species authorized in the upper range up to 95, but staying with default at 54 inches. Moving on to the retention limits.

Right now, you can have one shark from the following list, and you can have one sharpnose and one bonnethead per person per trip, and then an unlimited number of smoothhound sharks. If you have two people on the boat fishing, you can keep one blacknose, two sharpnose, two bonnetheads and unlimited number of smoothhounds during the fishing trip.

Under the retention limits we look at three alternatives. The preferred alternative is to create a flexible recreational minimum size limit, retention limit for sharks that I'll go in detail in the next slide. Similar to what we are talking about for the minimum size limits we created one for the retention limits for this and could adjust it based on the harvest levels. Here is the table of what the preferred Alternative is, Alternative D2. This one here we kind of binned them slightly different.

We have the shark species on the left-hand side and then we have the recreational retention limits. What we are proposing to do is go from for all species to go to number of sharks per vessel per trip, and then we have a range and a default number. For like blacknose, Bull, blue, hammerheads, spinners and those species, we could create a range up to 3 or no limit, but we're going to default at 1 for those species for the fishing season.

For sharpnose we can have a higher range, same with the bonnetheads, wo go from 0 to 4 or no limit, each one defaulted at 1 of those species per vessel per trip. Now blacktip, we have a different hold out, because we have the Atlantic blacktip stock assessment, which is a healthy stock. We created for that species a separate limit, where we can go up to 5 or no limits for that species.

But certainly, at the beginning of the season will default at 1 shark per trip, and then smoothhound we have a range of 0 to 4, or no limit. Currently right now there is no limit on the species so we're defaulting at the current limit. Those are the management measures there. Moving on to the miscellaneous things that we included in this rulemaking.

As I mentioned earlier, we have commercial management group quota linkages. Amendment 14 we analyzed removing those from the fishery, and we finalized that measure to ensure that fishermen fully utilize the quotas. But once the catch limits are reached, we do plan to close down the fishery to prevent overharvest of that stock. Right now, as I mentioned, there are quota linkages for blacknose and non-blacknose small coastal that were proposed to go away with that.

But also, the hammerhead and aggregate large coastal that are landed in the Gulf are liked too, which we are also going to remove. Also, we had some other minor things in here where we kind of clarified some of the regulations referring to thresher sharks, referring to what species we're talking about instead of just calling them thresher sharks.

Also, we plan to update one of our management group names, so we do have this management group called pelagic sharks other than blues and porbeagle. But it's just the two species in there, it's just common thresher and shortfin mako. We're planning to change the management group name to be common thresher and shortfin mako, when authorized, sharks.

Then we removed some references to the oceanic whitetip in the commercial fishery regulations. We released this earlier this year based on comments earlier this year and requests from the Gulf Council and also from Atlantic States Commission. We extended the comment period to the end of May, so we can come here and talk to you guys here again, and also, we're going to be talking, the same rulemaking at our AP meeting next week.

We've got a lot of comments on this rulemaking so far, close to 90 comments. We're still accepting comments until the end of May, hoping to turn this

around by the end of this year. But also, I want to show some of the comments we've gotten to date. We've got a lot of comments; a lot or majority of the comments are just about the recreational fishing changes. But we've gotten a lot of support for the Atlantic blacknose preferred management measures, to kind of help them optimize the quota, but also reduce regulatory dead discards. But for the recreational fishery we got a lot of comments for this one.

General support for creating management flexibility and establishing the size limits based on the size at maturity. But then there is some concern that NOAA fisheries could adjust the minimum size limit and retention limits without prior notification or frequency. Then also there's comments about the concern about states may not have the ability to make parallel changes fast or in a timely manner.

We've got a lot of questions regarding the proposed management groupings, a scientific basis for the proposed changes and also how the proposed changes would work. Then guidance suggestions to keep the per-person retention limit for Atlantic sharpnose and bonnethead retention limits. That is everything I have, and I'll gladly answer any questions and comments you guys would have. Thank you.

CHAIR LUISI: Okay, thank you, Guy, for the presentation. Let me look to members of the Board. I think at this point, questions, comments, whatever you have at this time. We don't need to start with questions and go into comments. John Clark, I saw your hand first.

MR. JOHN CLARK: Thank you for the presentation, Guy. Like one of the comments there, I am confused myself as to how that works, the whole default, the range. I mean, could you give just a concrete example of how you see this working in a season?

MR. DuBECK: Yes, for the recreational fishery we don't plan to change anything in-season. We would evaluate before the fishing season started what the catch was, whether it was too high or too low compared to the ACLs that we have, and then make the appropriate changes before the fishing season occurs.

You would know in advance what the new limits would be, whether it's a size limit or bag limits based on the catch. Like I mentioned, like the Atlantic blacktip, healthy stock, if the ACL is not being reached by the recreational sector, then we could increase the bag limit or decrease the minimum size kind of thing for those species to maximize catch for that species.

MR. CLARK: Right, but that would be done, you wouldn't do any changes in season, it would be before the season. Okay, got it.

MR. DuBECK: Yes, we don't want to confuse people recreationally in season. I know recreationally it is hard, fishermen know what the rules are, changing all the time, especially for sharks. It's not something we would do in season for this fishery.

CHAIR LUISI: Thank you, John, for that question. Guy, I made a note too. I assume that is the same for the size limits as well as the retention limit, so everything would be done prior to the season and then open the season up.

MR. DuBECK: The only caveat would be, say if we had a stock assessment or some sort of scientific advice that may make that change. But we probably would notify people about that kind of thing.

CHAIR LUISI: Okay, Chris Batsavage, and then John Maniscalco, I'll come to you next.

MR. BATSAVAGE: Thanks for the presentation, Guy. I noticed on the list of default in size limits you had the same one for spinner shark and blacktip shark, I think, but you have different default in vessel limits for those species. Trying to understand why there is a difference between having a uniform size limit for this species but different vessel limits, and I may have a follow up comment or question after that, thanks.

MR. DuBECK: Yes, so I mentioned, we have a stock assessment for Atlantic blacktip sharks. We can confidently say that we can maybe increase catch for that species, right. But based on the size at maturity we could lower that size at maturity, because right now it's 54 inches, which is above what the size at maturity is for that species.

Again, we group those together for the size at maturity, because yes, they look the same, right. Between spinner, blacktip, most fishermen can't tell the difference or unseasoned fishermen, I should say. But since we have information about blacktips, that is why we pulled them out and had the separate one that we could potentially allow additional catch for those.

MR. BATSAVAGE: Thanks, Guy. It makes sense from the stock assessment standpoint with a higher vessel limit for blacktip, I don't think that would be appropriate for spinners, although I think there might be some challenges for less knowledgeable anglers to know exactly which species they were harvesting.

I guess one thing to consider, although it would be maybe challenging for identification purposes is, if you had vessel limits for those species, perhaps maybe have different size limits, you know higher size limit for spinner sharks that more closely matches their length at maturity.

CHAIR LUISI: Thanks for that, Chris, thank you for the answers. Any other questions or comments around the Board table? Erika Burgess.

MS. ERIKA BURGESS: Florida appreciates the extension of the comment period, so that we could provide meaningful comments. We will be sending a letter from our state. We appreciate the commercial changes and the intent to liberalize where liberalization is possible. We have concerns, of course, about compliance and enforcement, and the potential to have frequently changing regulations in federal waters, and our ability or interest in matching those in state waters. But we'll be sending a formal comment letter in before the deadline.

CHAIR LUISI: John Maniscalco.

MR. JOHN MANISCALCO: I have a question and a comment. My quick question is, you said any changes would be timed before the fisheries, and I was just wondering if you could be a little bit more definitive about when exactly those kinds of changes, when those rules would be available, so how much time the states have to react to them. My comment is that many of those default size limits are not at all protective of sexually immature animals, and especially for species that don't have assessments, particularly strong assessments. I hope that the Service would be prioritizing size limits that do protect sexually immature animals.

MR. DuBECK: Regarding the timing. I can't state for definitive when the timing would be of a notification. But we would plan to notify the public if any changes would happen in advance. You know one of the thigs we mentioned in our Amendment 14 is doing a three-year-rolling average of numbers to these yields to determine catch. It's something we do during the year and give hopefully, people enough notification. I just can't be definitive of the timing of things, based on current timing of when regulations come out.

CHAIR LUISI: Thank you, Guy, for that. I saw Karyl raised her hand. Karyl.

MS. KARYL BREWSTER-GEISZ: Just reiterating what Guy said. We don't know exactly how much time it would take us. But my question back to the group is, how much time do the individual states need, and when would be most beneficial for you, for us to release the document?

CHAIR LUISI: Erika.

MS. BURGESS: For the state of Florida it would ideally be six months.

CHAIR LUISI: Okay, so Erika kind of set the bar at six months. Is there anyone else that it would take longer to make changes? Seeing no hands; hopefully that helps answer that question, Karyl.

Are there any other questions or comments from Board members regarding the presentation? Seeing none around the table. Since we are here to solicit for comment, is there anyone from the audience that would like to make any public comment? Sonja. You can just recognize yourself before you start.

MS. SONJA FORDHAM: Thank you, Chair. Sonja Fordham, Shark Advocates International. Thank you for the presentation. I do also look forward to submitting written comments and discussing the proposal at the HMS meeting. But I want to just say a couple things. We do certainly appreciate that climate change might result in some management lines, and appreciate the clarification for the pelagic category. That is quite important.

As we had said before, generally my community is very concerned about the relaxation of the safeguards that we have in place, so we'll be watching the actual numbers that are selected closely, and spending a bit more time trying to digest these defaults. I do think there is some benefit in more species-specific size limits, but we share the concerns just expressed about that they might not be sufficiently protective.

We were interested in hearing the comments from the states today, so that has been helpful to guide us. I did want to flag that in particular we're concerned about blacknose shark, given that the assessment is 16 years old. Just to use that to again reiterate and maybe take the opportunity to say this in front of a broader audience, that the environmental community is deeply concerned about the lack of shark stock assessments that we have to work with. If you go with this type of flexible approach, it is going to be crucial that you have reliable information on stock status, obviously. That's all I have for today, look forward to seeing you next week. Thank you.

CHAIR LUISI: Thank you, Sonja. Anyone else from the public, either online or in the crowd? Let me check the web. I don't see any hands. I'll ask Karyl and Guy, is there anything else that you want to bring up or any other questions that you may need some answers from the states on at this time?

Okay, excellent. Thank you very much for your presentation. Moving on.

UPDATES ON CONVENTION ON THE INTERNATIONAL TRADE OF ENDANGERED SPECIES PERMITTING FOR SMOOTHHOUND SHARKS

CHAIR LUISI: We are going to jump into the next item on our agenda. We're going to get an update on the Convention on the International Trade of Endangered Species Permitting for Smoothhound Sharks. I have Michelle Turton with us from U.S. Fish and Wildlife Service to provide us a presentation. Michelle, when you're ready.

MS. MICHELLE TURTON: Good afternoon, my name is Michelle Turton; I am with U.S. Fish and Wildlife Service. Additionally, my colleagues, Debra Abercrombie from Fish and Wildlife Service Division of Scientific Authority and Daniel Sahakian from our Office of Law Enforcement are joining in today.

I will be talking about CITES implementation for the U.S. Atlantic smoothhound fishery. In order to talk about CITES requirements for the smoothhound, I need to provide a quick overview of what CITES is. CITES is an international agreement aimed at ensuring that international trade does not threaten species survival.

Several shark species are included in CITES, legal, economically, sustainable and traceable international trade practices due the high demand for fins, meat and other traded parts. The structured CITES framework for implementing international trade controls facilitated enforcement and standardization of data collection for traded species, enhancing international cooperation and trade.

How does CITES work? CITES regulates the export, re-export, and import and introduction from the sea of specimens, including live and dead animals and plants and their parts and derivatives of species included in the appendices. It regulates

international trade through a system of permits and certificates that are only issued if certain conditions are met, and must be presented when leaving and entering a country.

Just to refresh folks' memory on the appendices. There are three of them, Appendix I, Appendix II and Appendix III. I'll mostly just be talking about Appendix I and II today, so Appendix I includes all species threatened with extinction, which are or may be affected by trade. Trade in these specimens are subject to particular strict regulation in order not to further endanger their survival.

International trade for primarily commercial purposes is prohibited, with some limited exceptions to that. Appendix II, which will be our main topic today includes species that are not necessarily now threatened with extinction, but may become so unless trade is closely controlled, so commercial and non-commercial international trade is allowed through the issuance of permits and certificates. Prior to issuing permits and certificates for species included in CITES Appendix I and II, CITES authorities of the exporting country must determine that the species were legally acquired, a legal acquisition finding, and that international trade in the species would not be detrimental to its survival in the wild, a nondetrimental finding.

The parties meet every two to three years at the Conference of Parties, also referred to as COP. During this two-week meeting they review and vote on proposed resolutions and decisions to improve the effectiveness of CITES, and also amendments to the CITES Appendix I and Appendix II to either include new species, remove species or to change appendices.

Changes to Appendix I and II must be proposed at a COP and agreed to by two-thirds majority of the parties present and voting. Just a quick mention before we get into the heart of the presentation. Fish and Wildlife Service is the implementing agency for CITES, but we work closely with over 20 different federal agencies, as well as the Association of Fish and Wildlife Agencies, AFWA, to develop U.S. positions for all CITES meetings, along with four COPs we have an extensive public comment period.

At the most recent Conference of the Parties, held in Samarkand Uzbekistan, November 24 through December 5 of 2025. A proposal submitted by Brazil with co-sponsors by Ecuador, the European Union, Panama and Senegal was adopted to include school shark or trope and all species and the genus, I'm very bad at pronouncing things, so please forgive me, for smoothhound in Appendix II with a delayed implementation of 18 months.

The proposal was adopted by consensus, that means that no party intervened to vote against the proposal. As of June 5th of 2027, smoothhound species harvested in U.S. smoothhound fishery will be included in Appendix II of CITES. What does that mean? That means that international trade may be authorized by granting of a CITES export permit, re-export certificate or an introduction from the sea certificate.

It's important to clarify what I mean by introduction by the sea, as its name can be very misleading. Introduction from the sea means transportation into the country of specimens of any species that were taken in the marine environment not under the jurisdiction of any country aka the high seas, as reflected in the United Nations Convention on the Law of the Sea.

I won't be covering introduction from the sea certificates in detail during this presentation, as most smoothhounds are harvested in U.S. waters, but just be aware that if you are harvesting smoothhound in the high seas, you will need to apply for an introduction from the sea certificate. In addition, no import permit is necessary for these species under CITES, though it should be noted that some countries have domestic laws that may require a CITES import permit.

It is the responsibility of the exporter to check with the importing country, to understand the requirements for their specimens. CITES permits and certificates are issued by U.S. Fish and Wildlife Service. An applicant can visit our e-permits page

to apply online, or you can download an application and mail it in. Application process varies, depending on the species, the level of protection, the complexity of the application and legality of the proposed activity. All applications must be reviewed carefully to ensure that the criteria under federal regulations are being met before issuance. We recommend applying 60 to 90 days prior to needing the permit or certificate. To prevent delays, it's important to fully complete the application to the best of your ability. A common question we get is, can the process or any of the steps in the process be expedited. The short answer is no.

Applications cannot be expedited and are required to meet all the issuance criteria under federal regulations. Applications are processed in the order that they are received. We do take into consideration extraordinary circumstances, but there is no formal mechanism or a fee schedule for expedited review.

It is the applicant's responsibility to apply as soon as possible for the required documents for the proposed activity. Today's presentation will concentrate on CITES export permits, since I think this will be what is most relevant to the group here today. More information on the other types like re-export or introduction from the sea can be found on our website, or you can contact us directly, and we're happy to assist you with the process.

Exports from the United States of smoothhound, whether alive or dead and any parts and derivatives must be accomplished by a CITES export permit starting June 5, 2027. The best application to use for commercial purposes is going to be Application Form 3-200-27. That is the export of wildlife removed from the wild under CITES.

This application can be used for a wide variety of purposes, but if you're trying to export a live or a dead animal, it's parts and products derived from a CITES Listed Appendix II species removed from the wild, this will be the best one. Individuals or businesses can apply. There are also single-use and multiple-use that are referred to as master files. I'll touch on it in a little bit. Some of the information asked in the Application Form 3-200-27 include the following that is on the screen.

I am not going to read through all of them, but I'll highlight a couple of them of like scientific name. It's important the scientific name versus the common name is used. For approximate age it can be simple as immature or adult. Description is very important to include of what is being exported, if it's a whole body, whole body with fins, fillets. Are they frozen, are they fresh. The more detail you provide the easier it is for us to process.

U.S. Fish and Wildlife Service, we have the ability to issue single use export permits or multiple use certificates that are known as master files. Both serve distinct purposes and offer different advantages, depending on the applicant's needs. Master files are a permitting efficiency to streamline the process for businesses or individuals.

Master files are an additional option available to applicants who are conducting the same activity, exporting frequently and need a more efficient way to obtain required CITES permits. Master file applications may take longer to review, but once established applicants may obtain multiple partially completed single use certificates, also known as clones, at a time, allowing for multiple shipments of a preauthorized specimens prior to needing to apply for more. Put more simply, this method can eliminate the need to submit individual applications for each shipment that an applicant may have planned. These files are valid for an authorized period, ranging from 1 year to up to 3 years and they can be customized for where the specimens are being exported to or a quantity being exported or both. For master files an applicant needs to apply prior to master file. Once established, the master file holder will need to apply for the partially completed, single-use certificates or clones.

Clones act the same as a single-use export permit, so each clone can only be used once, and they are valid for 6 months. Additionally, the partially completed means that there is specific information that is already pre filled out on the permit. But

there are blank sections depending on if you want quantity or consign year left open, that needs to be filled out before shipment.

Master file holders are held to certain terms and conditions presented in a letter upon establishment of the file. Master file holders must keep the master file up to date and comply with any changes to CITES regulations or changes to the holders' operations. In many instances we limit the total amount authorized to export under a master file, and also have reporting requirements such as an annual report, which would have to show legal acquisition chain of custody, annual export quantities, et cetera.

For example, if you're an exporter who expects to make multiple shipments over the year of a same type of product such as frozen fish fillets, a master file could be more of an appropriate choice. If you're an exporter who only expects to make one or two large shipments within a year, a single use permit might be the better option. It depends case to case.

After the application is submitted you will receive an acknowledgement letter or e-mail. U.S. Fish and Wildlife Service reviews the Export Application, which will include making a legal acquisition finding and non-detriment finding. Consulting with NOAA, states and/or tribes as applicable and contacting the applicant if additional information is needed.

Export permit is issued or denied, though if an applicant doesn't respond to a post to be contacted by U.S. Fish and Wildlife Service for additional information, an application can be abandoned. It's important to make sure that there is accurate contact information on the application and that you respond in a timely manner, even if it's just an acknowledgement of receiving the e-mail or phone call from Fish and Wildlife Service.

If an application is denied a letter is sent, to let the applicant know of the reason for the denial, and there is a reconsideration process for denials as well. Next, I'll talk a little bit more about legal acquisition findings. This means that the shark specimens were sourced in compliance with all relevant regulations ensuring legality, safeguards species, and supports accountability and international trade

Legal acquisition findings assure that specimens for sourced in compliance with all relevant regulations ensuring legality safeguard species and supports accountability in international trade. Legal acquisition findings assure that specimens were sourced in compliance with all national, state, local and international laws. This stuff is critical to prevent illegal trade, safeguard vulnerable species from illegal trade and overexploitation. We conduct a risk assessment to help assess the level of scrutiny and amount of information that a management authority needs to make a legal acquisition finding. This includes the status of the species, origin of the species, range of the species, volume of the illegal trade, type of trade, ability of the species to be bred or propagated in controlled environment and genetic status, which just means is it a hybrid or a purebred species.

Ultimately, we request documentation to establish an unbroken chain of custody with no evidence of illegal transactions involving the specimen. Exporters are required to present licenses and permits confirming that species were legally obtained. Providing proper documentation ensures transparency and supports enforcement of regulations. The types of documents required depends on the type of activity of where the species were harvested, state waters versus federal waters.

Below are some examples of potential, relevant information that may be requested for smoothhounds, such as quotas, the supplier's commercial buyers license, such as NOAAs federal dealer shark permit and U.S. Fish and Wildlife Service import/export license, harvest reports, timing and location of catch, transfer of ownership documents such as itemized invoices or receipts from the fisher to the dealer.

Fishing license and permits, such as NOAAs open access smoothhound shark permit for smoothhound harvested in federal waters, fishing

agreements and vessel registration. For an example, if an exporter sources smoothhound from two fishers, one that harvested smoothhound in Connecticut waters and the other from federal waters, when applying for a CITES permit the exporter should provide the period and location of the harvest, a copy of the Connecticut fisher's commercial fishing license valid for the time period of the harvest, the quota for Connecticut if known, a copy of NOAAs Open Access Smoothhound Shark Permit for the fisher in the federal waters, itemized invoices, pound of purchases smoothhound from both fishers, a copy of valid vessel registration from both fishers, a copy of the Fish and Wildlife Service import/export license and a copy of the federal dealer shark permit.

Then we would in turn consult with Connecticut and NOAA and receive any applicable harvest reports or confirmed quotas. Next, I'll go over Non-Detriment Findings. Non-Detriment Findings are scientific assessments ensuring trade does not threaten species survival or ecosystem health.

Non-Detriment Findings are essential for CITES permits to maintain a balance between sustainable trade and species conservation. We have a legal obligation to make a Non-Detriment Finding for proposed export or introduction from the sea of Appendix I, or Appendix II species. A Non-Detrimental Finding can be in written or verbal form, and agreed upon by the Scientific Authority for a specific time period, such as one year or on a case-by-case basis, depending on the permit application and circumstances.

Non-Detrimental Findings are based on scientific review of available information on life history, distribution, population status, trends, harvest and other threats as appropriate, including international trade impacts. Fish and Wildlife Service we often consult with states, tribes, other federal agencies, scientists and range countries for the species during the Non-Detrimental Finding process, particularly with regards to making sure that we have accurate information on management measures and population monitoring that is in place, or is being proposed that address the various threats and ensure harvest for trade is biologically sustainable. In the case of smooth dogfish harvest in state waters, we would consult each state agency that authorizes commercial harvest to ensure all fishing and reporting regulations have been adhered to, and it can be very helpful for us if those regulations are posted online and made publicly available.

We also consider how well the management measures are being implemented and what's happening to the conservation status of the population. It is important to note for migratory species, Non-Detrimental Findings should ensure that harvest anywhere throughout the species range does not negatively impact the species as a whole, which includes jurisdictions outside of the United States.

The Non-Detrimental Finding is essentially a science-based risk assessment for several reasons. Not all CITES permit applications are subject to the same level of scrutiny during the Non-Detrimental Finding process. As mentioned with the legal acquisition finding process, due to the degree of risk involved, some applications are more closely reviewed than others. Some species have high risk factors such as being in Appendix I, wild source specimens, whether the activity is commercial, and then native species receive greater scrutiny than their non-native counterparts.

For the export of specimens of smoothhound sharks harvested in the U.S. smoothhound fishery for commercial purposes. We would consider this low risk, but due to the management measures in place that ensure sustainability such as quotas, reporting requirements and monitoring of the populations. Low risk.

For NDFs for sharks included in Appendix II of CITES based here in the U.S., U.S. fishers and dealers must obtain permits, report catch, as applicable, attend shark identification or handling and release workshops, adhere to science-based quotas, retention, prohibitions, gear restrictions, and land sharks with fins naturally attached for accurate species ID and catch reporting inspections by enforcement, except smooth dog hound which are

excepted from the shark fin elimination act and the shark conservation act. But this doesn't apply to all of the different smoothhound species found here in the Atlantic.

For Non-Detrimental Findings, very similar documents are required such as the legal aquisition fishing finding, ones that I went over. I'll let folks read here on the screen, but you need to see if you have dealer permits and your import/export license from Fish and Wildlife Service and any shark-direct permits issued by NMFS For these species. Now we're getting to the law enforcement part of it, and I think you guys have heard my voice enough, so I'm going to hand it over to my colleague, Daniel over there to finish.

MR. DANIEL SAHAKIAN: Cool, thank you guys, sorry. If you don't mind me sitting over here. I get to see the big screen, so I'll take it. I don't have a name tag so you can blame Michelle for everything I say. But my name is Daniel Sahakian; I am a wildlife inspector. As senior wildlife inspector I sit here in the wilds of northern Virginia. But just to go quickly through the declaration and the port procedures for you all. All wildlife going in and out of the country needs a declaration. That is done under Wildlife Declaration Form 3-177, and I have a wonderful test example up there on the right for you guys. It just has general information about the shipment, where it's going, who it's coming from, where it's going to, the species contained, some like the flight information, for example.

With that declaration we ask that there is like a declaration package. It's all submitted together and that would be invoices, licensing, permits, the CITES permits in this particular case we're discussing now, all be kind of consulted and submit together. I know in this fun post-COVID world no one wants to see each other in person, but we do need physical copies of CITES permits still.

Physical CITES must be delivered to the inspectors at the port when the shipments are going out. Quickly back on the other one. There are import/export licenses. If you are commercially shipping any wildlife, and this goes for sharks as well, unless someone has like an emotional support shark or something. I can't think of why you would not have commercial licenses.

For the purpose of this meeting I am assuming everyone will need a import/export license. That is a license that you apply online with the Fish and Wildlife Service. The licenses are good for one year and that just allows these businesses to operate as an importer or an exporter of wildlife. Where some people get kind of confused is you know the licenses needed for whoever is doing the shipping are not necessarily the fisherman.

If those are going to a third party, the sharks are going to a third party that is consolidating sharks and sending them out. They are the ones responsible for the import/export license and the Declaration in the CITES, it's not necessarily just the fishermen. Just to make that note.

Shipments do need to be moving through designated ports. Most if not all of our big ports in the U.S. are designated wildlife ports, but if for whatever reason here is a port that is not, and that is where a fisherman is located, they can apply for a designated port exception permit, and this would allow them to ship through a non-designated wildlife port.

There are three reasons why you could apply. One is the scientific purposes, one is to mitigate deterioration or loss for a perishable good, which I think would fit in this, and the other one is monetary reasons. I think monetary or deterioration would be the two likely for this group, where port exemption permits could be applied for.

Also, just early notice requirements for live or perishable shipments, which again applies to this situation. At designated ports the officers need 48 hours' notice of a shipment occurring and for non-designated ports that is bumped to 72 hours. These notice requirements are just so we can make sure inspectors are there and ready to work with the shipments at the port.

It seems to make sense and is helpful to everybody. It's helpful to us and it's helpful to those shipping, because it expedites the process. If I had like a big tip, which everyone asks, what can I do to be the best shipper, and it's always just; communicate with the port officers, talk to the inspectors, call the inspectors. I don't clear shipments anymore; I sit in an office all day. But when I was at the port the best thing would be to communicate with the trade. I don't want problems, trade doesn't want problems, nobody wants problems and we solved the problems by talking before we have a problem. That is the number one tip.

Just once we get to the inspection process. You get your license, you declare your shipment, again, we need to see each other face-to-face unfortunately for both of us. I need to sees that physical copy of the CITES permit and stamp and sign the bottom. Don't need to get into the crazy details, but the inspectors are going to review the document package. If they need to do a physical inspection, they will physically inspect the shipment.

That is dependent on the port and the type of trade, if you will, if you're shipping air cargo it is different than a truck cargo, so not to get into the nitty gritty. If the inspectors need to physically look at it, they will, and then they will validate the CITES permit with a signature and with a stamp, and then process the declaration and you'll get a canceled copy of the CITES permit to keep in your records.

You will get the original CITES permit, and that has to go with the shipment on to its destination. You can see more about the import/export regs at 50CFR part 14 import/export. But I am happy to answer any questions you guys all have today. I think I'll jump, Michelle, do you have a slide after this? There you go, hopefully that's not me, so see you guys.

MS. TURTON: We just have some helpful links there on the screen, such as where our website is, overview of CITES, in case you didn't get enough from today. Frequently asked questions concerning certificates needed for CITES listed sharks and rays. A quick note, we have not updated our website yet to include smoothhound, so the information up there talks about requiem sharks.

But the same information for requiem sharks apply to smooth hounds and we'll have the website updated soon. Then the next slide has our contact information for Division of Management Authority, Division of Scientific Authority and the Office of Law Enforcement, depending on your question. With that, thank you.

CHAIR LUISI: Thank you both very much for the presentation and all of the information contained within it. Let's go around the table. Does anybody have any questions, comments, thoughts regarding what you saw or heard? Ben.

MR. BEN DYAR: Thank you for the presentation, they were thorough, thank you. I missed this and if it was said I apologize. I saw the length of declarations 48 hours and 72 hours, but as far as the application for the permit, what kind of timeline does that look like in receiving it and getting it and then being able to start declaring the exports?

MS. TURTON: I mentioned it briefly at the beginning that time varies case-by-case, each a number of different factors on if they are applying for a master file or single-use permit. What products are being shipped out, how many applications that we have ahead of it, since we do process applications as they come in, which is why we do recommend submitting an application 60 to 90 days in advance. Then once it's been issued it is valid for 6 months if it's a single-use permit and for a master file it will specify if it's valid for a year to 3 years, but you then have to apply to get the clones, which are those partially completed single-use permits and each individual permit, like the regular single-use export permits are valid for 6 months.

MR. DYAR: Thank you very much, my apologies.

CHAIR LUISI: Any other questions or comments from the Board? Toni.

MS. KERNS: I think Caitlin and I have been thinking about this a lot, and Michelle met with us a couple

times. Michelle, one thing that we talked about on Friday is, so because these are fisheries and they don't necessarily know how much they are going to catch or where they're going to be catching it.

Are there ways to get around applying for the permits when you don't know that information ahead of time, because they don't know. Because they don't know what state they will necessarily be buying from, because they buy it from fishermen from multiple states and then bring it to one place to process and then export.

MS. TURTON: It's all by a case-by-case basis, so it's hard for me to give exact details without having information in front of me. But that is where supplying as much information as you're able to on the application would help us. If you're applying for a master file, but you haven't already bought the products from the fishers yet, and you're applying.

It is helpful to see what you've done in previous years, so for that estimated total, you know for the last five years or so, what has kind of been the average that you've been exporting out? You can always ask for a little bit more within a reasonable amount to be approved for. Then, what fishers have you bought from in the past, and have them go ahead and give you a copy of whatever applicable fishing license they have, depending on the state or federal waters.

But we definitely have been able to issue established master files without someone having to have the product on hand. But we need more information of just what have they done in previous years, what are they expecting and you know the best reasonable thing of what fishers are they buying for and applicable copies of those licenses. More information is always better in the application, and then we're always happy to work with individual applicants to see what we can do to help them out.

CHAIR LUISI: Thank you for that. Daniel.

MR. SAHAKIAN: Yes, if I could just add as well. From the enforcement perspective and once you're at the port, those CITES permits and the validation that the officers are doing. We're validating up to the amount issued on the permit as well. They don't have to have the exact number that is there, as long as it is under, because the sign says, under this amount is good. The enforcement officers at the port that day will be validating the quantity. As long as it's under, we're all good at the port.

CHAIR LUISI: Any other questions or comments? Caitlin Starks.

MS. CAITLIN STARKS: I guess I just wanted to maybe ask a question that might be helpful for exporters to know the answers to, since all through the course of meeting with Fish and Wildlife Service about this, it's clear that there is a lot of uncertainty about what might be needed just based on a case-by-case basis, and so thank you, Michelle, for going through all of it.

But I think it would be helpful if you could just let us know who or what would be the best contact method for exporters to get directly in touch with you guys and answer questions as they are starting these application processes.

MS. TURTON: The best is to reach out to that Management Authority e-mail. I did not include it on the slide, but we also have a phone number as well. It is in the Stakeholder letter that I provided to the Commission. But either that number or the Management Authority e-mail is the best way to reach us, and that goes directly to our branch of permits who are the application processors, and you'll get an answer within 72 hours or so.

CHAIR LUISI: Thank you for bringing that up, Caitlin, clarifying that. Last call around the table. Yes, Ma'am.

MS. DEBRA ABERCROMBIE: Hi, I'm Debra, Debra Abercrombie.

CHAIR LUISI: Debra, hi, if you want to introduce yourself.

MS. ABERCROMBIE: Debra Abercrombie, Scientific Authority. I work with Michelle and Daniel. I just wanted to indicate, based on the requiem shark applications that we receive, they usually establish a master file, and that means that they provide information that indicates what their intent is for export quantities and things like that, because the smoothhound fishery also has quotas. It's going to be within the quota, obviously.

If they can just provide the information, several orders within the Atlantic smoothhound fishery and state waters from Maine or whatever. The more information, like Michelle mentioned, the better. But especially if they are going through the information and they think they want to establish a master file.

The effective date is June of 2027, that is kind of in the middle of when the fishing season starts. So if they want to submit applications sooner rather than later, in anticipation there will be questions, that would be recommended. Three months would probably be a good thing, and there is also a way to in the e-permitting system online itself is to create a ticket, and that way you're ensured somebody is going to actually contacts you.

There are multiple ways to get into the system. If you're confused about what's online, call or e-mail, but if you are pretty savvy and you can understand going straight to the application form that we gave you, and then just looking for how to apply online and submit the ticket. There is also a help desk way to submit a ticket there. There are multiple ways, but definitely, definitely, definitely reach out if anybody has any questions.

CHAIR LUISI: Okay, so thank you, so we need to reach out if we've got them. Questions and information that we want to run by you guys, that sounds really good. Toni.

MS. KERNS: I don't have another question, I just wanted to say that we really appreciate the states getting back to us on how you collect data, how you do the permitting. We shared those with the Fish and Wildlife Team. I think we collectively think that that information is helpful for them, and that we don't need to be making any changes to how you're doing the permitting or collecting.

Because the way you're doing it now kind of meets what the needs are for the permitting system, as long as the dealer makes sure that they are acquiring a paper trail along the way. It may mean that your fishermen are going to have to provide additional information as they sell product to the dealers, especially those that are state only non-federally permitted fishermen.

They may have to provide some more paperwork then your federally permitted fishermen that are selling to the federal dealers, potentially. But just putting that out there as you talk to your fishermen. I think we talked about this a little bit before, but so far, I've only been able to find two dealers that are exporting. There certainly could be more out there. I don't mean to suggest that that's it, so it is a pretty small number of individuals.

CHAIR LUISI: All right, thanks, Toni. Karyl, did you have something to add? I saw you waving your hand.

MS. BREWSTER-GEISZ: I actually had a question. Throughout this presentation you've been very clear it doesn't come into effect until June, 2027, which is a little more than a year away. Do fisherman, exporters, dealers need to do anything now regarding these species, and what happens as we get closer to June?

As Debra indicated, it's in the middle of the fishing season. There is going to be fish collected before June that will be exported after June, but I'm assuming at that point all those fish will need all the appropriate permits. I just want to be very clear about what is needed now, and what is going to be needed come June next year.

MS. TURTON: Currently right now to export smoothhound, you don't need a CITES permit. As soon as it is June 5th of 2027, even if it's smoothhound that was caught prior to that date, it will still require a CITES document. I didn't go over

it in the presentation, but that would be considered pre-convention specimens, and there is a different application for that. But those will be able to go out, but they do need a CITES document with that.

Also, if you have a shipment, if it's going on a large ship but you think even though it might leave the port prior to June, but you don't think it's going to reach the importing country until that date. Contact us and we can make sure that you have the required documents so you are not held up at the importing country, requiring the CITES document. Very good question, thank you.

CHAIR LUISI: Thank you, Karyl, and thanks for the answer. Is there anyone from the audience, either online or in the crowd here today that would like to ask any questions or have anything clarified for them? Seeing no names and no other hands around the table, I want to thank the three of you for being here with us today and providing this information for all of us.

It is going to be important as we move into 2027 and prepare our stakeholders for the challenges that this will likely have for them as they move into this time when these applications need to be filled out and this paperwork needs to be done. Thank you again for being here.

CONSIDER APPROVAL OF FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE FOR COASTAL SHARKS FOR THE 2024 FISHING YEAR

CHAIR LUISI: Next, we are going to the next item on our agenda, which is to Consider the Approval of Fishery Management Plan Review and State Compliance for Coastal Sharks for the 2024 Fishing Year. Caitlin Starks, who is our FMP Coordinator will be providing us that presentation.

MS. STARKS: In this presentation I'll just go over the main parts of the annual FMP review, including the status of the FMP, updates to stock status, recent fishery information. I went backwards, recent fishery information, de minimis requests, implementation of the FMP requirements and PRT recommendations.

The most recent changes that we've had for the sharks management program are the implementation of the zero-retention limit for shortfin mako sharks in 2022, and then in 2024 the implementation of a zero-possession limit for oceanic whitetip sharks for commercial and recreational fisheries.

For updates to stock status there was a research track assessment of the hammerhead complex, which was SEDAR 77, and that was completed in 2024 for scalloped hammerhead, which is now considered a complex that includes scalloped and Carolina hammerheads, SEDAR 77 preliminarily indicates that the scalloped hammerhead shark was not overfished, and overfishing was not occurring in the terminal year, which was 2019.

For smooth hammerhead it suggests that overfishing most likely is not occurring and the stock has been rebuilding since 2000, though this was a data limited assessment. Then for great hammerhead the assessment found the stock was overfished and no overfishing is occurring in the terminal year.

I'll just go over the preliminary fishery landings information for the 2024 fishing year from NOAA Fisheries. This table includes the Atlantic region landings of aggregated large coastal sharks. The hammerhead group, non-blacknose small coastal sharks and blacknose sharks and smoothhound, and there were not quota overages for any of these groups and landings increased for all of them when compared to 2023.

This next table shows the landings for groups with no regional quotas, including the shark research fishery landings of aggregated large coastal sharks, the sandbar research fishery, and then blue, porbeagle and common thresher sharks. Again, there weren't any quota overages for these groups and landings in all of the groups increased compared to 2023. The FMP review also goes over recreational landings information as reported in the state compliance reports. However, most of that data is from MRIP, and there are very high PSEs, so

I'm not going to go over it here but they are in the document. Then under the sharks FMP states can request de minimis status on a case-by-case basis. There are not specific de minimis guidelines that would exempt a state from regulatory requirements contained in this FMP. Massachusetts is the only state that has been granted de minimis status, and they are requesting continuation of that status for aggregated large coastals and the hammerhead species group.

Massachusetts has implemented all of the regulations in the FMP, with the exceptions of the possession limit and closures for aggregated large coastals and hammerhead shark fisheries. Then finally, these are the PRT comments on the FMP review and state compliance. The PRT recommends the Board grant de minimis status to Massachusetts.

Then they noted one inconsistency with the management plan, which is that Georgia's regulations do not establish a zero-retention limit for shortfin mako sharks. Federally permitted harvesters are required to comply with the federal regulations, and that includes the zero-retention limit for shortfin mako, and that is regardless of where they are fishing.

However, the regulations appear to allow harvest of shortfin mako in state waters by non-federally permitted commercial and recreational harvesters. Then the PRT also noted that Massachusetts, Rhode Island and Maryland didn't report the shark landings by month, including a number of trips.

That said, the FMP does not explicitly require that landings and trips by month be reported for the compliance report. I would propose we modify the FMP review language to make it clear that this isn't a compliance issue. Then with the exception of those bullet points there, all of the states have implemented the regulations consistent with the FMP requirements.

To wrap up, the Board's action items for this are to consider approval of the de minimis status for Massachusetts and the approval of the FMP review and state compliance for the 2024 fishing year. I can take any questions.

CHAIR LUISI: Any questions for Caitlin regarding her report? Seeing none; would anyone like to make a motion to approve? Dan McKiernan.

MR. DANIEL McKIERNAN: Make a motion to approve the report and grant Massachusetts de minimis status.

CHAIR LUISI: Would you mind reading what's on the screen, Dan? Sorry, it's getting late, I know.

MR. McKIERNAN: **Motion to approve the Fishery Management Plan Review and State Compliance for coastal sharks for the 2024 fishing year, and approve de minimis status for Massachusetts**.

CHAIR LUISI: Thank you, I've got a second by Doug Haymans. Any discussion on the motion? **Is there any objection to the motion? Seeing none; the motion carries by consent.** I'll just check with Caitlin before we move on. Is that all we need for this item?

ELECT VICE CHAIR

CHAIR LUISI: Moving into the next item on our agenda, we have the election of a Vice-Chair. Would any member of the Board like to make a nomination for Vice-Chair? Chris Batsavage.

MR. BATSAVAGE: I **move to elect Ben Dyar as Vice-Chair of the Coastal Sharks Management Board.** A second, Malcolm Rhodes seconds that motion, is there any discussion on the motion? **Any objection to the motion? Congratulations, Ben**, you are now elected to be the Coastal Sharks Vice-Chair.
If this group meets as often as CITES and as often as it has been meeting, you won't have a Board meeting until 2028. That could be something to look forward to. Okay.

OTHER BUSINESS

CHAIR LUISI: We have one more item on the agenda today, it's new business. Chris Batsavage

asked for time to bring up new business, so I am going to turn to you, Chris, for that.

SHARK FISHING FROM SHORE

MR. BATSAVAGE: Sally Dowd, a PhD student at the University of North Carolina's Institute for Marine Science presented her research on the land-based shark fishery in North Carolina to our staff, I guess last month. We thought that might be something that would interest the Board for her to present that information at a future meeting, especially since several of the states have land-based shark fisheries and are developing and growing recently. Just offering that to see if that would be of interest to the Board for a future meeting.

CHAIR LUISI: All right, Chris, thanks for that. Any thoughts for Chris? Joe.

MR. CIMINO: I know it's getting late, but he said they have a landshark fishery?

CHAIR LUISI: Erika.

MS. BURGESS: I have to say that shore-based shark fishing is a real hot topic right now, and it fills up half my inbox. Florida has regulations specific to shore-based shark fishing, if there is an interest in pairing a presentation on that with the presentation, as well as we've had similar research done in Florida. I would be willing to explore that if there is interest from the Board.

CHAIR LUISI: Okay, Dan McKiernan.

MR. McKIERNAN: In the same vein, Massachusetts has regulated the use of terminal tackle to avoid people from trying to catch white sharks from the beach, as well as the use of devices to launch baits over the horizon. We would be happy to contribute to that discussion.

CHAIR LUISI: Sounds like there is definitely some interest there, Chris. I'll look to staff, maybe we can make that happen in an upcoming meeting, a couple years from now. Hopefully, we'll get another meeting on the books a little sooner than that, I think. Erika.

MS. BURGESS: And just paired with that, Florida in the next year will be considering regulations related to ground fishing, which is directly related to this topic.

CHAIR LUISI: Caitlin, you were leaning into the mic, did you have something you wanted to say? No, okay. Is there any other business to come before the Coastal Sharks Board at this Time. It's almost four o'clock, and it's either time for a party or a nap. I've been watching people yawn all afternoon. With that said, I'm going to go to Bob, to see what he has in store for us.

EXECUTIVE DIRECTOR ROBERT E. BEAL: The awards banquet this evening for the Annual Awards of Excellence starts at five o'clock, so you've got an hour to get a nap or since it's Cinco de Mayo, go get a margarita or churro or whatever you want to do. But yes, everybody has about an hour to kill before the beginning of the awards banquet.

MR. McKIERNAN: In light of this time change, maybe people could reach out to like members of the delegation who may not be here, that don't know about that time change.

EXECUTIVE DIRECTOR BEAL: The five o'clock time? It was mentioned at the end of menhaden, but that would be great if people could.

MR. McKIERNAN: Well, that's true, everybody was here for menhaden.

ADJOURNMENT

CHAIR LUISI: Any other business to come before this Coastal Sharks Board? Seeing none; I'll entertain a motion to adjourn. This meeting is adjourned, thank you.

(Whereupon the meeting adjourned at 3:55 p.m. on Tuesday, May 5, 2026)

Outlook

[New] [External] Sharks and Striped Bass

From Michael Roy <captainmike@reelcastcharters.com>
Date Mon 7/27/2026 8:13 PM
To Caitlin Starks <CStarks@ASMFC.org>

Hi,

I wanted to reach out and share what I'm seeing on the water this season regarding the brown shark population and the impact it is having on our striped bass fishery.

Over the past several years, I have expressed my concern that the rapidly increasing brown shark population was becoming a significant problem. Unfortunately, this season those concerns have become a reality. From what I am seeing on the water every day, the situation has reached a point where it is severely impacting our ability to fish for striped bass during the summer months.

Nearly every area holding striped bass is now holding large numbers of brown sharks. Instead of catching striped bass, we are hooking sharks continuously throughout the day. Even when we do hook a striper, there is a high likelihood that it will be attacked before we can land it. It has become extremely difficult to successfully target striped bass because the sharks are so widespread and aggressive.

As a full-time charter captain, this is more than an inconvenience—it is threatening my livelihood. July and August are typically two of the most important months of my season, yet this year I find myself unable to consistently provide the striped bass trips my clients book.

I'm writing because I believe this issue deserves serious attention. My observations come from being on the water virtually every day throughout the season, and I have never seen anything approaching the shark abundance we are experiencing now. The ecosystem appears to have changed dramatically, and the effects on the striped bass fishery are becoming impossible to ignore.

We desperately need a shark season to target them or we will not have a summer striped bass fishery left!

Captain Mike Roy

Reel Cast Charters

(203) 710-5116

www.reelcastcharters.com

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Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
703.842.0740 • asmfc.org

MEMORANDUM

TO: **Coastal Sharks Management Board**

FROM: **Caitlin Starks, Senior FMP Coordinator**

DATE: **October 26, 2026**

RE: **2027 Coastal Shark Specifications and Smooth Dogfish State Shares**

This memo contains proposed coastal shark specifications for the 2027 fishing year based on the default federal regulations for Atlantic coastal shark fisheries. Effective January 1, 2024, NOAA Fisheries changed the federal regulations for Atlantic shark fisheries for the 2024 and future fishing years to automatically open the commercial fishing year on January 1 of each year under the base quotas and default retention limits.

The final rule included the following measures (Table 1):

- The commercial shark fisheries will automatically open on January 1 of each year.
- At the start of each fishing year, the default commercial retention limit is 55 LCS other than sandbar sharks (i.e., aggregated LCS and hammerhead shark management groups) per vessel per trip
- The commercial possession limit at the start of the season will be 8 blacknose sharks per vessel per trip.
- NMFS may consider in-season adjustments to the commercial possession limits depending on catch rates.

More information can be found at:
https://www.federalregister.gov/documents/2023/11/08/2023-24307/atlantic-highly-migratory-species-2024-atlantic-shark-commercial-fishing-year
and https://www.ecfr.gov/current/title-50/chapter-VI/part-635#p-635.24(a)

The proposed 2027 specifications include the NMFS default season start date and commercial possession limits based. The Coastal Sharks Board does not actively set quotas for any species contained in the non-blacknose, small coastal shark (SCS), blacknose, aggregated LCS, hammerhead or pelagic species groups but will close the fishery for any species in these groups when NMFS closes the fishery in federal waters, as outlined in the FMP.

Table 1. NMFS base quotas and default retention limits for the 2027 coastal shark fishery. Atlantic shark fisheries will automatically open on January 1, 2027 unless adjusted by NMFS.

Region or Sub-region	Management Group	2025 Annual Quota	Quota Linkages	Commercial Retention Limits for Directed Shark Limited Access Permit Holders (in-season adjustments are possible)
Atlantic	Aggregated Large Coastal Sharks	168.9 mt dw (372,552 lb dw)	Linked	55 LCS other than sandbar sharks per vessel per trip. If the quota is landed too quickly, NMFS will consider in-season reduction as needed.
	Hammerhead Sharks	27.1 mt dw (59,736 lb dw)		
	Non-Blacknose Small Coastal Sharks	264.1 mt dw (582,333 lb dw)	Linked (South of 34°N. lat. only)	N/A
	Blacknose Sharks (South of 34° N. lat. only)	17.2 mt dw (37,921 lb dw)		8 blacknose sharks per vessel per trip (applies to directed and incidental permit holders)
	Smoothhound sharks	1,802.6 mt dw (3,973,902 lb dw)	Not Linked	N/A
No regional quotas	Non-Sandbar LCS Research	50.0 mt dw (110,230 lb dw)	Linked	N/A
	Sandbar Shark Research	90.7 mt dw (199,943 lb dw)		
	Blue Sharks	273.0 mt dw (601,856 lb dw)	Not Linked	N/A
	Porbeagle Sharks	1.7 mt dw (3,748 lb dw)		
	Pelagic Sharks Other Than Porbeagle or Blue	488.0 mt dw (1,075,856 lb dw)		

*1 mt dw = 2,204.6 lb dw

The following motion is provided for the Board's consideration to set coastal sharks specifications for the 2027 fishing year:

Move to adopt the 2027 coastal shark specifications matching the default season start date and retention limits as specified by the National Marine Fisheries Service final rule published on November 8, 2023 (88 FR 77039). The fishing season will open on January 1, 2027 with a commercial possession limit of 55 large coastal sharks (LCS) other than sandbar sharks per vessel per trip (i.e., aggregated LCS and hammerhead shark management groups) and 8 blacknose sharks per vessel trip. The commercial possession limit is subject to change; states will follow NMFS for in-season changes to the commercial possession limit.

Smooth Dogfish State Shares

If the base federal coastwide quota for the 2027 Atlantic smooth dogfish fishery (1,802.6 dressed weight (dw) metric tons; 3,973,902 dw lbs) is adopted, state shares would be established based on Addendum II to the Interstate Coastal Sharks FMP. Rollover of unused state shares is not permitted because it could result in overages of the federal coastwide quota. The state shares shown in Table 2 reflect the base coastwide quota for 2027. Please note that the state shares in pounds do not add up to 3,973,902 due to a rounding error in converting from metric tons to pounds.

Table 2. State shares[1] of the coastwide smooth dogfish quota based on the base coastwide quota for the 2027 fishing year (January – December).

	State Share Percentages	State Share (dw mt)	State Share (dw lbs)
ME	0.021%	0.4	817
MA	0.433%	7.8	17,195
RI	1.363%	24.6	54,163
CT	0.234%	4.2	9,282
NY	7.953%	143.4	316,037
NJ	18.828%	339.4	748,214
DE	0.339%	6.1	13,464
MD	6.703%	120.8	266,362
VA	34.803%	627.4	1,383,026
NC	28.583%	515.2	1,135,860
SC	0.742%	13.4	29,481
TOTAL	100%	1,802.6	3,973,902

[1] State shares are based on total landings by state from 1998-2010

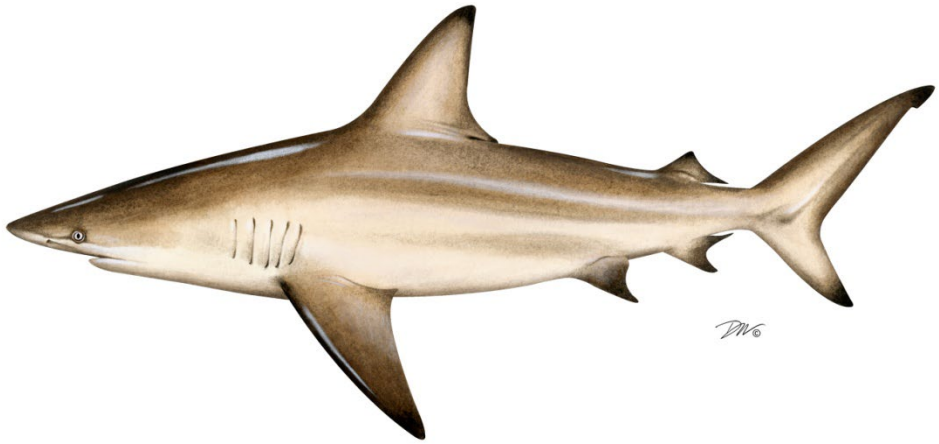
DRAFT FOR BOARD REVIEW

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

FOR COASTAL SHARKS

2025 FISHING YEAR



Prepared by the Coastal Sharks Plan Review Team

October 2027

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

DRAFT FOR BOARD REVIEW

REVIEW OF THE ASMFC FISHERY MANAGEMENT PLAN AND STATE COMPLIANCE FOR COASTAL SHARKS FOR THE 2025 FISHERY

Management Summary

Date of FMP Approval:	August 2008
Amendments:	None
Addenda:	Addendum I (September 2009) Addendum II (May 2013) Addendum III (October 2013) Addendum IV (August 2016) Addendum V (October 2018)
Management Unit:	Entire coastwide distribution of the resource from the estuaries eastward to the inshore boundary of the EEZ
States With Declared Interest:	Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida
Active Boards/Committees:	Coastal Shark Management Board, Advisory Panel, Technical Committee, and Plan Review Team

I. Status of the Fishery Management Plan

The Atlantic States Marine Fisheries Commission (ASMFC; Commission) adopted its first fishery management plan (FMP) for coastal sharks in 2008. Coastal sharks were initially managed under this plan as six different complexes: prohibited, research, small coastal, non-sandbar large coastal, pelagic and smooth dogfish. The Board does not actively set quotas for any shark species. The Commission follows National Oceanic and Atmospheric Administration's (NOAA Fisheries) openings and closures for small coastal sharks, non-sandbar large coastal shark, and pelagic sharks. Species in the prohibited category may not be possessed or taken. Sandbar sharks may only be taken with a shark fishery research permit. All species must be landed with their fins attached to the carcass by natural means. This was adjusted through subsequent addenda listed below. The Interstate Fishery Management Plan for Coastal Sharks (FMP) established the following goals and objectives.

GOAL
The goal of the Interstate Fishery Management Plan for Coastal Sharks is "to promote stock rebuilding and management of the coastal shark fishery in a manner that is biologically, economically, socially, and ecologically sound."

OBJECTIVES

In support of this goal, the following objectives for the FMP include:

1. Reduce fishing mortality to rebuild stock biomass, prevent stock collapse, and support a sustainable fishery.
2. Protect essential habitat areas such as nurseries and pupping grounds to protect sharks during particularly vulnerable stages in their life cycle.
3. Coordinate management activities between state and federal waters to promote complementary regulations throughout the species' range.
4. Obtain biological and improved fishery related data to increase understanding of state water shark fisheries.
5. Minimize endangered species bycatch in shark fisheries.

The FMP has been adapted through the following addenda:

Addendum I (September 2009)

Approved in September 2009, Addendum I modified the FMP to allow commercial fishermen to process (remove the fins of) smooth dogfish at sea from March – June of each year, but also requires a 5-95% fin to carcass ratio for all dressed smooth dogfish carcasses. This Addendum also removed recreational smooth dogfish possession limits, as well as the two-hour gill-net check requirement for commercial fishermen, which applied to all shark species.

Addendum II (May 2013)

Approved in May 2013, Addendum II modified Addendum I to allow commercial fishermen to process (remove the fins of) smooth dogfish at sea year-round but requires a 12-88% fin-to-carcass ratio for all dressed smooth dogfish carcasses. This ratio was consistent with the Shark Conservation Act of 2010. Addendum II also allocates state-shares of the upcoming federal smoothhound shark quota based on historical landings from 1998-2010.

Addendum III (October 2013)

Addendum III modifies the species groups to ensure consistency with NOAA Fisheries. It creates two new species groups (Blacknose and Hammerhead Species Groups). The addendum also increases the recreational minimum size limit for all hammerhead species to 78 in fork length (FL).

Addendum IV (August 2016)

Addendum IV allows smooth dogfish carcasses to be landed with corresponding fins removed from the carcass as long as the total retained catch, by weight, is composed of at least 25% smooth dogfish, consistent with federal management measures.

Addendum V (October 2018)

Addendum V allows the Board to respond to changes in the stock status of coastal shark populations and adjust regulations through Board action rather than an addendum, ensuring greater consistency between state and federal shark regulations. Addendum V allows the Board to change a suite of commercial and recreational measures, such as recreational size and possession limits, season length, and area closures (recreational and commercial), in addition to

the current specifications for just the commercial fishery, throughout the year when needed. Under this provision, if the Board chooses to adjust measures through Board action, the public will be able to provide comment prior to Board meetings, as well as at Board meetings at the discretion of the Board Chair. Additionally, the Board can still implement changes in shark regulations through an addendum.

In 2019, in response to measures implemented by NOAA Fisheries through Amendment 11 for Federal Highly Migratory Species (HMS) Permit Holders, the Board approved changes to the recreational size limit for Atlantic shortfin mako sharks in state waters, specifically, a 71 in straight line FL for males and an 83 in straight line FL for females. These measures were implemented in response to the 2017 Atlantic shortfin mako shark stock assessment that found the resource is overfished and experiencing overfishing. The states were required to implement the changes to the recreational minimum size limit for Atlantic shortfin mako sharks by January 1, 2020.

Additionally in 2019, the Board moved to require non-offset circle hooks for the recreational shark fishery in state waters with an implementation date of July 1, 2020. The Board chose to do so after NOAA Fisheries requested that the states implement a circle hook requirement for the recreational fishery consistent with the measures approved in HMS Amendment 11.

In May 2022 the Board approved a zero retention limit in state waters for Atlantic shortfin mako sharks for both recreational and commercial fisheries. These measures are consistent with those implemented by NOAA Fisheries for federal HMS permit holders. This action was taken in response to the 2019 Atlantic shortfin mako shark stock assessment update that indicates the resource is overfished and experiencing overfishing, with a rebuild date of 2070.

In May 2024, the Board established a zero possession limit for oceanic whitetip sharks for recreational and commercial fisheries, consistent with the NOAA Fisheries final rule adding oceanic whitetip to the prohibited species list in US waters of the Atlantic Ocean, effective February 2, 2024.

Table 1. List of commercial shark management groups under Commission FMP

Species Group	Species within Group
Prohibited	Sand tiger, bigeye sand tiger, whale, basking, white, dusky, bignose, Galapagos, night, reef, narrowtooth, Caribbean sharpnose, smalltail, Atlantic angel, longfin mako, bigeye thresher, sharpnose sevengill, bluntnose sixgill and bigeye sixgill sharks
Research	Sandbar sharks
Non-Blacknose Small Coastal	Atlantic sharpnose, finetooth, and bonnethead sharks
Blacknose	Blacknose sharks
Aggregated Large Coastal	Silky, tiger, blacktip, spinner, bull, lemon, and nurse sharks
Hammerhead	Scalloped hammerhead, great hammerhead and smooth hammerhead
Pelagic	Shortfin mako*, porbeagle, common thresher, oceanic whitetip*, and blue sharks
Smoothhound	Smooth dogfish and Florida smoothhound sharks

*Zero retention limits are in place for these species

II. Status of the Stocks

Stock status is assessed by species or by species complex if there are not enough data for an individual assessment. Eleven species have been assessed domestically, three species have been assessed internationally, and the rest have not been assessed. Table 2 describes the current stock status of all assessed shark species along with references for the stock assessments. More details on assessments are provided below, beginning with the most recent.

A stock assessment for sandbar sharks (SEDAR 101) is currently ongoing and expected for completion in 2027. A stock assessment for bull sharks is scheduled to begin in 2027.

A research track assessment of the hammerhead complex (SEDAR 77) was completed in 2024. Based on the 2009 stock assessment for the Northwest Atlantic and Gulf of Mexico populations of scalloped hammerhead sharks (*Sphyrna lewini*), which indicated the Northwest Atlantic stock is overfished and experiencing overfishing (Hayes et al. 2009), NOAA Fisheries established a scalloped hammerhead rebuilding plan that ends in 2023. Since the assessment, research has determined that in the U.S. Atlantic, a portion of animals considered scalloped hammerheads are actually a cryptic species, recently named the Carolina hammerhead (*Sphyrna gilberti*; Quattro et al. 2013). Little to no species-specific information exists regarding the distribution, abundance and life history of the two species, therefore for now, both species are currently managed under the name scalloped hammerhead. The SEDAR 77 assessment preliminarily indicates that the scalloped hammerhead shark was not overfished and overfishing was not occurring in the terminal year (2019). For smooth hammerheads it suggests overfishing most likely is not occurring and the stock has been rebuilding since 2000. The assessment found that for the great hammerhead shark the stock is overfished, and no overfishing is occurring in the terminal year.

In December 2020, Southeast Data and Assessment Review SEDAR completed a benchmark assessment of the Atlantic blacktip shark (*Carcharhinus limbatus*) stock (SEDAR 65), which indicates the stock is not overfished and not experiencing overfishing.

In June 2020, the International Commission on the Convention of Atlantic Tunas (ICCAT)'s Standing Committee on Research and Statistics (SCRS) completed an assessment of Porbeagle sharks (*Lamna nasus*), which indicates the stock is overfished and not experiencing overfishing. As a result of the previous 2009 assessment, NOAA Fisheries established a 100-year rebuilding plan for porbeagle sharks; the expected rebuilding date is 2108.

The 2017 ICCAT assessment of the North Atlantic population of shortfin mako sharks (*Isurus oxyrinchus)* indicates that the stock is overfished and overfishing is occurring. Multiple models were explored and new data sources were integrated. Combined probability of overfishing occurring and the stock being in an overfished state was 90% across all models.

The 2017 stock assessment (SEDAR 54) for sandbar sharks (*Carcharhinus plumbeus*) indicates the stock is overfished and not experiencing overfishing. This assessment used a new approach

(Stock Synthesis) instead of the State Space Age Structure Production Model that was used in the previous assessment (SEDAR 21). A replication analysis conducted using the prior model (updated with data through 2015) resulted in the same stock status as the new model (overfished, no overfishing occurring). The rebuilding date for sandbar sharks is 2070.

The 2016 stock assessment update to SEDAR 21 for Atlantic dusky sharks (*Carcharhinus obscurus*) indicates the stock is overfished and experiencing overfishing. This latest review functioned as an update to the 2011 assessment (SEDAR 21), so no new methodology was introduced. However, all model inputs were updated with more recent data (i.e., 2010-2015 effort, observer, and survey data). The rebuilding date for dusky sharks is 2107.

In 2015, a benchmark stock assessment (SEDAR 39) was conducted for the smoothhound complex, including smooth dogfish (*Mustelus canis*), the only species of smoothhound occurring in the Atlantic. The assessment indicates Atlantic smooth dogfish are not overfished and not experiencing overfishing.

The North Atlantic blue shark (*Prionace glauca*) stock was assessed by ICCAT's SCRS in 2015. Similar to the results of the previous 2008 stock assessment, the assessment indicated the stock is not overfished and not experiencing overfishing. However, scientists acknowledge there is a high level of uncertainty in the data inputs and model structural assumptions; therefore, the assessment results should be interpreted with caution.

SEDAR 34 (2013) assessed the status of Atlantic sharpnose sharks (*Rhizoprionodon terraenovae*) and bonnetheads (*Sphyrna tiburo*). The Atlantic sharpnose shark stock is not overfished and not experiencing overfishing. The stock status of bonnethead stocks (Atlantic and Gulf of Mexico) is considered unknown. Assessment results indicated the stock is not overfished with no overfishing occurring, however all available data pointed towards separate stocks. As the assessment framework would not allow stocks to be split, the assessment continued under a single stock scenario. The results of the assessment were rejected by reviewers noting that the stocks need to be assessed independently. A benchmark assessment is recommended for both stocks of bonnetheads.

A 2011 benchmark assessment (SEDAR 21) of blacknose sharks (*Carcharhinus acrontus*) indicated the stock is overfished and experiencing overfishing. As described in the Magnuson-Stevens Act, NOAA Fisheries must establish a rebuilding plan for an overfished stock. As such, the rebuilding date for blacknose sharks is 2043.

The 2007 SEDAR 13 assessed the SCS complex, finetooth (*Carcharhinus isodon*), Atlantic sharpnose, and bonnethead sharks (SEDAR 2007). The SEDAR 13 peer reviewers considered the data to be the 'best available at the time' and determined the status of the SCS complex to be adequate. Finetooth, Atlantic sharpnose, and bonnethead were all considered to be not overfished and not experiencing overfishing.

Table 2. Stock Status of Atlantic Coastal Shark Species and Species Groups

Species or Complex Name	Stock Status		References/Comments
	Overfished	Overfishing	
Pelagic			
Porbeagle	Yes	No	Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report (2020); Rebuilding ends in 2108 (HMS Am. 2)
Blue	No	No	ICCAT Standing Committee on Research and Statistics Report (2015)
Shortfin Mako	Yes	Yes	ICCAT Standing Committee on Research and Statistics Report (2017)
All other pelagic sharks	Unknown	Unknown	
Aggregated Large Coastal Sharks (LCS)			
Atlantic Blacktip	No	No	SEDAR 65 (2020)
Aggregated Large Coastal Sharks - Atlantic Region	Unknown	Unknown	SEDAR 11 (2006); difficult to assess as a species complex due to various life history characteristics/ lack of available data
Non-Blacknose Small Coastal Sharks (SCS)			
Atlantic Sharpnose	No	No	SEDAR 34 (2013)
Bonnethead	Unknown	Unknown	SEDAR 34 (2013)
Finetooth	No	No	SEDAR 13 (2007)
Hammerhead			
Scalloped	No	No	SEDAR 77 (2024) preliminary results
Smooth	Unknown	No	SEDAR 77 (2024) preliminary results; Stock assessment suggests rebuilding has been occurring since 2000.
Great	Yes	No	SEDAR 77 (2024) preliminary results
Blacknose			
Blacknose	Yes	Yes	SEDAR 21 (2010); Rebuilding ends in 2043 (HMS Am. 5a)
Smoothhound			
Atlantic Smooth Dogfish	No	No	SEDAR 39 (2015)
Research			
Sandbar	Yes	No	SEDAR 54 (2017); Rebuilding ends 2070 (HMS Am. 2)
Prohibited			
Dusky	Yes	Yes	SEDAR 21 update (2016); Rebuilding ends in 2108 (HMS Am. 5b)
All other prohibited sharks	Unknown	Unknown	

III. Status of the Fishery

Specifications (Opening, closures, quotas)

NOAA Fisheries sets quotas for coastal sharks through the 2006 Consolidated Atlantic Highly Migratory Species Fishery Management Plan and its amendments. The opening dates, closure dates, and quotas are detailed in Table 3. All non-prohibited coastal shark management groups opened on January 1, 2025. NOAA Fisheries closes commercial shark fisheries when 80% of the available quota is reached. When the fishery closes in federal waters, the Interstate FMP dictates that the fishery also closes in state waters. For 2025, the fishery did not close for any of the species groups before December 31.

Table 3. Commercial quotas for the 2025 shark fishing season. All Atlantic shark fisheries automatically opened on January 1, 2025.

Region or Sub-region	Management Group	2025 Annual Adjusted Quota*	Quota Linkages	Commercial Retention Limits for Directed Shark Limited Access Permit Holders (in-season adjustments are possible)
Atlantic	Aggregated Large Coastal Sharks	168.9 mt dressed weight (dw) (372,552 lb dw)	Linked	55 LCS other than sandbar sharks per vessel per trip. If the quota is landed too quickly, NMFS will consider in-season reduction as needed
	Hammerhead Sharks	27.1 mt dw (59,736 lb dw)		
	Non-Blacknose Small Coastal Sharks	264.1 mt dw (582,333 lb dw)	Linked (South of 34°N. lat. only)	N/A
	Blacknose Sharks (South of 34° N. lat. only)	17.2 mt dw (37,921 lb dw)		8 blacknose sharks per vessel per trip (applies to directed and incidental permit holders)
	Smoothhound sharks	1,802.6 mt dw (3,973,902 lb dw)	Not Linked	N/A
No regional quotas	Non-Sandbar LCS Research	50.0 mt dw (110,230 lb dw)	Linked	N/A
	Sandbar Shark Research	90.7 mt dw (199,943 lb dw)		
	Blue Sharks	273.0 mt dw (601,856 lb dw)	Not Linked	N/A
	Porbeagle Sharks	1.7 mt dw (3,748 lb dw)		
	Pelagic Sharks Other Than Porbeagle or Blue	488.0 mt dw (1,075,856 lb dw)		

*1 mt dw = 2,204.6 lb dw

Commercial Landings

Commercial landings data through 2024 are provided in the NOAA Fisheries Stock Assessment and Fisheries Evaluation (SAFE) Report[1] in Tables 4-6. Preliminary commercial landings for the 2025 fishing year are provided in Tables 7-8.

[1] https://www.fisheries.noaa.gov/s3/2026-09/safe-report-2024-2025.pdf

Table 4. Commercial Landings (lb dw) of Large Coastal Sharks (LCS) in Atlantic Region, 2020–2024. Source: NOAA HMS SAFE Report, 2024-2025. Note: Blacktip shark landings were mistakenly omitted from the aggregated LCS landings total for 2023 and 2024.

Management Group	LCS	2020	2021	2022	2023	2024
Aggregated LCS	Blacktip	131,962	106,588	106,092	158,283	150,113
	Bull	17,703	8,745	8,015	5,418	4,381
	Lemon	4,479	4,883	4,333	3,198	3,206
	Nurse	0	0	C	C	C
	Silky	223	C	C	C	C
	Spinner	71,094	63,553	97,997	102,235	51,973
	Tiger	2,232	2,516	1,921	3,565	1,160
	Unclassified, assigned to LCS	90	0	0	0	0
Total aggregated LCS		227,783	<189,000	<220,000	<115,000	<62,000
Hammerhead	Great	27,529	33,621	43,869	48,823	33,784
	Scalloped	12,024	9,947	15,077	3,222	7,700
	Smooth	0	C	C	2,002	C
Total hammerhead		39,553	<44,000	<60,000	54,115	<43,000
Management Group	LCS	2020	2021	2022	2023	2024
Total LCS carcass weight		**267,336**	**229,995**	**278,577**	**327,305**	**253,308**

Management Group	Species	2020	2021	2022	2023	2024
Sandbar—shark research fishery	Sandbar	49,989	108,197	86,809	49,144	123,059

Table 5. Commercial Landings (lb dw) of Small Coastal Sharks (SCS) in Atlantic Region, 2020-2024. Source: NOAA HMS SAFE Report, 2024-2025.

Management Group	SCS	2020	2021	2022	2023	2024
Blacknose	Blacknose	10,644	15,056	9,364	13,068	12,221
Non-blacknose	Bonnethead	1,818	4,620	2,844	1,878	776
	Finetooth	7,793	21,575	16,411	21,142	21,416
	Sharpnose, Atlantic	214,303	205,681	126,430	172,738	160,220
Total non-blacknose SCS		**223,913**	**231,873**	**145,708**	**195,758**	**182,412**
Total SCS carcass weight		**234,557**	**246,931**	**155,072**	**208,826**	**194,633**

Table 6. Commercial Landings (lb dw) of U.S. Atlantic Pelagic Sharks, 2020-2024. Source: NOAA HMS SAFE Report, 2024-2025.

Management Group	Pelagic Shark	2020	2021	2022	2023	2024
Blue sharks	Blue	0	C	C	4,324	C
Porbeagle sharks	Porbeagle	0	C	0	C	962
Other pelagic sharks	Mako, shortfin[1]	36,029	25,942	18,623	441	C
	Oceanic whitetip[2]	0	C	0	0	0
	Thresher	62,485	58,908	39,851	44,323	39,265
Total other pelagic sharks		**98,514**	**84,850**	**58,474**	**44,764**	**39,265**
Unclassified, assigned to pelagic	Unclassified	0	0	0	0	0
Total pelagic carcass weight		**98,514**	**85,177**	**58,474**	**49,088**	**40,227**

Table 7. Preliminary landings estimates in metric tons (mt) and pounds (lb) dressed weight (dw) for the Atlantic shark commercial fisheries, Atlantic Region.

Shark Management Group	2025 Quota (dressed weight, dw)	Estimated Landings through 12/31/2025 (dw)	% of 2025 Quota	2024 Landings through Same Reporting Period (dw)
Aggregated LCS (quota linked to Hammerhead)	168.9 mt (372,552 lb)	61.8 mt (136,208 lb)	37%	84.2 mt (185,731 lb)
Hammerhead (quota linked to Agg. LCS)	27.1 mt (59,736 lb)	20.5 mt (45,162 lb)	76%	17.8 mt (39,191 lb)
Non-Blacknose Small Coastal (quota linked to Blacknose south of 34° N. lat. only)	264.1 mt (582,333 lb)	31.9 mt (70,352 lb)	12%	77.7 mt (171,377 lb)
Blacknose (South of 34° N. lat. only)	17.2 mt (37,921 lb)	2.9 mt (6,471 lb)	17%	5.4 mt (11,852 lb)
Smoothhound	1,802.6 mt (3,973,902 lb)	252.4 mt (556,196 lb)	14%	333.8 mt (735,890 lb)

Table 8. Preliminary landings estimates in metric tons (mt) and pounds (lb) dressed weight (dw) for the Atlantic shark commercial fisheries, No Regional Quotas.

Shark Management Group	2025 Quota (dressed weight, dw)	Estimated Landings through 12/31/2025 (dw)	% of 2025 Quota	2024 Landings through Same Reporting Period (dw)
Shark Research Fishery (Aggregated LCS)	50.0 mt (110,230 lb)	<13 mt (<28,660 lb)	<26%	9.1 mt (20,016 lb)
Shark Research Fishery (Sandbar only)	90.7 mt (199,943 lb)	<56 mt (<123,458 lb)	<62%	56 mt (123,059 lb)
Blue	273.0 mt (601,856 lb)	0 mt (0 lb)	0%	<1 mt (< 2,205 lb)
Porbeagle	1.7 mt (3,748 lb)	<1 mt (2,205 lb)	<59%	<1 mt (<2,205 lb)
Pelagic Sharks other than Porbeagle or Blue ††	488.0 mt (1,075,856 lb)	18.1 mt (39,887 lb)	4%	16.3 mt (35,963 lb)

Recreational Landings

The 2024-2025 NOAA Fisheries SAFE Report includes data for 2020-2024 recreational shark landings (Tables 9-11, Figure 2) . For 2025, recreational data provided in state compliance reports are summarized in Table 12.

Table 9. Estimated Recreational Harvest of Large Coastal Sharks in the U.S. Atlantic Region in Number of Fish. Source: NOAA HMS SAFE Report, 2024-2025.

Species	2020	2021	2022	2023	2024
Blacktip	1,507	485	1,503	4,292	345
Bull	17	.	1	11	6
Hammerhead, great	5	.	1	.	.
Hammerhead, scalloped	.	.	.	.	.
Hammerhead, smooth	.	.	.	.	.
Hammerhead, unclassified	.	.	.	.	.
Lemon	.	217	11,796	16	.
Nurse	2	1	29,595	36	1,280
Spinner	27	61,228	287	5	865
Tiger	.	1	.	.	.
Requiem shark, unclassified	37,803	241	14,147	10	.
Total	**39,361**	**62,173**	**57,330**	**4,380**	**2,496**

Table 10. Estimated Recreational Harvest of Small Coastal Sharks in the U.S. Atlantic Region in Number of Fish. Source: NOAA HMS SAFE Report, 2024-2025.

Species	2020	2021	2022	2023	2024
Blacknose	661	1,855	1,105	1,410	880
Bonnethead	28,861	34,840	15,309	18,979	86,238
Finetooth	113	166	1,476	32,382	128
Atlantic sharpnose	34,256	72,251	18,248	24,714	49,219
Total	63,891	110,835	36,138	77,484	136,465

Table 11. Estimated Recreational Harvest of Smoothhound Sharks in the U.S. Atlantic Region in Number of Fish. Source: NOAA HMS SAFE Report, 2024-2025.

Region	2020	2021	2022	2023	2024
Atlantic	61,128	37,535	17,541	30,627	68,524

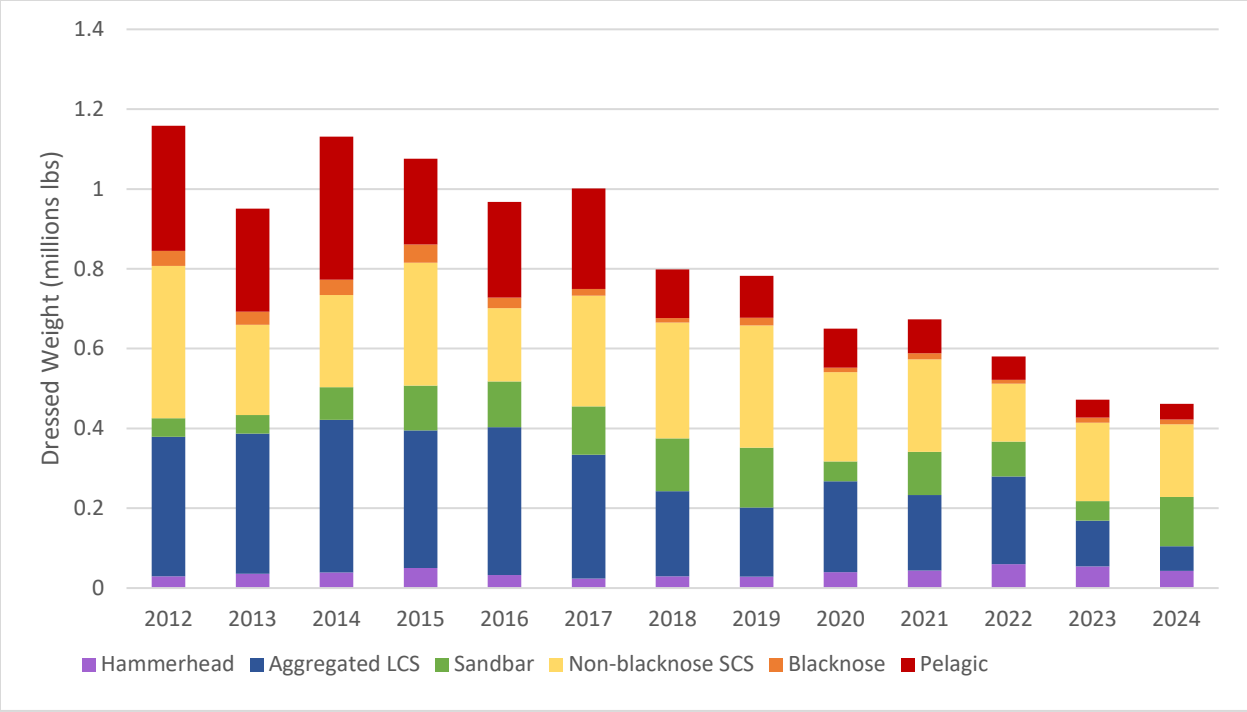


Figure 1. Commercial landings of coastal sharks off the east coast of the United States by species group, 2012-2024. Source: NOAA Fisheries Stock Assessment and Fisheries Evaluation Report, May 2026.

Table 12. Recreational harvest estimates (numbers of sharks or lbs) reported by states in 2025. Most estimates are from the Marine Recreational Information Program (MRIP) and have high percent standard error (PSE). Aggregated LCS and SCS are unspecified species reports.

Species	MA	RI	CT	NY	NJ	DE	MD	VA	NC	SC	GA	FL
Total Hammerhead												
Blacktip										3,113 lbs		
Total Aggregated LCS												56,359 lbs
Blacknose												15,094 lbs
Bonnethead										203,258 lbs	7,249	
Finetooth												
Atl. Sharpnose							6			26,197 lbs		
Spinner		1,640					1			286 lbs		
Thresher							3					
SCS Total									3,061			92,197 lbs
Blue												
Porbeagle	128											
Smooth dogfish	4,537	1,469	13,269	21,557	9,236	1,315		1,179	1,506	5,721 lbs		

IV. Status of Research and Monitoring

Under the Interstate Fishery Management for Coastal Sharks, the states are not required to conduct any fishery-dependent or independent monitoring; however, states are encouraged to submit any information collected while surveying for other species. This section describes the research and monitoring efforts through the 2025 fishing year, where available.

The Cooperative Atlantic States Shark Pupping and Nursery (COASTSPAN) Survey is administered by the NOAA Fisheries Northeast Fisheries Science Center (NEFSC) through the Apex Predators Program based at the NEFSC's Narragansett Laboratory in Rhode Island. COASTSPAN has been collecting information on shark nursery areas along the U.S. Atlantic coast since 1998. It involves NOAA Fisheries scientists, along with state and university partners in New Jersey, Delaware, Virginia, South Carolina, Georgia, and Florida. The survey monitors the presence of young-of-year and juvenile sharks along the east coast. Longline and gillnet sampling, along with mark-recapture techniques are used to determine relative abundance, distribution, and migration of sharks utilizing nursery grounds from Massachusetts to Florida. In 2025, COASTSPAN program participants were the Virginia Institute of Marine Science, South Carolina Department of Natural Resources, and University of North Florida (samples Georgia and north Florida state waters). Standardized indices of abundance from COASTPAN surveys are used in the stock assessments for large and small coastal sharks.

Massachusetts

DMF continued its research on the fine-scale predatory behavior of white sharks off the coast of Massachusetts. In 2025, 22 white sharks were tagged with acoustic, satellite, and/or biologging tags off the coast of Cape Cod. When combined with collaborative tagging efforts off Canada (1), Maine (4), New York (1), New Jersey (1), North Carolina (3), South Carolina (40), and Florida (1), this brings the total to 415 individuals tagged since 2009. These data will be used to examine swimming patterns (e.g., traveling, resting, hunting, foraging, mating), bioenergetics, and, ultimately, provide estimates of the intensity of white shark predation on gray seals.

Rhode Island

The RI Division of Fish & Wildlife, Marine Fisheries Section (RIDEM DMF) has conducted a monthly and seasonal trawl survey since 1979 within Narragansett Bay, Rhode Island Sound and Block Island Sound. Smooth dogfish are the only coastal shark species captured in the trawl survey regularly. The Fall survey catches smooth dogfish most frequently, with indices from the Fall and Monthly surveys greater than the Spring survey in recent years (Figure 2).

RIDEM DMF has been improving Rhode Island's monitoring efforts on coastal sharks in state waters. An acoustic receiver array is now established in RI state waters, which will detect tagged fish within 0.5-1 km of a receiver. The receiver array is traditionally deployed from mid-April through mid-November/early December. To date, the array has detected sand tiger sharks, white sharks, smooth dogfish, blue sharks, shortfin mako sharks, thresher sharks, and sandbar sharks. Additional sampling is also being conducted through a Baited Remote Underwater Video System (BRUVS) survey and shark tagging efforts to understand their

residence time in RI state waters. The BRUVS is intended to monitor various species, including sharks. The tagging is directed at the pelagic shark complex.

In 2022, RIDEM DMF began a state waters observing program with gillnet harvesters. Data are reviewed to assess catch rates for coastal shark species when encountered in commercial gillnets.

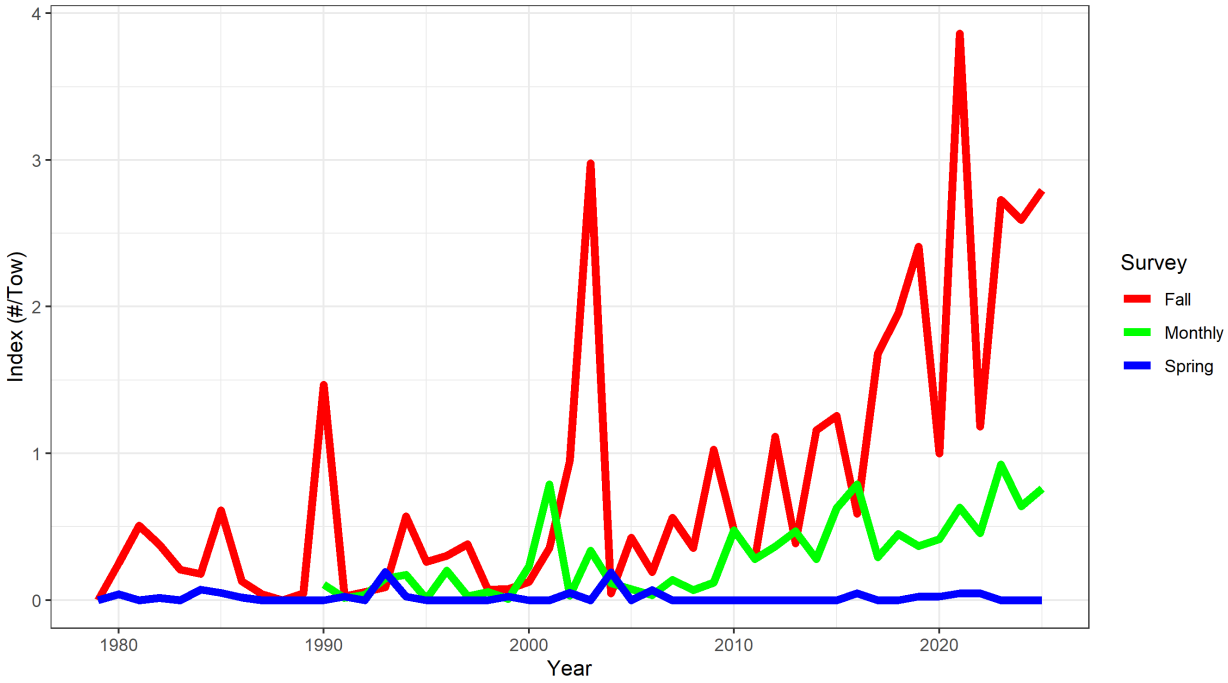


Figure 2. Smooth dogfish (*Mustelus canis*) annual mean number per tow from the RIDEM DMF bottom trawl surveys.

Connecticut

The Connecticut Department of Energy and Environmental Protection (CT DEEP) monitors the abundance of marine resources in nearby coastal waters with the Long Island Sound Trawl Survey. Spring (April, May and June) and fall (September and October) surveys are conducted each year. Other than smooth dogfish, coastal sharks are not typically encountered by the Long Island Sound Trawl Survey (Figure 3). The survey was not conducted in 2025. Additionally, the survey was not conducted in fall 2010 (mechanical issues) or 2020 (COVID-19 pandemic). More information on the Long Island Sound Trawl Survey report can be found here.

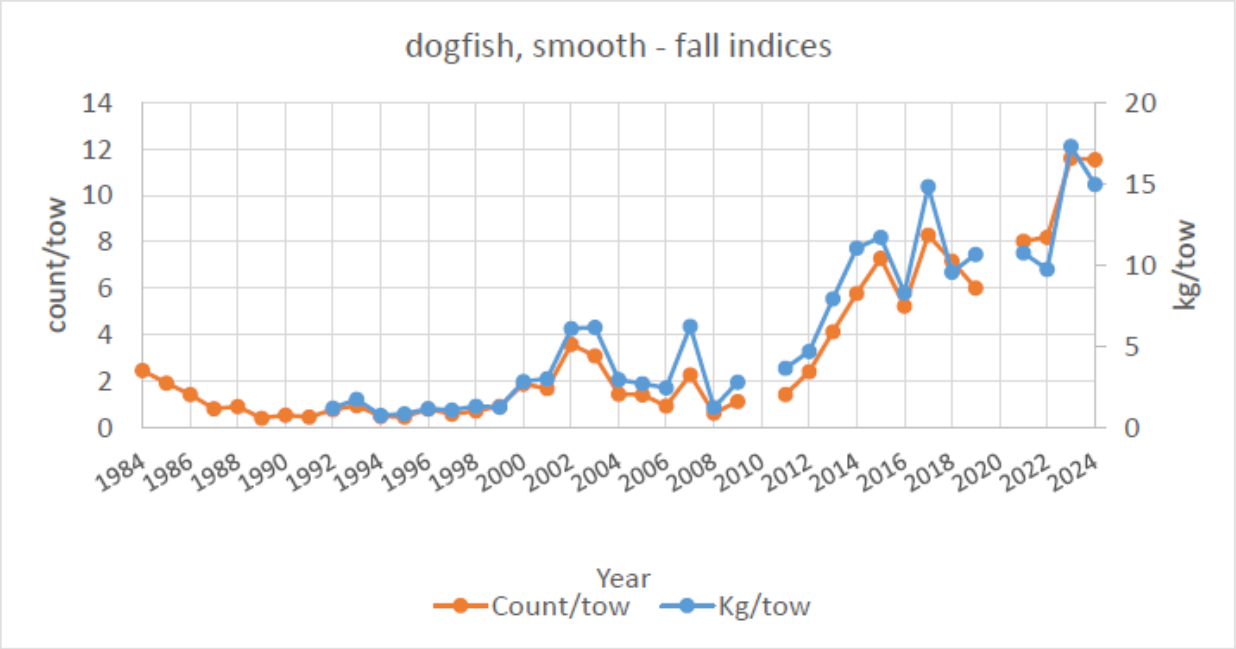


Figure 3. CT DEEP Long Island Sound Trawl Survey Smooth Dogfish Indices

New York

NYSDEC started a near shore multispecies ocean trawl survey fall of 2017. This survey was not completed in 2025 due to vessel issues.

Additionally, In 2025 New York DEC issued six special licenses to shark researchers, and each of these permit holders submitted reports of their sampling activities. Combined, these researchers sampled 11 different shark species from June–October. A total of 155 sharks were sampled and released under the purview of their permits. These researchers collected species, sex, and length information from most of the sharks sampled. Some researchers also collected muscle, fin, blood, or fecal samples as part of their studies. Collectively, these permit holders deployed 81 acoustic tags, 21 mTags, and17 satellite tags on the sharks that they sampled in 2025.

New Jersey

New Jersey does not currently conduct any fishery-independent monitoring programs specifically for Atlantic coastal sharks but does encounter sharks from the state's Ocean Stock Assessment Survey. Prolonged survey vessel maintenance resulted in no sampling for the entire 2025 calendar year.

Sharks sampled by the New Jersey Ocean Stock Assessment Survey are collected by a 30-meter otter trawl every January, April, June, August, and October since 1989. Tows are approximately 1 nautical mile and are performed via a stratified random sampling design. Latitudinal strata are identical to those used by the National Marine Fisheries Service groundfish survey. Longitudinal boundaries are defined by the 18-30, 30-60, and 60-90-foot isobaths. Smooth

Dogfish are cumulatively weighed and measured by total length in centimeters. All other shark species are sorted by gender, weighed individually, and measured by total length in centimeters.

Delaware

Delaware conducts a 30 ft adult trawl survey and a 16 ft juvenile trawl survey in the Delaware Bay. In the adult trawl survey, the smoothhound is the most common shark species caught (Figure 4), with the sand tiger shark (Figure 5) and sandbar shark (Figure 6) taken in low numbers. Thresher, Atlantic angel, Atlantic sharpnose (Figure 7) and Dusky Shark have been rarely caught in the past. Sand tiger and sandbar shark catch per nautical mile increased in 2025 compared to 2024. Smooth dogfish catch per nautical mile decreased in 2025 and remains relatively low compared to the early 2000s. In the juvenile trawl, the species caught include sand tiger sharks (Figure 8), sandbar sharks (Figure 9) and smoothhound (Figure 10). Apart from smoothhound, the capture of coastal sharks in the juvenile trawl is a rare occurrence.

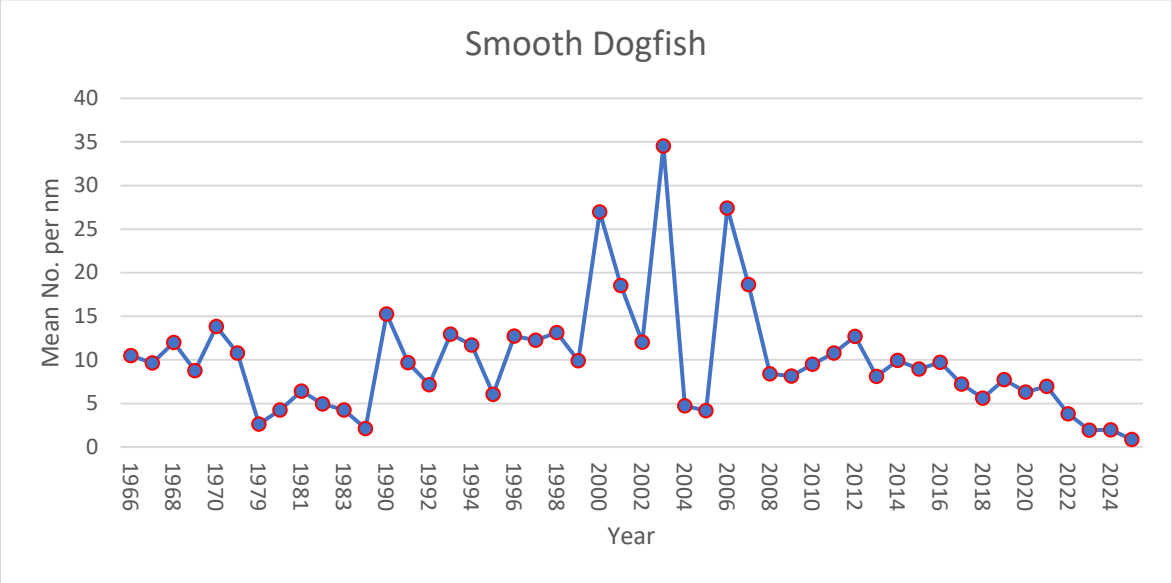


Figure 4. Smooth dogfish relative abundance (mean number per nautical mile), time series (1966 – 2025) as measured in 30-foot trawl sampling in the Delaware Bay.

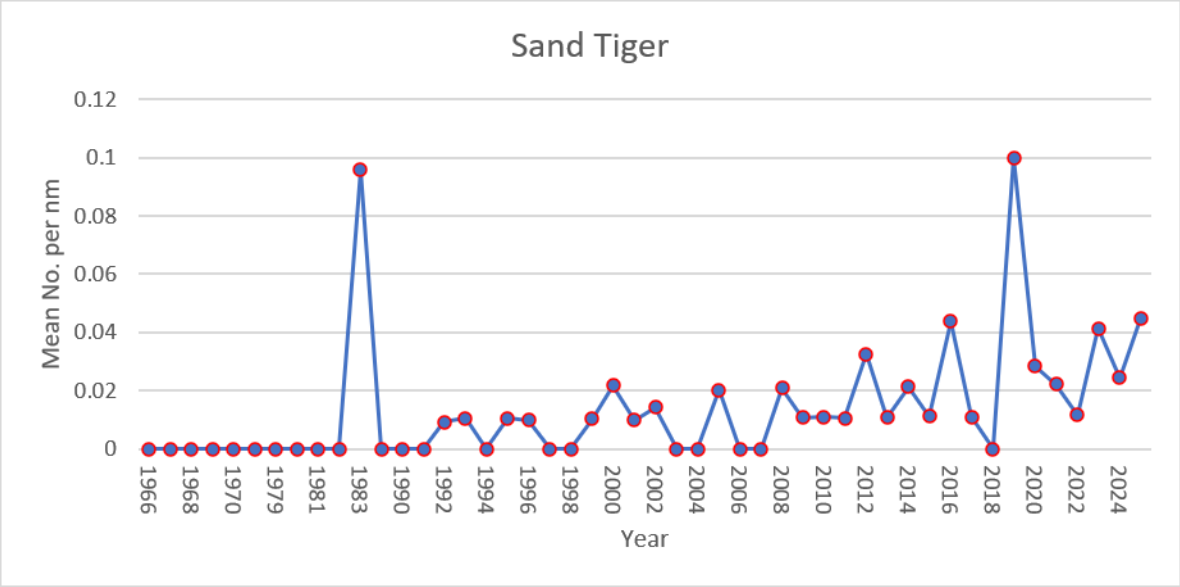


Figure 5. Sand tiger shark relative abundance (mean number per nautical mile), time series (1966 – 2025) as measured in 30-foot trawl sampling in the Delaware Bay.

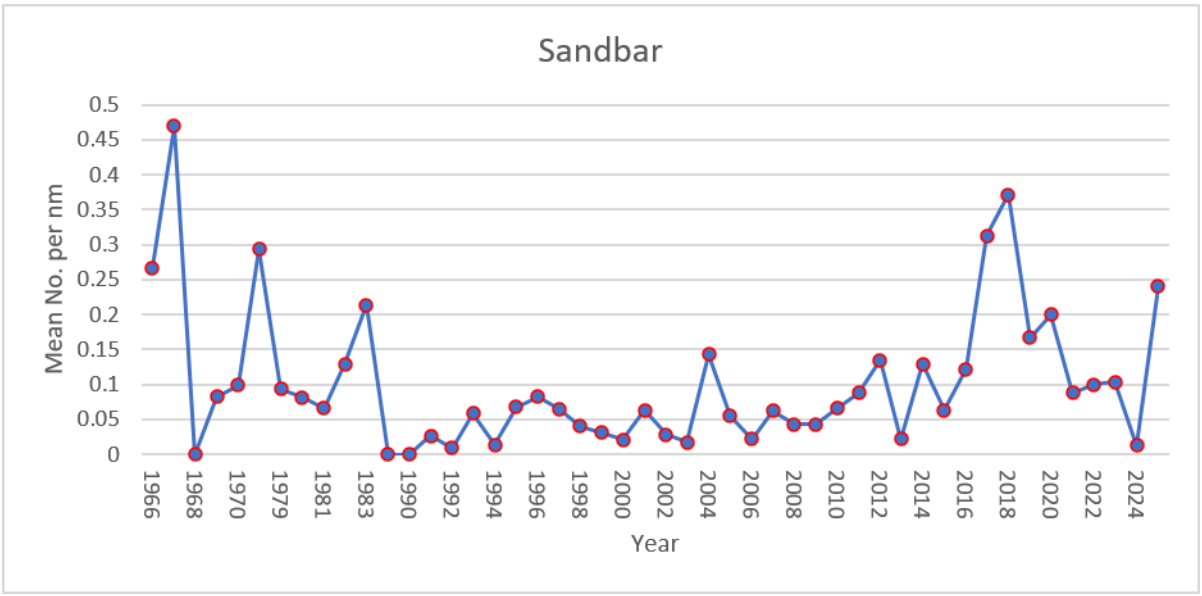


Figure 6. Sandbar shark relative abundance (mean number per nautical mile), time series (1966 – 2025) as measured in 30-foot trawl sampling in the Delaware Bay.

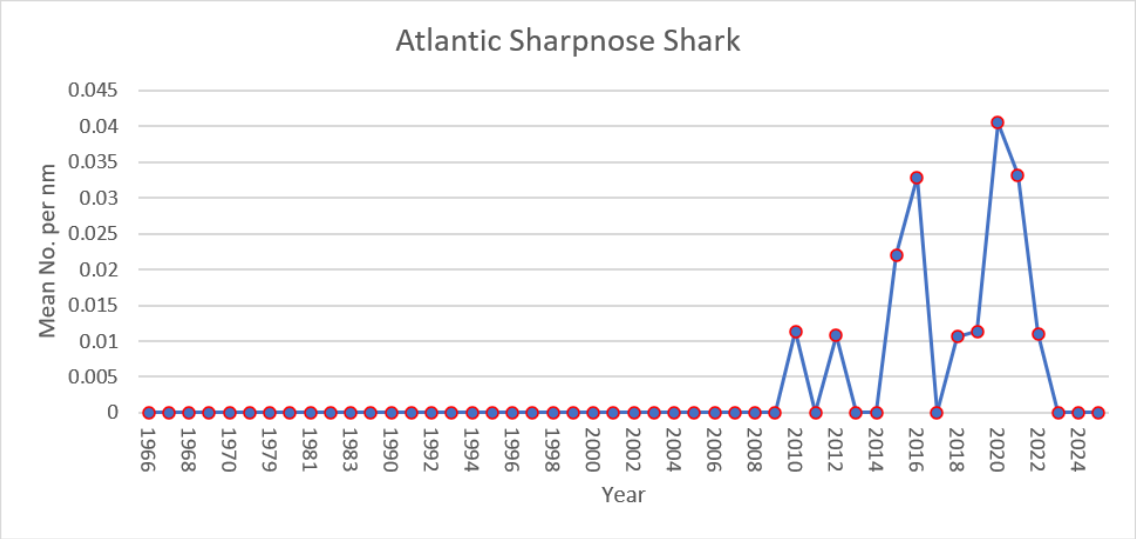


Figure 7. Atlantic sharpnose shark relative abundance (mean number per nautical mile), time series (1966 – 2025) as measured in 30-foot trawl sampling in the Delaware Bay.

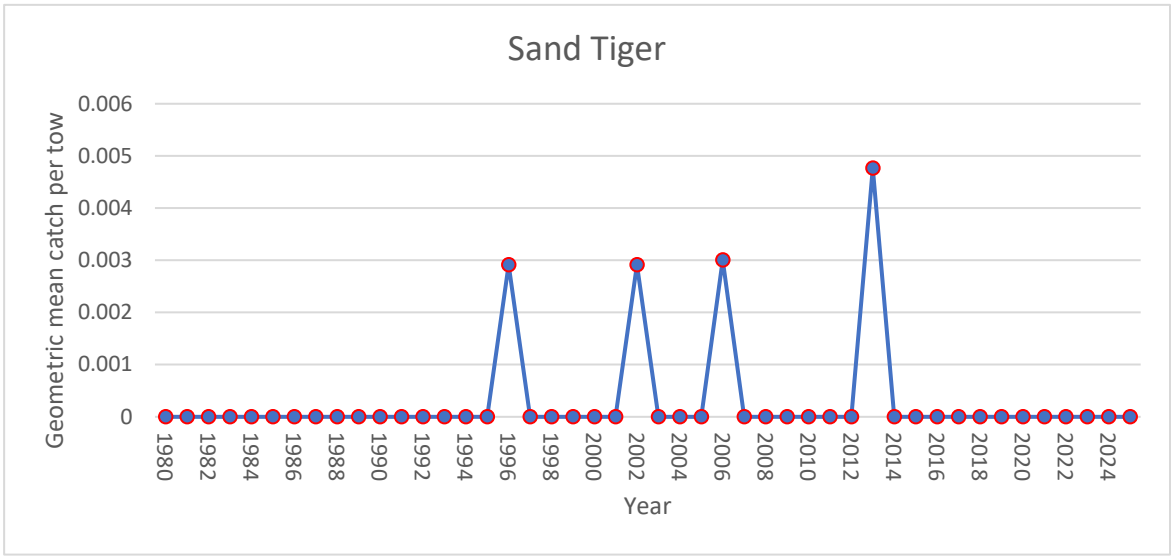


Figure 8. Index of sand tiger shark, time series (1980 – 2025) as measured by 16-foot trawl sampling in the Delaware Estuary.

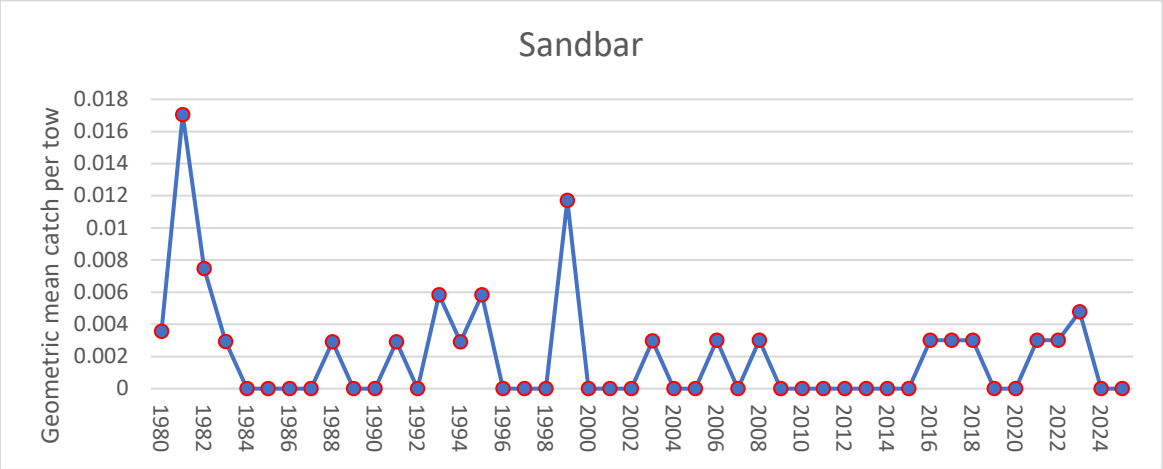


Figure 9. Index of sandbar shark, time series (1980 – 2025) as measured by 16-foot trawl sampling in the Delaware Estuary.

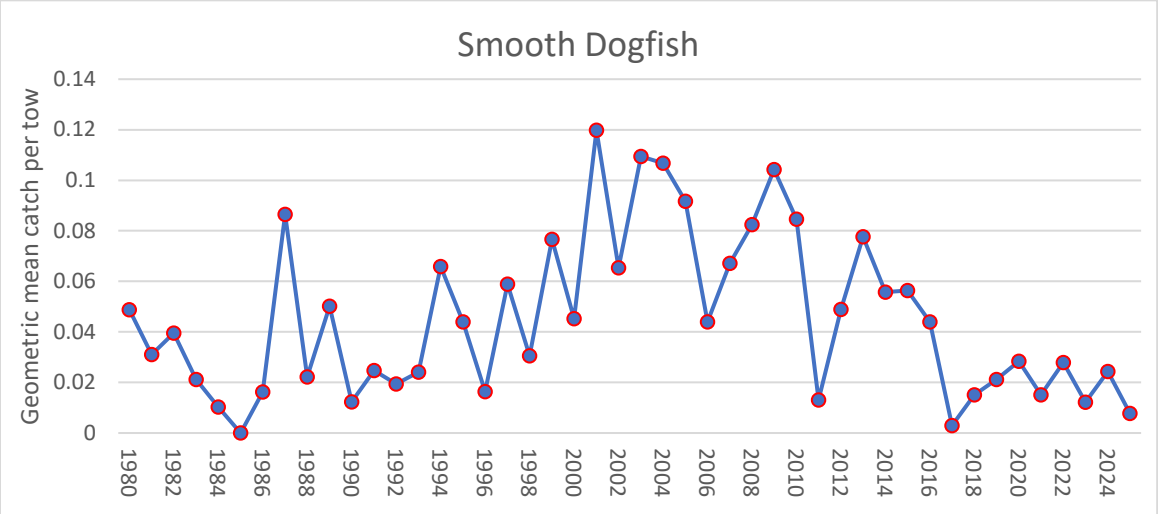


Figure 10. Index of young-of-year smooth dogfish abundance, time series (1980 – 2025) as measured by 16-foot trawl sampling in the Delaware Estuary.

Maryland

No fishery-independent monitoring for Atlantic coastal sharks was conducted in Maryland state waters.

Virginia

The Virginia Institute of Marine Science Shark Research Program began in 1973 and is one of the longest running longline surveys in the world. The program has provided data on habitat utilization, age, growth, reproduction, trophic interactions, basic demographics, and relative abundance for dominant shark species. Cruise times have been variable over the time series, but sampling generally has occurred monthly from May through October. The survey utilizes a

fixed station design with six core sampling locations, although additional auxiliary locations have been sampled frequently over the years.

Beginning in 2012, a separate longline survey conducted by the Virginia Institute of Marine Science designed specifically to target young-of-year sandbar sharks in the lower Chesapeake Bay and Eastern Shore was initiated. The new survey follows a stratified random sampling design, rather than a fixed survey design, and falls under the broader COASTSPAN umbrella survey.

In 2025, Atlantic sharpnose shark was the most commonly encountered species by the offshore survey followed by sandbar shark, spinner shark, sand tiger shark, tiger shark, scalloped hammerhead, blacktip shark, and dusky shark. Seven single blacknose sharks and one bull shark were also collected (Table 13). Seasonal patterns in survey catches were also evident with May and June showing the highest overall catches of sharks, while catches were lower during August and September.

Monthly COASTSPAN catches of neonate sandbar shark (<= 71 cm TL) in the lower Chesapeake Bay were lowest in June and increased during July and August. In the coastal lagoons of the Eastern Shore, peak neonate catch occurred in July (Table 14). As in previous years, neonate total catch in 2025 was higher in the coastal lagoons of the Eastern Shore when compared to that of the lower Chesapeake Bay.

Table 13. Monthly catch summaries for key shark species encountered during offshore longline cruise conducted by VASMAP, 2025 pooled across the standard six sampling sites. Effort is expressed as total longline soak time of 100 hooks.

Month	Effort (hrs)	Sand Tiger	Sandbar	Tiger	Atlantic Sharpnose	Spinner	Blacknose	Blacktip	Bull	Scalloped Hammerhead	Dusky	Silky	Total
May	29.4	10	39	2	0	9	0	5	1	4	7	0	77
Jun	33.4	0	6	6	54	3	7	2	0	1	0	0	79
Aug	28.0	2	5	3	15	4	0	1	0	3	0	0	33
Sep	19.8	0	7	0	0	3	0	1	0	2	2	0	15
Total		12	57	11	69	19	7	9	1	10	9	0	204

Table 14. Neonate catch summaries for each monthly COASTSPAN cruise in 2025, pooled across the sampling sites with the lower Chesapeake Bay and coastal lagoons of the Eastern Shore. Effort is expressed as total longline soak time of 50 hooks.

Lower Chesapeake Bay

Month	Effort (hrs)	Neonate
Jun	10.8	14
Jul	12.7	30
Aug	10.5	36
Total		80

Lagoons, Eastern Shore

Month	Effort (hrs)	Neonate
Jun	7.6	68
Jul	7.5	122
Aug	7.5	42
Total		232

North Carolina

Fishery-Dependent

Fishery-dependent sampling of North Carolina commercial fisheries has been ongoing since 1982 (conducted under Title III of the Interjurisdictional Fisheries Act and funded in part by the U.S. Department of Commerce, National Marine Fisheries Service). Predominate fisheries sampled includes the ocean gill net, estuarine gill net, ocean trawl, long haul seine/swipe net, beach seine, and pound net fisheries. Shark species were sampled from 8 commercial trips in 2025. From these trips, 24 sharks comprising five species were sampled (Table 15).

Table 15. North Carolina 2025 fishery-dependent shark sampling summary by species for total number of individuals and total sampled weight.

Shark Species	#Total Individuals	Weight (kg)
Atlantic Sharpnose	13	22.7
Blacktip	4	44.4
Hammerhead, unidentified	3	69.8
Thresher	3	39.1
Finetooth	1	6.8
Total	24	182.8

Fishery-Independent

The NCDMF has two fishery-independent surveys that collect coastal sharks: A gill net survey (Program 915) and a red drum long line survey (Program 365). Program 915 was initiated in 2001 and aims to provide annual relative abundance indices for key estuarine species in the near shore, Pamlico Sound, Pamlico, Pungo, Neuse, New, and Cape Fear rivers. The survey employs a stratified random sampling design and utilizes multiple mesh gill nets (3.0 in to 6.5 in stretched mesh, by 0.5 in increments). Program 365 was initiated in 2007 for developing an index of abundance for adult red drum, but also allows for capture and tagging of Atlantic coastal sharks in collaboration with the NOAA Fisheries Cooperative Shark Tagging Program.

Eleven species of shark were encountered in Program 915 in 2025, with Atlantic sharpnose (n=452) representing the highest abundance (Table 16). Twelve sharks representing four species were caught in Program 365 in 2025.

Table 16. Summary of shark captures from NCDMF fishery-independent gill net survey for 2025.

Shark Species	# Measured	Minimum TL (mm)	Maximum TL (mm)	Average TL (mm)
Atlantic Angel Shark	3	883	1,015	951
Atlantic Sharpnose Shark	452	272	1,020	528
Blacknose Shark	2	522	1,013	767
Blacktip Shark	31	659	1,460	1,246
Bonnethead Shark	166	438	1,195	928
Bull Shark	16	742	951	891
Dusky Shark	1	966	966	966
Finetooth Shark	15	610	1,491	1,256
Sandbar Shark	73	663	1,350	968
Smooth Dogfish	3	617	730	672
Spinner Shark	2	940	965	952
Unidentified/Misidentified LCS*	2	740	749	744

*Identified as Dusky Shark but TL below length at birth

South Carolina

Currently, data are collected from estuarine waters by the SCDNR Cooperative Atlantic States Shark Pupping and Nursery Habitat survey (COASTSPAN), the SCDNR trammel net survey, and the Coastal Longline Survey. The COASTSPAN survey monitors the presence and abundance of young-of-year and juvenile sharks in the estuaries and bays of South Carolina from April-September using gillnets, longlines and drumlines to sample index stations (Table 17).

The SCDNR trammel net survey is designed to sample recreationally important species in shallow estuarine waters. Sharks are not a target species, but their abundance as well as length and sex data are recorded (Table 12). Stations selected based on suitable habitats are randomly sampled using a multi-panel net to encircle a section of marsh. Species captured are measured, sexed if possible, and released. In addition, physical and water quality data are recorded for each sample location.

The presence and abundance of juvenile and adult coastal sharks in the bays, sounds and coastal waters of South Carolina are documented by the Coastal Longline Survey using a stratified-random approach to sample for adult red drum and coastal sharks annually from August to December. Species captured are measured, sexed, tagged, and released, and physical and water quality parameters are recorded. The data gathered from these programs are shared with the NMFS Apex Predators Program and are utilized in stock assessments and management decisions in South Carolina.

Table 17. Number of sharks captured and tagged by South Carolina Department of Natural Resources' Cooperative Atlantic States Shark Pupping and Nursery Habitat Survey (COASTSPAN), Trammel Net Survey, and Coastal Longline survey in 2025.

	COASTSPAN		Trammel Net		Coastal Longline Survey	
Shark Species	Captured	Tagged	Captured	Tagged	Captured	Tagged
Atlantic Sharpnose	110	0	42	0	313	0
Blacknose	7	6	2	0	80	77
Blacktip	54	32	12	0	83	69
Bonnethead	209	143	167	0	20	19
Bull	10	10	2	0	4	3
Dusky	0	0	0	0	0	0
Finetooth	229	71	25	0	43	38
Great Hammerhead	0	0	0	0	0	0
Lemon	18	17	12	0	3	1
Nurse	2	0	0	0	2	1
Sand Tiger	0	0	0	0	0	0
Sandbar	244	130	4	0	89	78
Scalloped/Carolina Hammerhead	39	0	1	0	6	6
Smooth Dogfish	0	0	0	0	0	0
Spinner	1	1	0	0	23	22
Tiger	0	0	0	0	0	0

Georgia

Fishery-Dependent

Although a directed fishery for sharks does not exist in Georgia waters, there is a fishery-dependent sampling project conducted by the Coastal Resources Division (CRD) that can result in the incidental capture of coastal sharks. The Marine Sportfish Carcass Recovery Project, a partnership with recreational anglers along the Georgia coast, is used to collect biological data from finfish. In 2025, no coastal shark species were included.

Fishery-Independent

Georgia has several fishery-independent surveys that sample in areas where coastal shark species are encountered and one survey specifically designed to sample sub-adult sharks in Georgia's inshore waters.

- *Coastal Longline Survey (SEAMAP):* The Coastal Longline Survey is designed to sample adult Red Drum and coastal sharks. Sampling occurs in inshore and nearshore waters of southeast Georgia from mid-June through mid-December. Sampling gear consists of a bottom set 926 m, 600 lb test monofilament mainline configured with 60, 0.5 m gangions made of 200 lb test monofilament. Each gangion consists of a longline snap and a 15/0 circle hook. Soak time for each set is 30 minutes. During 2025, CRD staff deployed 140 sets consisting of 8,400 hooks and 70 hours of soak time. A total of 225 sharks were captured, representing 11 species (Table 18).

- *Shark Nursery Survey (COASTSPAN):* The University of North Florida assumed field operations for this survey in 2016. Data for the complete time series are maintained by the NMFS Apex Predators Program in Narragansett, RI (contact: Cami McCandless).
- *Ecological Monitoring Trawl Survey (EMTS):* The EMTS is designed to sample penaeid shrimp, blue crab, and other marine organisms typically encountered in the trawl for management and monitoring purposes. Each month, a 40 ft flat otter trawl with neither a turtle excluder device nor bycatch reduction device is deployed at 36 stations across six estuaries. At each station, a standard 15-minute tow is made. During 2025, 432 tows/observations were conducted, totaling 106.68 hours of tow time. A total of 172 sharks, representing 4 species, were captured during 2025 (Table 18).
- *Marine Sportfish Population Health Survey (MSPHS)*: The MSPHS is a multi-faceted ongoing survey used to collect information on the biology and population dynamics of recreationally important finfish. Sampling is ongoing in three Georgia estuaries: the Altamaha River System, St. Andrew, and Wassaw. During the June to August period, young-of-the-year Red Drum in the three estuaries are collected using gillnets to gather data on relative abundance and location of occurrence. Between September and November, fish populations in the Altamaha River System and Wassaw Estuary are monitored using trammel nets to gather data on relative abundance and size composition. In 2025, a total of 324 gillnet and 225 trammel net sets were made, resulting in the capture of 207 sharks representing 8 species (Table 18).

Table 18. Numbers of coastal sharks captured in Georgia fishery-independent surveys in 2021 by species and by survey.

	CLS	EMTS	MSPHS
SHARK, ATLANTIC SHARPNOSE	96	23	2
SHARK, BLACKNOSE	54	---	---
SHARK, BLACKTIP	15	2	3
SHARK, BONNETHEAD	15	146	185
SHARK, BULL	1	---	1
SHARK, FINETOOTH	12	--	3
SHARK, LEMON	---	---	12
SHARK, NURSE	2	---	---
SHARK, SANDBAR	17	--	---
SHARK, SCALLOPED HAMMERHEAD	3	1	---
SHARK, SPINNER	5	---	1
SHARK, TIGER	5	---	---
ALL SPECIES COMBINED	225	172	207

Florida

Florida Fish and Wildlife Conservation Commission had no fisheries-independent monitoring programs for coastal sharks during the 2025 calendar year.

V. Status of Management Measures and Issues

Coastal Sharks are managed under the Interstate FMP for Coastal Sharks, which was adopted in August 2008 and effective in January 1, 2009, Addendum I (2009), Addendum II (2013),

Addendum III (2013), Addendum IV (2016), and Addendum V (2018). The FMP addresses the management of 41 species and establishes a suite of management measures for recreational and commercial shark fisheries in state waters (0 – 3 miles from shore). Addendum V provided the Board the ability to respond to changes in the stock status of coastal shark populations and adjust regulations through Board action rather than an addendum, ensuring greater consistency between state and federal shark regulations.

ASMFC will continue to respond to changes in the Atlantic Highly Migratory Species FMP and make changes as necessary to the interstate FMP.

VI. Implementation of FMP Compliance Requirements for 2025

Addendum III to the Coastal Sharks FMP was implemented in March 2014, which modified the recreational minimum size limits and the commercial species groupings in the FMP. The Board annually sets specifications, generally maintaining complimentary management with federal waters measures.

In 2019, the Board approved the requirement for non-offset, corrodible, non-stainless steel circle hooks, except when fishing with flies or artificial lures. In 2022, the Board adopted a zero retention limit for Atlantic shortfin mako sharks for recreational and commercial state waters fisheries. In May 2024 the Board also established a zero-possession limit for oceanic whitetip sharks for recreational and commercial fisheries.

Appendix 1 provides an overview of required coastal shark fishery regulations. All states must demonstrate through the inclusion of regulatory language that these recreational and commercial management measures were implemented.

Recreational Size Limits

Table 19. Recreational minimum size limits, 2025.

No Minimum Size	Minimum Fork Length 54 inches		Minimum Fork Length 78 inches
Smoothhound	Tiger	Nurse	Great hammerhead
Atlantic sharpnose	Blacktip	Porbeagle	Scalloped hammerhead
Bonnethead	Spinner	Thresher	Smooth hammerhead
	Bull	Oceanic whitetip	
	Lemon	Blue	
	Blacknose	Finetooth	

Commercial Species Groupings

This FMP establishes eight commercial 'species groups' for management (Table 1): Prohibited, Research, Smoothhound, Non-Blacknose Small Coastal, Blacknose, Aggregated Large Coastal, Hammerhead, and Pelagic. These groupings apply to all commercial shark fisheries in state waters.

VII. PRT Recommendations

State Compliance

The PRT noted one inconsistency with the coastal sharks FMP:

- Delaware's regulations regarding the circle hook requirement states "It is unlawful to use any hook other than a non-offset, corrodible circle hook when recreationally fishing for the sharks specified in this regulation, excluding smoothhound, except when fishing with artificial lures or flies." The exemption of smoothhound from the circle hook requirement is inconsistent with the Board action.

The PRT determined that all other states have fully implemented regulations consistent with the FMP requirements.

De Minimis Status

The Coastal Sharks FMP does not establish specific *de minimis* guidelines that would exempt a state from regulatory requirements contained in this plan. *De minimis* shall be determined on a case-by case basis. *De minimis* often exempts states from monitoring requirements in other fisheries but this plan does not contain any monitoring requirements.

De minimis guidelines are established in other fisheries when implementation and enforcement of a regulation is deemed unnecessary for attainment of the fishery management plan's objectives and conservation of the resource. Due to the unique characteristics of the coastal shark fishery, namely the large size of sharks compared to relatively small quotas, the taking of a single shark could contribute to overfishing of a shark species or group. Therefore, exempting a state from any of the regulatory requirements contained in this plan could threaten attainment of this plans' goals and objectives.

Massachusetts is the only state that has been granted *de minimis* status. Massachusetts can continue to have *de minimis* status until their landings patterns change or they request a discontinuation. In some cases, it is unnecessary for states with *de minimis* status to implement all regulatory requirements in the FMP. Massachusetts has implemented all regulations with two exceptions: it is exempt from the possession limit and closures of the aggregated large coastal and hammerhead shark fisheries.

VIII. Research Recommendations

Research recommendations were identified in 2018 in the Commission's Fisheries Research Priorities document (p. 42).

APPENDIX 1. OVERVIEW OF COASTAL SHARK REGULATIONS

Coastal Sharks FMP Regulatory Requirements

1. Recreational seasonal closure (Section 4.2.1)
    a. Recreational anglers are prohibited from possessing silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead in the state waters of Virginia, Maryland, Delaware and New Jersey from May 15 through July 15—regardless of where the shark was caught.
    b. Recreational fishermen who catch any of these species in federal waters may not transport them through the state waters of VA, MD, DE, and NJ during the seasonal closure.
2. Recreationally permitted species (Section 4.2.2)
    a. Recreational anglers are allowed to possess aggregated large coastal sharks, hammerheads, tiger sharks, SCS, and pelagic sharks. Authorized shark species include: aggregated LCS (blacktip, bull, spinner, lemon, and nurse); hammerhead (great hammerhead, smooth hammerhead, scalloped hammerhead); tiger sharks; SCS (blacknose, finetooth, Atlantic sharpnose, and bonnethead sharks); and, pelagic sharks (blue, common thresher, and porbeagle). Sandbar sharks and silky sharks (and all prohibited species of sharks) are not authorized for harvest by recreational anglers.
3. Landings Requirements (Section 4.2.3)
    a. All sharks (with exception) caught by recreational fishermen must have heads, tails, and fins attached naturally to the carcass. Anglers may still gut and bleed the carcass by making an incision at the base of the caudal peduncle as long as the tail is not removed. Filleting sharks at sea is prohibited.
    b. All sharks (with exception) harvested by commercial fishermen within state boundaries must have the tails and fins attached naturally to the carcass through landing. Fins may be cut as long as they remain attached to the carcass (by natural means) with at least a small portion of uncut skin. Sharks may be eviscerated and have the heads removed. Sharks may not be filleted or cut into pieces at sea.
    c. Exception: Fishermen holding a valid state commercial permit may process smooth dogfish sharks at sea out to 50 miles from shore, as long as the total weight of smooth dogfish shark fins landed or found on board a vessel does not exceed 12 percent of the total weight of smooth dogfish shark carcasses landed or found on board.
4. Recreational Minimum Size Limits (Section 4.2.4)
    a. Sharks caught in the recreational fishery must have a fork length of at least 4.5 feet (54 inches) with the exception of Atlantic sharpnose, bonnethead, and

smoothhound which have no minimum size. Hammerhead species must have a fork length (FL) of 6.5 feet (78 inches).

5. Authorized Recreational Gear (Section 4.2.5)
    a. Recreational anglers may catch sharks only using a handline or rod & reel. Handlines are defined as a mainline to which no more than two gangions or hooks are attached. A handline must be retrieved by hand, not by mechanical means.
    b. Non-offset, corrodible, non-stainless steel circle hooks are required when fishing for sharks recreationally, in state waters. The only exception is when fishing with flies or artificial lures.
6. Possession limits in one twenty-four hour period (Section 4.2.7 and 4.3.6)
    a. Recreational and commercial possession limits as specified in Table 18.
    b. Smooth dogfish harvest is not limited in state waters and recreational shore-anglers may harvest an unlimited amount of smooth dogfish.
7. Commercial Seasonal Closure (Section 4.3.2)
    a. All commercial fishermen are prohibited from possessing silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead in the state waters of Virginia, Maryland, Delaware and New Jersey from May 15 through July 15. Fishermen who catch any of the above species in a legal manner in federal waters may transit through the state waters listed above if all gear is stowed.
8. Quota Specification (Section 4.3.4)
    a. When NOAA Fisheries closes the fishery for any species, the commercial landing, harvest, and possession of that species will be prohibited in state waters until NOAA Fisheries reopens the fishery.
9. Permit requirements (Section 4.3.8)
    a. State: Commercial shark fishermen must hold a state commercial license or permit in order to commercially catch and sell sharks in state waters.
    b. Federal: A federal Commercial Shark Dealer Permit is required to buy and sell any shark caught in state waters.
    c. Display and research permit is required to be exempt from seasonal closure, quota, possession limit, size limit, gear, and prohibited species restrictions. States are required to include annual information for all sharks taken for display throughout the life of the shark.
10. Authorized commercial gear (Section 4.3.8.3)
    a. Commercial fishermen can only use one of the following gear types (and are prohibited from using any gear type not listed below) to catch sharks in state waters.

i. **Rod & reel.**
ii. **Handlines.** Handlines are defined as a mainline to which no more than two gangions or hooks are attached. A handline is retrieved by hand, not by mechanical means, and must be attached to, or in contact with, a vessel.
iii. **Small Mesh Gillnets.** Defined as having a stretch mesh size smaller than 5 inches.
iv. **Large Mesh Gillnets.** Defined as having a stretch mesh size equal to or greater than 5 inches.
v. **Trawl nets.**
vi. **Shortlines.** Shortlines are defined as fishing lines containing 50 or fewer hooks and measuring less than 500 yards in length. A maximum of 2 shortlines are allowed per vessel.
vii. **Pounds nets/fish traps.**
viii. **Weirs.**

11. Bycatch Reduction Measures (Section 4.3.10)

    a. Any vessel using a shortline must use corrodible circle hooks. All shortline vessels must practice the protocols and possess the recently updated federally required release equipment for pelagic and bottom longlines for the safe handling, release, and disentanglement of sea turtles and other non-target species, all captains and vessel owners must be certified in using handling and release equipment.

12. Smooth Dogfish

    a. Each state must identify their percentage of the overall quota (Addendum II, 3.1)

    b. Smooth dogfish must make up at least 25%, by weight, of total catch on board at time of landing. Trips that do not meet the 25% catch composition requirement can land smooth dogfish, but fins must remain naturally attached to the carcass (Addendum IV, 3.0; modifies Addendum II Section 3.5).

Table 20. Possession/retention limits for shark species in state waters

Recreational	*Shore-angler*	1 shark (of any species except prohibited) per person per day; plus one Atlantic sharpnose, and one bonnethead. No limit on smoothhound.
	Vessel-fishing	1 shark (of any species except prohibited) per vessel per trip; plus one Atlantic sharpnose, and one bonnethead per person per vessel. No limit on smoothhound.
Commercial	*Directed permit*	Variable possession limit for aggregated large coastal sharks (LCS) and hammerhead shark management groups. The Commission will follow NMFS for in-season changes to the possession limit. The possession limit range for LCS is 0-55, the default is 55 sharks per trip. 8 blacknose sharks per trip. No limit for SCS or pelagic sharks.
	Incidental permit	3 aggregated LCS per vessel per trip and 16 pelagic or SCS (combined) per vessel per trip

Atlantic States Marine Fisheries Commission

Atlantic Coastal Cooperative Statistics Program Coordinating Council

November 10, 2026
8:30 – 10:30 a.m.
Hybrid Meeting

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to Order *(K. Knowlton)* 8:30 a.m.

2. Council Consent *(K. Knowlton)* 8:35 a.m.
   - Approval of Agenda
   - Approval of Proceedings from May 2026

3. Public Comment 8:40 a.m.

4. Consider FY2027 ACCSP Project and Administrative Proposals for Funding *(J. Simpson)* **Action** 8:45 a.m.

5. Consider Changes to 2027 Access Point Angler Intercept Survey Sampling **Action**
   a) Depredation predators question
   b) Area-fished map question 9:15 a.m.

6. Program and Committee Updates (G. White / J. Simpson) 9:45 a.m.

7. Chair / Vice-Chair Nominations *(K. Knowlton)* 10:20 a.m.

8. Other Business/Adjourn 10:25 a.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, RI; 401.847.3300) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC COASTAL COOPERATIVE STATISTICS PROGRAM

COORDINATING COUNCIL

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

May 4, 2026

These minutes are draft and subject to approval by the ACCSP Coordinating Council.
The Board will review the minutes during its next meeting.

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INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of October 2025** by consent (Page 1).

3. **Move to approve the ACCSP FY2027 RFP as presented, including updated language in the funding decision document as amended today** (Page 5). Motion by Renee Zobel; second by Jay McNamee. Motion approved by consent (Page 5).

4. **Move to adjourn** by consent (Page 22).

ATTENDANCE

Board Members

Megan Ware, ME
Carl Wilson, ME
Renee Zobel, NH
Dan McKiernan, MA
Jason McNamee, RI
Greg Wojcik, CT
Marty Gary, NY
Joe Cimino, NJ
Heather Corbett, NJ
Richard Wong, DE
Kris Kuhn, PA
Carrie Kennedy, MD
Stephanie Iverson-Cason, VA
Brandi Salmon, NC
Ben Dyar, SC
Kathy Knowlton, GA
Erika Burgess, FL
Dave McCarron, NEFMC
Julia Beaty, MAFMC
John Carmichael, SAFMC
Ingrid Braun-Ricks, PRFC
Richard Cody, NMFS
Rick Jacobson, US FWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Staff

Bob Beal
Toni Kerns
Tina Berger
Alex DiJohnson
Madeline Musante
Michael Opiekun
Trevor Scheffel
Julie DeFilippi Simpson
Geoff White
Marisa Powell

The Atlantic Coastal Cooperative Statistics Program Coordinating Council of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Monday, May 4, 2026, and was called to order at 3:50 p.m. by Chair Kathy Knowlton.

CALL TO ORDER

CHAIR KATHY KNOWLTON: Good afternoon, everyone, take a moment here to thank you all for being here. I know you've already had a long day. This is the first day, and probably will be several long days, should history repeat itself, as it usually does. We will try to get everybody out of here on time, we know that the after-meeting deliberations are sometimes just as important as the ones when you're sitting at your seat. We will try to get us all going through. To start off with, I'm Kathy Knowlton, I'm here as Georgia DNR and also Chair of the Coordinating Council.

MR. GEOFF WHITE: Thank you, Kathy, Geoff White, staff member with ACCSP. Before we get into the roll call, I just wanted to take a moment and say congratulations to Alex DiJohnson sitting next to me. Over the winter he was promoted to a position of Deputy Director of Recreational Fisheries Data.

That is in recognition of his growth and a lot of things that are happening with MRIP, as you see on our agenda. Very much big thanks to Alex for taking up a lot more of the MRIP agreements with the states and partnerships, and all the interactions that you've been doing. He's been with us since 2015, and has gone from a data coordinator to the recreational team lead, and now Deputy Director of Recreational Fisheries. Thank you, Alex.

Before you get to announce yourself in a new position, I wanted to make folks aware. That is alongside Julie Defillippi Simpson, who is our Deputy Director of the Program, and she helps with coordination across team programs and activities, which you will see in both the RFP portion at the beginning of the meeting, as well as the program updates as we get through the admin. With that, in the interest of time, I will kind of run through folks that we have in the room and online in terms of a roll call.

First, we'll go through the folks in the room and then ask for awareness from Marissa who is online virtually. As I look around the room we have Megan Ware from Maine, Renee Zobel from New Hampshire as our Vice-Chair up front, Dan McKiernan from Massachusetts, Jason McNamee for Rhode Island, Marty Gary for New York. Rich Wong from Delaware, Joe Cimino for New Jersey, Kris Kuhn for Pennsylvania, Carrie Kennedy for Maryland, Joe Grist for Virginia, Brandi Salmon for North Carolina. Ben Dyar for South Carolina, Kathy Knowlton as already mentioned is our Chair, Erika Burgess for Florida. For NOAA we have Richard Cote is on virtually, I believe, and Katherine Papacostas in person, as well as Tim Sartwell.

We have Bob Beal for the Commission, Ron Owens as PRFC, and I believe online we have John Carmichael. Confirming, one moment. Yes. Julia Beaty from Mid-Atlantic Council. Great, and I believe we have Greg Wojcik from Connecticut as well. If you are a member and have not yet been recognized, please raise your hand around the room or online, and I will get that added to our agenda. Dave McCarron for New England Council, thank you. I think we've captured everybody, bonus for that, starting well. Kathy, back to you.

APPROVAL OF AGENDA

CHAIR KNOWLTON: Excellent, okay first item we have on the agenda is finding out if there are any requested changes to the agenda. Not seeing any here at the table, do we have any online? Okay, can we approve the agenda as submitted then, by consensus? Okay, great seeing no objections our agenda is approved by unanimous consent.

APPROVAL OF PROCEEDINGS

CHAIR KNOWLTON: We were just seeing who was paying attention, and Julie has won. She will get a prize later. Next up we have the proceedings from our last meeting. Did anybody in the room have any suggested changes or questions from those proceedings? Seeing none; any online? Okay, are there any objections to approving the proceedings? Seeing none they are approved by unanimous consent.

PUBLIC COMMENT

CHAIR KNOWLTON: We are rolling right through this. Do we have any members of the public that are here in the room that would like to speak? Seeing none. Over to Julie.

CONSIDER FUNDING DECISION DOCUMENT AND FY2027 REQUEST FOR PROPOSALS

MS. JULIE DEFILLIPPI SIMPSON: This is going to be a pretty uneventful review and approve of the FY2027 RFP. We don't have a ton of changes for today. There are just a few changes in the Funding Decision Document language. First, we are adding a cover letter, where we are going to ask for responses to the review questions that were submitted in the first round.

The goal of this is that the Operations and Advisory Committee has found that they are often getting to the actual ranking where they still have questions, because their questions weren't answered from the initial round. What they want to do is pose those questions in the initial round and have a cover letter where those questions have to specifically be answered, rather than trying to imbed them into the proposal itself.

The next one is there is a language that was added about third party data, or development of third-party software. The second half of that sentence they thought that was unclear, so they did some wordsmithing to the second half of that sentence, and it now reads "the software offered by ACCSP will be considered on a case-by-case basis, and may or may not be recommended for funding. They felt that this was more clear, that it was not about we would not be funding those things, but that we would be considering those in a different light, potentially.

The only other item is that when we had originally switched to our current method of determining the step-down math there was transitional math that was part of that. That language is now outdated, because there are no proposals that are that old that have not stepped down. We just removed that because it was unnecessary. The next item is the timeline. We did shift one week, so there is one more week allowed for proposals to be reviewed in the initial round. That would take one week away from the folks to respond. But it still does give plenty of time for everyone to submit their final proposal. The next item is, I just wanted to go through some of the addendums, just to let you guys know that those hadn't changed, but just to refresh them for your memory.

The Biological Sampling Priority Matrix, again there are no changes from last time. It does list the species that are in the upper 25% of the matrix as those that should be considered for funding, and that anything that covers more than one species would be highly recommended for funding. This is what that matrix looks like.

In the inadequate and high average priority we have black sea bass, Spanish mackerel and red snapper. Those are the species that sort of fall at the top of that 25% of the matrix. You can obviously read the rest of the matrix yourself, because no one wants to listen to me read a list of species. The Bycatch Sampling Priority Matrix, again there are no changes to this one.

This is the top quartile of that matrix. Again, just a reminder, this one is listed by fleet. It is essentially a region and a gear type that defines these fisheries. The next one is the Recreational Sampling Priority, these were established in 2023, and they also have not changed. The top one here is

improved precision or the PSE, and presentation of MRIP estimates.

Then comprehensive for-hire data collection and monitoring, improving the recreational fishery discard and release data, the improved timeliness of MRIP recreational catch and harvest estimates, biological sampling for recreational fisheries separate from MRIP and improved in-season monitoring.

I think we can see from some of the projects that we're funding, especially some of the ones coming out of Rec Tech that we are adjusting these priorities, so that is really exciting to see. Then the last one is the socioeconomic priority data elements. Essentially this is not an exhaustive list, but we are looking for trip level information and data elements for owner/operator surveys.

One of the things that I did want to point out is that this year, in an effort to try to get a few more proposals, we are going to be directly sending this RFP to the Committee for Economic and Social Science. I'm not sure I get that acronym correctly, but the CESS, so that those folks are aware of the RFP and we've been working with Pat Campfield on that. That is where we are right now with the RFP. Anyone have any questions?

CHAIR KNOWLTON: Ben.

MR. BEN DYAR: In regarding the proposals for a third-party data. I didn't know if it made sense for say redundancy and clarity at the last part of the last sentence was stricken. It basically just would read, would be considered on a case-by-case basis, full stop. The rest of that reads, and may or may not be recommended for funding, which again the case-by-case basis would allude to that. I didn't know if that made more sense for clarity purposes.

MS. SIMPSON: Yes, the recommendation language comes out of Ops, but this group does have the power to change that language if they want to.

CHAIR KNOWLTON: Do you see any reason, and you here at the table from your point of view. It's a relatively minor thing, but I know Ops deliberated on this for quite a while with relative to third party, and trying to make sure we were clear.

MR. WHITE: If there are other comments around the table in agreement then we can certainly make a change to that.

CHAIR KNOWLTON: I am a visual person, so I need to see it in front of me again. Ben, time number two, would you give us that change you would like to see happen, please.

MR. DYAR: Yes, Madam Chair. Again, it would be stricken, the last part of the last sentence, so that second bullet on the screen. It would strike, and may or may not be recommended for funding. It would be, will be considered on a case-by-case basis, full stop.

CHAIR KNOWLTON: Okay, I'll pause it, a question to you, Julie. What was the importance of having that? That is a very particular phrase to have on that sentence, because any proposal that is submitted may or may not be funded. What was the priority with that language on that sentence?

MS. SIMPSON: The focus that the group had was that they may decide to potentially not rank something, if they felt that it was redundant in its entirety to something that ACCSP was already offering. I think it gives them that opportunity to say they aren't going to rank it, because it may still rank well, because of the way that the priorities are built, so that's an excellent question.

CHAIR KNOWLTON: Erika.

MS. ERIKA BURGESS: I support the suggestion to remove it. I find it redundant. Back story, the previous year's document I think just said, proposals request funding to purchase third party data may not be recommended for funding. It

sounded very much like, we will not fund you, and I think having the case-by-case basis followed by may not be recommended for funding, still implies a negative view point. I think it's fine, the intent to just end it at a case-by-case basis.

CHAIR KNOWLTON: Thank you, Erika, any other questions? Any other comments? Jason.

DR. JASON McNAMEE: This all makes sense to me to. I guess I wondered, is there a mechanism so if that is a decision that the group makes, that gets documented in the meeting report or something like that, that that element was triggered. Is that kind of the idea? Just wondering how that gets documented so we can sort of see it.

MS. SIMPSON: I think the idea would be that if they chose not to rank it, it would be shown that that proposal was not ranked, but that it had been submitted. That proposal would still be in the packet that this group received when all of the proposals were presented to you, it just would not have a ranking associated with it. I think if you don't want to have that mechanism in place then the alternative for the Committee would be that they would have to rank it, but then potentially tell you that even though it ranked high, they would recommend that the Coordinating Council still not fund it, even though that it ranked high. That is a recommendation that they can make to this group.

It is up to, I think this group, which way you would rather see that recommendation. Would you like to see it with the ranking and with the recommendation that it not be funded, or would you rather see it as not being ranked, because they felt that it was outside of the RFP scope.

CHAIR KNOWLTON: If I could, do you want to go ahead first, Dan? Okay, I'll throw these out there. I'm literally very old school with Operations Committee. I like hearing the deliberations and the work they put into and the discussions and the time. I feel comfortable with it remaining that they are ranked, because that was part of the process for a proposal that is submitted.

But I also feel that the advice that they provide in writing that is presented fully to the Coordinating Council currently meets our expectations of understanding, that just because something was submitted it may not be appropriate at the time for ACCSP to continue to fund. I think we're okay, I've got follow up from Jay, Dan first, follow up from Jay. Then I want to go back to you, Ben and see if you are onboard with where we are going with this.

MR. DANIEL McKIERNAN: It seems to me the message you're trying to put out is that those types of requests are discouraged, but will be considered on a case-by-case basis, so why not just say that?

CHAIR KNOWLTON: Jay.

DR. McNAMEE: I'm still thinking about what Dan just said. But generally speaking, I like what you said, Madam Chair. You wanted to know that that was the reason why the method that you offered captures that. That sounds good, what Dan just said notwithstanding.

CHAIR KNOWLTON: Are you sure? Yes, Jay.

DR. McNAMEE: Yes.

CHAIR KNOWLTON: Okay, I see your thinking bubbles. To Ben then, please, and then we'll wrap this up.

MR. DYAR: My understanding is that what is being suggested is to leave the wording in, but that the Operations Committee would rank some of those proposals, but then provide information to the Coordinating Council that they may not be recommended for funding because of X, Y and Z, is that what I'm understanding?

CHAIR KNOWLTON: Yes, I think it's fine, to also change the language. My recommendation is that the words after case-by-case basis will be deleted,

and we will remain with the instructions through the Operations Committee and the Advisors to please rank proposals in these situations. Then if they are not recommended for funding because of certain reasons, then that would be spelled out in the meeting notes. Ben.

MR. DYAR: Yes, I would prefer that for transparency's sake, thank you.

CHAIR KNOWLTON: Agreed, do we have any other comments? Megan.

MS. MEGAN WARE: This is on a separate topic in the funding document, if that's okay.

CHAIR KNOWLTON: Let me make sure we're wrapped up with this one. Are there any other comments, any other concerns? Well, that was a great discussion to get us rolling, now we're all warmed up. Thank you. Megan.

MS. WARE: I have to stress; I am in full support of the Funding Decision Document. This is kind of Maine specific, but acknowledging we're in our sixth year of the Harvester Reporting funding. I know we're about 200,000K short of funding in one of the years, and so I just wanted to kind of reinitiate those conversations offline, not at this meeting.

I want to be very clear; this is nothing that ACCSP or ASMFC has done. You guys have gone above and beyond to try and make us whole. But it is tough to be kind of weaning off the ACCSP grant and have a 200,000K shortfall in the funding we were supposed to be getting. If we can continue those conversations over the next year that would be awesome.

MR. WHITE: Thank you, Megan, we certainly can do that and if others weren't following, this is a 2024 ACCSP Grant year that ended up not getting the funding distributed from NOAA to Maine, the 2025 award was provided to Maine to keep them going.

CHAIR KNOWLTON: All right, ready to turn this over to Alex. Oh, it just struck me to see if you were following along and paying attention again. I never brought you a motion. Renee.

MS. RENEE ZOBEL: Okay, I **move to approve the ACCSP FY2027 RFP as presented, including updated language in the Funding Decision Document, can I add as amended today**, since we did make a slight modification. Perfect, thank you.

CHAIR KNOWLTON: We have a motion; we've got a second by Jason McNamee. Okay, is there any discussion on the motion? None here in the room, do we have anything online, please? Okay, **are there any objections? All right, we'll consider the motion approved by unanimous consent**. Thank you.

MARINE RECREATIONAL INFORMATION PROGRAM (MRIP) UPDATES

MR. WHITE: I'll just take a quick introduction on this, in terms of a process placement. ACCSP serves a couple of roles in the recreational world. Back in 2015 MRIP asked the regional FIN's to be the coordinating body for the MRIP states to provide information backup.

The recreational priorities were presented in the RFP and also kind of the day-to-day items through Rec Tech and through the state leads. They come up as items that are of coastwide importance that the Atlantic Coast would then ask MRIP to make changes to any of the survey components. That is one of our roles. At the same time when it comes to the MRIP survey components design and estimation piece that is a development of MRIP, and so MRIP needs to follow the Paperwork Reduction Act, which has its own set of timelines.

Back in March I emailed out to the Committee a summary of this, here is the process different between aligning what the Atlantic and ACCSP does to make requests for changes in the current level of partnership, which has been pretty great in terms of how to work together in our respective roles, and also balance out with the Paperwork Reduction Act.

There are parts of those proposals in the meeting materials, but with that I'll hand it over to Alex to explain the other details.

ACCSP: DISCUSS POTENTIAL UPDATES TO MRIP APAIS ON AREA FISHED AND DEPREDATION

MR. ALEX DiJOHNSON: I'm not going to go through, I think it ended up being Attachments 5A and 5B that had the full details that I think was what Geoff originally sent back around to Coordinating Council, Operations and Rec Tech back in March. I'm not going to go through the full process there, but basically what we're talking about here for a few slides before we get over into more interesting items, maybe, is just a quick update on where we are with this process.

I'm not even going to go into the history, because this attachment covers the full history about why those items were being asked. The two items being, I think the first one sequentially was looking at depredation disposition, so that is adding in. I think it ended up being 7 different depredation dispositions to the APAIS.

Then the other one was looking at a more specific area fished. The way that we were hoping to accomplish that through the Rec Tech was in adding a map. The way that the questions are asked right now is where were you fishing, and then if it was in the ocean, is this shore, and this would be to add in another item to that.

That would allow for some selection of something on a map. That is sort of what we're doing right now, and sort of what Geoff is alluding to in this overlapping timescale right now in 2026, but we have the Paperwork Reduction Act process going along. We're waiting to hear back on approval. As we're doing that, we're also doing some feasibility testing.

We're trying to figure out what works best both from the angler's perspective and from people that are actually collecting the information on tablets, so sort of a two-pronged approach in looking at what is feasible. I think that pretty much covers that.

What we're looking at here is, and I sort of alluded to this and I think then Geoff got back a full response to what ended up being Ben's question back in the full Coordinating Council, which was sort of how is this overlap working? How is this timeline progressing in 2026? Just to sort of take a step back. Geoff sort of already mentioned a little bit.

But the PRA is just something that is sort of required for federal surveys. The idea here with the Paperwork Reduction Act and we're talking about tablets now not paperwork, but the same Act applies. It's just trying to limit burden to anglers, thus making sure that they're not taking up an inordinate amount of time.

Basically, what we're trying to do right now is make sure that that burden for the anglers is consistent over time, that we're not adding more burden, and if we are then that is what we're trying to look for that additional approval from the PRA to understand what we're looking at. Like I mentioned, we're sort of doing that concurrently right now. The idea was trying to make that request for a Paperwork Reduction Act amendment for both the Depredation Disposition and for this Area Fished Map.

The idea was to make that request in the timeline that exists for the PRA that happens about every three years. You can make adjustments made for PRA, but it is a lot more onerous to do that, which is why we were trying to stick to that schedule, basically to get that request on the docket for PRA, with the idea that while that is going on, we're going to be doing the feasibility testing of the area fished, of the depredation dispositions that are going on right now, sort of get an idea for what that final state could look like at the end of this year.

The idea being that we could theoretically have PRA approval in 2026 with implementing these in 2027. That is why we're sort of doing these concurrently. I think that ultimately, the idea here is not to sneak this and to get it into 2027, but to come back through what Geoff was highlighting as the Committee process.

If you go back through, seeing where we are with PRA approval to go back through the Rec Tech, back through Operations, back through Coordinating Council with sort of final decisions based on that feasibility study, feasibility studies that are going on right now; for final sort of implementation into 2027.

What we're looking for here today is sort of a little bit of a discussion point, if helpful for folks to see, I think sort of two different pieces. One is the piece that Geoff highlighted, which is sort of Committee processes and intended path forward for amendments to the MRIP if that sort of is tracking and making sense. Then also to see if there are any questions about these specific amendments, sort of see if there is anything about these two APAIS amendments that are going through the process right now,

CHAIR KNOWLTON: Okay, more from the floor, comments, questions? Brandi.

MS. BRANDI SALMON: First of all, congratulations, Alex, that's awesome. Secondly, have you all gotten any preliminary like feedback on what the samplers are thinking about these questions and then what the anglers are thinking about it?

MR. DiJOHNSON: Yes, for depredation we actually do have the depredation items are being collected right now in a sort of way to be able to collect the information via comments, so it's not actually a part of the existing piece. What we're hearing is, well there are not a whole lot of people identifying depredation right now.

I think so far there have been three different items that have been identified, so it's pretty scant to actually get any feedback on what is going on. But because the dispositions are the ask piece of the APAIS, I think that the impact on anglers and interviewers has been pretty minimal. The only thing would be some additional scroll maybe in the tablets and look at the additional dispositions. For the area fished, we are still trying to finalize that.

Actually, we got a first version of that question a couple weeks ago, and we immediately got some feedback that said we should have some more specific depth contours added to the map. I think Trevor and Micha Dean in Massachusetts are working to make sure that that shape file is in good order and then back out to the group. The feasibility testing is theoretically possible but hasn't started fully going out there in the field as of yet.

CHAIR KNOWLTON: Any other questions, comments? Ben.

MR. DYAR: Thank you, Geoff and Alex for meeting with me and explaining all this and working through it. I really appreciate the time. Just to catch up Brandi, the input that we do get back from the interviewers and the public from this, I think is really important and to make some new decisions. When it goes back through that official process in November or pre-November, it will be individually kind of discussed at the different levels, like Operations, so they will get the feedback and information. They can provide input recommendations and so on, so forth.

MR. DiJOHNSON: Yes, exactly, Ben. That is the intended process is to basically take it back through the same piece where we sort of had Rec Tech ideas about, it would be an update to the recommendation based on the feasibility testing through Operations then eventually the Coordinating Council, and that would go the exact same path forward.

CHAIR KNOWLTON: Yes, Rich.

MR. RICHARD A. WONG: Rich Wong, Deleware. Could you provide some clarification on how these depredated fish are classified in a final estimate and the destination is either B1 or B2, because if the fish is released alive but then eaten, will that work its way into a B1 category? Because that is really where it probably belongs.

MR. DiJohnson: Yes, Rich, thanks again for that question. I think where we were going with that right now is we have binned those questions, the depredation disposition, but the attachment, I don't remember if it's A or B, but it fully outlines exactly what those are. You will notice that those dispositions are the same as existing positions.

But they have just a depredation item added to it, and that would sort of trigger this popup in the future state that would allow for you to select a category of depredator, as marine mammal, other fish, whatever, anything else. I think there are like 6 different categories. The idea about how that would be used in the estimates, so right now, I think we're still working with John Foster at NOAA Fisheries to try and figure out exactly how those are binned.

But the idea was that it wouldn't be an effect on the estimate. Those would be matched to existing dispositions, which would show up in your regular A, B1, B2. I think then they would appear in the microdata, so I think it's call Catch_disk, or something like that. I think that is the actual export that would be through a custom data request to NOAA Fisheries.

I think that your question is specific to whether or not those dispositions could be assumed to be alive versus dead. We're working with NOAA Fisheries on that assumption right now. I understand what you're saying. If you are having unavailable catch but saying that it was alive, but then it experienced depredation is that dead or alive? I think we're still working through exactly how those will be mapped.

MR. WONG: Yes, thank you, Alex, I appreciate you taking that question seriously. I hope you can relay that to John Foster in NOAA, because that could have a pretty big impact on the stock assessing discard mortality and things like that. Because if they stay in B2, then I think that would be a wasted opportunity. This is great, I love these two additions. But if they don't take that final step or that last step to change those live released fish that were eaten into the B1s then we really are missing a huge opportunity here to help management.

CHAIR KNOWLTON: Thank you for those comments, Rich. Geoff.

MR. WHITE: I think it's a great plan. Alex will take it back to John and the MRIP team. Is there any, I was going to ask Richard and Katherine if you're online, and Katherine is that the right approach, or is there anything else you wanted to add to that discussion at this point?

MS. KATHERINE POPACOSTAS: I don't have anything to add on my end.

MR. WHITE: Richard, your hands up, go ahead.

MR. RICHARD CODY: Yes, Geoff, thanks. I think what the discussion has been is of the classification of catch, once it's released, into either if it was observed as dying or being eaten versus not being observed as doing so. I think there are ways to get at the proportion of fish that go unobserved and that are released.

But still a proportion would be assumed to have also experienced mortality. I think there are ways of getting at that information. I think it's going to be important for us when we collaborate with you, and ACCSP more broadly on this question that we be as open as we can in communicating progress as we go. I would say, I wouldn't worry too much at this point about the classification into B1 or B2.

That should be addressed as we bin the different dispositions to reflect the true observation on the water, of whether a fish was depredated on or not. Once we can get that information, I think then the

rest should fall into place. But I think it would be important for us to try and clarify that as best we can while we're doing so. Then the other thing I would point out is, well going back to Alex's points about documenting input from samplers and the public.

As we go through the PRA process it will be important that we have as much of the input that we got from, whether it is samplers or anglers that have been interviewed or whomever, and that it is documented, so we have that to go by. Because I think that response burden is a difficult kind of question to broach. It has been a challenge for us in the past going through PRA approval.

CHAIR KNOWLTON: Thank you, Richard, for adding that. I look at these issues as, if they were easy, we would have done them a long time ago. I really appreciate the work of our Rec Tech members. Adding this to the Discard Catch Project is an incredible amount of work for everyone to take on, in addition to everything else that is going on with MRIP and some of the other challenges that we face. I will be very, very interested to see what the responses are for those feasibility studies, and also to see if they differ by region. We do have a pretty big coastline with a lot of different opinions and fishery management rules and relationships, and things could get very interesting.

Again, I just wanted to put on the record, I really appreciate everybody's work from staff to the Rec Tech members, because it is a lot, they have been doing an incredible amount of work, so thank you. Any other comments or questions on this issue? Okay, seeing none; I believe we are moving to Katherine, is that okay? Thank you, and thank you for coming, both you and Tim. We really appreciate you being here.

MS. POPACOSTAS: Oh yes, of course. Tim will start and then he'll hand it off to me, we're a tag team.

NOAA: RECREATIONAL ANGLER PARTNERSHIP IMPROVEMENT DIRECTIVE (RAPID), MRIP ESTIMATE PUBLICATION DATES, AND 2027 RECREATIONAL SUMMIT

MR. TIM SARTWELL: Thank you all, so yes, my name is Tim Sartwell; I am currently serving as the Special Advisor for recreational fisheries to the Deputy Undersecretary for Oceans and Atmosphere at NOAA. That is a very fancy title that just means I get to work on Dr. Jacob's recreational fisheries priorities.

I am working at the NOAA level now to implement Dr. Neil Jacob's NOAA Administrators Recreational Fisheries Portfolio. Thank you all for inviting me here today to talk about RAPID or the Recreational Angler Partnership Improvement Directive. What is RAPID, I think is the question of the day. It is not just another NOAA acronym to put in the alphabet soup; it is the process. RAPID is the process from MRIP to a new recreational fishing data enterprise.

We aim to improve trust and confidence in recreational fishing data and management. The resulting ecosystem will be built on a strong state/federal partnership, and work to support all of our partners to produce the best recreational fishing agenda possible. This process will require partnership throughout, and will result in hopefully clearly articulated roles for NOAA, states, territories and the Interstate Fishery Commissions.

Again, we seek to empower our partners and the states to develop and use data systems that fit their needs, as well as support them to ensure our fishery management mandates under the Magnuson-Stevens Act can still be achieved. One thing I do want to be very clear on is that the current MRIP data collection systems will continue as we go through this process of building a new enterprise. The APAIS and FES will continue to collect data as we start these discussions.

I do see the Interstate Commissions playing a pivotal role in helping to collect, organize and

produce this trusted recreational fisheries data. In light of that I've built a small Steering Committee to help me guide the development of this partnership. One of those members is here with us today.

Alex DiJohnson will serve as an Atlantic representative on the Steering Committee. We also have Gregg Bray, who is the Assistant Director and the Fishery Information Network Program Coordinator from the Gulf States Commission on the Steering Committee. Dr. Luiz Barbieri, the Section Leader of Marine Fisheries Research at the Florida Fish and Wildlife Research Institute, as well as Dr. John Hare, the Science Director of NOAAs Northeast Fisheries Science Center and Dr. Evan Howell, the NOAA Fisheries Deputy Assistant Administrator for Scientific Programs. This was an intentional group that represents states, commissions and a large spatial scale of recreational fisheries data collection.

This core team will navigate and coordinate the Commission and state level activities, design and organize regional workshops, and truly build the strength in state and federal partnership. Very excited to work with this group and the expertise that they provide. As I just mentioned, we will be doing regional workshops across the country to help design this new partnership.

As many of you heard Dr. Howell say before, he envisions a nationally standard, regionally flexible approach to recreational data collection that we implement with all of our partners. The workshops will be to help us identify the capabilities and needs on a regional basis, for how recreational data can be collected and harvest estimates produced.

I'm working with ASMFC. Bob Beal has generously offered to help procure a neutral facilitator for this process, to ensure that these discussions bring everyone to the table, and that everyone has a voice to provide their feedback. We hope to start these workshops starting this late summer into the fall and winter. I'm also planning on having an industry angler workshop to get fishermen ideas on how they do the nuts and bolts of data collection should work. I think a lot of these regional workshops will be in the weeds program management. A lot of roles, responsibility, resource needs are being discussed.

But I want to ensure that we are transparent through this process and that fishermen also have an input of how their data is used, and how their fisheries are managed. We've asked many times before, we've heard MRIP going through transition processes, what makes this one different. I think my first response to that is the leadership right now.

From Dr. Jacobs to Deputy Undersecretary Laura Grimm, Fisheries AA Eugenio Pineiro Soler, and Dr. Evan Howell, all levels of NOAA are working together to improve recreational fisheries data, and there has never been more momentum behind those improvements as there are now.

The second point is that partnership is the focus. We know we can't do this without you all, without our other state partners, without our other state fishery commissions. Moving forward with these conversations we are going to be open and inclusive, so everyone has their say at the table. Finally, technology continues to advance. We need to embrace the new technology, figure out the best way to utilize it to improve not just recreational management but fisheries management all over, and that's a cornerstone of Dr. Jacobs and Secretary Lutnick's vision for NOAA.

Again, thank you for having me. I will hang out. I welcome your all's input on how to make this process as successful as possible, and know that you can always contact me whenever you would like, but I know Katherine has some updates before we hop into questions, so I'll pass it to her.

MS. PAPACOSTAS: Thanks, Tim, so just switching gears temporarily for a couple more miscellaneous rec things. I wanted to just make sure you all are aware of the 2026 MRIP estimate publication

schedule. This is contingent upon maintaining existing resource capacity having no additional unexpected disruptions which you don't expect, so hopefully this stays on target.

But we're working on releasing the final 2025 estimates. Any day now, by mid-May likely, we'll have them out. Those will be the not calibrated to reflect the new FES design, but just to kind of the prior FES design. We wanted to make sure that we could get at least something out, rather than kind of waiting for the calibrated estimates, you know until the summer.

That is kind of our top thing that we're trying to get out this mid-month, and then the calibrated time series obviously is a massive priority, where now we can think summer for quite a while. We can now say our working target is August. We intend to have the whole revised historic time series from 1981 to 2025 calibrated to reflect the improved FES design.

Then once we complete that we'll move to the preliminary 2026 estimate with targeting late summer, you know as soon as possible following production of the calibrated time series. The hope is that we can make up some lost time and publish some waves together. That will remain to be determined, and we will reassess as we get closer, and we'll push out some more specific updates on preliminary estimates for 2026 as we have them.

Next slide, and then this is another miscellaneous item that was requested for an update on. Planning for the RecFish Summit is underway. It is tentatively scheduled from March 23 and 24 of 2027 in Alexandria. The Agency is partnering with ASMFC to host the Summit. We have been the Agency has been holding regional roundtables to inform summit topics, and also there is going to be a couple of National Level listening sessions coming up.

Russ Dunn who is leading this effort is working on getting a Steering Committee together this summer, with rec fisheries representation from across the country, so that there is good representation on the Steering Committee. If you have any questions about the summit process, and the planning process, Russ Dunn is your chief point of contact. We put his info on the slide, so feel free to reach out to him with any questions on planning for that. Those are all our slides, and yes, I will be happy to take any questions, and yes, thanks for having us.

CHAIR KNOWLTON: We really appreciate the opportunity to hear this from you all. We are trying to keep our ears open for announcements and messaging we're receiving. I really appreciate you all trying to clarify that in an efficient and singular role coming here and talking to us today, we really appreciate that.

I'm trying just to wrap my head around it. First up, we have the Partnership Revision Framework Reports, and I am going to continue statements to the Atlantic Coast, since this is where we are. We have the report, the individual states in the Commission look at all the various items that were in each of those topics, essentially went through them, correct. They went through and said, what were the biggest priorities for each of these opportunities for improvement, and that is going to be the basis that goes into planning the regional workshops, correct. Then I heard you say, Tim, that you expected it to be very in the weeds and detailed, in terms of, is it going to include new ways of collecting data.

You don't have to answer that. I realize that this is a bit of example of boarding the plane while you're flying and you have the illustrious job of coming out and telling us what that plane is going to look like, because I want to know whether I need a reservation or not. Yes, I think that is a basic picture.

I just don't understand when you say, we're going to be designing new state and federal partnerships. We have state and federal partnership, so we've been working on them for a very long time, and we made huge steps with ACCSP being the center point

for the APAIS, work on the for-hire, the possibility of the methodologies for the logbooks, certifying through the MRIP process, these are the things. If you would just touch on more of what you mean by that, I think that would be very helpful, at least in my mind, thank you.

MR. SARTWELL: Yes, you have a ticket, you are reserved, your spot is reserved. We are going to not predetermine anything. I think if we want to talk about new ways to collect data that is on the table. If we want to talk about a new governance model that is on the table. If there are pieces of the current MRIP program that are working, there is no need to throw out things that are working.

What we want to better understand and build is a partnership that maybe the Commission's could take on more things to do. Maybe things have to stay at the federal level. But there are partnerships that exist. It is about strengthening them and ensuring that there is enough flexibility to collect the data that we need. I think part of that is ensuring that our management systems can use the data that is collected as well.

CHAIR KNOWLTON: Thank you. Comments, questions. Brandi.

MS. SALMON: Yes, probably for Tim, question. Communication with the states on like the regional workshops. Is that going to be through like Alex, is that going to be through our state representative? Like how will we know? Because I strongly recommend coming to North Carolina, because we have a lot of stakeholders that have a lot to say.

The other follow up to that, so one is the communication to us, and then also the second would be whether you are considering including like Academia in that as well, because we have had a lot of legislation that has been put in place in North Carolina that has had academia essentially assess our recreational, managing our fisheries in the state, and so they put a lot of work into doing some final reports on that, and I think it might be helpful to kind of get their insight, as well as the stakeholders for how they think managing fisheries should continue.

MR. SARTWELL: Yes, communication has been slow. I hope while bringing Alex and Gregg and Louise into the fold that we can amp up our communication and get more information out. I wish I was able to get more information out sooner, but we are where we are, and it will increase over time. Yes, I do see Alex as being a very big conduit of information to you and from you all. I hope to get to every state and meet with you one-on-one and talk about your needs on individual basis. But we want to make sure that the regional workshops represent everyone that needs to be there. I am going to lean on Alex to help design that invite list. We'll probably bring many of you into that conversation to design who is going to be in those workshops to make them as productive as possible. I think those were your two questions. Yes, good. Okay, thank you.

CHAIR KNOWLTON: Any other comments or questions? Do we have any from online from anybody? Geoff.

MR. WHITE: Tim and Katherine, thanks again for being here and giving a presentation. I did just want to add that while the Commission and Alex and we're all involved in the national level workshops. We do intend to include the regional FINS and Councils and groups to help determine what the best participation lists are for that, what the best locations and timelines are to get those meetings done. This is about partnership, and we in our role our approaching this as much partnership in the planning stages as possible, as that information and the things become available.

MR. SARTWELL: I share that same vision of you all being the partners and building this plane together.

CHAIR KNOWLTON: Okay, we've got a question from Julie Evans online, please. Go ahead when you're ready.

MS. JULIE EVANS: Yes, my name is Julie Evans; I represent the East Hampton Town Fisheries Advisory Committee. We are a town sponsored group of commercial, recreational fishermen in the for-hire industry. I'm hoping that you will reach out to us and include us in your conferences and deliberations, because we have a lot of information for you.

CHAIR KNOWLTON: Thank you, Ms. Evans. Tim.

MR. SARTWELL: Thank you, Ms. Evans, I will get your contact information from ACCSP, appreciate it.

CHAIR KNOWLTON: Okay, I think we're good. Renee.

MS. ZOBEL: Tim, question for you, I believe. With these round tables that have been held it says that GARFO has been covered, and that was run through the Mid-Atlantic. I just didn't know if, knowing that there are two components to GARFO the New England area and the Mid-Atlantic.

There wasn't a lot of traction necessarily from New England on that, and I know it wasn't super heavily attended. I sat on and listened myself, so I appreciate the opportunity. But I don't see New England on the list, just GARFO is being checked off. Are there any plans, potentially to kind of solicit feedback from New England or is that just part of the GARFO process that has already occurred?

MS. PAPACOSTAS: There were some planning, the round tables that were held previously, kind of prior to the shutdown and all of those things, and kind of pausing planning for the Rec Fish Summit. Yes, I don't think the plan is to, and we can confirm with Russ for sure, but I don't think the plan is to have another one in New England, since there was one held, what was it fall, 2024 or winter 2024.

That feedback that was gathered through that is being used to inform the summit, rather than holding another one. Then yes, the Mid-Atlantic one was just in March, so together those are kind of covering the greater Atlantic. Then there will be those national levels with more sessions too that should also give some opportunity for people to chime in, who feel like they haven't been heard yet.

MS. ZOBEL: Thank you very much for that response, just noting that there have been a lot of changes recently, so the common theme I hear might be significantly different, in the light of kind of new information coming out in these partnership discussions. Thanks.

CHAIR KNOWLTON: Yes, Sir.

MR. ERIC REID: I agree with Ms. Zobel, there would be a substantial change in your input from New England two years later. But I guess my real question is, who is paying for the fuel that is going into this plane?

CHAIR KNOWLTON: Great question. Tim.

MR. SARTWELL: I think the discussion of the resources needed is going to be a part of these workshops moving forward. We understand that costs are rising, and we need to figure out what is the true cost of collecting recreational data that meets the needs of management.

CHAIR KNOWLTON: Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I'm trying really hard to resist bringing up Spirit Airlines, but you know it's real. That's not why I raised my hand. During the short term, as Tim mentioned in his presentation, NOAA is moving money to ASMFC to hire a facilitator and manage and set up all the eight regional workshops, so that is the short term.

Tim's answer I think applies to looking forward. You know what does rec data collection look like, you know one, two, three years down the road, and how much does that cost is part of these workshops. But in the short term, ASMFC will be

receiving a grant to do the workshops and all the planning associated with them in the short term.

CHAIR KNOWLTON: I know there has been some discussion about some of the first pieces of funding, whether it is accounting for the dollar fee for the facilitator, or whether it is the potential for an increased number in intercept surveys with the states, potentially later in 2026. I feel like the conversations of moving forward in partnership. We understand that that is a directive that is coming down potentially for increasing some of the sample size we're hoping for moving into 2027, maybe even further out. Anybody that is involved with the details of these surveys knows that these are not widgets that can just be stamped out. You know when we want to do more samples, and also then come back to the public for transparency on how were funds spent, and are we actually getting close to that asymptote with our sample size, where we're not getting much return. We've got certain states that feel saturated, you know at this point already with the number of locations that they have, the number of funds they have.

We will be looking forward to the power of that being a partnership when it comes to discussions of increases and sample size, because the states certainly appreciate that funds are available, but it takes a lot to get those staff, who are usually hourly, and are not doing this necessarily for a part of the job or their career, to go out and be our face to the public. As you all know, it's an extremely complicated survey that has to be done under rigorous protocols, obviously. But it takes time to do that, so we appreciate that flexibility as well, thank you. Rich.

MR. WONG: I just would like to wish you luck, and I think everyone in this room has an opinion about MRIP, so you're going to get good input, I think, and no shortage of partners that want to come and have a seat at the table. I think that's just because, honestly, I think we've reached a tipping point here.

Where we have to think about whether we have to have some real long and hard discussions about whether we scrap this existing process, which is very complicated, like you said, based on statistics and develop something like a census like our hunting population has to do. Then putting our efforts and research money into addressing the known biases with that kind of approach. But like I said, I think we are at a tipping point here, and its simply timing for this management process.

CHAIR KNOWLTON: Okay, so unless there are any objections, I'm going to go ahead and wrap up this bit of conversation. Just a quick reminder that ACCSP I believe our motto, means better data and better decisions. Yes, as you said, Rich, we all have strong opinions about how to get there and hoping that we can work together and make that happen.

Thank you very much. I'm going to roll this right back over to Alex for some of our program updates. We might go a little bit quicker than we had planned, because we're getting over our time. But all we want to make sure we have time for questions. This is your time.

UPDATE ON PROGRAM AND COMMITTEE ACTIVITIES

MR. DiJOHNSON: I'm going to go through a little bit quicker with the assumption that you all have heard these updates, in order to, just like Kathy said, make time for questions or any other considerations that we haven't heard before. I'm going to quickly go through the discards, an update on the discards/catch card pilot project that has been ongoing 2025 through 2026. Talked a little bit, very little bit about updates to the For-Hire Methodology that we've been talking about for a long time, and we've been working on. Then sort of round out with Estimate Review Process Updates with where we are in the Atlantic right now, where we're looking to go, and just sort of making sure everyone feels that. Okay, so the Catch Card Pilot Project started in 2025 with 8 states on the Atlantic, and we

had initially developed two major goals, which are pretty straightforward if you were tracking this project through time. One is to sort of provide an ability to compare between the unavailable catch of the existing APAIS, which is asked after a fishing trip to an angler, to a catch card that is handed out before, where that angler will have the intention to know that looking for their discard of the released information before their trip.

Two different ways of going about that. We're looking for a major comparison, and I'll jump in before I talk about the 2025 report, which you can see there have been a couple of news blasts about that. I don't know if that was made an attachment for today, but that is a report that is out there to study, but we're still working on that specific analysis through 2025, right now in 2026.

The other piece was just to collect additional release catch lengths. That was one of the major asks that we are looking at here. As Julie was covering earlier, and looking at the implementation plan priorities, this is sort of addressing Number 3, improving recreational fishery discard release data.

Like I mentioned, the 2025 report has been released, Dawn Franco, Georgia, Angela Giulano of Maryland were the PIs with that for the current time, and guiding the Rec Tech Subcommittee of our 8 states for touring through there and make sure that everything was in good shape.

Hopefully, you all have taken a look at that, if you haven't, definitely take a look at it, because it has a nice update. It's a lot of summary statistics, but then a lot of what we go through as well, which I am going to cover in the next slide really quickly, which is just a brief update on some of the, "How did things go out in the field."?

Then just an awareness point that this is going on in 2026. We have 8 partner states again on the Atlantic; South Carolina stopped doing this in 2026, and we picked up Delaware instead. All right, so this is too busy to look at. I wouldn't focus too much on it. But the idea here is we wanted to identify some of the major rec managed species.

Just so you can view this probably at a later time, I'm not going to go through each of them right here. But we were getting a lot of blanks on species where we think it would be meaningful to have the lengths collected. We had about 1300 lengths collected on just about 500 of these mock APAIS assignment, catch card assignments we're calling them.

The idea was rolling this in, just handing on to catch card in the existing ecosystem design. We have 500 assignments, what we saw and I'm going to give you some really napkin math, because I think it helps drive the point forward about why this is maybe an important project.

The idea was, out of these 500 assignments for each assignment on average we got about 1 card return, there was about 5 cards handed out, so our rate of return was just over 20%, I think it was 22 or 23% return rate. Our goal was 25 and we thought that was lofty, so we were really excited at a 23% return with catch cards.

Of each of those catch card returns again, on average 1 per assignment, we had about 3 lengths. Didn't break that down by species, so we're getting 3 lengths per catch card, 3 lengths per assignment, that's for 500 assignments. If you expand that out, if this was ever implemented for the full APAIS right now with the sample size, something like 12,000 assignments. You expand that out to 12,000 times 3, close to 40,000 lengths that we could be collecting. A part of this catch card was to also have the depth reported in there. We're pretty excited about this. We thought that we had a really good first year, and looking forward to seeing what comes out of the second year.

Going to change subject now, quick update on the for-hire methodology of logbook estimates, effort and catch.

This is something we've been talking about for a while. The idea is trying to have a methodology that can create effort and catch estimates, in order to reduce work. We're going back in time to sort of reduce when for-hire captains need to report 5 different locations, and also be intercepted and looking at all these different ways that they sort of encourage burden on these for-hire reps to have their information.

What we did in this project is we used GARFO VTRs, eVTRs, and compared that to the APAIS. Those are the two data streams that we are looking at to create this estimation math. We used FHS and APAIS, because their existing data streams, not FHS, sorry, APAIS and GARFO, because they are existing data streams right now.

That's what we had to work with, we have a contractor that is going through 2019 through 2024 information. We just saw our first real results a couple weeks ago, super excited to see that. But this is still an ongoing process. This is due to be finished with a full report, the actual work will be done in May, this month.

Then we'll have a full report at the end of June, and that is when we can have a really meaningful update. This is more of just a heads up that this is coming down the pipeline, and we'll definitely be talking about this more in November, the next Coordinating Council. Just as a visual. This is on the NOAA Fisheries website looking at certification.

A big part of this is getting this methodology as a step towards what we're calling a comprehensive for-hire data collection program for the coast. This could be many different flavors and many different things. It could be different logbooks, potentially different intercept methodologies as well, different creel surveys.

The idea again is you can use GARFO and APAIS and I don't know if we have the laser or not, but there is a red box around where we are in this process, where we think we are in this process right now, which is taking in a bunch of feedback that we had from the physical consultants.

Made a couple of changes, hired contractors to create some real simulations of estimates of effort and catch with different approaches, to look at where we have the best results, in terms of paying us in the estimation process compared to the MRIP, as well as looking at biases.

Then we're hoping to return this back eventually to our consultants for another review back to Rec Tech, and then back through our normal process of working through Rec Tech, Operations, Coordinating Council to present this again in November. All right, and then my last item just a quick update on where we are with the MRIP estimation process. This has been an ongoing piece. This was in the reenvisioning report as well. It's one of the pieces that was really important for the coast, not just the Atlantic, but I think nationally looking at this, the Gulf as well was the idea of looking at these estimates. We sort of updated this process where it was sort of a little bit loose of hey, get in there and look at this. We really regimented to say, every time, every wave when an update comes through, preliminary information comes through for MRIP effort, catch, states that is sort of a trigger point to say, get in there and start looking at this information.

What we're hoping, and I think where we are at this point, is that once this comes through that what we're seeing is our Rec Tech, our state leads with the APAIS and FHES, that they are then using that and then the idea would be talking within the state, within states in the region on the coast, to think about what's important to be reviewing.

There is sort of a standardized approach, we have an R script that we put together with the help of Jeff Borzo from New Jersey, to come up with basic outliers. But that is just sort of the tip of the iceberg. What we're really looking for is a full review of going through these estimates every way, to be going through here to look for basic outliers,

but then also potentially specific species that you're looking at and interested in.

That's why we're looking at getting the Rec Tech members to engage, not just amongst themselves, but with everyone within the state to look at the people that have the expertise with those species to know where they should focus the outliers. Then the last piece in here is just some of the general outcomes.

I thought it would be helpful just to be aware of what can happen, is that we see that there could be no change made when something is identified, obviously. That there could be a change to the actual data, but there might have been a mistake. You can see that there could be an adjustment to PSE for small sample sizes, and then there is also a sample weight adjustment.

There are a couple different ways these could be going. They could be going about and correcting this information. Then I just pulled it up on screen, it's sort of an awareness point for the coast and to the number of edits, to the number of times that a state has reached out to NOAA Fisheries and said, something may be wrong, we should take a look at this.

This doesn't just mean this was a change made; this is just an inquiry or an identification of an outlier by state on the coast. The idea here again is sort of making sure that everyone is doing this, because the MRIP is super important for management. To make sure that you're looking at this, and if you don't see your state on here, I might just ask to doublecheck with your Rec Tech member to make sure that they are in there looking at everything. We think that this is a really important process, as is being identified at many different levels. I think that's it for me.

CHAIR KNOWLTON: Okay, great, any questions, comments? Yes, Rich.

MR. WONG: Alex, this is a great idea. How does this process work? Does the preliminary wave estimate just go to the Rec Tech members, or do you find outliers in the raw data? How does that process work?

MR. DiJOHNSON: The process is just an automated e-mail, not totally sure about the distribution list, it comes from Lucas Johansen, that is the e-mail that says Preliminary Wave Estimates for Wave X has been released. Then there is almost always the wave before, because we typically have an update, so maybe 2 and 1 would be released at the same time.

That is the through the point where states are encouraged to get in and look at everything. The R scripts just use the data downloads from NOAA Fisheries website and the data estimates in a fell form as an input, to be able to quickly run through and look at any number of species because it's entirely adjustable.

Just to be able to plug in whatever TSM, whatever species you're interested in, take a look at and pull out that. Then the idea is not just to rely on that alone, but to continue to dig fuller into the actual estimate. You have the query tool, the ACCSP Data Warehouse and/or the raw data download, microdata.

MR. WONG: Does your R script actually flag outliers, or does it just give them the waves and say that looks a little busy, looks too high, looks too low. How does that R script work?

MR. DiJOHNSON: It's basically just the output is things that are flagged. It would populate items that say hey, you should take a look at the species. The flag is not meant to be, I'm going to send this e-mail to NOAA Fisheries saying that we have an issue we need to look into what's going on.

The state leads Rec Tech members also have access to the Atlantic log data to potentially look at what was happening, to see if maybe that was something that could be validated or why that outlier might be

occurring a little bit further. It requires a little bit of homework.

CHAIR KNOWLTON: Okay, we've got a comment from Renee, and then we'll go to Brandi, please.

MS. ZOBEL: Just a comment to say I was looking forward to that logbook certification process.

MS. SALMON: My question is, so I might be behind the times. How exactly is this process different from how you were doing it before? Because you guys were flagging for anomalies and things like that before, but how is this different than that?

MR. DiJOHNSON: There is already some, NOAA can speak way more to this than I could, but there is already an existing process with external reviewers looking at this before they are even posted. This is sort of relying on the state members. I think it really, Brandi, its sort of just like a formalization of a process that should have already existed beforehand.

I would say that the addition was this standardized approach with hopefully simple R script that is pretty much just a plug and chug. Sync it up to the right directory, run it with species you're interested in, and the outliers are at least a good starting point in understanding and getting into the data themselves. But none of the information, so none of the data sources that are being used right now are new. It's just sort of making sure that we're actually getting our partners engaged every way.

CHAIR KNOWLTON: Katherine.

MS. PAPACOSTAS: Yes, I'll just add too. Prior to 2024 there was a period of time where it was just internal NOAA regions reviewing the estimate before they are released. Then that was kind of the only formal review we had. Then historically there were data workshops where people really dug into data, you know wave level workshops. Then those were discontinued for various reasons, so this was kind of a way to get back to collaborative review of the data, really taking advantage of the state partner local knowledge about regulations and their local fisheries that we just don't have at headquarters, you know plus seeing hundreds and hundreds of species all the time. Yes, we really have valued this process and think it's been a really big improvement to our collective quality control. Great job, states, please keep it up.

CHAIR KNOWLTON: Okay, and with respect to time we will move on. I do really appreciate your questions and comments. Julie, over to you.

MS. SIMPSON: All right, the next thing up is the spring data load. We've once again been able to do an on-time public data reviews, which is extremely dependent on all of the partners submitting their data and they are on time. Big kudos to everyone for working with the data team on that process.

Those data have also been submitted to NOAA Fisheries, so they will be part of the FUS process when that comes out. Just to note that they have released FUS for 2023, so that is coming out. I know that there were a couple of hiccups in their publications, but I think they have the next years, the 2024, almost ready to go.

Things are going to probably publishing faster out of FUS. One of the highlights this year is we wanted to especially highlight Virginia; they've done a lot of work with the data team on implementing a new process for the merge of the state fishermen report to the dealer report. Big kudos to the staff, whose names I don't all know, so I'm not going to try that, because that would be terrible.

But I know that the data team worked with them quite frequently, so props to everybody for improving that process. The next up is the conversion factors. The background here is just this is a project that was proposed by ACCSP. There are 5 species and 6 states that were participating.

You guys have heard about this project before, so I'm just going to pop to the next slide. The current status is that the project has been completed and conversion factors have been calculated. What we are doing now is we are going to be incorporating gear into the conversion factor. The new conversion factors are not going to be used to apply to all of the data that is in the data base, they are going to be used for a certain time period moving forward. There is interest in working on conversion factors for other species. The Commercial Technical Committee has already started considering other species that might be worthy of having their conversion factors reviewed, because the source of those original conversion factors is unknown. Essentially, the very successful project that was run through the committee process, it will be improving the quality of the data and we will potentially be expanding in the future.

The next item up here is just informative that we are adding a line, statement on use of AI in an ACCSP the confidential access form. If you've never filled it out, good for you for not having to do that. But there are a few statements where you have to provide your initials. We're going to be crafting language for one more statement that essentially says that thou shalt not put data into an AI platform that would use those data or uses them for any other purposes.

It's just about security. You have confidential data you can't be sharing that with some AI. Welcome to the world of AI. That actually moves me on to software projects. eDR redesign was the big software project for 2026. We did launch that in January 2026, wanted to say really, really, very successful launch. We did do all of the parts of eDR at one time when we did the eTRIPS redesign.

We had done separate parts and the partners asked us to do it altogether at one time. That is a lot of information that needed to be online changed, to be API changed, the file upload change, and it all rolled out at one time. There was a lot of Outreach, and a lot of Help Desk, and everyone stepped up and did this.

The amount of communication that occurred, both during the project development in 2025 and in 2026, all the partners have expressed that no rollout is ever without a bug or without somebody saying, hey, I don't like this and asking questions. But overall, they were extremely happy. They thought that it was a very successful launch. They felt well informed throughout the whole process, about what was happening and when it was happening.

We're very excited about this. We did see an increase in support in the first quarter of the year, but we were actually seeing that fall off. We're only seeing now really support coming in from a dealer who maybe hasn't been using the system, because they weren't purchasing things in the beginning of the year. This is just a reminder about the interface; I'm going to skip that altogether.

The Software Project Overview. Just a few things we've done an eTRIPS update. The biggest thing here is that the latitude and longitude, which used to be a core question, which meant it had to be answered by everyone, has now been moved to a partner attribute. If your partner and your agency do not want to ask that question anymore, you can take it off the form.

We are working on the validation in both eTRIPS and eDR, so those are going to be partner level validations. You'll be able to add validation to your own version of the questions, and we are containing these, just so you know, to warnings, because we don't want to prevent anyone from entering data if a validation was incorrectly created. The next item here is that we are going to be working with the federal folks on the East Coast Logbook and HMS. We're going to be having some new APIs that go to those projects. I think Geoff will talk a little bit more about East Coast Logbook and the coordination. We've also added angler catch, it is now using the SAFIS SciFish API, so their data are coming in through that and they've also been able

to load all of the historical data. Those data are now part of the SciFish program.

In VMS we do have the funding for that project that was approved by the RFP. We are going to be doing that this year, working on some advances to that software. In the past year we did add a new framework for Rhode Island compliance. This is just a summary of the Action Plan. We've already facilitated the eDR transition.

We are currently working on the One Stop Reporting Initiative in eTRIPS to add state questions. We've been working on that with the state partners. I can give you a lot of details about that update if you catch me after the meeting, I can give you a lot of details. But that is moving along very well.

Essentially, what we are going to allow people to do is if you have a federal form and you really want to know the number of fish, because of the number of tags associated with those fish, then that question is now going to be allowed on the form. The next one is we are going to be soliciting some harvester feedback on eTRIPS just because we want to see how people feel about the look and feel of the application, what can make it easier.

We're working with partners to determine how to best solicit that feedback and make implementations in the future. Then we've already had some interest from some of the partners. The One Ticket feature in eTRIPS, which allows you to fill out one form and it counts as both your fishing trip and your dealer report.

We built that in eTRIPS to take the place of the e1-ticket system, and at our last state coordination call on Friday we had some federal coordination as well. We already had some interest of folks who were especially interested in a lot of their shellfish harvesters act as their own dealers. We want to have those folks be able to fill out one form and they're done. It fills out their fishermen trip and their harvest and their dealer report in one form, so reducing that burden.

This slide is just a summary of the OSR that I talked about. Essentially, appropriate state questions from non-chosen permits will be added. But we do understand that there are some places we don't add every state question, because it could be redundant to a federal question that is already being asked. We know we need to pay attention to the details in that and we're going to be rolling that out in January of 2027. I'll turn it over to Geoff.

MR. WHITE: Rolling right through these things. One of the geeky but really cool points about the SAFIS eTRIPS and now the SAFIS electronic dealer reporting. The state and federal partner staff control of the switchboard, moving those optional attributes on and off in those questions.

It is the only system we are aware of that a state partner changes a question and a minute later that is in the application without requiring software staff to build that. It's geeky, but it's also really cool. It means that the changes that you as partners want in the reporting applications can be implemented immediately, without some long lag of software development. Some things do take longer in development, but the one OSR implementation and how our eTRIPS media software works, there is a lot of background work that gets into it, but we think it's pretty cool. I'm just going to touch on regional data coordination. Again, the main point here is because ACCSP sits in the middle of monthly GARFO coordination calls, from HMS calls, vessel permit registry, all these other pieces.

We have the opportunity to see things that are partner-cross agency and flag them early. When one partner says, I want to make this field mandatory, we can say, cool, have you talked to all the other partners about it, because three of the partners say that would be a problem, and getting that communication going has been super, super helpful.

With GARFO we have been working with them, specifically on the Dealer Module Development. They are updating their system. GARFO has been a huge partner with ACCSP since 2004 for federal dealer reporting, are using SAFIS system to get there. But there have been requests from GARFO and modifications from each partner to include new requirements of theirs over time. That theme kind of continues on through.

The other items on this list, the federal vessel permit registry, Southeast Permit and the East Coast Logbook are all examples where ACCSP support of a federal project to get the regions to talk to each other more, has resulted in some cases, if not many, where they are trying to figure out problems that we've addressed in part or in whole before, and as they build the vessel permit registry to consolidate, we were able to show them what ACCSP had already done.

Then they took that and added to it, and we take their learning and we put it back into our system. It's been a really great collaboration throughout that. Under Southeast Permit Support, that has been an ongoing issue for years now about how that system works in getting data back out and shared for southeast permits that impact what reporting happens tomorrow.

They have released a newer version of their database. We have created and are in the midst of finishing up the security agreements and data linkages, and over the next several months we need to implement those new datasets into our reporting application. That is coming along. As Julie touched on the East Coast Logbook Project to consolidate different federal systems and vessel data reporting.

That project is coming along with a goal in September of being more fully released to the public. But one of the items that they've done is that if you've got this one permit use East Coast Logbook for the initial implementation, but if you have multiple permits, which is the One Stop Reporting App, meaning you've got Southeast Coastal Logbook, plus an HMS permit, then use SAFIS eTRIPS, which can combine those requirements into one report, and make things easier on the fishermen by only submitting that trip report once.

Those are some of the partner regional coordination things that I found are important and I wanted to share with you today. There is more, but we are over time for today's meeting. I will go one more slide, and ask if there are any questions, but we presented this kind of before at the ACCSP by the numbers. This is of the last grant report, so it is September through the end of February, of the number and types of the outreach, system uptime, Help Desk requests, and when we did the fall data load it is about 47 datasets they can put together. That was relevant to the spring data load as well that we just got published out, thanks to the data team and all of your staff for submitting all that data on time. With that, that calls the end of our program updates, so thank you for your attention. We'll take questions.

CHAIR KNOWLTON: Jay.

DR. McNAMEE: Flipping all the way back to one of Julie's slides, it's just quick. The AI one. You'll have this kind of new edition to the form, and I just want to clarify. You are talking about, don't take confidential data and give it to Claude or Chat GPT, but you are not talking about, you know we build a deep running neural network and Python on our computer like that is going to be okay.

MS. SIMPSON: Correct, so the idea would be that if you put something into Chat GPT or some of these other Claude things, those companies will mine that data for various reasons or they will retain those data in ways that we don't want them to, in ways that would be prohibitive to the intent of confidentiality.

Your exactly right. The discussion came up in that should we state use of AI explicitly, and then someone said, well, isn't it kind of just fall into, you

shouldn't share your data, and everyone was like yes, but people aren't going to necessarily think about that with respect to AI. That is why we decided to actually make it align.

CHAIR KNOWLTON: Any other questions, comments, and do we have anybody online? Richard.

MR. COTE: Just adding to Jay's mention on Julie's AI concerns. I would like to echo that sentiment as well. I think there are some considerations here that probably wouldn't be the first thing on people's minds when they are thinking about confidentiality, and the security of using different AI tools. It depends on the settings, of course, but I think it is a good conversation to have, and hopefully we'll be able to continue that.

CHAIR KNOWLTON: I really appreciate everybody's attention and the discussion. Once again, we have some great discussions around the table. I am very appreciative of that. One of the things that my boss and I talk about all the time is we're so focused on projects and project management and deadlines and reports and getting these things that are very finite done.

You're never done with communication. You can be glad when you got something right, we can pat ourselves on the shoulder when something goes well, or learn when things don't go well. But you are never done. It can be exhausting and very trying to a lot of people's patience.

Everybody has a different perspective, and everybody has different constituents and how they need to receive communication. I applaud you all for your conversation today, I am very appreciative.

ADJOURNMENT

Thank you, and do we have a motion to adjourn? We've got Jay McNamee and Erica Burgess seconded. I am assuming there is no objection, have a great evening.

(Whereupon the meeting adjourned at 5:20 p.m. on Monday, May 4, 2026)

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FY27 Proposal Recommendations to Coordinating Council

From the Operations and Advisory Committees

- The Operations and Advisory Committees would like to present the rankings from both groups individually.
- Recommend that funding be awarded at the $3.35M level so that any additional funds can be directed at the Administrative grant
- Maintenance proposals
    - Fund all maintenance proposals
- New proposals
    - Fully fund the four (4) new proposals listed
        - FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies
        - Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine
        - Develop Maryland's Recreational Fishery Data Collection Program
        - FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York

** all above are consensus decisions*

FY2027 Proposal Rankings

Operations Rank	Advisors Rank	Average Rank	Project Name	Partner	Operations Score	Advisors Score	Average Score	Cost
1	1	1	FY27: Managing 100% Lobster Harvester Reporting in Maine	**ME DMR**	9	10	9	$ 111,892
2	2	2	FY27: North Carolina socioeconomic database construction for the management of existing and future data"	**NCDMF**	8	8	8	$ 145,020
3	4	3	FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project	**SAFMC**	7	8	7	$ 136,742
4	3	4	Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Addess Stock Assessment Needs	**RI DEM**	7	8	7	$ 70,769

1	1	1	FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies	**ACCSP IS**	58	62	59	$ 74,250
3	4	3	FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York	**NY DEC, Cornell**	51	50	51	$ 166,887
6	6	6	FY27: Electronic Reporting Initiatives for New York Fisheries	**NY DEC, Cornell CE**	45	40	45	$ 135,722
5	3	4	Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries	**NY DEC**	48	56	49	$ 266,443
2	2	2	Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine	**ME DMR, CFRF**	57	59	57	$ 59,452
4	5	5	Developing Maryland's Recreational Fishery Data Collection Program	**MD DNR**	49	47	49	$ 18,873

FY2027 Operations Proposal Rankings

	Admin Grant	2,489,992	$44,423	2,534,415
3.35M	Maint @ 75%	611,689	New @ 25%	203,896
3.50M	Maint @ 75%	724,189	New @ 25%	241,396

Project Name	Partner	Score	Cost	Cumulative Cost	3.5M Amt Remaining	3.35M Amt Remaining
FY27: Managing 100% Lobster Harvester Reporting in Maine	ME DMR	8.74	$ 111,892	$ 111,892	$ 612,297	$ 499,797
FY27: North Carolina socioeconomic database construction for the management of existing and future data"	NCDMF	7.64	$ 145,020	$ 256,912	$ 467,277	$ 354,777
FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project	SAFMC	7.45	$ 136,742	$ 393,654	$ 330,535	$ 218,035
Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Addess Stock Assessment Needs	RI DEM	6.52	$ 70,769	$ 464,423	$ 259,766	$ 147,266

includes carryover from maintenance projects

FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies	ACCSP IS	58.12	$ 74,250	$ 74,250	$ 426,912	$ 276,912
Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine	ME DMR, CFRF	56.88	$ 59,452	$ 133,702	$ 367,460	$ 217,460
FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York	NY DEC, Cornell CE	51.40	$ 166,887	$ 300,589	$ 200,573	$ 50,573
Developing Maryland's Recreational Fishery Data Collection Program	MD DNR	49.26	$ 18,873	$ 319,462	$ 181,700	$ 31,700
Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries	NY DEC	48.46	$ 266,443	$ 585,905	$ (84,743)	$ (234,743)
FY27: Electronic Reporting Initiatives for New York Fisheries	NY DEC, Cornell CE	45.13	$ 135,722	$ 721,627	$ (220,465)	$ (370,465)

FY2027 Proposal Rankings (Combined)

	Admin Grant	2,430,054	$44,423	2,474,477
3.35M	Maint @ 75%	656,642	New @ 25%	218,881
3.50M	Maint @ 75%	769,142	New @ 25%	256,381

Project Name	Partner	Score	Cost	Cumulative Cost	3.5M Amt Remaining	3.35M Amt Remaining
FY27: Managing 100% Lobster Harvester Reporting in Maine	ME DMR	8.85	$ 111,892	$ 111,892	$ 657,250	$ 544,750
FY27: North Carolina socioeconomic database construction for the management of existing and future data"	NCDMF	7.69	$ 145,020	$ 256,912	$ 512,230	$ 399,730
FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project	SAFMC	7.48	$ 136,742	$ 393,654	$ 375,488	$ 262,988
Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Addess Stock Assessment Needs	RI DEM	6.71	$ 70,769	$ 464,423	$ 304,719	$ 192,219

includes carryover from maintenance projects

FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies	ACCSP IS	58.65	$ 74,250	$ 74,250	$ 486,850	$ 336,850
Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine	ME DMR, CFRF	57.15	$ 59,452	$ 133,702	$ 427,398	$ 277,398
FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York	NY DEC, Cornell CE	51.27	$ 166,887	$ 300,589	$ 260,511	$ 110,511
Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries	NY DEC	49.45	$ 266,443	$ 567,032	$ (5,932)	$ (155,932)
Developing Maryland's Recreational Fishery Data Collection Program	MD DNR	48.94	$ 18,873	$ 585,905	$ (24,805)	$ (174,805)
FY27: Electronic Reporting Initiatives for New York Fisheries	NY DEC, Cornell CE	44.53	$ 135,722	$ 721,627	$ (160,527)	$ (310,527)

FY2027 Advisors Proposal Rankings

	Admin Grant	2,430,054	$44,423	2,474,477	
3.35M	Maint @ 75%	656,642	New @ 25%	218,881	
3.50M	Maint @ 75%	769,142	New @ 25%	256,381	

Project Name	Partner	Score	Cost	Cumulative Cost	3.5M Amt Remaining	3.35M Amt Remaining
FY27: Managing 100% Lobster Harvester Reporting in Maine	ME DMR	9.67	$ 111,892	$ 111,892	$ 657,250	$ 544,750
FY27: North Carolina socioeconomic database construction for the management of existing and future data"	NCDMF	8.00	$ 145,020	$ 256,912	$ 512,230	$ 399,730
Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Addess Stock Assessment Needs	RI DEM	8.00	$ 70,769	$ 327,681	$ 441,461	$ 328,961
FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project	SAFMC	7.67	$ 136,742	$ 464,423	$ 304,719	$ 192,219

includes carryover from maintenance projects

FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies	ACCSP IS	62.33	$ 74,250	$ 74,250	$ 486,850	$ 336,850
Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine	ME DMR, CFRF	59.00	$ 59,452	$ 133,702	$ 427,398	$ 277,398
Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries	NY DEC	56.33	$ 266,443	$ 400,145	$ 160,955	$ 10,955
FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York	NY DEC, Cornell CE	50.33	$ 166,887	$ 567,032	$ (5,932)	$ (155,932)
Developing Maryland's Recreational Fishery Data Collection Program	MD DNR	46.67	$ 18,873	$ 585,905	$ (24,805)	$ (174,805)
FY27: Electronic Reporting Initiatives for New York Fisheries	NY DEC, Cornell CE	40.33	$ 135,722	$ 702,754	$ (141,654)	$ (291,654)

		Partner	Title	Primary Module	Others		Cost	Max Funding Year 5/6
Maintenance	1	ME DMR	FY27: Managing 100% Lobster Harvester Reporting in Maine	Catch/Effort (100%)		$	111,892	$ 111,892
	2	NCDMF	FY27: North Carolina socioeconomic database construction for the management of existing and future data"	Socioeconomic (100%)		$	145,020	
	3	SAFMC	FY26: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project	Biological (85%)	Bycatch (15%)	$	136,742	
	4	RI DEM	Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Addess Stock Assessment Needs	Biological (100%)		$	70,769	
					Total Maintenance	**$**	**393,654**	

		Partner	Title	Primary Module	Others		Cost
New	1	ACCSP IS	FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies	Catch/Effort (100%)		$	74,250
	~~2~~	~~NCDMF~~	~~FY27: Estimating recreational hook and line discard mortality for Black Sea Bass Centropristis striata~~	~~Biological (100%)~~			
	3a	NY DEC, Cornell CE	FY27: Fishery Dependent Sampling of Federal and State Permitted Vessels in New York	Biological (100%)		$	166,887
	3b	NY DEC, Cornell CE	FY27: Electronic Reporting Initiatives for New York Fisheries	Catch/Effort (100%)		$	135,722
	4	NY DEC	Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries	Bycatch (60%)	Catch/Effort (30%) Not ranked Biological (10%)	$	266,443
	5	ME DMR, CFRF	Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine	Biological (100%)		$	59,452
	6	MD DNR	Developing Maryland's Recreational Fishery Data Collection Program	Catch/Effort (100%)		$	18,873
					Total New	**$**	**702,754**
Admin		ACCSP	ACCSP Administrative Budget (with both options)	Admin		$	2,489,992
					Grand Total Proposed	**$**	**3,586,400**

STATE OF MAINE
DEPARTMENT OF
MARINE RESOURCES
MARINE RESOURCES LABORATORY
P.O. BOX 8, 194 MCKOWN POINT RD
W. BOOTHBAY HARBOR, MAINE 04575-0008

JANET T. MILLS
GOVERNOR

CARL J. WILSON
COMMISSIONER

August 14, 2026

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

Dear ACCSP:

We are pleased to submit the proposal titled "FY27: Managing 100% Lobster Harvester Reporting in Maine" for your consideration. This is a maintenance proposal which has not changed in the scope of work. The continuation of this project will allow the Maine Department of Marine Resources (MEDMR) to continue its compliance with ASMFC's Addendum 26 requirement that the MEDMR move from 10% lobster reporting to 100% electronic lobster reporting. The MEDMR implemented 100% lobster reporting starting January 1, 2023; which was a full year ahead of the addendum's requirement to be fully implemented by January 1, 2024. The MEDMR felt it was important to implement as early as possible to comply with and track the pending vertical line reductions resulting from the new regulations to reduce the risk of entanglement to right whales through the Atlantic Large Whale Take Reduction Plan. Collecting as much information on these gear configurations during the recent six-year pause of these regulations is imperative to accurately document the effort and vertical line use in the lobster fishery. MEDMR's initial goal was to implement 100% reporting in 2021; however, funding shortfalls prevented this from occurring. Continued funding of this proposal would allow MEDMR to continue the implementation.

The MEDMR does not currently have the funds needed to continually support and staff the program at the 100% reporting level. Overall, MEDMR created nine new positions that have been filled and vital to the successful roll out of 100% electronic lobster harvester reporting. Not all nine positions are included in our funding request as other one-time funding sources have been secured to alleviate the burden of our request to ACCSP. Please view all graphs in color. This proposal addresses the following 2027 ranking criteria: catch and effort, data delivery plan, regional impact, funding transition plan, in kind contribution, improvement in data quality and timeliness, impact on stock assessment and properly prepared.

Feeback received from the ACCSP Operations and Advisory Committee's joint meeting is addressed below and within the proposal where appropriate.

1. **There does not appear to be a data delivery plan and completed data delivery, please make sure that if included, section headings match for ease of reviewer.**
   This section has been properly labeled and moved from the Approach section. We have included more information about how data are transmitted utilizing an ODBC connection and staging tables located within the ACCSP Warehouse.

2. **The table of completed metrics and objectives may be table 3, but it was not clear.**
   This has been moved into its own section and updated to include 2026 numbers.

In addition to these changes, the MEDMR received a new "Certificate of Indirect Cost" since the original pre-proposal submission that lowered the overall indirect cost. This proposal has taken that new value into account, and the budget has been adjusted accordingly to absorb any savings from indirect back into the personal services portion of this step-down proposal. We are still asking for the same amount of funds and changes to the budget have been highlighted.

For a summary of the proposal for ranking purposes, please see page 28. Please contact Robert Watts at the MEDMR with any questions. Thank you for your consideration of this proposal.

Sincerely,

Robert B. Watts II
Marine Resources Scientist IV
rob.watts@maine.gov
(207) 350-7154

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street. Suite. 200A-N
Arlington, VA 22201

FY27: Managing 100% Lobster Harvester Reporting in Maine

Total Cost: $111,892.00

Submitted by:

Robert B. Watts II
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Erin Summers
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Applicant Name: Maine Department of Marine Resources (MEDMR)

Principal Investigator: **Robert** Watts, Marine Resource Scientist

Project Title: FY27: Managing 100% Lobster Harvester Reporting in Maine

Project Type: **Maintenance** Project

Requested Award Amount (without the NOAA administration fee): $111,892

Requested Award Period: One year after receipt of funds

Objectives:

The objective of this proposal is to comply with Addendum XXVI (http://www.asmfc.org/uploads/file/5a9438ccAmLobsterAddXXVI_JonahCrabAddIII_Feb2018.pdf) of ASMFC's (Atlantic States Marine Fisheries Commission) American lobster Fisheries Management Plan (FMP) which required MEDMR increase the percentage of trip level landings information MEDMR collects from commercial lobster harvesters from the "optimized draw method" (approximately 380 harvesters) to 100% (approximately 5,400 harvesters). Starting in 2019, ASMFC Addendum XXVI required MEDMR move to an "optimized draw" selection method to choose the lobster harvesters required to report for the following year. The "optimized draw" selects different percentages of license types and active/non-active harvesters based a statistical analysis of the variability of each license class using a of combination of dealer data and harvester reported data. In the past MEDMR would select approximately 700 to 800 harvesters per year, now around 350 to 400 harvesters are selected with the idea that the selected harvesters would provide the same number of trip records (See Figure 3). Addendum XXVI requires 100% reporting (electronic reporting is recommended but not mandatory) by January 2024 in addition to other new required fields that became mandatory in January 2021. MEDMR started collecting total endlines and 10 min square data at the trip level in 2020 even though ASMFC moved these requirements back to 2021. Starting January 1, 2023, MEDMR required 100% electronic lobster harvester reporting. This requirement has caused MEDMR to increase landings and licensing staff by a total of 9 positions to effectively manage, monitor and audit what was a 1000% increase in the number of trip level reports the MEDMR receives from the lobster industry on an annual basis.

National Marine Fisheries Service (NMFS) was in the process of finalizing new rules to protect North Atlantic right whales as part of the Atlantic Large Whale Take Reduction Plan (ALWTRP) for the Northeast lobster fishery. The implementation of these plans have been pushed back as part of a six-year moratorium. This will allow states the ability to collect vital information such as end line counts and gear configuration with a spatial component to better map out where actual fishing activity is occurring. The MEDMR required trackers be placed on all federally permitted vessels starting December, 2023. ASMFC is requiring 100% reporting in the lobster fishery by 2024. GARFO started requiring all federal lobster permits submit eVTRs on April 1, 2024. The AWTRT has recommended on more than one occasion that fisheries move to 100% reporting as soon as possible. MEDMR strongly agrees with this recommendation because our ability to achieve and monitor the consensus goals of the AWTRT is tied to the availability of these data in the short term. MEDMR believes that the January 2023 date was necessary to meet the data guidelines outlined in Addendum 26, the needs of the AWTRT, and work out any data collection and data management issues well before the 2024 deadline. Additionally, MEDMR was interested in moving the timeframe for 100% electronic lobster harvester reporting up to as early as 2023 to track effort and vertical line use in support of pending new regulations. The FY20 proposal intended MEDMR to require 100% reporting starting in January 2021; however, lack of funding has required this timeframe be pushed back to 2023. Similarly, with the 2023 timeframe the MEDMR does not

have the funding to continuously fund all the positions necessary to effectively administer, collect, audit and distribute the data required in Addendum XXVI**.** If the MEDMR are not able to secure adequate funding, the continued implementation of the 100% reporting would need to be revisited. **The MEDMR has self-funded the creation of an offline mobile application for both iOS® and Android® platforms through dedicated technology funds. This program was built to accept reports from all fisheries and meet NMFS electronic reporting requirements. This program has dynamic entry pages and is completely table driven allowing the entry pages to display more concise field descriptions based on species and gears fished. There are built in data validations, basic end user analytics and reoccurring selections appear at the top of drop-down lists.** The MEDMR released this program industry wide in the fall of 2021. With the release of this program, the MEDMR has required electronic reporting in multiple fisheries if there's a data management need. **The primary tasks will be electronic reporting software training, regulation compliance, data audits, data entry and general outreach. Staff will also focus on harvester outreach to help industry understand the importance of accurate and timely reporting. Electronic reporting are required for commercial lobster harvesters and heavily pushed for those that still report other fisheries on paper. The focus on expansion of electronic reporting will require the MEDMR to spend a significant amount of time on outreach, explaining the reporting system to harvesters and troubleshooting any issues that might arise.** Currently, MEDMR requires electronic reporting in our Atlantic herring, scallop (inshore state fishery), halibut (inshore state fishery), lobster and Atlantic menhaden fisheries. There are currently no plans to mandate electronic reporting for other fisheries, as this is not an ACCSP requirement.

Need:

Maine currently requires harvesters from 14 fisheries to report trip level landings on a variety of timelines (daily, weekly or monthly). A total of five fisheries require mandatory electronic harvester reporting (lobster, scallop, menhaden, herring and halibut). Two quota monitored fisheries (Atlantic herring and Atlantic menhaden) have daily reporting requirements during their "open quota monitored seasons (i.e. directed and episodic fishing season for menhaden) and two other fisheries (halibut and scallop) have trip level reporting due weekly during their inshore state seasons. **When the MEDMR implemented 100% lobster reporting in 2023, the number of new harvesters (see Table 1) required significant resources in outreach, tracking compliance, and entering and auditing a ~500% increase in the number of reports received from approximately 60K to ~300K. In the past, MEDMR would select approximately 700 to 800 harvesters for mandatory reporting per year. During the 2019 season, the MEDMR moved to an "optimized draw" selection method to choose the lobster harvesters required to report for the following year. Using a combination of dealer data and harvester reported data, the "optimized draw" looked at active/non-active harvesters and selected different percentages of license types for mandatory reporting based on a statistical analysis of the variability of each license class. In 2022, which was the last year of the optimized draw, approximately 5,643 lobster harvesters were licensed to fish in Maine. Of those 5,643, MEDMR selected 474 harvesters to report trip level information, with the idea that the selected harvesters would provide the same number of trip records (See Figure 3) as the previous 10%.** The number of individual lobster harvesters required to report electronically increased to just under 5,700 when 100% lobster harvester reporting became mandatory in 2023. **With 100% reporting continuing in 2025, all 5,017 license holders were required to report for each month they held a current license. Of the 5,017 harvesters, MEDMR dealer reports indicate 3,579 harvesters sold at least once to a licensed dealer.**

Of the 5,017 licensed harvesters, ~1,250 (24%) are required to report to National Marine Fisheries Service (NMFS) since April 1, 2024, since they possess a federal lobster permit. **Regardless of their federal permit status, MEDMR will work with all harvesters to ensure all landings are reported either to MEDMR or NMFS since the collected data will benefit all partners. MEDMR staff will also audit all records with a**

state landed of Maine but defer any federal data changes to NMFS. The rollout of federal reporting was not smooth and brought many challenges that have been addressed and appear to be in the past. The biggest challenge with the state to federal reporting transition was "re-training" the 1,300 "new" federal harvesters that were used to reporting their landings using the "state only form". The differences in form and terminology have caused an increase in the number of phone calls MEDMR staff have received since April 1. MEDMR and GARFO are continuously looking for ways to streamline these reporting issues and ways to simplify the reporting process within the lobster industry.

Table 1: Increase in Individual Harvester Reporting Expected in Maine

Moving from 10% to 100% Lobster Reporting							
Year	Total Trips Entered	Lobster Only Entered	10% Active Lobster Harvesters	100% Active Lobster Harvesters	100% Lobster Harvesters	Lobster Trips From Dealer Reoprts	Lobster Harvester Reports Expected if 100% Required
2015	55,876	29,563	532	4,406	6,014	270,324	282,759
2016	58,576	30,931	566	4,504	6,009	293,919	307,439
2017	59,529	30,172	535	4,485	5,997	276,754	289,485
2018	59,612	27,110	543	4,391	5,925	264,095	276,243
2019	46,386	17,693	276	4,336	5,834	258,089	269,961
2020	47,103	18,326	297	4,065	5,773	220,608	230,756
2021	65,904	25,170	367	4,168	5,763	255,507	267,260
2022	54,648	21,889	308	3,981	5,643	211,514	221,244
2023	260,579	244,726		4,240	5,372	221,876	
2024	289,951	246,678		4,293	5,171	222,191	
2025*	274,764	225,004		3,758	5,017	201,469	
*2025 data are preliminary and subject to change without notice.							
100% active license based on dealer reported data from 2015 - 2022							
100% active license count for 2023, 2024 and 2025 based on harvesters that reported as of 5/18/2026							
Harvester counts are individual harvesters. Many harvesters have multiple licenses that are tracked seperately.							
Expected reports are calculated from reports received by harvesters and extraoplated based on reports received by dealers.							

*Increase in the number of harvesters and reports expected when MEDMR implements 100% lobster harvester reporting.

In 2016 MEDMR converted to a new online licensing and landings system, called Maine LEEDS (**L**icensing **E**nforcement and **E**nvironmental **D**ata **S**ystem). Using this system, harvesters and dealers are able to:

- Renew a license you previously held
- Apply for a new license you've never held before
- Order tags (for certain licenses)
- Reprint your license
- Upgrade a license (if applicable)
- Pay administrative fees
- Report landings
- Check reporting compliance status
- Upload documents to the department
- Change your password to the system

This web application has been an extremely useful tool that has allowed for more "self-service" for harvesters and dealers, has improve customer satisfaction and increase MEDMR staff efficiency. The Landings Program now utilizes this LEEDS system to send compliance emails to industry informing them of what reports are delinquent. Harvesters and dealers also have the ability to login to the system and see what reports are missing as well. Overall, this program has saved the MEDMR thousands of dollars in mailing cost as many of our correspondence have been sent via email as opposed to mail when appropriate. The process of informing

harvesters that they have a license with reporting requirements has been automated and each harvester that purchases a license for the first time with reporting requirements are provided a notice included in their license packet to streamline our notification process. **In late spring 2018, MEDMR started allowing harvesters to enter their data through the LEEDS system and in 2021 released the VESL application to a group of test harvesters. Since the MEDMR provided harvesters with an electronic reporting option, the number of harvesters utilizing an electronic reporting option has increased from 85 in 2018 to almost 1,300 harvesters in 2022. At the time of writing this proposal, just over 5,100 harvesters (out of ~5,700 total) reported electronically in 2025. Since 2018, the percentage of electronic reports has increased from just over 1% to 43% in 2022 (and 95% in 2025) (Figure 1 – view in color and Table 2 for electronic reporting breakdown).** Having industry enter their own information also saves staff time because paper reports do not need to be opened or processed through the mail, scanned into our LEEDS system or entered by hand. Staff have spent significant time training and creating outreach material (videos, electronic user guides, etc.) and communicating directly with industry. The shift to electronic reporting has caused staff to focus more of their time on data audits and outreach with industry. While MEDMR recommends industry utilize Maine LEEDS (state reporting only) or VESL (GARFO and ME state only reporting), we do not require users to use these two programs. We have users that have elected to utilize Fish Online (FOL), eTRIPS and other reporting options to fulfill their state and federal combo reporting requirements.

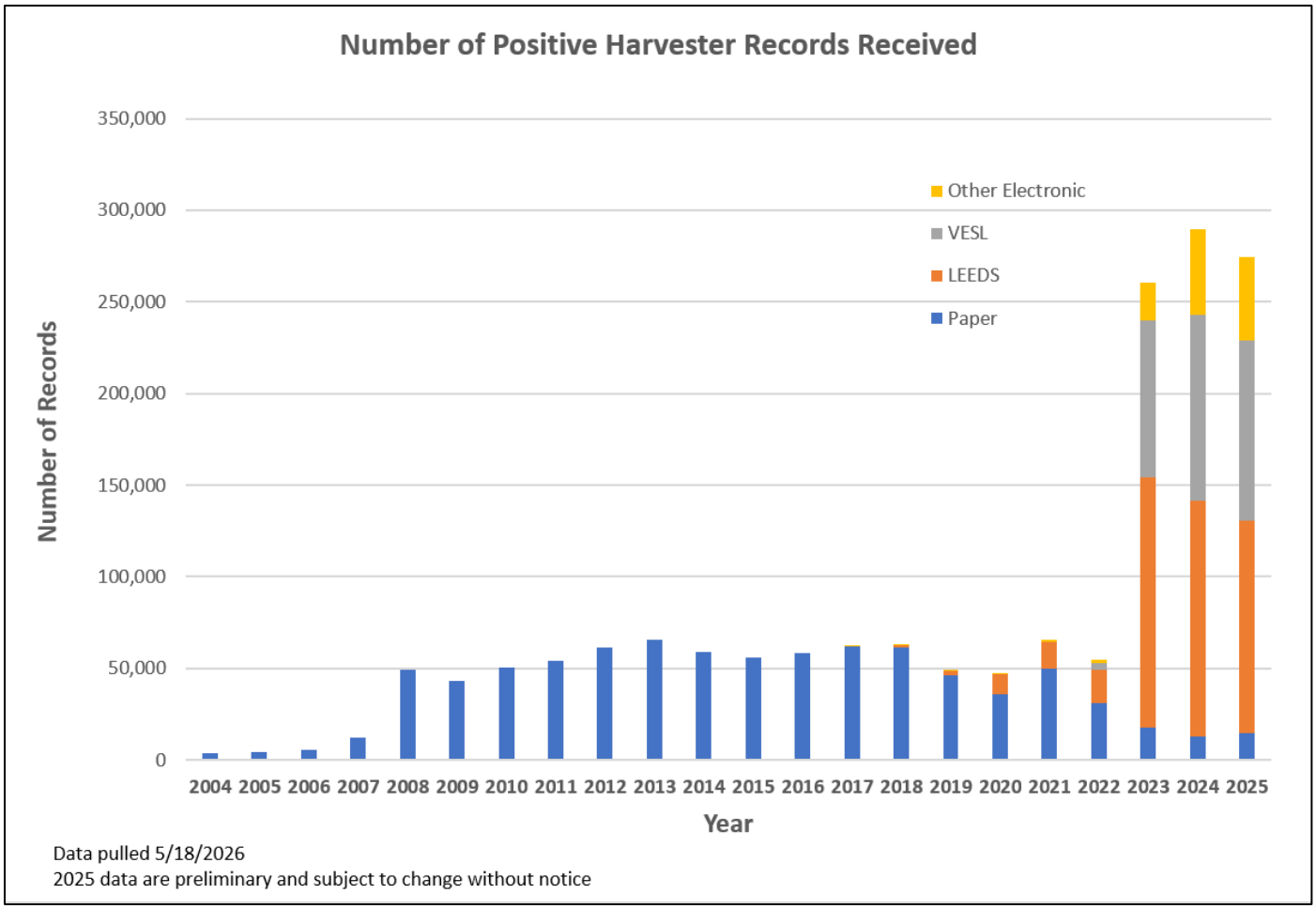


Figure 1: Number of Positive Trip Records Entered by MEDMR Staff and Industry into MARVIN and SAFIS

MEDMR Harvester Reported Data Trends (Data received through 5-18-2026)										
		Electronic Reports								
		LEEDS		VESL		Other Programs				
Year	Paper Reports	# Trips Reported	# Users	# Trips Reported	# Users	# Trips Reported	# Users	**Total Electronic**	**Total Reports**	**% Electronic**
2020	36,014	10,854	604	0	0	235	6	**11,089**	**47,103**	**24%**
2021*	50,210	14,411	775	352	15	931	17	**15,694**	**65,904**	**24%**
2022	30,998	18,459	1,243	3,297	170	1,894	94	**23,650**	**54,648**	**43%**
2023**	17,721	136,379	3,187	85,685	1,428	20,794	269	**242,858**	**260,579**	**93%**
2024	13,080	128,332	3,496	101,512	1,428	47,027	653	**276,871**	**289,951**	**95%**
2025***	14,705	115,877	3,157	98,169	1,428	46,013	547	**260,059**	**274,764**	**95%**
Paper reports are entered directly into MEDMR's MARVIN database by MEDMR staff										
LEEDS is MEDMR's web based online reporting application that feeds directly to our MARVIN database.										
VESL data numbers include state only and GARFO trips										
*2021 was pilot year for roll out of VESL in Maine										
**2023 is the first year of 100% lobster reporting for MEDMR (approx 5,800 harvesters)										
***2025 data are preliminary and subject to change without notice.										
MEDMR currently requires lobster, menhaden, Atlantic herring, Atlantic halibut and scallop to report electroncially.										
Number LEEDS and VESL users could overlap and be counted more than once.										
Other Programs are mostly Fish Online and eTrips										

Table 2: Breakdown of trip reports entered by Maine harvesters between 2020 and 2024 (to date)

MEDMR currently requires (with some potential exemptions based on to be determined criteria) 100% electronic harvester reporting for lobster, herring, halibut, scallop and menhaden. Reliable high-speed internet access is not available in certain parts of the state which prohibits full 100% electronic reporting. The goal is to get as close to that as possible. The addendum allowed until January 1, 2024 to meet this requirement. The MEDMR has taken a strict approach to allowing harvesters under certain circumstances to report on paper. **Scallop, halibut, herring and menhaden are quota monitored species that MEDMR has identified as benefiting from requiring state only harvesters to report electronically. Starting in 2020 all herring and menhaden harvesters were required to report electronically through either Maine LEEDS or some federally accepted reporting application during the active harvest season. This requirement replaced the email system MEDMR relied upon in the past to monitor quota. Requiring daily electronic reporting saved the harvesters from emailing and then filling out complete harvester reports at the end of the week/month. Starting in 2022, the MEDMR required trip level electronic reporting due weekly for scallop and halibut.** The offline mobile application MEDMR had Bluefin Data LLC built through its own funds has allowed harvesters with multiple reporting fisheries the ability to use one program to fulfill all their requirements whether they are state only or federal. **Of the 1.358 million trips for 2025 in the data warehouse, 44% of them were landed in Maine which exceeds any other state (Figure 2 – view in color). This figure includes both dealer and harvester records.** These records were submitted by both "state-only" harvesters (those that only report to MEDMR) as well as federal harvesters (those that report to fulfill both NMFS and MEDMR reporting requirements). **Because all state licensed harvesters are required to report to the MEDMR regardless if they have federal reporting requirements or not, MEDMR works with NMFS to collect data from federally permitted harvesters, so they do not need to double report. MEDMR staff devotes time and resources to help all harvesters that submit data to NMFS and MEDMR.**

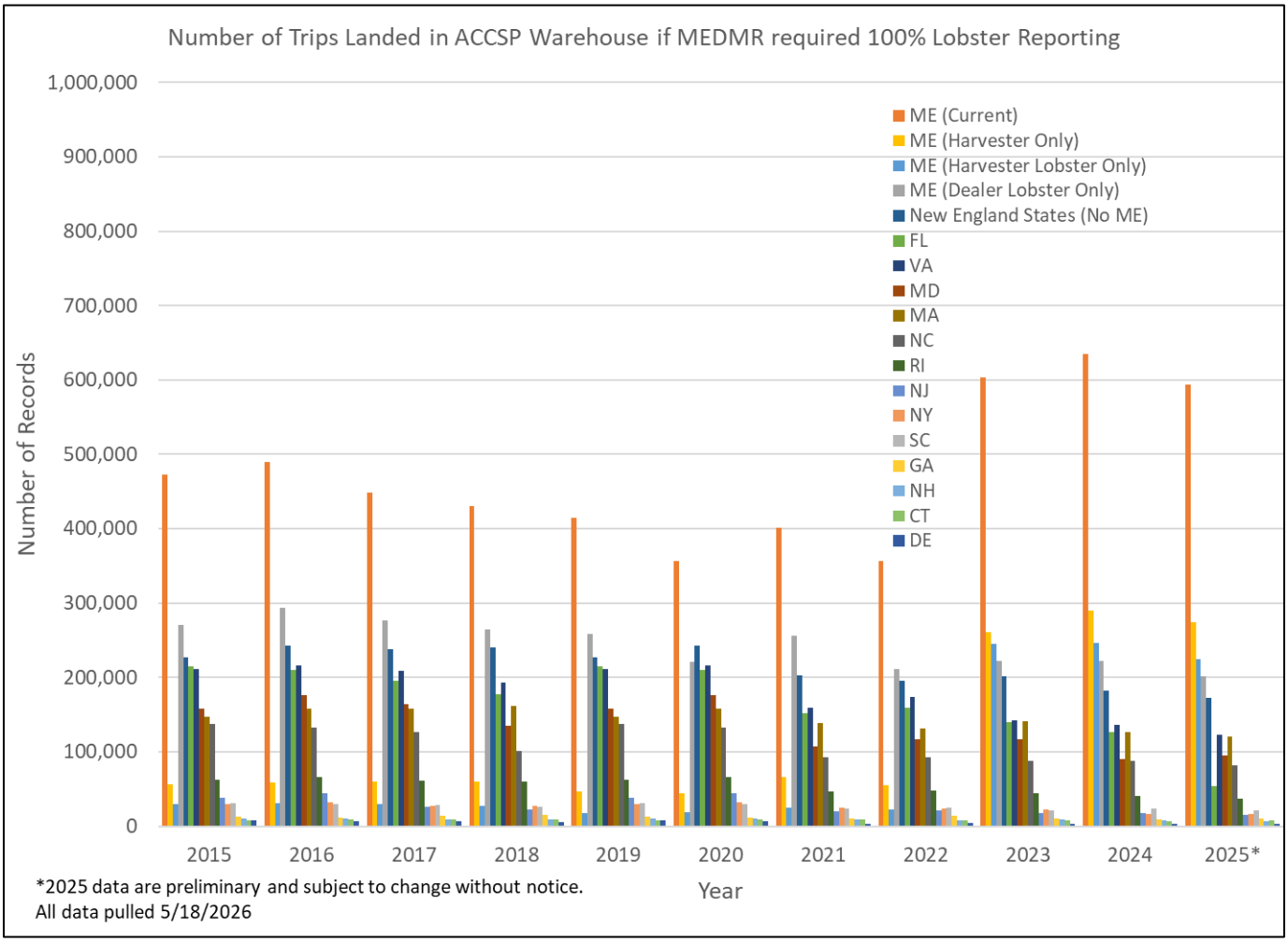


Figure 2: Number of Reported Trip Records by <u>State Landed</u> in ACCSP Data Warehouse

Since the MEDMR has required 100% lobster harvester reporting the volume of phone calls and data requests have increased. Throughout the year, approximately 40% to 60% of all harvesters are out of compliance for at least one month of reporting. In 2025 there were 8,738 harvesters with 8,800 individual licenses from all 14 fisheries that required harvester reporting and MEDMR sent out approximately 6,500 compliance letters (and emails) and fielded thousands of calls a month relating to reporting questions and compliance/license renewal status. Doubling the total number of harvesters required to report (many lobster harvesters are required to report other fisheries) has increased these figures and require more staff and staff time to provide industry with an acceptable level of customer service. In 2024, all 5,017 lobster harvesters were required to report (the penalty for not reporting is the inability to renew their license until they become compliant. If they do not renew their license before the end of the licensing year, then they forfeit their license).

Additional staff are needed to assist with audits and the increase in data that require auditing. The increase in data has significantly increased the time it takes to complete audits. The implementation of 100% lobster harvester reporting allows the MEDMR to audit and compare 100% of our lobster dealer and harvester data. These two datasets alone account for just under 500,000 records annually and will take significant staff resources to complete. MEDMR historically matched up what the 10% harvester reports indicate against what dealers reported for the same individuals. Any discrepancies over 2,000 pounds for the year are flagged and further research is conducted. Even with certain data validations in place, the data submitted through an electronic means will require a large amount of staff time to run the audits and research and correct any flagged records. These

audits have taken up significant staff time the first few years of 100% reporting. The current staff level has been spending audit time assisting with federal lobster harvester reporting since many of the federal lobster harvesters are using our VESL system to report. Other audits that staff perform on the data include spatial audits, trap counts, sea time, set time, gear configuration audits (this includes a spatial component to ensure that gear configuration matches regulatory requirements by area), over trip limits and basic vessel/harvester combinations. MEDMR has started to look at building audits around federal tracker data and compare that spatial data to the single location provided in the harvester report to use for spatial validation. The Landings Program also intends to use the data from the location information to validate other reporting fields (i.e. depth, 10 min square, stat area, number of sets and sea time for instance). While these next level audits are in the works, it will be some time before they replace current audit methods.

The first few years have required significant outreach with industry. **Communicating with industry and fielding electronic reporting questions will be the biggest time burden the landings program will face. Prior to 2023, 57% of all harvester records submitted to MEDMR are key entered by MEDMR staff. This number dropped to 5% in 2025 which created its own challenge of increasing the level of audits required to ensure data accuracy. Electronic reporting has been a cultural shift for the lobster fishery, which has required diligent customer service and an intuitive reporting application. MEDMR staff have spent significant resources (mostly time) holding in person and virtual meetings with industry to assist with the implementation and education of electronic reporting options with industry. Maine has been without a dedicated NOAA Port Agent since early 2025 and has tried to help fill this gap whenever possible.** MEDMR has funded the development of a new harvester reporting application that is user friendly and meets the reporting needs of all MEDMR reporting fisheries, as well as meet NMFS eVTR reporting requirements. MEDMR spent significant time testing ACCSP's eTRIPs V2, which was greatly improved over the previous versions. However, there are still significant concerns about the number of reporting pages it took to complete, the agility of a program that is not fully table driven, and the ease of use for different fisheries. The program MEDMR contracted with Bluefin Data LLC to build works on both Android® and iOS® and meets all GARFO eVTR requirements so those harvesters with state and GARFO permits will be able to utilize this system. The MEDMR has a contract with Bluefin Data LLC that will allow any harvester with a MEDMR license or permit to use the VESL application free of charge. Since VESL was approved by GARFO, those harvesters with a MEDMR license or permit that also has reporting obligations to GARFO, will be able to use VESL to fulfill their GARFO reporting requirements regardless of where they are landing. **All data collected through the new MEDMR funded harvester applications will be submitted directly to ACCSP through the newly developed API (requirements are listed here https://accsp-software.github.io/spec-unified-api-prod/).** The funding source for the new mobile applications are through dedicated technology funding within MEDMR's budget. These funds must be used for advancing technologies and cannot be used for personnel.

The number of trip records that MEDMR staff and industry entered into MARVIN (MEDMR's database that contains all sampling, biological and landings data that MEDMR collects) has increased ~1124% since 2007 (Figure 1 – view in color), which was the last year the MEDMR did not require 10% lobster harvester reporting. The overall number of reports by harvesters during this same period has increased by 2,295%. If not for the electronic reporting requirement this increase would not have been possible. Since the start of electronic reporting in ME, the number of electronic trip reports has increased 23,996% between 2024 and 2018 (278,759 reports in 2024 compared to 1,163 in 2018). When harvesters submit paper reports, they are entered into the MARVIN database. MARVIN is used for reports submitted on paper because it is a faster method of data entry and MEDMR uses this tool to audit the data before sending a copy of it to ACCSP. Routines are configured to convert the MARVIN data to ACCSP codes before they are uploaded to the ACCSP warehouse.

Landings data entered in MARVIN are uploaded to the ACCSP data warehouse. The significant increase in the amount of data entry, outreach/education and auditing are the single greatest challenge facing the landings harvester (including lobster) program staff. MEDMR currently funds seven positions that work at least part-time on harvester reporting. Currently four positions working on the harvester program are funded by ACCSP grants. **In addition to the FY24 ACCSP grant, MEDMR was able to secure additional one-time funding of $600K (funding ended on 6/20/2024) from NOAA through congressional appropriations as part of a large $1.6 million dollar bill to offset costs that might result from new regulations in the lobster fishery to protect right whales (split with MA, NH, ME and RI) and two million for a one-time ARPA funding (this is why the MEDMR did not request funding in FY2023). While this funding is vital, it does not provide MEDMR with enough funds to fully fund multiple years of lobster reporting. MEDMR continues to look for other sources of funding (both internal and external) to fund 100% lobster reporting. MEDMR has modified the current budget from previous years funded proposals to account for the ARPA and other NOAA funds. The positions listed in this grant currently have no other fully funding sources available.** MEDMR is now requesting continued funding for four positions.

This proposal is designed to continue to assist with funding the transition from 10% harvester reporting to 100% harvester reporting where most harvesters will be required to report electronically as required by Addendum XXVI. MEDMR understands that not everyone will be able to report electronically so a paper option must still be available. The positions being funded will be doing very little data entry and will mostly be assisting harvesters with reporting questions, educating harvesters with electronic reporting options and other outreach duties along with other data entry/auditing duties.

Summary of staffing:

MEDMR Landings Program staff involved in harvester reporting who are fully funded by MEDMR:

- Scientist IV: makes decisions on the general Landings Program direction, participates in ACCSP committees, transfers data to ACCSP; reporting technology development and responds to data requests.
- Scientist II: manages the day-to-day operations of the Landings Program, is responsible for database development, responds to data requests and updates the Landings Program web page. This position also audits data, and monitors licenses and compliance.
- Scientist I: provides one-on-one outreach with the harvesters; trains harvesters how to report electronically or on paper; follows up on compliance issues. This position audits data from "state-only" and "NMFS" harvesters. See the *Approach* section below for further details on auditing. This position is also assigned tasks in the dealer-reporting project.
- Office Associate II: corresponds with industry regarding new suspension authority for failure to report on time; identifies and notifies delinquent reporters; follows protocols for suspending licenses; works with the licensing division to ensure licenses are re-issued when reports have been submitted.
- Office Associate I (2 positions): opens and processes mail and enters data into MARVIN.

New MEDMR Landings Program staff to be funded by additional ARPA grant:

- Marine Resource Scientist II (1 position): Oversee the daily operations of harvester reporting program, including but not limited to scheduling of duties, directly supervising four employees, managing harvester data audits, database maintenance and assisting with reporting writing.
- Marine Resource Scientist I (2 positions): Oversee the rollout of the new offline harvester reporting application, outreach with industry and overseeing data audits. These two positions will be one of the primary contacts for industry members that have reporting program questions.
- Office Specialist I Supervisor (1 position): Supervise two Office Associate I positions and two Office Associate II positions located in the West Boothbay Harbor, ME Laboratory. This position will assist

with incomplete reports, handle in-person report drop-off, report rejections, compliance mailings and calls and data audits.

- Office Associate II (1 position): Will have similar duties to the Office Associate II listed below. Will be based out of our Augusta office and will be cross trained to assist our Licensing Department when help is needed.
- Office Associate II: Primary contact for incomplete reports, rejects reports, primary contact for compliance and reporting questions, notifies new harvesters of reporting requirements, assists with audit research.

New MEDMR Landings Program staff to be funded by ACCSP grant:

- Marine Resource Specialist (2 positions): Help run data audits and correct erroneous data, primary data audit researcher for dealer vs harvester audits and will assist the Marine Resource Scientist I's with any industry technical outreach questions.
- Office Associate II (2 positions): Will have similar duties to the Office Associate II listed above. This position will be based out of our West Boothbay Harbor office.

The MEDMR decided against the idea to ramp up the current number of harvesters selected to report to 100% reporting. It was determined the best way forward is to go directly to 100% harvester reporting. For MEDMR to provide excellent customer service from the beginning, the number of positions proposed were what we felt necessary to provide the best level of customer service while being as fiscally responsible as possible. Each position created was a limited period position and each year MEDMR will evaluate these positions to determine if they are still needed. We anticipate that by year 3 to 5 we might be able to reduce the number of positions as harvesters become more versed with the reporting programs.

Finding funding to help defray the costs for this federally mandated requirement is something that the MEDMR has been looking for and will continue to look for. MEDMR will also look for ways to bring the overall costs down through either staff reductions as the program evolves or any and all in-house or outside sources. MEDMR will continue to look at ways to streamline the Landings Program's operation and will continue to try and automate as many processes (compliance and audits for instance) that will cut down on staffing needs. The extra staff included in this proposal will assist with the initial roll out and anticipated help that industry will need and the ability to assist industry within a reasonable amount of time to answer their questions.

It is essential that this harvester reporting program continues to meet funding needs, which are born because of ASMFC's requirement that MEDMR collect trip level harvester reports from 100% of all licensed commercial lobster harvesters. The implementation of new lobster fishery regulations in the Atlantic Large Whale Take Reduction Plan to reduce the threat of entanglement to endangered right whales is expediting the timeframe to increase reporting to 100% faster than Addendum XXVI required**. Requiring 100% lobster reporting will add another tool for monitoring Maine's commercial fisheries, which are large and economically important to the U.S. seafood industry.** According to the NMFS commercial fisheries database (as of 5/29/2024), Maine was ranked as the highest state on the Atlantic Coast in commercial value ($630.7 million of which $464.4 million were lobster) and fourth highest in whole pounds landed (198.4 million of which 93.73 million were lobster) in 2023. **This comprehensive harvester reporting program also addresses ASMFC compliance issues for several fisheries, including American lobster, Atlantic herring, American eel and Atlantic menhaden.**

This grant does not include any funding for the offline mobile harvester reporting application. The MEDMR has fully funded the original programming, programmatic updates and maintenance costs associated with this project. The MEDMR will continue to fund the monthly maintenance fees. MEDMR will continue to try to identify alternative sources of funding for the harvester reporting project, but the

State of Maine is continuing to face budget challenges and there are few options for state funding to cover the total cost.

Results and Benefits:

The data collected so far through MEDMR's harvester reporting program has shown how valuable this information is for Maine's fisheries. **Currently MEDMR requires 14 fisheries to submit trip level harvester reports and prior to 2023, lobster was the only fishery not collecting 100% of harvester trips (Figure 3 shows all non-confidential fisheries trips reported over past 5 years). Maine's commercial lobster fishery is by far the largest lobster fishery on the East Coast in both volume and number of individuals.** There are just over 5,000 licensed harvesters of which MEDMR previously selected between 380 and 800 harvesters each year to report. Even with selecting only a percentage of harvesters in the lobster industry, MEDMR scientists have learned more about the fleet characteristics, gear configurations and fishing patters for full time and part time fishermen involved in this fishery than they have been able to with the current sampling programs. Other fishery managers are now analyzing landings data to learn more about the fishing fleet and the makeup of other fisheries. **Requiring 100% reporting will only increase the MEDMR's knowledge base and increase the amount of data collected. Since most data will be submitted to SAFIS and all data stored in the ACCSP Warehouse, this large dataset will be available to all partners.**

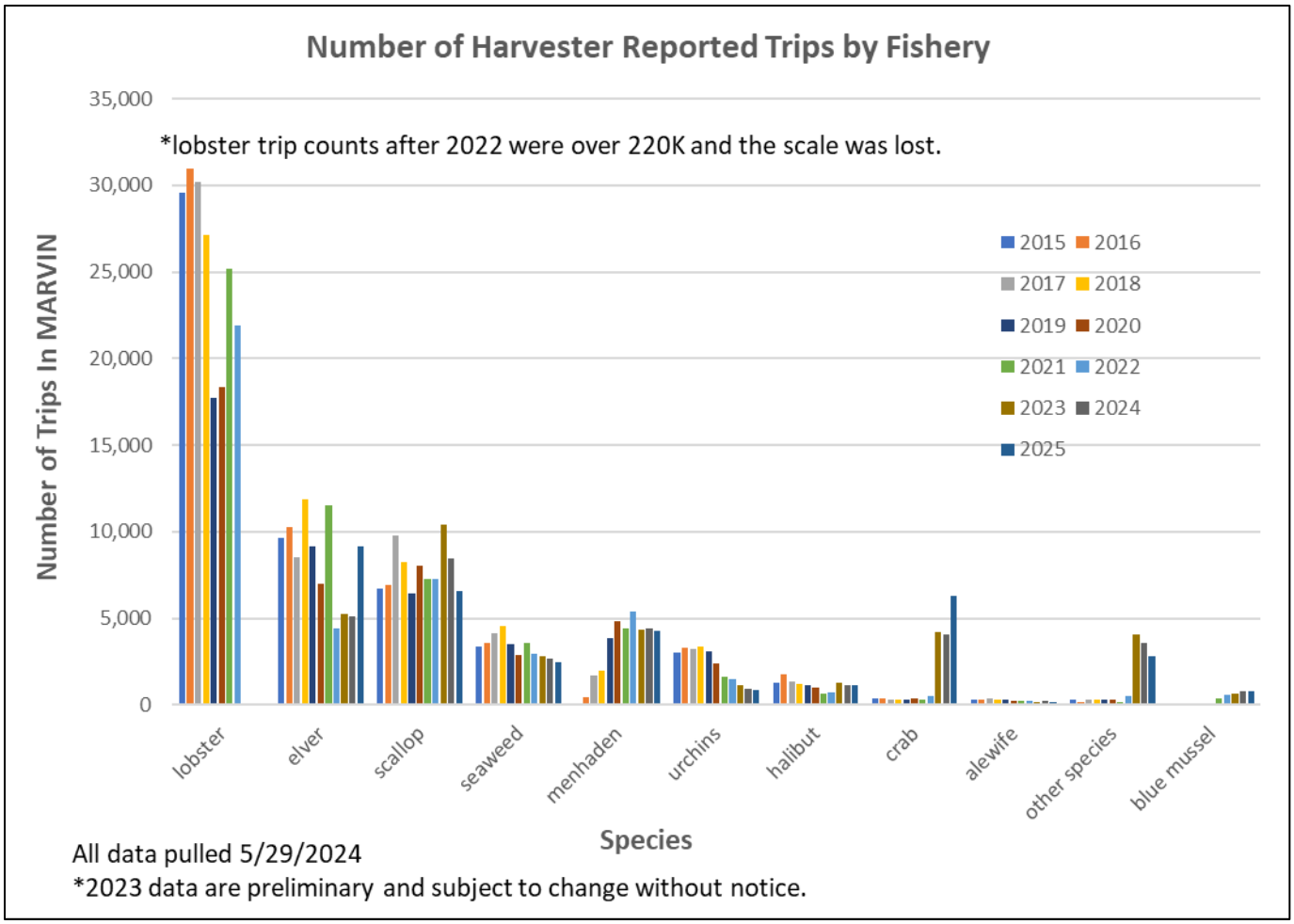


Figure 3: Number of Harvester Reported Trips by Fishery from Harvester Data

This grant will continue to allow MEDMR to meet ASMFC's Addendum XXVI target of 100% harvester reporting in the lobster fishery by January 2023. MEDMR wanted to speed up this deadline for protected

species issues and required 100% trip level reporting in the lobster fishery in January 2023. This grant will allow MEDMR the ability to continue to fund positions needed to ensure the data collected are as accurate as possible through more data auditing, especially linking dealer and harvester reports together though our "dealer vs harvester reporting" audits where we match up each harvester report to the dealer report and their total landings are scrutinized. MEDMR staff's ability to audit the spatial data while overlapping effort data has also provided fisheries managers with a level of certainty that was previously unattainable. Addendum XXVI does not necessarily require 100% electronic reporting; however, MEDMR has required nearly 100% lobster harvester electronic reporting and know that harvesters in other fisheries were looking to move from paper reporting to electronic reporting. MEDMR anticipates that harvesters that report on paper will be offset by those that have reported on paper but will be required to switch to an electronic reporting option and the data entry staff currently employed will be sufficient. Staff are fielding more calls each day asking about electronic reporting and are promoting our Maine LEEDS and VESL online reporting, but most want a mobile friendly reporting option. **MEDMR is already uploading data reported to MARVIN to ACCSP every six months and intends to start uploading every other month, which benefits all partners.**

Metadata for the harvester program will be updated as needed according to the Federal Geographic Data Committee (FGDC) and the Content Standard for Digital Geospatial Metadata (CSDGM) standards where appropriate. The resulting metadata will be reported to ACCSP as text and XML.

This project will help MEDMR meet the data collection standards of ACCSP. All partners will benefit, as all data will be uploaded to ACCSP and many of the species landed in Maine have a broad geographic range which includes many other agencies in their management. Partners will benefit from the technologies built and lessons learned from the offline harvester reporting application MEDMR intends to have in production by early summer as this will be available to any partner.

Data Delivery Plan:

MEDMR will continue to upload harvester data from MARVIN to the ACCSP data warehouse at least twice a year utilizing their ODBC connection and ACCSP Warehouse staging tables. Currently data submitted and entered into MARVIN through March, 2026 have been submitted to the data warehouse. In each data feed, the following fields are uploaded to the warehouse according to ACCSP protocols: cf_license_nbr, iss_agency, trip_type, supplier_trip_id, port, state, coast_guard_nbr, state_reg_nbr, trip_start_date, trip_start_time, trip_end_date, trip_end_time, num_crew, num_anglers, vtr_number, vessel_permit, sub_trip_type, reporting_source, fuel_used, fuel_price, charter_fee, distance, in_state, area_code, sub_area_code, local_area_code, latitude, longitude, gear, lma, gear_quantity, gear_sets, fishing_hours, hours_days, total_gear, gear_size, mesh_ring_length, mesh_ring_width, stretch_size, target_species, avg_depth, species_itis, disposition, market_code, grade_code, unit_of_measure, sale_disposition_flag, dealer_license_nbr, date_sold, reported_quantity, price, dea_iss_agency, catch_source, catch_latitude, catch_longitude, supplier_catch_id. MEDMR enters data daily and audits data weekly, so the data uploaded to the warehouse is a mix of pre- and post-audited records. MEDMR does not keep track of what percentage of the uploaded records are "reloads" due to errors but simply reloads all the data in MARVIN to the warehouse once every three months. **In addition, the data supplied by the MEDMR offline mobile application will be sent directly to SAFIS daily.**

The MEDMR does not upload data from MARVIN to SAFIS because MEDMR staff continually audit data each week, so the data that are uploaded to the warehouse are a mix of pre- and post-audited records. The reloading of data from MARVIN to the Warehouse is an automated process that the MEDMR loads into a temporary table provided by the Warehouse. If we were to perform the same upload method to SAFIS we would need the ability to mass delete records from SAFIS (which we do not have the ability to do at this time) before records are reloaded to avoid creating duplicate records.

Metadata will be created with ESRI ArcCatalog 10 to conform to the FGDC (Federal Geographic Data Committee) standards and specifications. As specified by the federal standard, MEDMR metadata will include the following main sections with detailed information on identification information, data quality information, spatial data organization information, spatial reference information, entity and attribute information, distribution information, metadata reference information, citation information, time period information and contact information. Created metadata will be available in text and XML formats.

Approach:

1. Enforce compliance

MEDMR staff will enforce compliance of the trip level reporting regulation through these methods:

- **Provide initial outreach and technical support needed for harvesters to report trip level landings to MEDMR. Meet with harvesters in a group setting and one on one as needed to explain reporting procedures, install application, troubleshoot issues with reporting, and explain consequences for failing to report.**
- **Review paper reports submitted for completeness and verify the submissions in Maine LEEDS. If reports are incomplete, MEDMR will contact industry to correct reporting mistakes. If a harvester cannot be contacted by phone, the report will be returned for correction. Reports submitted electronically are deemed complete upon submission. If during the data audit process reports are unable to be reconciled, MEDMR staff will reject the electronic report back to the harvester for correction and re-submission.**
- **Send delinquent harvesters not included in the suspension process emails indicating what they are missing and send automated notifications within the Maine LEEDS program when a report is received or not.**
- **Complete suspension notices monthly to those harvesters involved in the halibut, herring, menhaden and elver fisheries that are delinquent enough to meet the minimum notification criteria as outlined in the suspension law (Attachment 3).**
- **Complete follow-up suspension notices monthly to those harvesters that are delinquent enough to meet the minimum notification criteria as outlined in the suspension law (Attachment 4).**
- **MEDMR will suspend harvester licenses for those who fail to report in a timely manner. See Attachment 4 for the law, which dictates suspension procedures MEDMR will follow.**

2. Data entry

Paper reports and electronic reports entered through the Maine LEEDS system will go directly into MARVIN and then be uploaded to the ACCSP Warehouse at least every 6 months once it has been thoroughly audited.

The harvester reporting application MEDMR contracted to have built by Bluefin Data LLC includes point of entry validations for harvester, vessel, gear, gear to various other variables (i.e. fisheries, gear quantities), gear quantities, locations, pounds, dispositions for example. The data entered through these new applications will utilize ACCSP's API and all data will be submitted directly into SAFIS.

3. Encourage electronic reporting

MEDMR staff will require lobster, menhaden, scallop, halibut and herring harvesters to report electronically and encourage harvesters who report on paper for other fisheries to report using one of the two electronic reporting methods MEDMR will offer (Maine LEEDS or our own Offline Electronic

Reporting Application). MEDMR staff will train all harvesters who are required to report electronically regardless if they have reporting obligations to NOAA or not.

MEDMR believes that electronic reporting will benefit industry as much as it benefits MEDMR. If harvesters enter their own data through the proposed MEDMR application, they will have the ability to run basic analytics within the application to view their own trends and harvest information. MEDMR will benefit by reducing the amount of staff time spent entering data. If MEDMR could not offer an electronic reporting option, the number of data entry staff required to handle approximately 280,000 records per year would be at least 7 or 8 individuals in addition to what is currently proposed. Electronic reporting will not only save MEDMR staff data entry time, but we will also automate many of our daily reporting processes, including data validation at the point of harvester entry and automate compliance and spend more time on data audits and outreach with industry.

4. Continue outreach with industry to promote buy-in.

MEDMR staff will continue to work with harvesters to explain the purpose and benefits of harvester reporting. MEDMR staff spent two days at the annual Fishermen's Forum in March 2025 and were available to assist harvesters with setting up and demonstrating the two reporting options MEDMR are currently offering (VESL and Maine LEEDS). These two days were very successful with staff directly assisting over 30 individuals and providing information to others that were not quite ready to start fishing and just wanted to see what was available. MEDMR in 2023 held six meetings along the coast of Maine to assist harvesters with setting up their reporting software or answer questions. All six sessions were very successful and heavily attended. MEDMR staff are available by phone or video calls Monday – Friday from 8 to 4:30 but many harvesters need the extra help of someone in person to guide them through the initial set up and first few reports. Many of these individuals have little to no experience with smartphones, tablets or computers so the learning curve can be steep. MEDMR staff have also added resources on our Landings Program homepage (https://www.maine.gov/dmr/fisheries/commercial/landings-program) to assist harvesters with reporting questions. Currently we have "how-to" guides for each fishery available and will have videos to help assist harvesters. Before the 100% reporting became a requirement staff (along with staff from GARFO and Bluefin Data LLC) attended the annual Maine Fishermen's Forum in March 2020 to facilitate an electronic reporting discussion. This discussion allowed MEDMR, GARFO and Bluefin Data LLC an opportunity to show harvesters the current and future electronic reporting options that are/will be available. The session was lightly attended but helped formulate ideas of how to improve this important part of outreach. In addition to the in-person trainings we have offered we will also utilize videos and remote outreach; however, there are times when it is most productive to hold a few large in-person meetings to assist those that are not as tech savvy as others and are more comfortable having an in-person meeting. Having to on board almost 5,400 new harvesters required every tool we had in our toolbox. There are also areas in Maine where internet speeds and or connectivity are lacking so remote meetings are difficult (this is why we developed a reporting application that will work "offline"). We intend to rely heavily on remote meetings and self-help video and reporting how-to's to assist those individuals that are comfortable with that format but will continue to hold in-person meetings for those that need extra assistance. In addition to the above issues was the delay in NOAA requiring 100% lobster reporting until April 1, 2024. There are approximately 1,250 federally permitted lobster harvesters in Maine that also have a MEDMR commercial lobster license. The majority of these 1,250 harvesters had no previous federal reporting experience and were not familiar with NOAA's different forms and terminology. MEDMR staff have been working closely with NOAA GARFO staff to help educate these harvesters and explain the differences from what harvesters were reporting as "state only" now that they are required to report to NOAA.

Staff will work with established industry organizations, such as the MEDMR advisory councils, lobster zone councils, and dealer and harvester associations to reiterate the program goals and show results of mandatory

reporting. Staff will also focus on explaining the statutory authority for suspending licenses for those who fail to report on time, and how this will help gather more accurate data.

5. Audit of harvester data submitted.

Staff will audit data submitted bi-weekly. Paper data will be audited twice per month; electronic audits sent via email from SAFIS will be corrected weekly. SAFIS audits for "state-only" harvesters will be corrected through the VESL app by either industry or MEDMR staff. **Audits concerning federal harvesters will be vetted through the NMFS Northeast Region. MEDMR staff will audit electronic data submitted by federal harvesters because these harvesters submit data to fulfill MEDMR reporting requirements. MEDMR performs basic audits of records to catch potential oversights from NMFS audits.** MEDMR also compares dealer-reported landings with harvester-reported landings and identifies both parties if there are any discrepancies. In these audits, MEDMR contacts dealers and harvesters when discrepancies are discovered and works to correct records or recover missing data.

MEDMR does intend to audit 100% of all individual records that are submitted. **Many of these audits will be simple gross audits (over the trip, gear quantity, spatial audits, etc.); however, the data submitted through the new mobile application have some validations built-in for pre-submission checks. Harvesters will not be able to enter certain gear/species combinations, certain dispositions for certain species and gear quantity checks for instance. The app also utilizes validations built into ACCSP's API (species/market/grade combos for instance). Many of these audits will be canned within the audit database and will be added to a routine check. Staff have been working on incorporating spatial audits into our routine. They have added gear configuration by area reported to these audits to catch any harvesters that might be reporting their gear configuration incorrectly based on the area they reported their activity. The dealer/harvester audits are performed annually and start by looking at yearly totals with a 2,000-pound discrepancy.** Dealer/harvester audits are not performed on a trip-by-trip basis. **MEDMR is also exploring the utilization of the tracker data collected on federal lobster boats to cross reference the spatial data reported on the trip report. It's the intent of the Landings Program to expand the use of the tracker data to better validate and audit other trip and effort fields collected on the trip reports (i.e. 10 min square, depth, lat/long, # of sets, sea time, date of report, etch). These audits are in the early phase of brainstorming but it's a goal we hope to have implemented at some level by the end of 2025.**

Geographic Location: Operations will be based out of Boothbay Harbor, Maine and the project will take place throughout Maine.

Milestone Schedule:

	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Enforce harvester compliance	X	X	X	X	X	X	X	X	X	X	X	X
2. Data enter harvester reports	X	X	X	X	X	X	X	X	X	X	X	X
3. Encourage electronic harvester reporting	X	X	X	X	X	X	X	X	X	X	X	X
4. Industry outreach to promote industry buy-in	X	X	X	X	X	X	X	X	X	X	X	X
5. Audit harvester data	X	X	X	X	X	X	X	X	X	X	X	X
6. Upload harvester data to ACCSP		X		X		X		X		X		X
7. Report metadata to ACCSP												X
8. Semi-annual reports						X						X
9. Annual reports												X

Project Accomplishments Measurement:

Table 3: Project Accomplishments

Goal	Measurement	2019	2020	2021	2022	2023	2024	2025	2026
Enforce Harvester Compliance	Number of compliance letters to harvesters	3,226	2,555	1,903	3,283	6,374	6,782	6,589	3,435
Enforce Harvester Compliance	Number of harvesters suspended for failing to report timely	447	421	560	628	257	0	0	0
Harvester Data Entry	Number of trip records by year landed in data warehouse	46,386	47,103	65,904	54,648	260,579	289,951	274,764	66,770
Harvester Data Entry	Number of positive trip records by year landed in MARVIN	46,172	44,316	55,618	49,457	154,100	141,412	130,582	25,867
Harvester Data Entry	Number of paper trip records entered in MARVIN	43,388	36,014	50,210	30,998	17,721	13,080	14,705	4,573
Harvester Data Entry	Number of electronic trip reports entered into Maine LEEDS	2,784	10,854	14,441	18,459	136,379	128,332	115,877	21,294
Harvester Data Entry	Number harvesters entering directly into Maine LEEDS	240	604	775	1,243	3,187	3,496	3,157	1,472
Harvester Data Entry	Number of electronic trip reports entered into VESL	-	-	352	3,297	85,535	101,512	98,169	29,529
Encourage Electronic Reporting	Number harvesters entering directly into VESL	-	-	15	170	1,428	1,516	1,432	1,089
Harvester Data Entry	Number of positive trip records by year landed in SAFIS	-	234	1,283	5,191	106,479	148,539	144,182	40,903
Encourage Electronic Reporting	Number of harvesters submitting positive reports in SAFIS	-	-	32	264	1,716	2,188	2,014	1,484
Transmit Harvester Data to Data Warehouse	Frequency of data submitted by year landed	1 time every 6 months	1 time every 6 months	1 time every 6 months	1 time every 6 months	1 time every 6 months	1 time every 6 months	1 time every 6 months	1 time every 6 months
Outreach	Number of custom data requests	479	946	733	1,044	292	321	461	237
Outreach	Number of custom data requests from portal	-	362	667	648	559	703	730	564

*2025 and 2026 data are incomplete at time of report creation.

Cost Summary: FY27 Managing 100% Lobster Harvester Reporting in Maine					
5/1/2026 - 4/30/2027					
Personnel[A]				**Description**	**Cost**
	072002692	Vacant	Marine Resource Specialist	full time position for 3 months	$13,021.81
	072002693	Z. May	Marine Resource Specialist		$12,042.23
	072002705	K Hamblen	Office Associate II		$10,053.79
	072002706	Vacant	Office Associate II		$10,455.54
				Subtotal	**$45,573.37**
Fringe Benefits[A]					
	072002692	Vacant	Marine Resource Specialist II	Includes health, dental, workers comp, FICA, life insurance and retirement	$10,244.22
	072002693	Z. May	Marine Resource Specialist II		$7,243.03
	072002705	K Hamblen	Office Associate II		$6,596.60
	072002706	Vacant	Office Associate II		$9,362.31
				Subtotal	**$33,446.17**
				Total Personnel	**$79,019.54**
Travel					
	1 vehicle[B]			1 car * $377.34/mo * 12 mo	$4,528.08
	Mileage fee			1 car * 1,150 mi per mo * $.1533/mi * 12 mo	$2,115.54
	2 Overnight stays[C]			2* $150/night	$300.00
	Per diem (includes extended days)			(2 overnights @ $65/day & 5 extended days @ $24/day	$250.00
				Total Travel	**$7,193.62**
Supplies					
	Year labels			1,000 labels (500/box * 2 boxes * $15.00/box)	$30.00
	Folder labels			1,000 labels (500/box * 12 boxes * $24.50/box)	$49.00
Other					
	Telecommunication charges[D]			5 phones * $50/mo * 12 mo	$3,000.00
				Total Supplies	**$3,079.00**
				Subtotal	**$10,272.62**
	Total Direct Costs				**$89,292.16**
	Indirect Costs (25.31%)				**$22,599.85**
	Total Award to DMR				**$111,892.00**

A: Cost includes salary and benefits, which are dictated by contract with State of Maine and are non-negotiable.
B: All state agencies must rent vehicles through state's Central Fleet Agency which is non-negotiable. Vehicle costs include the following services and costs: maintenance, repairs, insurance, and gasoline.
C: DMR staff meet with and train harvesters how to electronically report to DMR and/or NMFS.
D: One cell phone for each of the Scientist II, Scientist I (2) and Specialist II (2) working on the project.

Partner Contribution For ACCSP Purposes			
E. Summers	072000621	Public Service Executive II	$14,229
R. Watts	072002431	Scientist IV (25% time)	$41,249
L. White, Jr	072002453	Scientist II (25% time)	$37,493
P. Williamson	072002398	Scientist I (25% time)	$24,622
D. Young	072002647	Office Associate II (25% time)	$21,461
			$139,054

Budget Narrative for FY2027 proposal:

Personnel and Fringe Benefits: The positions in this proposal (2 Marine Resource Specialists and 2 Office Associate II). These positions are funded part-time (~25%) by this award and are Department of Marine Resources' employees. Salary and benefits for this employee are dictated by the contract with the State of Maine and are non-negotiable. Benefits include retirement benefits, FICA, health insurance, dental insurance, workers compensation and life insurance. The benefits are determined by a formula the state uses which is variable dependent upon the position classification, the pay grade of the employee (e.g. the number of years the person has been employed by the State of Maine) and the type of coverage the employee selects.

Travel: The Scientists and Specialists are the employees who will be travelling. The travel is for holding electronic harvester reporting workshops, visiting harvesters to install reporting software, training harvester staff how to electronically report or troubleshooting reporting problems. Staff provide harvesters with one-on-one training first via phone but then in person if individuals need further assistance with the reporting system and help troubleshoot electronic reporting problems. Travel occurs throughout the coast of Maine, although trips to the interior are unusual unless the harvester can only meet inland. These harvesters must be trained in the use of electronic reporting and in some cases a group informational setting will not be enough for some to learn how to report their landings information.

The monthly fee for the vehicle is dictated by contract with the State of Maine Central Fleet Agency; the fee is based on the type of vehicle leased, and the mileage fee is based on how many miles the car was driven the previous year. Because of this, the vehicle fees between projects may differ. This project has one Nissan Rogue SUV which is a state-owned vehicle that MEDMR leases from the State of Maine Central Fleet Agency.

Occasionally extended day travel is necessary. If multiple harvester appointments to these remote areas are made for the same day, extended days may be necessary. The rates were calculated through the GSA website for posted rates.

Supplies: Filing supplies are needed each year but as more harvesters eventually shift to electronic reporting the need for filing supplies will decrease. The filing supplies include labels (year and name) and protective coatings for these labels. These are the same folders used for all MEDMR's harvester reports and are purchased from Allied Systems Products AAK Filing system.

Other: Cell phones for the Specialists and the Scientists are necessary for communication and safety when travelling to harvester meeting locations. Staff often need to call NMFS or the programmer when installing software or troubleshooting reporting issues in the field.

Indirect costs: The Department of Marine Resources has an indirect cost rate of 26.52%. These indirect funds are a necessity to help defray and offset the administrative costs associated with the ASMFC's directive to increase MEDMR's lobster reporting from its current rate to 100%. These indirect monies are utilized to help cover the administrative costs not covered directly by this grant proposal and help offset any burden MEDMR assumes by fulfilling their ASMFC reporting requirements.

Cost Summary: FY26 Managing 100% Lobster Harvester Reporting in Maine					
5/1/2026 - 4/30/2027					
Personnel[A]				**Description**	**Cost**
	072002692	Z. May	Marine Resource Specialist	full time position for 6 months	$27,024.18
	072002693	S. Gamber	Marine Resource Specialist		$24,759.78
	072002705	K Hamblen	Office Associate II		$22,392.61
	072002706	L. Schinhofen	Office Associate II		$25,656.76
				Subtotal	**$99,833.32**
Fringe Benefits[A]					
	072002692	Z. May	Marine Resource Specialist II	Includes health, dental, workers comp, FICA, life insurance and retirement	$16,177.09
	072002693	S. Gamber	Marine Resource Specialist II		$17,685.20
	072002705	K Hamblen	Office Associate II		$16,085.30
	072002706	L. Schinhofen	Office Associate II		$16,823.64
				Subtotal	**$66,771.23**
				Total Personnel	**$166,604.55**
Travel					
	1 vehicle[B]			1 car * $377.34/mo * 12 mo	$4,528.08
	Mileage fee			1 car * 1,150 mi per mo * $.1533/mi * 12 mo	$2,115.54
	2 Overnight stays[C]			2* $150/night	$300.00
	Per diem (includes extended days)			(2 overnights @ $65/day & 5 extended days @ $24/day	$250.00
				Total Travel	**$7,193.62**
Supplies					
	Year labels			1,000 labels (500/box * 2 boxes * $15.00/box)	$30.00
	Folder labels			1,000 labels (500/box * 12 boxes * $24.50/box)	$49.00
Other					
	Telecommunication charges[D]			5 phones * $50/mo * 12 mo	$3,000.00
				Total Supplies	**$3,079.00**
				Subtotal	**$10,272.62**
	Total Direct Costs				**$176,877.17**
	Indirect Costs (26.52%)				**$46,907.83**
	Total Award to DMR				**$223,785.00**

A: Cost includes salary and benefits, which are dictated by contract with State of Maine and are non-negotiable.
B: All state agencies must rent vehicles through state's Central Fleet Agency which is non-negotiable. Vehicle costs include the following services and costs: maintenance, repairs, insurance, and gasoline.
C: DMR staff meet with and train harvesters how to electronically report to DMR and/or NMFS.
D: One cell phone for each of the Scientist II, Scientist I (2) and Specialist II (2) working on the project.

Partner Contribution For ACCSP Purposes			
J. Waller	072001271	Scientist IV (7% time)	$11,900
R. Watts	072002431	Scientist III (25% time)	$39,000
L. White, Jr	072002453	Scientist II (25% time)	$38,500
E. Layland	072002398	Scientist I (25% time)	$28,684
D. Chase	072002540	Office Associate I (85% time)	$44,715
D. Whelan	072002657	Office Associate I (50% time)	$39,395
D. Young	072002647	Office Associate II (25% time)	$21,741
			$223,935

Budget Narrative for FY2026 proposal:

Personnel and Fringe Benefits: The positions in this proposal (2 Marine Resource Specialists and 2 Office Associate II). These positions are funded part-time (50%) by this award and are Department of Marine Resources' employees. Salary and benefits for this employee are dictated by the contract with the State of Maine and are non-negotiable. Benefits include retirement benefits, FICA, health insurance, dental insurance, workers compensation and life insurance. The benefits are determined by a formula the state uses which is variable dependent upon the position classification, the pay grade of the employee (e.g. the number of years the person has been employed by the State of Maine) and the type of coverage the employee selects.

Travel: The Scientists and Specialists are the employees who will be travelling. The travel is for holding electronic harvester reporting workshops, visiting harvesters to install reporting software, training harvester staff how to electronically report or troubleshooting reporting problems. Staff provide harvesters with one-on-one training first via phone but then in person if individuals need further assistance with the reporting system and help troubleshoot electronic reporting problems. Travel occurs throughout the coast of Maine, although trips to the interior are unusual unless the harvester can only meet inland. These harvesters must be trained in the use of electronic reporting and in some cases a group informational setting will not be enough for some to learn how to report their landings information.

The monthly fee for the vehicle is dictated by contract with the State of Maine Central Fleet Agency; the fee is based on the type of vehicle leased, and the mileage fee is based on how many miles the car was driven the previous year. Because of this, the vehicle fees between projects may differ. This project has one Nissan Rogue SUV which is a state-owned vehicle that MEDMR leases from the State of Maine Central Fleet Agency.

Occasionally extended day travel is necessary. If multiple harvester appointments to these remote areas are made for the same day, extended days may be necessary. The rates were calculated through the GSA website for posted rates.

Supplies: Filing supplies are needed each year but as more harvesters eventually shift to electronic reporting the need for filing supplies will decrease. The filing supplies include labels (year and name) and protective coatings for these labels. These are the same folders used for all MEDMR's harvester reports and are purchased from Allied Systems Products AAK Filing system.

Other: Cell phones for the Specialists and the Scientists are necessary for communication and safety when travelling to harvester meeting locations. Staff often need to call NMFS or the programmer when installing software or troubleshooting reporting issues in the field.

Indirect costs: The Department of Marine Resources has an indirect cost rate of 26.52%. These indirect funds are a necessity to help defray and offset the administrative costs associated with the ASMFC's directive to increase MEDMR's lobster reporting from its current rate to 100%. These indirect monies are utilized to help cover the administrative costs not covered directly by this grant proposal and help offset any burden MEDMR assumes by fulfilling their ASMFC reporting requirements.

Attachment 1. Project History

Fund Year	Title	Cost	Extension through	Actual dates funding covered	Results
2020	FY20- Managing 100% Lobster Harvester Reporting in Maine	$336,120	Apr-22	May 2020 – Apr 2021	Start preparting for MEDMR to move from mandatory 10% lobster harvester reporting to 100% lobster. Work on enhancement to Maine LEEDS program and continue work on app development.
2021	FY21- Managing 100% Lobster Harvester Reporting in Maine	$335,918.13 (withdrawn)		May 2021 – Apr 2022	Continue preperations for MEDMR to move from mandatory 10% lobster harvester reporting to 100% lobster. Finalize enhancement to Maine LEEDS program, outreach with industry and rolling out MEDMR's offline harvester application built by Bluefin Data LLC.
2022	FY22- Managing 100% Lobster Harvester Reporting in Maine	$335,662		May 2022 – Apr 2023	Final preperations before 100% reporting requirement is implemented in January 2023. Continue with outreach, audits and implementing reporting requirements.
2023	FY23- Managing 100% Lobster Harvester Reporting in Maine	No Proposal Submitted		May 2023 – Apr 2024	100% reporting requirement implemented in January 2023. Continue with outreach, audits and implementing reporting requirements. Utilized funds from FY20 and FY22 before asking for more funds.
2024	FY24- Managing 100% Lobster Harvester Reporting in Maine	$335,591	Funds were never dispersed and unable to be rolled over by NOAA	May 2024 – Apr 2025	Continue with 100% reporting requirement. Assist with GARFO harvesters once NOAA implements 100% lobster reporting in April 2024. Continue with outreach, audits and implementing reporting requirements.
2025	FY25- Managing 100% Lobster Harvester Reporting in Maine	$335,591		May 2025 – Apr 2026	Continue with 100% reporting requirement. Continue with outreach, audits and implementing reporting requirements.
2026	FY26- Managing 100% Lobster Harvester Reporting in Maine	$223,785		May 2026 – Apr 2027	Continue with 100% reporting requirement. Continue with outreach, audits and implementing reporting requirements.
2027	FY27- Managing 100% Lobster Harvester Reporting in Maine	$111,892		May 2027 – Apr 2028	Continue with 100% reporting requirement. Continue with outreach, audits and implementing reporting requirements.

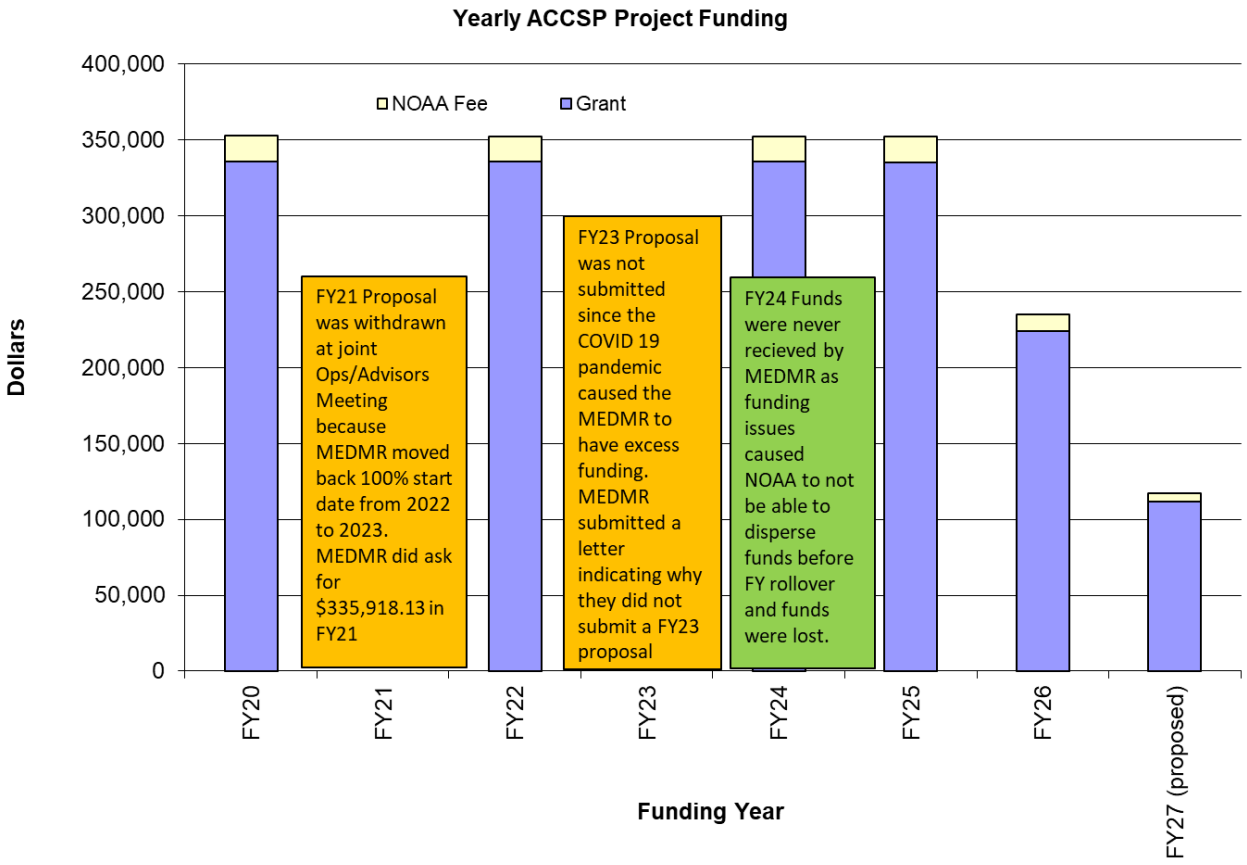


Figure 4. Project Funding History

Attachment 2: Negotiated Indirect Cost Agreement and Letter of Acknowledgement

U.S. Department of Commerce
Office of Acquisition Management – Grants Management Division
1401 Constitution Ave., NW, HCHB Rm 6412
Washington, DC 20230, Attn: Indirect Cost Program

CERTIFICATE OF INDIRECT COSTS

This is to certify that I have reviewed the indirect cost rate proposal prepared and maintained herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal dated 6/9/2026 to establish indirect cost billing rates for July 1, 2026 through June 30, 2027 are allowable in accordance with the requirements of the federal awards to which they apply and 2 CFR Part 200 , "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards". This proposal does not include any costs which are unallowable as identified in the applicable federal cost principles. For example, advertising contributions and donations, bad debts, entertainment costs or fines and penalties.

(2) All costs included in this proposal are properly allocable to federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the Federal Government will be notified of any accounting changes that could affect the rate.

(3) The indirect cost rate calculated within the proposal is **25.31%** which was calculated using an indirect cost rate base type of Modified Total Direct Costs. The calculations were based on actual costs from fiscal year July 1, 2024 thru June 30, 2025 to obtain a federal indirect cost billing rate for fiscal year beginning July 1, 2026.

Subject to the provisions of the Program Fraud Civil Remedies Act of 1986, (31 USC 3801 et seq.), the False Claims Act (18 USC 287 and 31 USC 3729); and the False Statement Act (18 USC 1001), I declare to the best of my knowledge that the foregoing is true and correct.

Organization Name: State of Maine, Department of Marine Resources

CFO Signature: _____ Date: Aug 4, 2026

Name/Title Authorized Official: Gilbert M. Bilodeau, Director, Natural Res Ser Ctr

Dept Head Signature: _____ Date: 7/29/26

Name/Title Authorized Official: Carl Wilson, Commissioner

Attachment 3: Authority to Suspension Licenses for Delinquent Reporters

An Act to Improve the Quality of the Data Used in the Management of Maine's Fisheries

Be it enacted by the People of the State of Maine as follows:

Sec. 1. 12 MRSA §6301, sub-§6 is enacted to read:

6. Ownership identified. If a license issued under chapter 625 is issued to a firm, corporation or partnership, the individual who owns the highest percentage of that firm, corporation or partnership must be identified on the license application. When 2 or more individuals own in equal proportion the highest percentages of a firm, corporation or partnership, each of those owners must be identified.

Sec. 2. 12 MRSA §6412 is enacted to read:

§ 6412. Suspension of license or certificate for failure to comply with reporting requirements

1. Authority to suspend. The commissioner, in accordance with this section, may suspend a license or certificate issued under this Part if the holder of the license or certificate fails to comply with reporting requirements established by rule pursuant to section 6173. A license or certificate suspended under this section remains suspended until the suspension is rescinded by the commissioner. The commissioner shall rescind a suspension when:

A. The commissioner determines and provides notice to the holder of the suspended license or certificate that the holder has come into compliance with the reporting requirements established by rule pursuant to section 6173; and

B. The holder pays to the department a $25 administrative fee.

When a suspension is rescinded, the license or certificate is reinstated. Until the suspension is rescinded, the holder of the suspended license or certificate is not eligible to hold, apply for or obtain that license or certificate.

2. Process for suspension for failing to comply with weekly reporting. If the commissioner determines that a person who holds a license or certificate under this Part has failed to comply with a weekly reporting requirement established by rule pursuant to section 6173, the commissioner shall notify the person at the telephone number provided on the application for the license or certificate and by e-mail if an e-mail address is provided on the application. If the license or certificate holder has not complied with the reporting requirements within 2 days after the commissioner has provided the notice, the commissioner shall mail a notice of suspension to the license or certificate holder by certified mail or the notice must be served in hand. The notice must:

A. Describe the information that the license or certificate holder is required to provide pursuant to this Part that the department has not received; and

B. State that, unless all the information described in paragraph A is provided to the department or the license or certificate holder requests a hearing, the license or certificate will be suspended in 3 business days after the license or certificate holder's receipt of the notice.

If the license or certificate holder has not complied with the reporting requirements or requested a hearing within 3 business days after receipt of the notice, the commissioner shall suspend the license or certificate.

3. Process for suspension for failing to comply with monthly reporting. If the commissioner determines that a person who holds a license or certificate under this Part has failed to comply with a monthly reporting requirement established by rule pursuant to section 6173, the commissioner shall notify the person at the telephone number provided on the application for the license or certificate and by e-mail if an e-mail address is provided on the application. If the license or certificate holder has not complied with the reporting requirements within 45 days after the commissioner has provided the notice, the commissioner shall mail a notice of suspension to the license or certificate holder by certified mail or the notice must be served in hand. The notice must:

A. Describe the information that the license or certificate holder is required to provide pursuant to this Part that the department has not received; and

B. State that, unless all the information described in paragraph A is provided to the department or the license or certificate holder requests a hearing, the license or certificate will be suspended in 3 business days after the license or certificate holder's receipt of the notice.

If the license or certificate holder has not complied with the reporting requirements or requested a hearing within 3 business days after receipt of the notice, the commissioner shall suspend the license or certificate.

4. Hearing. A license or certificate holder receiving a written notice of suspension pursuant to this section may request a hearing on the suspension by contacting the department within 3 business days of receipt of the notice. If a hearing is requested, the suspension is stayed until a decision is issued following the hearing. The hearing must be held within 3 business days of the request, unless another time is agreed to by both the department and the license or certificate holder. The hearing must be conducted in the Augusta area. The hearing must be held in accordance with:

A. Title 5, section 9057, regarding evidence, except the issues are limited to whether the license or certificate holder has complied with reporting requirements established by rule pursuant to section 6173;

B. Title 5, section 9058, regarding notice;

C. Title 5, section 9059, regarding records;

D. Title 5, section 9061, regarding decisions, except the deadline for making a decision is one business day after completion of the hearing; and

E. Title 5, section 9062, subsections 3 and 4, regarding a presiding officer's duties and reporting requirements, except that notwithstanding Title 5, section 9062, subsection 1, the presiding officer must be the commissioner or the commissioner's designee.

Summary of Proposal for ACCSP Ranking

Proposal Type: Maintenance Proposal

Primary Program Priority and Percentage of Effort to ACCSP modules:

Catch and Effort (8 points): 100% of licensed lobster (and 13 other fisheries) must report trip level information. Most of these reports will be electronic.

Data Delivery Plan (2 Points): All electronic data through the MEDMR offline application will be submitted into SAFIS daily. All data entered into MEDMR's MARVIN database and will be sent to the ACCSP Data Warehouse on at least a bi-annual basis after all data are thoroughly audited.

Project Quality Factors:

Regional Impact (5 Points): all partners will benefit, as all the data collected will be uploaded to ACCSP. Regional management organizations, such as ASMFC, will benefit from the trip level information from Maine. Partners may also benefit from the technologies/procedures tested in the new offline MEDMR mobile application. MEDMR is currently contracted with Bluefin Data LLC to build a mobile app for harvesters to use to meet the 100% lobster reporting requirement mandated in ASMFC Addendum XXVI. MEDMR is currently paying for all start-up costs associated with this project and shares findings with ACCSP. Partners will be able to utilize (the developer might charge a support fee) this application once they have built if they choose.

Funding transition plan (4 Points): MEDMR will continue to look for other funding sources; however, with the timeline of 100% lobster reporting being pushed forward from the date set in Addendum XXVI, MEDMR will need help to achieve the requirements coming in the next few years. MEDMR is funding the development of an offline mobile harvester reporting application that will meet MEDMR and GARFO reporting requirements. MEDMR will pay for the ongoing monthly maintenance fee associated with this program. MEDMR has already secured an additional one-time $600K in additional federal funding and a one-time 2 million ARPA fund for this project. Currently, the MEDMR does not have any plans to require electronic reporting for all fisheries but intends on pushing electronic reporting. Geographical restrictions prevent all harvesters from having reliable high-speed internet access at this time.

In-kind Contribution (3 Points): the partner contribution is listed on page 19. MEDMR's in-kind contribution is approximately 55%.

Improvement in Data Quality/Timeliness (4 Points): MEDMR can audit data at a more detailed level, including checking harvester reported data against dealer reported data. MEDMR encourages reporting timeliness through outreach with harvesters and is working with Marine Patrol to ensure industry understands the importance of submitting accurate and timely information. The Maine State Legislature also passed law that authorizes license suspensions for those who fail to report on time which has improved the timeliness and quality of the data submitted for the fisheries that utilize this law.

Potential secondary module as a by-product (in program priority order) (3 points): The offline application that MEDMR envisions will eventually link up with certain dealer reports and accept tracker data which will revolutionize the way spatial data could be used to determine many effort fields and dealer, and harvester reports are matched up.

This project has also been used to help with socio-economic programs such as disaster relief from flooding in the winter of 2024. Having access to landings data has proven to be useful in town/working waterfront planning.

Impact on Stock Assessment (3 Points): Regional management organizations which carry out stock assessments will benefit from the detailed landings data reported from Maine. This information is used in stock assessments for many species that are managed by regional agencies.

Impact on Management (3 Points): MEDMR and Federal Fisheries Managers rely on these data daily to make decisions about quota monitored fisheries. Lobster data collected through this project are used to inform State and Federal regulatory authorities about where fishing activity and the effort of fishing activities to make management decisions.

Properly Prepared (1 Points): MEDMR followed ACCSP guidelines and pertinent documents when preparing this proposal.

Merit (3 points): This proposal allows MEDMR to comply with mandatory ASMFC requirements.

Robert B. Watts II
Maine Department of Marine Resources
(207) 350-7154
rob.watts@maine.gov

June 2026

PROFILE:

- Knowledge of Maine and federal regulations pertaining to commercial fishing and associated reporting requirements through working with the Department of Marine Resources and the National Marine Fisheries Service.
- Knowledgeable of Maine's fishing industries and how they operate.

EDUCATION:

B.S. Marine Science, Maine Maritime Academy, Castine, ME 2002

EMPLOYMENT EXPERIENCE:

May 2025 – Present **Marine Resource Scientist IV**
May 2016 – May 2025 **Marine Resource Scientist III**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversee DMR's landings suspension authority and process.
- Oversee DMR's swipe card reporting program.
- Oversee MEDMR's MARVIN database.
- Maintains dealer and harvester auditing databases.
- Oversaw Maine's Interactive Voice Response (IVR) reporting program (IVR reporting ended in 2019)
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP), serving on the Operations Committee, Commercial Technical Committee, Information Systems Technical Committee, Standard Codes Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

Jan 2014 – Jan 2016 **Marine Resource Scientist III (Acting Capacity)**
June 2015 – Apr 2016 **Marine Resource Scientist II**
Feb 2012 – Apr 2015 **Marine Resource Scientist I**

Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.

- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversee DMR's landings suspension authority and process.
- Oversee DMR's swipe card reporting program.
- Maintains dealer and harvester auditing databases.
- Oversee Maine's Interactive Voice Response (IVR) reporting program.
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP) through serving on the Commercial Technical Committee, Information Systems Technical Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

Oct 2007 – Jan 2012 **Marine Resource Specialist II**
Maine Department of Marine Resources

- Oversee daily operations of the harvester landings program.
- Notify new harvesters about reporting requirements.
- Maintain databases used for data audits and data entry.
- Monitor reporting compliance database and notifies harvesters if they are delinquent.
- Supervise two Landings Program personnel.
- Oversee IVR reporting.
- Prepare data requests from various sources

Jul 2005 – Oct 2007 **Marine Resource Specialist I**
Maine Department of Marine Resources

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Created publications, updated regulation handouts and updated the recreational fishing website as needed.

May 2001 – Jun 2005 **Conservation Aid**
Maine Department of Marine Resources

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Acted as a liaison between the State of Maine and the recreational anglers, answered anglers questions about fishing regulations.

SELECTED PUBLICATIONS:

Watts, Robert B, Bartlett, J., Bates, E., Bray, H., Brown, M., Cieri, M., ... & Wilson, C. (2023). Reflecting on the recent history of coastal Maine fisheries and marine resource monitoring: the value of collaborative research, changing ecosystems, and thoughts on preparing for the future. *ICES Journal of Marine Science*, 80(8), 2074-2086.

Erin Summers
Maine Department of Marine Resources
207-232-1425
erin.l.summers@maine.gov

June 2026

PROFILE:

- Work collaboratively with state, federal, academic, conservation, and industry partners.
- Build and support research programs to provide baseline or priority data for Gulf of Maine resources.
- Oversee research and monitoring programs for a variety of marine species aimed at supporting population assessments, management, and specific conservation goals.
- Provide leadership and direction for funding priority programs
- Participate in planning and determining objectives for initiatives such as priority large whale research and scenario planning, wind energy siting and permitting, Natural Resource Damage Assessments, ecosystem-based fishery management, and department wide research and priority setting.
- Member, Atlantic Scientific Review Group 2017 - 2025
- Member, Right Whale Recovery Plan Northeast Implementation Team
- Member, Atlantic Large Whale Take Reduction Team
- Steering Committee, New England White Shark Research Consortium
- Program Advisory Committee member, Maine Sea Grant

EDUCATION:

M.A. Biology, Boston University Marine Program, Boston, MA 2002
B.A. Biology, Truman State University, Kirksville, MO, 2000

EMPLOYMENT EXPERIENCE:

March 2025 - Present **Acting Bureau Director**
Maine Department of Marine Resources
West Boothbay Harbor, ME

Supervise the Leads for Divisions within the Bureau of Marine Science and oversee and direct all programs within each division, including more than 80 science and field staff. Divisions include:

- Division of Biological Monitoring and Assessment – fisheries assessment, long-term monitoring of commercially important species, and commercial resource assessments
- Division of Ecology and the Environment – offshore wind monitoring, habitat assessment, Maine Coast Mapping Initiative, fishery independent surveys and research, large pelagic fish and shark research program
- Division of Marine Mammal Research – North Atlantic right whale visual and passive acoustic detection, modeling, habitat monitoring, real-time fishery risk management, and alternative fishing gear research
- Division of Landings – Commercial landings and harvest data collection, real-time quota monitoring
- Division of Education – the Maine State Aquarium, Burnt Island, and educational programming

Oversee the Maine Department of Marine Resources research and laboratory facility in West Boothbay Harbor, including facilities, wet lab, aquarium, Burnt Island Living Lighthouse and support staff.

Aug 2023 – March 2025 **Marine Resource Scientist IV – Director of Marine Mammal Research Div.**
Jan 2022 – August 2023 **Marine Resource Scientist IV – Director of Ecology and Environment Div.**
Jan 2017 – January 2022 **Marine Resource Scientist IV – Director of Biomonitoring and Assessment Div.**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Oversee, lead, and direct research and monitoring programs:
- Supervise all program leads
- Secure and direct funding for research and monitoring programs and associated staff
- Provide scientific guidance, recommendations, and leadership
- Coordinate Maine's participation in the Atlantic Large Whale Disentanglement Network
- Member, Atlantic Large Whale Take Reduction Team
- Member, Right Whale Recovery Plan Northeast Implementation Team
- Steering Committee, New England White Shark Research Consortium
- Member, Regional Wildlife Science Collaborative Marine Mammal Subgroup
- Member, Maine Offshore Wind Environment and Wildlife Working Group

Feb 2006 – Jan 2017 **Marine Resource Scientist II**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Lead scientist on large whale entanglement and fisheries interactions issues
- Secure funding, design and implement research programs in support of large whale conservation management objectives
- Supervise project staff and contractors
- Coordinate Maine's participation in the Atlantic Large Whale Disentanglement Network
- Oil Spill Response Coordinator
- GIS Coordinator
- Participate in stranding response as needed

Selected Publications

1. Stoll, J.S., Burnham, T.L.U., Kilchenmann, J., MacKeracher, T., McCosker, C.M., Reardon, K.M., **Summers, E**. (2025). Fleet-wide stability masks change in the Maine lobster fishery (2008–2022). *ICES Journal of Marine Science*, Volume 82, Issue 6, June 2025.
2. Willse, N., **E. Summers**, Y. Chen (2022) Vertical Line Requirements and North Atlantic Right Whale Entanglement Risk Reduction for the Gulf of Maine American Lobster Fishery. Marine and Coastal Fisheries, 14(2), pp. 1-14. *Marine and Coastal Fisheries Best Manuscript of 2022 Winner*
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4. Davis *et al*. 2020. Exploring movement patterns and changing distribution of baleen whales in the western North Atlantic using a decade of passive acoustic data. Global Change Biology. 00:1-29.
5. Waller, J., Reardon, K., Caron, S., Masters, H., **Summers, E**., Wilson, C. 2019. Decrease in size at maturity of female American lobsters *Homarus americanus* (H. Milne Edwards, 1837) (Decapoda: Astacidea: Nephropidae) over a 50-year period in Maine, USA. Journal of Crustacean Biology. Volume 39, Issue 4 Pages 509-515.

Proposal for Funding made to:

Atlantic Coastal Cooperative Statistics Program
Operations and Advisory Committees
1050 N. Highland Street, Suite 200 A-N
Arlington, VA 22204

FY27: North Carolina socioeconomic database construction for the management of existing and future data

Submitted by:

Jason Walsh
North Carolina Division of Marine Fisheries
3441 Arendell Street; P.O. Box 769
Morehead City, NC 28557
jason.walsh@deq.nc.gov

Applicant Name:	North Carolina Division of Marine Fisheries
Project Title:	FY27: North Carolina socioeconomic database construction for the management of current and future data
Project Type:	Maintenance
Principal Investigator:	Jason Walsh NCDMF Fisheries Economics Program Manager
Requested Award Amount:	$145,020
Requested Award Period:	For one year, beginning after the receipt of funds.
Original Date Submitted:	June 15, 2026

Objective

Continue developing a consolidated socioeconomic database to be used by the North Carolina Division of Marine Fisheries (NCDMF) to organize existing data for easier analysis and standardize future data entry and storage. In FY26, focus will be on migrating historical datasets into the new database and expanding the interface to support multiple survey types (e.g., recreational, for-hire, shellfish) beyond the commercial survey design used as the template by building a flexible question bank to accommodate their diverse survey structures. A consolidated database housing standardized data will also facilitate future transmissions of fishery-dependent socioeconomic data to the Atlantic Coastal Cooperative Statistics Program (ACCSP) Data Warehouse.

Background/Need

North Carolina's fisheries are a significant social and economic resource to the state and its communities. The NCDMF works to better understand and predict the impact these fisheries have both on their communities and on the state's economy. The North Carolina Fisheries Economics Program (NCFEP) has a wide range of surveys that they use to monitor economic performance over time including commercial fishermen, recreational fishermen, shellfish/aquaculture, for-hire, and dealer surveys.

NCDMF has been collecting socioeconomic information on commercial and recreational fishing in North Carolina for more than two decades. The NCFEP collects data on all stakeholders in commercial and recreational fisheries to better understand the role fisheries play in the state of North Carolina. Due to the diversity of stakeholder groups in fisheries, the data collected varies between surveys and between years as surveys are continuously updated to summarize contributions. The variables that are often collected include but are not limited to the following: demographic information, gear used, species targeted, expenditure and/or costs associated with business, income, fishing history, and perceptions and awareness of regulations. These data are collected to better understanding coastal communities that rely on the fishing industries, recreational and commercial fishermen, and the impact of all fishing industries on the State's economy through intra and interstate commerce.

The program administers surveys to stakeholders to monitor species-specific and broad fishery performance to achieve the goals of the Division. The data collected through these surveys are considered sensitive and confidential information about fishermen and dealers in North Carolina but are currently stored on a NCDMF network drive that is open to every employee within the License and Statistics Section. These data are collected and stored in Microsoft Excel or Microsoft Access formats in organized folders with corresponding metadata in Microsoft Excel or Microsoft Word documents according to standard operating procedures written by the NCFEP. Given the diversity and structure of datasets there has not been a centralized location for data to be stored. This leads to data being disorganized, difficult to work with and challenging to identify trends which is pertinent to the goal of identifying fishery economic performance and participation over time. Consolidation of these data into a standardized database will allow for faster data entry, validation and analysis as well as facilitate increased protection and organization to ensure data are handled appropriately.

Some surveys are newly created every year, while other surveys are updated about every five years. In the last few years, there has been a delay in data collection due to the COVID-19 pandemic and staff turnover. To better accommodate future variability, consolidating data into a centralized system will reduce delays and improve the organization and structure of resources, enabling more efficient collection, management, and sharing of socioeconomic data across management bodies.

ACCSP funded a new project in FY2023 called “North Carolina socioeconomic database construction for the management of existing and future data” and a developer to build this new database and interface was hired in January 2024. The delay in the start date of the FY2023 grant was due to funds not being available to NCDMF until September 2023 and longer than expected recruitment of a contract developer. An FY2025 maintenance project was also funded through the ACCSP entitled “FY25: North Carolina socioeconomic database construction for the management of current and future data” to continue this work. Those monies are expected in July 2025. Between the end of the FY2023 grant in December 2024 and the upcoming start of the FY2025 grant, NCDMF supported the developer to continue work on this project with in-house monies but those were one-time monies and are unavailable for future use. This maintenance proposal is being submitted to continue funding a contractor for the development of the socioeconomic application for one more year. This project is a large consolidation of past surveys that have a variety of survey question types and variables. The new system will allow for standardized storage and use of past survey data and the development of a novel survey application to meet the needs of fishery managers and the Division. The development of this interface is centered around being flexible and object-oriented by using one past survey as an example to build the infrastructure of the new system but still allow the economist to add all other past surveys and their associated data without having to build additional functionality into the system. The new system will have a modular structure which will vary across fishery sectors and will provide the socioeconomic program with a simple “point and click” format that can adapt to changes in survey needs over time.

Although the overall scope of the project has not changed from the previously funded work, FY27 funding is needed to complete the transition from a successful commercial-survey prototype to a production-ready, multi-sector socioeconomic data management system. The FY23 and FY25 awards established the core SQL Server database, commercial survey template, and initial web-based interface. The FY26 work is expected to begin the incorporation of additional survey types; however, the remaining work requires continued contractor support to complete migration, mapping, validation, testing, documentation, and transition of the system for regular NCDMF use.

This additional year is necessary because North Carolina’s socioeconomic datasets are not a single uniform data stream. They include commercial, recreational, for-hire, shellfish/aquaculture, and dealer surveys that differ substantially in question structure, response format, skip logic, identifiers, confidentiality concerns, and analytical use. A flexible question bank and reusable data model must be able to accommodate those differences without requiring a new custom application for each survey. Completing that work in FY27 will allow NCDMF to preserve the efficiency gained from the current contractor’s institutional knowledge, avoid the delays and cost of onboarding a new developer, and move the project from prototype and expansion into a stable, documented system that NCDMF and NCDIT can maintain after the grant period.

The FY27 work also directly supports ACCSP’s socioeconomic priorities. Where available in North Carolina datasets, the database and question bank will be structured to identify, map, and document ACCSP priority elements, including trip-level identifiers, vessel identifiers, labor cost information, trip cost categories, owner/operator annual cost information, demographic information, and fishing activity information. Particular attention will be given to preserving identifiers needed to link socioeconomic survey results to other fisheries-dependent data sources, consistent with ACCSP’s emphasis on linkable data that can support coastwide management and analysis. The project will not create a new data collection scope; rather, it will organize, standardize, validate, and document existing and future NCDMF socioeconomic data so they can be used more efficiently by NCDMF and prepared for future ACCSP data delivery.

This proposal covers the socioeconomic module (100%).

Review of Previous Results:

A relational SQL Server database was developed to store existing data that have been historically housed in Microsoft Access and Microsoft Excel documents on the NCDMF servers. One survey was chosen as our prototype for this project which was a survey of commercial fishermen who fish in the Atlantic Ocean. All data for this survey has been migrated into the database and can be accessed by the NCDMF Economist with statistical software like SAS or R. The start of an interactive web-based interface has been developed with screens to view and manage surveys and survey questions, and a commercial survey template can be created by the system. In the future, this modern SQL Server database can be linked to the NCDMF FIN database for commercial license data and the GoOutdoors (formerly known as ALVIN) database which houses the recreational license data to facilitate pulling sample populations more efficiently.

Through the development of the database, it has become clear that the socioeconomic surveys are complex and variable across sectors. There is a wide variety of types of questions unique to sectors that require diverse relational structures in the database. The developer has produced tables in the database for the commercial sector, developed a web-based interface that allows the PI to add and edit surveys, view, sort, modify, and add survey responses for the template commercial survey and the ability to view and create a new survey template which allows the PI to add questions the survey and format each question based on a display type which controls how the question will look on the screen. All of this functionality is being pushed to the user acceptance testing (UAT) environment for detailed feedback from the PI.

The FY2023 grant ended in December 2024. The FY2025 maintenance proposal began in August 2025. NCDMF was able to sustain the same developer between the FY2023 and FY2025 projects to ensure continuity of institutional knowledge, maintain development momentum, and reduce onboarding time, significantly enhancing efficiency and consistency across all phases of the system's design and implementation. The team is on track to start incorporating additional survey types (starting with recreational) into the system at the start of the FY2026 project in August 2026. To support timely project completion, two additional NCDIT staff continue to provide in-kind support to assist the ACCSP-funded contractor in a limited capacity.

Approach

NCDMF staff will continue to work with NCDIT staff on a requirements document to detail specific needs and expectations of the new data structure and corresponding input/output (I/O) interface. This document will be fluid and will be updated as decisions are made. The requirements document will be updated to reflect multiple survey types added during this project. All data will be consolidated into a relational database within SQL Server. The commercial survey data that is serving as the template has been fully migrated into the SQL database.

A web-based application will continue to be built to serve as the front-end interface for data entry and editing of socioeconomic surveys for commercial, recreational, for-hire, shellfish, and dealers. A robust question bank supporting all survey formats will continue to be built and the database fields will be expanded to accommodate the diversity of data fields between survey types. NCDMF staff will continue to work with NCDIT staff to complete this project. Several NCDIT staff are housed at the NCDMF Headquarters office in Morehead City, NC and will be overseeing, assisting, and facilitating this project as well as helping with database development. A contractor was hired under the FY2023 grant to complete the interface development, has continued on ACCSP funds for FY2025, will be starting on the FY2026 project soon, and then this grant, if approved.

The fully migrated SQL Server database and modern web-based interface will allow for consolidation of NCFEP data for optimized use by the NCDMF to meet fishery management goals. Once the data are consolidated, a file can be submitted to ACCSP for use by other state partners and in regional fishery management plans such as Black Sea Bass, Bluefin Tuna, American Shad, Cobia, and other commercially and recreationally targeted species in North Carolina.

NCDIT at NCDMF has been using the Agile SCRUM methodology for software development over the last 10 years. Development of the database and interface referenced in this proposal will also be conducted using Agile and 3-week development Sprints. User stories to define "bite-sized" pieces of functionality from the requirements document will be created to guide the development process. During development, components of the system will undergo User Acceptance Testing (UAT) by the NCDMF Economist, who will validate that the functionality meets analytical and programmatic needs. This iterative feedback loop ensures the application remains aligned with user expectations and real-world use cases as new modules are developed and integrated.

During FY27, NCDMF and NCDIT will use the requirements document and Agile user stories to complete four major categories of work: (1) migration and mapping of priority historical survey datasets into the SQL Server relational schema; (2) configuration of additional survey types within the web interface, including recreational, for-hire, shellfish/aquaculture, and dealer surveys as applicable; (3) expansion of the reusable question bank to support differing display types, response formats, skip logic, and sector-specific variables; and (4) quality assurance, user acceptance testing, and documentation needed to transition the system to routine NCDMF/NCDIT support.

In FY2027, focus will be on rigorous testing and application validation. Testing will include walking through each step in the interface from survey creation and the creation of survey questions and subquestions, to verification that survey templates for a recreational survey can be created, edited, published or prepared for response collection, populated with legacy data, reviewed through the interface, and queried for analysis. NCDMF will also verify that migrated datasets retain appropriate identifiers, metadata, variable definitions, and confidentiality protections. If time allows, a dealer survey will go through this same process.

Results and Benefits

By the end of FY27, the project will provide:

- Consolidation and standardization of NCDMF's socioeconomic data including legacy datasets
- Data that can be easily formatted to facilitate use of fishery-dependent socioeconomic data by NCDMF staff and other state partners once data are submitted to ACCSP
- Fully functional data entry and verification modules for North Carolina NCFEP data including multiple fishery sectors within the interface
- Increased timeliness and cleanliness of North Carolina's socioeconomic data to state and regional fishery managers and stakeholders

Geographic Location

The NCDMF Headquarters are located in Morehead City, North Carolina. This project may be performed remotely and does not require the position to be located in Morehead City. NCDIT staff working on this project are also based in Morehead City. NCDIT contractors working for the Department are located in Charlotte, North Carolina. The current NCFEP manager is located in Kill Devil Hills, NC, which is close to the NCDMF Manteo field office.

Data Delivery Plan

Documentation of the new data entry and editing interface, metadata, database schema, and data mapping tables will be provided to ACCSP through the required semi-annual and final reporting process. As the database is validated, NCDMF will identify the fields that correspond to ACCSP socioeconomic priority data elements and document whether each element is available, unavailable, confidential, or requires additional transformation before delivery. This approach will give ACCSP a clear understanding of the data structure, available priority elements, and remaining steps needed to establish a routine data feed or recurring data submission after the system is fully implemented.

Completed Data Delivery to ACCSP

The FY2023 project finished in December 2024, after a no-cost extension. The FY2025 project began in August 2025. Throughout the project, performance reports have been submitted as required. The final report for FY2025 will be completed by the due date. Reports for the FY2026 project, once started, will also be completed by the respective due dates.

Milestone Schedule (start date depending on time of grant award):

	Month											
Task	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Update requirements document and user stories	X	X	X	X	X	X	X	X	X	X	X	
Create new database tables for new survey types		X	X	X	X	X	X	X				
Migrate historic survey data			X	X	X	X	X	X	X	X		
Refactor interface for new survey templates, as needed			X	X	X	X	X	X	X	X	X	
Expand question bank and mapping					X	X	X	X	X			
QA, testing, and documentation							X	X	X	X	X	X

The contractor is expected to work 40 hours a week on this project. Report writing will follow the requirements of two semi-annual status reports and a final report due at the end of the grant award.

Project Accomplishments Measurement (Metrics and Achieved Goals)

Projects	Accomplishments
Update requirements document, as needed throughout project	• Document is completed and describes functionality that needs to be completed in new application
User stories are created for Agile Development	• User stories are written and document small tasks for developers to complete requirements within Sprints

Projects	Accomplishments
Multi-survey interface integration	• At least 3 additional new surveys active within the interface (making the total 7 across the life of the project)
Question bank development	• Minimum of 150 validated reusable survey questions in the question bank
Data migration	• 100% of data for surveys active within the system have been migrated to SQL
Documentation	• Updated schemas and metadata delivered to ACCSP
Data Mappings to ACCSP	• Data in the NC Economics database will be mapped to relevant ACCSP Socioeconomic tables

Project Personnel

Jason Walsh— Fisheries Economics Program Manager, NCDMF License and Statistics Section (NCDEQ)
Stephanie McInerny—Section Chief, NCDMF IT Section (NCDIT)
Brandi Salmon—Section Chief, NCDMF License and Statistics Section (NCDEQ)
Semir Badic – Applications Systems Analyst II, NCDMF IT Section (NCDIT)
Chris Capoccia – Applications Systems Analyst II, NCDMF IT Section (NCDIT)

Funding Transition Plan

FY27 is intended to be the completion and transition year for this phase of the socioeconomic database project. After FY27, NCDMF and NCDIT expect to assume routine maintenance of the system, including minor updates to survey templates, addition of remaining historical surveys as staff time allows, maintenance of metadata and data dictionaries, and preparation of future extracts for ACCSP or other management needs. The substantial state in-kind contribution included in this proposal demonstrates NCDMF's commitment to that transition. ACCSP support in FY27 will allow the project to move from development to an operational system that can be maintained by NCDMF/NCDIT and used to support future socioeconomic data delivery, management analyses, and regional fisheries decision-making.

FY27 Budget Narrative

The cost summary table below shows an explanation for each budget item for a one-year period. NCDIT will not charge an indirect fee for the Contractor. The cost for the developer in the summary below is based on an expert level .NET developer from NCDIT's convenience contracts.

The hours represent the time dedicated to this project from the developer, NCDIT staff, and L&S staff. The contractor that has been on the project since FY2023 will continue to work on this project in the proposed maintenance window, if approved. In the case of the departure of the contractor from this project, a new contractor will be hired at the same hourly rate. Additional NCDIT staff were included in

this year's project as in-kind to support the contractor on developing novel approaches to application development to facilitate this project.

FY27 Cost Summary

Category	Expense	Units	Cost	ACCSP Request	State In-Kind	Explanation
Personnel	Contractor	1	$143,520	$143,520		One Analyst @ $69/hr for 2,080 hrs (1 year)
	IT Section Chief	1			$40,768	$10,192/month for 4 months
	L&S Section Chief	1			$13,602	$6,801/month for 2 months
	IT Applications Systems Analyst II	2			$45,600	$7,600/month for 3 months
	Fisheries Economics Program Manager	1			$34,422	Average salary of $5,737/month for 6 months
Subtotal				$143,520	$134,392	
Fringe	Retirement, Social Security, Health Insurance				$45,905	Fringe=24.67% of salary ($33,155) plus $8,500/year for health insurance (1 month insurance = $708.33*18 months combined work=$12,750)
Indirect						No indirect needed for NCDMF contractors
Subtotal				$0	$45,905	
Supplies	Computer	1	$1,500	$1,500		Replacement laptop for contractor, if needed
Subtotal				$1,500	$0	
	Column Totals			$145,020	$180,297	Total project cost = $325,317
	Total Request					
	Percent			45%	55%	Percentage calculated from total cost

Attachment 1: Budget Narrative and Cost Summary for previously funded projects (FY2026)

FY26 Budget Narrative

The cost summary table below shows an explanation for each budget item for a one-year period. NCDIT will not charge an indirect fee for the Contractor. The cost for the developer in the summary below is based on an expert level .NET developer from NCDIT's convenience contracts.

The hours represent the time dedicated to this project from the developer, NCDIT staff, and L&S staff. The contractor that was hired on the FY23 grant is still working on this project and will start on the FY2025 grant when the money becomes available. This contractor will continue to work on this project in the proposed maintenance window, if approved. In the case of the departure of the contractor from this project, a new contractor will be hired at the same hourly rate. Additional NCDIT staff were included in this year's project as in-kind to support the contractor on developing novel approaches to application development to facilitate this project.

FY26 Cost Summary

Category	Expense	Units	Cost	ACCSP Request	State In-Kind	Explanation
Personnel	Contractor	1	$143,520	$143,520		One Analyst @ $69/hr for 2,080 hrs (1 year)
	IT Section Chief	1			$40,768	$10,192/month for 4 months
	L&S Section Chief	1			$13,602	$6,801/month for 2 months
	IT Applications Systems Analyst II	2			$45,600	$7,600/month for 3 months
	Fisheries Economics Program Manager	1			$34,422	Average salary of $5,737/month for 6 months
Subtotal				$143,520	$134,392	
Fringe	Retirement, Social Security, Health Insurance				$44,965	Fringe=25.02% of salary ($33,625) plus $7,557/year for health insurance (1 month insurance = $630*18 months combined work=$11,340)
Indirect						No indirect needed for NCDIT contractors
Subtotal				$0	$44,965	
Supplies	Computer	1	$1,500	$1,500		Replacement laptop for contractor, if needed
Subtotal				$1,500	$0	
	Column Totals			$145,020	$179,357	Total project cost = $324,377
	Total Request					
	Percent			45%	55%	Percentage calculated from total cost

Attachment 2: Project History and Total Project Cost by Year

Year	Title	Cost	Results
2023	*North Carolina socioeconomic database construction for the management of existing and future data*	$145,020	Project completed in December 2024. Requirements document was created. SQL database has been built and populated with pilot survey data, a web-based interface has been created, new surveys and survey questions can be added and edited within the system. The commercial survey used as the pilot can be viewed in the system as a template.
2025	*FY25: North Carolina socioeconomic database construction for the management of existing and future data*	$145,020	Project started in July 2025 and will be completed in July 2026. The ability to view survey responses, add new survey responses, and edit survey responses for the commercial survey has been added to the interface as well as the ability to create a new survey template. Each question in the survey can be modified to look differently in the template based on the display type selected for the question. This functionality will be pushed to UAT for feedback on the whole survey creation and response collection cycle by the end of FY2025.
2026	*FY26: North Carolina socioeconomic database construction for the management of existing and future data*	$145,020	Expected to start in August 2026

Condensed Summary for Ranking for Maintenance Proposals

Proposal Type: ***Maintenance***

Achieved Goals:

Goals of the FY23 and FY25 projects have been met; however, the full interface has required more work than originally expected due to the diversity of survey designs, question types, response structures, and data needs across commercial, recreational, for-hire, shellfish/aquaculture, and dealer sectors. The FY23 project was completed in December 2024. A requirements document was created, the SQL database was built and populated with pilot survey data, a web-based interface was created, and the commercial survey used as the pilot can be viewed in the system as a template.

Development has continued steadily under the FY25 project. The ability to view, modify, and add new survey responses has now been completed. In addition, the ability to build and modify a new survey template has been completed, including functionality to add and edit survey questions and modify how questions appear in the template based on selected display types. These accomplishments complete the core survey creation and response management workflow for the commercial survey template and provide the foundation needed to expand the system to additional survey types.

Data Delivery Plan:

A detailed plan is in place to deliver documentation, metadata, stored procedures, and database schema to ACCSP. New documentation on the new database will include data mapping tables that provide a definition of each variable. Any new stored procedures created during this project will include documentation on primary function, data tables being accessed, and corresponding variables within the procedure's SQL code. Documentation will be provided as part of the grant completion report. (Page 6)

Level of Funding:

This proposal is requesting the same amount as last year's proposal.

Properly Prepared:

This proposal follows the guidelines provided in the ACCSP Funding Decision Document.

Summary of Proposal for Ranking Purposes

Proposal Type: ***Maintenance***

Primary Program Priority

Social and Economic: 100%

The NCFEP strives to assess and follow the economic performance of the State's marine resources. This goal includes, but is not limited to, understanding coastal communities that rely on the fishing industries, recreational and commercial fishermen, and the impact of all fishing industries on the State's economy through intra and interstate commerce. The program administers surveys to recreational fishermen, commercial fishermen, processors, and other stakeholders to achieve the goals of the Division. The project directly fulfills ACCSP's high-priority focus on socioeconomic data by centralizing trip-level and owner/operator socioeconomic information from North Carolina. (Page 3-6)

Data Delivery Plan:

A detailed plan is in place to deliver documentation, metadata, stored procedures, and database schema to ACCSP. New documentation on the new database will include data mapping tables that provide a definition of each variable. Any new stored procedures created during this project will include documentation on primary function, data tables being accessed, and corresponding variables within the procedure's SQL code. Documentation will be provided as part of the grant completion report. (Page 7)

Project Quality Factors

Multi-Partner/Regional impact including broad applications:

Although this project only covers data for North Carolina, many species within North Carolina are managed regionally. Regional management agencies such as the Atlantic States Marine Fisheries Commission (ASMFC) and Mid-Atlantic Fishery Management Council (MAFMC) would benefit from having more access to these fishery-dependent socioeconomic data. (Page 3-6)

Contains funding transition plan and/or justification for continuance:

The goals defined in this project should be completed within the grant cycle. (Page 8)

In-kind contribution:

55% (see cost table on Page 8-9)

Improvement in data quality/quantity/timeliness:

The project identified in this proposal will greatly improve data quality and timeliness by providing a more modernized format for the data with enhanced data entry/verification screens and workflows that will prepare North Carolina for future data reference and analysis. (Page 4)

Potential secondary module as a by-product:

None

Impact on stock assessment:

By organizing and standardizing socioeconomic data, the project enables more efficient access to information used in stock assessment processes. Accurate socioeconomic profiles of fishery participants, expenditures, and effort provide context for understanding fishery dynamics,

evaluating management alternatives, and informing bioeconomic models. With improved data quality and accessibility, assessment scientists and managers can better account for human dimensions in their analyses. (Page 3-6)

Impact on management:

The consolidation of socioeconomic data across multiple fisheries supports informed decision-making by providing a clearer picture of how regulations and fishery dynamics impact coastal communities and stakeholder economics. With improved access to data on income, expenditures, and participant demographics across sectors, managers can better evaluate the economic tradeoffs of management alternatives, ensure equitable outcomes, and increase transparency in the decision-making process. This system also improves the agency's responsiveness to ad-hoc policy questions and public information requests. (Pages 3-6)

Other Factors

Properly Prepared:

This proposal follows the guidelines provided in the ACCSP Funding Decision Document.

Merit:

Modernizing NCDMF's Socioeconomic Database and the front-end interface that allow data entry clerks and analysts to interact with the database is crucial to the success of socioeconomic data collection programs in North Carolina. (Page 6)

Jason Walsh

Cell: (525)269-9299 **Email:** Jason.Walsh@deq.nc.gov

SUMMARY OF QUALIFICATIONS

EDUCATION

University of Rhode Island **Graduated: 2021**

M.S., Environmental and Natural Resource Economics

University of North Carolina (Wilmington, NC) **Graduated: 2015**

B.A., Economics

B.S., Environmental Science

Nelson Mandela Metropolitan University (Port Elizabeth, South Africa) **January-May 2014**

Moulay Ismail University (Meknes, Morocco) **January-May 2013**

WORK EXPERIENCE

North Carolina Division of Marine Fisheries Morehead City, North Carolina

- Fisheries economics program manager **January 2022-Present**
- Supervisor of social research scientist temporary staff
- Support fishery managers in the development of fishery management plans
- Complete fiscal notes in the rule development process
- Leading PI to ongoing project identifying economic contribution of for-hire industry to North Carolina economy funded by ACFCMA
- Leading PI to ongoing project on an update status of economic contribution of shellfish aquaculture industry to North Carolina economy funded by SK grant
- Leading PI on ongoing project to create novel economic database for the NC fisheries economics program funded by ACCSP
- Member of SAFMC SSC and ASMFC CESS

McArthur Environmental Consulting Framingham, Massachusetts

- Prepare documents for clients and local municipalities **December 2020-December 2021**

Rhode Island Fish and Wildlife Wakefield, Rhode Island

- Field interview marine recreational anglers **July 2017-October 2017**

RESEARCH

Research Assistant (Dr. Todd Guilfoos, Professor of Natural Resource Economics URI) May 2017-May 2021

- 20 Hours/Week
- Creating hedonic studies on the economic effect of dam removals in New England using statistical tools Stata and ArcGIS

Student Trainee (USDA Economic Research Service) **June 2019-August 2019**

- 40 Hours/ Week
- Intern modelling nutrient runoff of farms from the agricultural resource management survey using the environmental policy integrated climate model software.

Research Assistant (Annette Bourbonniere) **September 2018-May 2019**

- 10 Hours/ Week
- A team member developing the model and performing analysis using R for a discrete choice study on the effect of removing earnings from insurance and social security payments for persons with spinal chord injuries

Research Consultant (Chris Brozyna) **December 2018-May 2019**

- 5 Hours/ Week
- A team member providing assistance during analysis and writing stages of an experimental economics study on TURFS (a rights based fishery management strategy)

Directed Independent Study (Dr. Peter Schuhmann, Professor of Economics at UNCW) **July 2015-2016**

- Used Contingent valuation methods and regression analysis to assess willingness to pay and willingness to return of tourists to Barbados

Directed Independent Study (Dr. Zachary Long, Professor of Ecology at UNCW) **July-December 2014**

- Studied macro algae at Fort Fisher recreation area to find how stability of benthic marine communities' consumers is influenced by the presence of invasive macro algae

PUBLICATIONS

A Hedonic Study of New England Dam Removals **September 2021**

- An analysis of dam removals heterogeneous effects on housing prices in New England
- https://www.sciencedirect.com/science/article/abs/pii/S0921800922002853

TURF Wars: Group Dynamics in Resource Management **October 2019**

- Working paper at the Center for Growth and Opportunity on TURF as a fishery management tool.
- https://www.thecgo.org/wp-content/uploads/2020/04/working-paper-2019.013.pdf

PRESENTATIONS

AAEA Conference Presentation **August 2018**

- Present preliminary results from first chapter of dissertation. A hedonic study on dam removals heterogeneous effect on housing prices.

Guest Lecturer **February 2019 & February 2020**

- Present results from first chapter of dissertation in an ecohydrology graduate course. A hedonic study on dam removals heterogeneous effect on housing prices. This also serves as an introduction to environmental economics to the masters of environmental management at URI.

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

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Trish Murphey, Chair | Jessica McCawley, Vice Chair
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August 14, 2026

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

We are pleased to submit the proposal titled, "FY27: Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project". The proposal objectives are summarized below:

- Continue data collection through the *SAFMC Release* citizen science project on released shallow-water grouper (Black, Gag, Red, Scamp, Yellowfin and Yellowmouth Groupers; Red Hind; Rock Hind; Coney and Graysby) and Red Snapper in the South Atlantic
- Sustain implementation of opportunistic strategies to recruit fishermen for the *SAFMC Release* citizen science project
- Enhance *SAFMC Release*'s participant retention and reactivation

The proposed work will help address key research needs on released shallow water grouper and Red Snapper – characterizing the size of released fish and helping to better understand how many released fish survive. Data collection is done via the SciFish platform, using ACCSP data standards and making the data more easily accessible for assessment and management.

This proposal is being submitted as a second-year maintenance project. It will build on the work that will be done through the FY25-26 'Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project' and work from the FY20-FY22 ACCSP funded SciFish projects.

The following bullets summarize how reviewer feedback was addressed in this proposal submission. Reviewer feedback received from ACCSP is provided in *italics*, followed by sub-bullets describing how each comment was addressed.

- *Report out is in percentages with no overall sample sizes. Please include some overall numbers to measure success to this point.*
    - *SAFMC Release* sample size tables were incorporated within the proposal in Figure 2 and Table 3.
- *Cover letter lists Julia and Meg and then later mentions project consultants (SC DNR and GA DNR, please list on cover page if they are also PIs or note that consultants are not PIs)*
    - SAFMC staff (Julia Byrd and Meg Withers) are the PI's for this proposal. SCDNR and GADNR are serving as project consultants (not PI's). Project PI's are now listed on the proposal cover page to clarify this distinction.
- *Add table of metrics and achieved goals and completed data delivery*
    - Tables of project costs by year and a summary of deliverables and achieved goals have been incorporated in the proposal as Tables 7 and 8.
    - Description of completed data delivery to ACCSP has been included on pg. 26. Additionally, ACCSP provided a memo with additional SciFish related information which is included as Appendix 2.
- *Is there sharing of data with public? – Yes, data summary is sent to project participants. This is then posted on project web page. Will include this information in the proposal.*

    - *SAFMC Release* annual data summaries are initially sent to project participants and then posted to the project's webpage and shared via Council communication channels. Additional language clarifying how these data are shared along with links to the annual data summaries have been incorporated into the proposal.
- *Could the drawing be for less frequent users to encourage participation? Council is limited in random drawings so have been partnering with SC Sea Grant. This is a great idea so we will discuss with them and add some more information in the proposal.*
    - The SAFMC is limited in the types of recognition it can provide for project participants. Thanks to a partnership with South Atlantic State Sea Grants, *SAFMC Release* participants can participant in the Sea Grant South Atlantic Release Rodeo, a three month challenge where participants can have the opportunity to win entries into prize giveaways through their submissions in *SAFMC Release*. Eligible submissions earn entries into monthly giveaways which are reset each month giving less frequent users an opportunity to get entries into monthly giveaways and grand prize giveaways. Additional language has been added to the proposal describing the Sea Grant South Atlantic Release Rodeo.
- *Note that the data are listed as recommended for use, but not if the data were actually used. The assessment is still in progress but will clarify that in proposal.*
    - Additional language has been added to the proposal noting the SEDAR 90 (South Atlantic Red Snapper) stock assessment is still underway. An additional year of data (2025) was requested from SEDAR 90 data providers in Spring 2026. *SAFMC Release* data from 2025 was provided to the SEDAR 90 data compilers / analysts in June 2026. The SEDAR 90 assessment is scheduled to be completed in December 2026.

In this submission, the bold text indicates sections that help with the ranking process and yellow highlighted text indicates changes from the initial submission.

Please let us know if you have any questions or would like any additional information.

Best,

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Applicant Name:	South Atlantic Fishery Management Council (SAFMC)
Project Title:	FY27: Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project
Principal Investigator:	South Atlantic Fishery Management Council
Project Consultants:	South Carolina Department of Natural Resources (SCDNR) and Georgia Department of Natural Resources (GADNR)
Project Type:	Maintenance (second year)
Requested Award Amount:	$136,742
Requested Reward Period:	One year upon receipt of funds
Submission Date:	August 14, 2026

FY27 Atlantic Coastal Cooperative Statistics Program (ACCSP) Proposal for the SAFMC

OBJECTIVES:

- Continue data collection through the *SAFMC Release* citizen science project on released shallow-water grouper (Black, Gag, Red, Scamp, Yellowfin and Yellowmouth Groupers; Red Hind; Rock Hind; Coney and Graysby) and Red Snapper in the South Atlantic
- Sustain implementation of opportunistic strategies to recruit fishermen for the *SAFMC Release* citizen science project
- Enhance *SAFMC Release*'s participant retention and reactivation

NEED:

Fishery managers consider the biology and sustainability of a fish stock in concert with socio-economic values of the resource and fishery when developing fishery management plans. Despite substantial efforts, perennial data gaps still exist. If addressed, new data would be useful in developing improved stock assessment models and associated management considerations.

Citizen science is growing in the United States and other countries (McKinley et al. 2017) and has been used for research, management, policy, and public engagement (Poisson et al. 2020). **A growing number of publications has shown that diverse types of citizen science projects can produce data on par with traditional scientific data when properly designed, implemented, and evaluated (Freitag et al. 2016, Kosmala et al. 2016, McKinley et al. 2017, Harris et al. 2021). Past studies have found that citizen science programs can provide timely and non-biased information on fisheries (Jiorle et al. 2016, Gundelund et al. 2021, Johnston et al. 2021, Bellquist et al. 2022, and Oremland et al. 2022).** Indeed, citizen science approaches are currently being investigated to address state and federal management needs including catch at size, shark depredation, biological data, and post release fishing mortality. Examples of this can be seen in recent efforts by the South Atlantic Fishery Management Council's (SAFMC) *SAFMC Release* project, North Carolina Division of Marine Fisheries' Catch U Later project, Massachusetts Division of Marine Fisheries' Striped Bass Citizen Science Project, Florida Atlantic University's Shark Depredation Project and The Nature Conservancy's App Based Catch Reporting Project for deepwater snapper grouper species. NOAA Fisheries recently published a technical memorandum that highlights examples of citizen science data being used in stock assessments and noted there is potential to increase and improve the use of citizen science within the Agency (Furnish et al. 2025). Additionally, **ACCSP recognized the potential of citizen science to fill data gaps and developed the SciFish platform to support, develop, and administer this type of research.**

Discard mortality has been an increasing contributor to the total mortality experienced by many species in the snapper-grouper complex and is a major source of mortality for Red Snapper (SEDAR 2021a). Importantly, released fish are not available for sampling by typical dockside monitoring programs. In the South Atlantic, observer coverage is limited for commercial and for-hire fisheries, and almost non-existent for private recreational fisheries. As such, there is often limited information available to characterize the size and fate of these releases for stock assessment modeling. **Improving information on released fish is commonly highlighted in South Atlantic stock assessment research recommendations (SEDAR 2021a, SEDAR 2021c, SEDAR 2022, SEDAR 2025) and is often a top priority in agency research plans. This project will focus on characterizing the size distribution of shallow-water grouper and Red Snapper releases in the South Atlantic region and gathering information to help understand how many of these releases**

survive. In the ACCSP request for 2027 proposals, improved recreational fishery discard and release data as well as biological sampling for recreational fisheries separate from the Marine Recreational Information Program (MRIP) are the #3 and #5 recreational priorities, respectively. Additionally, Red Snapper, Gag Grouper, Red Grouper, and Scamp are in the top 25% of the biological priority matrix, and the snapper grouper hook and line fishery is in the top 25% of the bycatch matrix. Discard characterization and information on barotrauma mitigation practices are priorities in the South Atlantic Fishery Management Council's (SAFMC) Research and Monitoring Plan for 2025-2029 and for the SAFMC's Citizen Science Program.

The *SAFMC Release* project was developed through the SAFMC's Citizen Science Program in consultation with South Atlantic stock assessment scientists and fishermen. It provides a streamlined approach for fishermen to provide a photograph of released fish along with details such as length, release location, depth caught, condition on release, and use of barotrauma mitigation techniques. The project focuses on collecting data on the size of released fish and information that helps characterize how many released fish survive. *SAFMC Release* began as a pilot project in June 2019 partnering with recreational, for-hire, and commercial fishermen to gather information on released Scamp Grouper via the *SAFMC Release* mobile application. In August 2021, *SAFMC Release* transitioned to the ACCSP's SciFish mobile application/platform and expanded to collect information on all shallow-water grouper species. In April 2022, Red Snapper was added to the project (Figure 1).

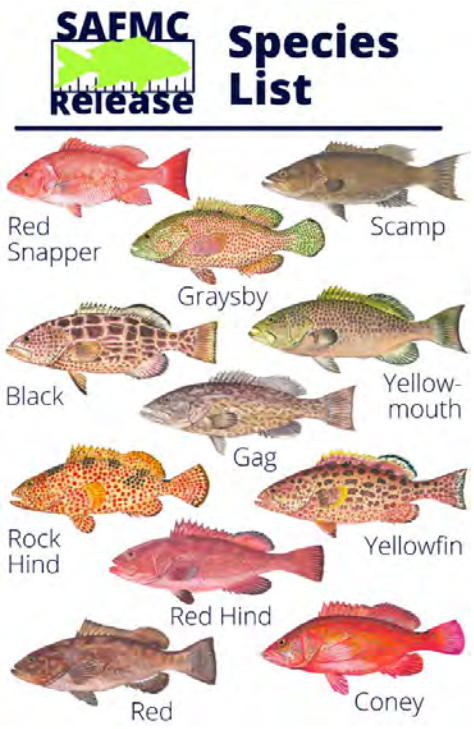


Figure 1. *SAFMC Release* Species List.

SAFMC Release operates under an open-access participation model, allowing any interested fisherman encountering these species to contribute data. While data collection is opportunistic, previous studies (e.g., Jiorle et al. 2016 and Johnston et al. 2021) have shown that citizen science programs can produce non-biased length frequency data and provide timely supplemental fisheries information. Both studies compared angler-reported length data with measurements collected through traditional fisheries sampling programs and found strong agreement between datasets. In combination with findings from

SEDAR90-DW17 (Byrd et al. 2025), these studies suggest that when appropriate training, protocols, and QA/QC procedures are in place, citizen science projects, like *SAFMC Release*, can provide useful supplemental information.

Recruitment for *SAFMC Release* has largely been through opportunistic outreach methods (e.g., tackle shop visits, seminars with fishing clubs and tackle shops, industry event participation, SAFMC-related meetings, online and media, etc.). The Council has also recruited fishermen to the project through targeted, randomly stratified recruitment mailings to saltwater fishing license or permit holders, conducted in partnership with state agencies. The Council has expanded the range, quantity, and quality of outreach by seeking mutually beneficial opportunities with partners, such as with SAFMC's Best Fishing Practices initiative, Sea Grant, and state agencies. Through this collaborative approach, the project has connected with broader audiences than could have been reached without partner assistance.

To support data quality and consistency, *SAFMC Release* participants follow standardized protocols and receive onboarding, training materials, and guidance on species identification, measurement techniques, and submission procedures prior to contributing data. Participants are encouraged to submit photographs which can support data validation and project staff conduct weekly QA/QC reviews and follow up with participants regarding unusual or incomplete records. These procedures help ensure data quality while maintaining the accessibility and engagement benefits of a citizen science approach.

The number of project participants and data submissions within the *SAFMC Release* project has been growing over time (Figure 2A and 2B). While all fishing sectors are represented in the project, most entries have come from private recreational and for-hire trips.

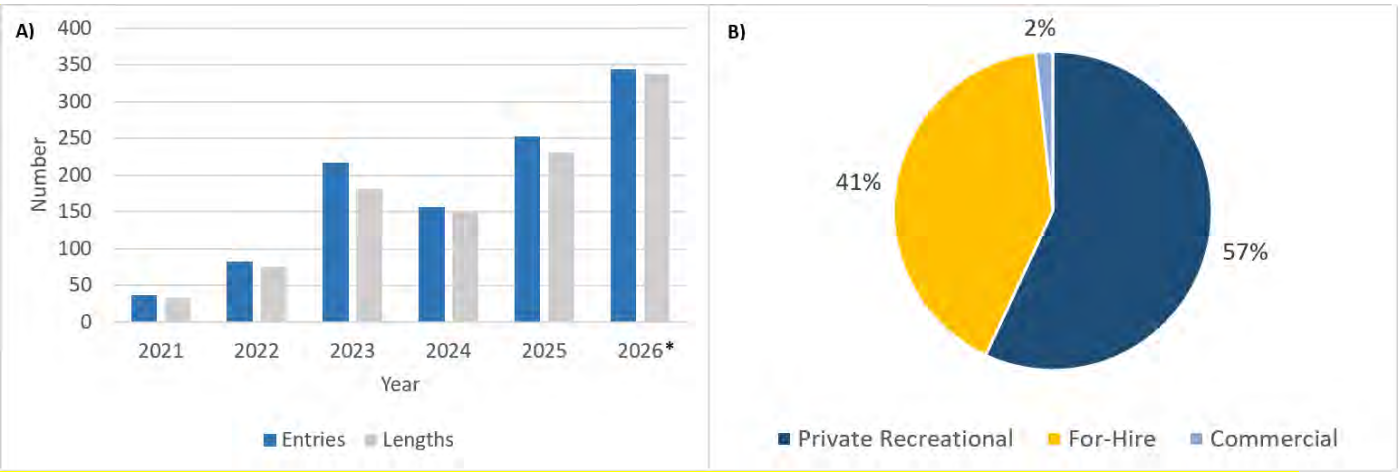


Figure 2. A) Number of *SAFMC Release* entries and lengths by year. Shallow water grouper were added to the project in August 2021 and Red Snapper was added in April 2022. B) Percent of *SAFMC Release* entries by sector. * 2026 data are through July 2026.

Recreational discards from the charter and private recreational sectors can represent a substantial portion of total catch for many *SAFMC Release* project species. This is illustrated by the fraction of total catch discarded in MRIP charter and private recreational data from 2021–2025 in the South Atlantic region (Table 1). Between 2021 and 2025, the fraction of catch discarded was at or above 0.50 in most years for the majority of *SAFMC Release* species and exceeded 0.85 in most years for Gag and Red Snapper. Given that recreational discards can make up such a large fraction of the recreational

catch, even modest improvements in characterizing discards could meaningfully improve data available for management and assessment of these species.

Table 1. Fraction of MRIP total catch discarded by the charter and private recreational sectors for *SAFMC Release* species in the South Atlantic region (North Carolina through Monroe County, FL), 2021-2025. Years and species with fractions >0.5 are bolded. Source: MRIP public-use data pulled 11/4/2025 for 2021 to 2024 and 8/5/2026 for 2025; custom analysis developed based on MRIP SAS Catch Estimation Template.

Species	2021	2022	2023	2024	2025
Black Grouper	**0.84**	**0.61**	**0.69**	**0.79**	**0.60**
Coney	0.00	0.00	NA	NA	**1.00**
Gag	**0.90**	**0.94**	**0.72**	**0.93**	**0.90**
Graysby	0.38	**0.59**	0.29	0.17	0.35
Red Grouper	**0.89**	**0.87**	**0.88**	**0.88**	0.50
Red Hind	0.00	**0.64**	0.00	0.31	0.00
Red Snapper	**0.96**	**0.94**	**0.83**	**0.88**	**0.97**
Rock Hind	**0.89**	**0.74**	**0.75**	0.01	**0.51**
Scamp	**0.52**	**0.76**	**0.66**	0.17	**0.54**

Although recreational discards from the charter and private recreational sectors can represent a substantial portion of the catch for many *SAFMC Release* species, collecting data to characterize the size composition of these often rare-event species can be challenging. While not an apples-to-apples comparison, MRIP charter and private recreational sample sizes for *SAFMC Release* species based on APAIS-sampled (landed) fish have been limited, with the number of measured (non-imputed) fish per species ranging from 2 to 379 lengths total from 2021 to 2025 in the South Atlantic region (Table 2). The number of lengths available from released fish can typically be more limited, particularly for the private recreational sector, where at-sea observer coverage is minimal. Existing at-sea observer programs in the region help fill the gap on discard lengths for the headboat (MRIP and South Atlantic state agencies) and charter (FL FWC and starting in ~mid-2025, other South Atlantic state agencies) sectors. However, private recreational trips are largely unmonitored by these programs, making *SAFMC Release* one of the only sources of length data for this sector. The number of lengths collected through *SAFMC Release* is comparable to the number of observed (non-imputed) lengths collected through MRIP for *landed* fish (Table 3). The *SAFMC Release* team has and will continue to coordinate with state partners; as part of this coordination, we will work to compare existing released fish data collection efforts with *SAFMC Release* data as appropriate, to help ensure the *SAFMC Release* project continues to provide biological data that meaningfully supplement existing programs.

Table 2. MRIP charter and private recreational observed (i.e., non-imputed) lengths for *landed* fish in the South Atlantic region (North Carolina through Monroe County, Florida), 2021-2025. Source: MRIP public-use data pulled 11/4/2025 for 2021 to 2024 and 8/5/2026 for 2025; custom analysis developed based on MRIP SAS Catch Estimation Template.

Species	Number of Observed Fish Lengths (Landed fish)
Red Snapper	379
Gag	198
Graysby	161
Red Grouper	160

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Scamp	80
Black Grouper	65
Red Hind	19
Rock Hind	17
Coney	2

Table 3. *SAFMC Release* number of entries and lengths submitted by species, 2021 – July 2026.

Species	Entries	Lengths
Red Snapper	552	489
Gag Grouper	301	291
Scamp	77	75
Red Grouper	86	86
Graysby	58	55
Black Grouper	5	5
Rock Hind	4	3
Red Hind	3	3
Yellowmouth Grouper	1	0

Each year, *SAFMC Release* develops Annual Data Summaries which are initially shared with project participants and then made publicly available via the project webpage and shared via Council communication channels. Annual summaries are shared with South Atlantic Council and Advisory Panel members, and data insights are frequently shared and discussed during seminars held with fishing clubs and tackle shops *SAFMC Release* Annual Data Summaries are available at the following links: *SAFMC Release* Data Summary 2021, *SAFMC Release* Data Summary 2022, *SAFMC Release* Data Summary 2023, *SAFMC Release* Data Summary 2024, *and SAFMC Release* Data Summary 2025. Aggregate length composition for Red Snapper and Gag, as well as aggregate release treatment by depth figures are provided below as an example of the data collected through the project over time (Figures 3, 4 and 5).

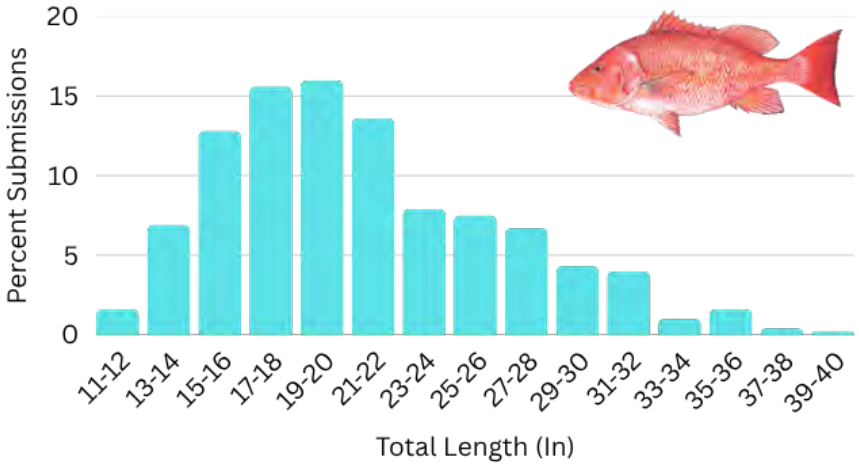


Figure 3. Red Snapper release length frequency logged through *SAFMC Release*, April 2022 – July 2026. Red Snapper was added to *SAFMC Release* in April 2022.

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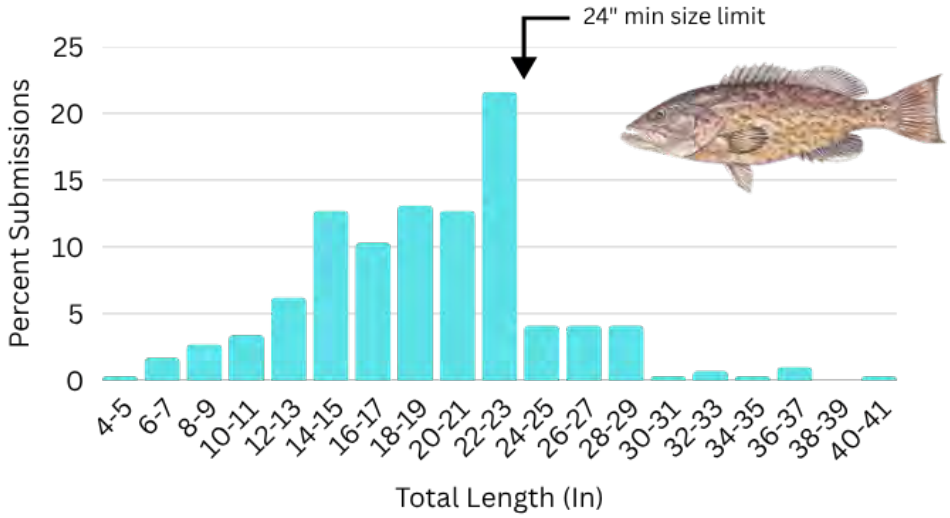


Figure 4. Gag release length frequency logged through *SAFMC Release*, September 2021 – July 2026. The minimum size limit for Gag in South Atlantic waters is 24 inches total length. Gag was added to *SAFMC Release* in August 2021.

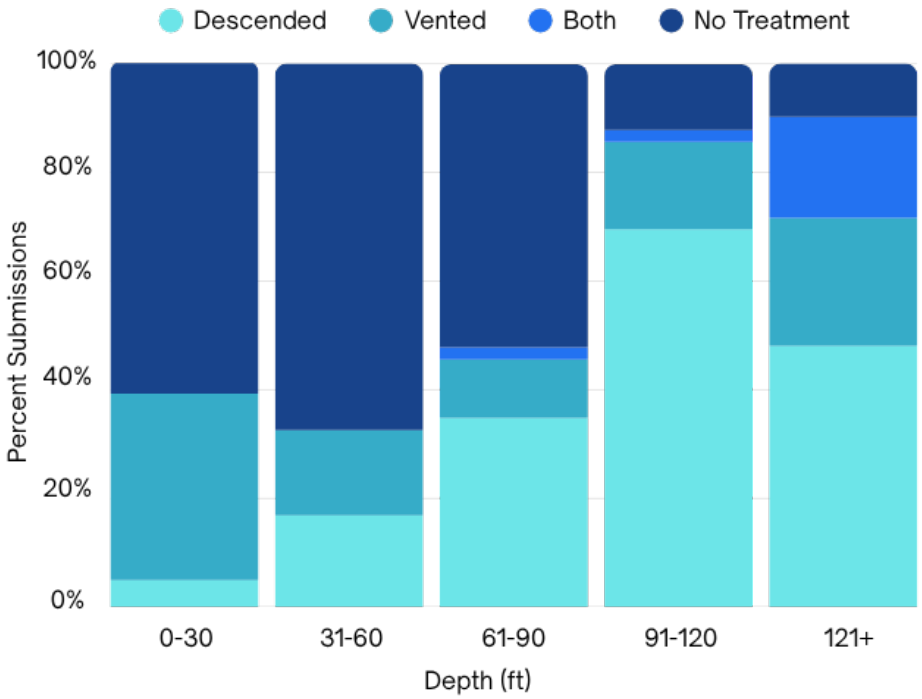


Figure 5. Release treatment by depth logged through *SAFMC Release*, 2021 – July 2026.

The value of these data has been demonstrated by the SEDAR 90 (South Atlantic Red Snapper) Data Workshop Panel which recommended *SAFMC Release* length data for use in the assessment (SEDAR 2025). *SAFMC Release* data were also considered in the development of release mortality estimates. SEDAR 90 Data Workshop Report research recommendations include developing more opportunities (e.g., citizen science, catch cards) to collect release lengths from the recreational fleet, gathering more information on hook type usage or hooking location and distribution of release depths in the general recreational fleet, and gathering more information on barotrauma mitigation technique usage rates (SEDAR 2025) – supporting the continuation and expansion of the *SAFMC Release* project. The SEDAR 90 stock assessment is

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still underway. Post Data Workshop, 2025 *SAFMC Release* data were provided to the SEDAR 90 data compilers and analysts in June 2026, and the assessment is scheduled to be completed in December 2026.

When new participants sign up for *SAFMC Release*, they are asked to identify how they learned about the project through an open-ended question. **Responses indicate that in-person outreach and targeted recruitment mailings in collaboration with state partners have been key recruitment pathways (Figure 6A). However, a comparison of total and active participants suggests that in-person outreach is particularly valuable for connecting with fishermen that ultimately become active *SAFMC Release* participants (Figure 6B). These findings underscore the importance of continued investment in in-person outreach efforts, which not only raise awareness of and engagement in *SAFMC Release* but also foster stronger connections with participants which can help encourage broader involvement in the overall fisheries science and management process.**

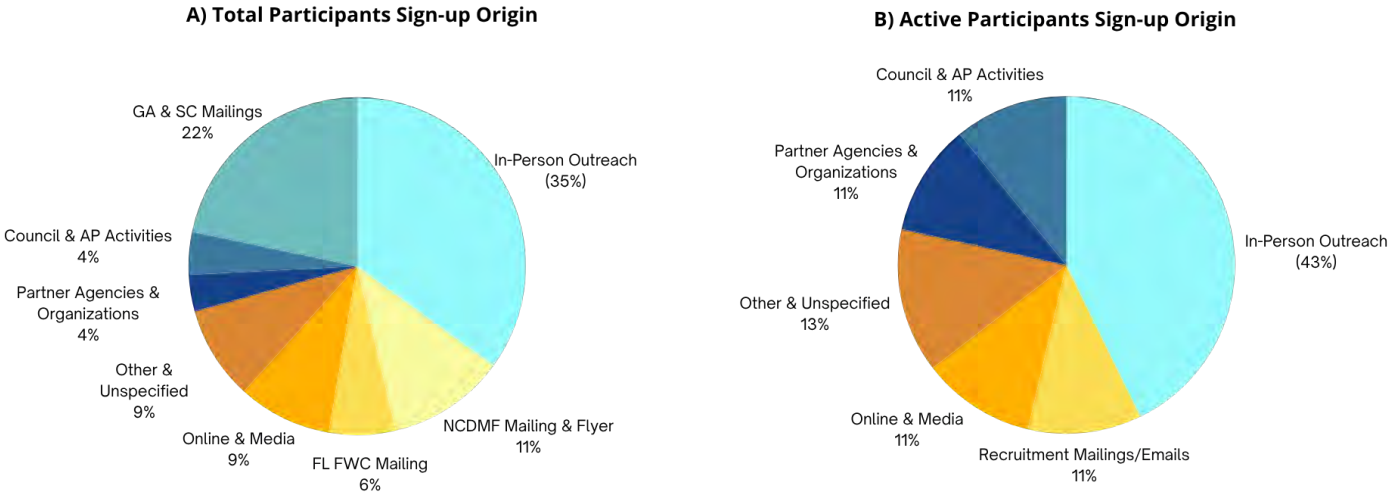


Figure 6. A) *SAFMC Release* total participants by origin (February 2022 – May 2026); B) *SAFMC Release* Active participants by origin (February 2022 – May 2026). Note: The recruitment mailings were combined into one category in Figure 4B, and the most recent mailing to GA and SC anglers was sent in late April 2026.

This pattern is consistent with experiences across other SAFMC citizen science initiatives, where volunteer participation often develops over time through repeated interactions and relationship-building with project staff and partners. Through *SAFMC Release* outreach efforts, staff have been able to build new and strengthen existing relationships with project participants and other stakeholders within the fishing community. Despite these successes, participant recruitment and retention remain a challenge. **This proposal will support the continuation of opportunistic outreach strategies to assist with participant recruitment and relationship building within the fishing community, focusing on in-person outreach that has been critical for project participation.**

To help with participant retention, *SAFMC Release* launched a Participant Recognition Program (PRP) in spring 2023. Participant recognition programs can improve volunteer retention within citizen science projects (Robinson et al. 2021). Such programs have been shown to increase the quantity of data submissions and support retention by providing recurring volunteer engagement opportunities (Dickinson et al. 2012; Diekert et al. 2023). Thus, a recognition program is an important element of a retention strategy for the *SAFMC Release* project.

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Due to SAFMC funding limitations and stipulations, the *SAFMC Release* PRP initially provided only public recognition (e.g., acknowledgement in monthly project newsletters or annual data summary) to participants who met program milestones. However, **programs such as Catch a Florida Memory (CAFM), which rewards anglers for submitting catch information to the Florida Fish and Wildlife Conservation Commission, demonstrate the value of incentive-based recognition programs in sustaining volunteer engagement.** In a 2023 CAFM participant survey, 88% of respondents indicated that earning prizes was a 'somewhat' or 'very important' motivation for participation, and approximately 54% reported being 'very satisfied' with the prize packages they earned (internal CAFM data). Also cited as contributing to program success are goals that re-engage volunteers after reaching all available milestones (J. Christopherson, personal communication, May 1, 2024).

To expand recognition opportunities for *SAFMC Release* participants, the Council partnered with Sea Grant in 2024, which adopted some of the PRP milestones (2024 PRP milestones). As participants meet these adopted milestones, they earn Sea Grant "thank you packets" and may win best fishing practices gear. The Council has continued to partner with Sea Grant for the 2025 and 2026 *SAFMC Release* PRPs.

While this partnership enhanced participant recognition, the available rewards are limited to best fishing practices-related items, and their motivational value has begun to diminish as participants accumulate similar gear over time. **The success demonstrated by programs such as CAFM indicates that incorporating a more substantial recognition program into *SAFMC Release*'s retention strategy can increase the quantity of data collected through the project, improve participant satisfaction, and support the long-term engagement of participants. FY25 ACCSP funding allowed the PRP to expand its 2026 milestones allowing participants to earn a variety of items by achieving project milestones. This marked the first year of a fully expanded recognition program and participant feedback on this change has been positive.**

The Sea Grant partnership also supported the development of a short-term participation challenge, the 2025 Sea Grant South Atlantic Release Rodeo. Held from May 1 through July 31, the three-month challenge offered South Atlantic fishermen opportunities to win Sea Grant-sponsored giveaways by submitting *SAFMC Release* entries that included photos suitable for data validation. Giveaway entries were capped and reset each month to lower the barrier of entry for new participants or those who submit less frequently. **The challenge was associated with a 28% increase in overall submissions compared to the average for the same period in 2023 and 2024. The number of submissions that included photos doubled, while submissions containing photos suitable for length validation nearly tripled. Given these positive results, and with continued support from Sea Grant partners, the South Atlantic Release Rodeo was offered again in 2026, and we hope to continue this or similar challenges in the future.**

These efforts appear to be fostering sustained participant engagement. The average number of *SAFMC Release* entries submitted per participant has increased over time (Figure 7), suggesting that initiatives such as the PRP and the Sea Grant South Atlantic Release Rodeo have been effective in strengthening participant engagement and encouraging sustained involvement in the project.

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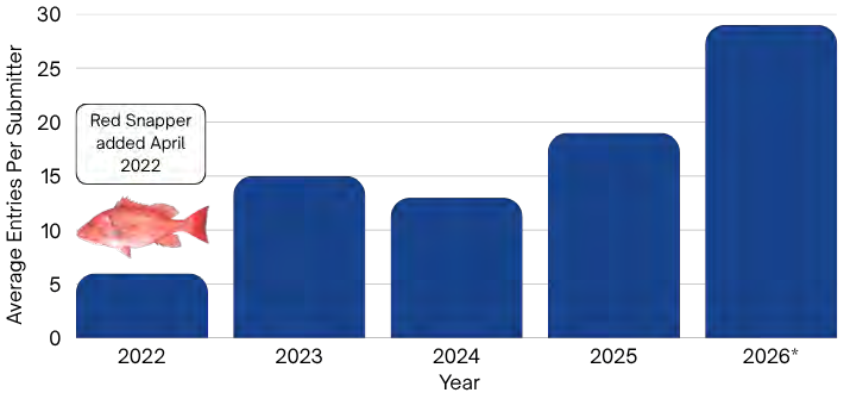


Figure 7. Average number of *SAFMC Release* entries per submitter since 2022. A submitter is someone who records at least one valid *SAFMC Release* entry. *Includes submissions through July 2026.

RESULTS & BENEFITS:

This project will continue to collect data on released fish via *SAFMC Release*, building on the work done through the FY20-FY22 ACCSP-funded SciFish projects and the FY25-FY26 ACCSP *SAFMC Release* projects. Observer funding for many fisheries along the Atlantic Coast has been limited. Many fisheries, such as the private recreational or the commercial snapper grouper hook and line, can be challenging to sample through conventional observer techniques due to their small vessels which could present safety concerns, potential liability issues, and logistical challenges. Although a few specific fisheries are highlighted in this project, **the proportion of catch attributed to releases is increasing in many popular fisheries along the Atlantic Coast so the insights, tools, and best practices developed through this project may be beneficial to other partners.**

***SAFMC Release* will continue collecting biological information on the component of catch that is released, addressing the ACCSP FY27 Request for Proposal priority 1b and Recreational Technical Committee priority 3. *SAFMC Release* will continue to collect biological and fishery data that is independent of MRIP, addressing Recreational Technical Committee priority 5.**

Additionally, as one of the initial projects in SciFish, *SAFMC Release* continues to help test the SciFish mobile app, project builder, and account creation portal. SAFMC staff work closely with ACCSP to address any issues that arise, helping to improve the platform which will benefit all partners who have or are interested in developing projects within SciFish.

The specific benefits to each data type and the rank of the target species within the biological and bycatch priority matrices included in the project are addressed below.

<u>Primary Program Priority: Biological Sampling: 85%</u>

The primary focus of the *SAFMC Release* project is to collect length data on released shallow water grouper (Black, Gag, Red, Scamp, Yellowfin and Yellowmouth Groupers; Red Hind; Rock Hind; Coney and Graysby) and Red Snapper. Through this proposal biological information from the commercial, for-hire, and recreational fisheries will continue to be collected through *SAFMC Release* for these species. Gag, Red Grouper, Scamp, and Red Snapper are in the top 25% of the ACCSP biological sampling priority matrix. All of these species are in the 'inadequate sampling' quadrants of the matrix and Red Snapper is in the 'high priority, inadequate sampling' quadrant. *SAFMC Release* data collection includes:

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- Data collected for each trip: trip type (commercial, recreational, headboat, charter), date, state, user (ACCSP ID);
- Data collected for each fish released: species (user's determination), length (based on ACCSP standards), location (state required, specific latitude/longitude optional), depth, time, fate (dead or alive release), hook type, hook location, use of barotrauma mitigation (descending device, venting, line cut), shark depredation, and photograph (to validate and evaluate species IDs and lengths, and when applicable, other details like hook type and hook location); and
- Users may also file a 'no fish released' report to share information on harvested fish.

Secondary Module as a by-product: Bycatch: 15%

The snapper-grouper hook and line fleet is ranked in the top quartile of the ACCSP bycatch priority matrix (ranked 2nd out of 17 fleets). Information collected through *SAFMC Release* can help provide information on length of released shallow water grouper and Red Snapper, hook type and hooking location, and release treatment (e.g., use of barotrauma mitigation devices) to supplement the data available through observer coverage and discard logbooks to help characterize the bycatch within this fleet.

Stock Assessment and Management Benefits and Impact:

By continuing data collection on released fish through the *SAFMC Release* project, the positive impact of this project to both stock assessments and management could be substantial and realized. Stock assessments rely upon accurate information on total catch and removals from the stock and accurate assignment of those removals to year classes. For fish that are landed, these requirements can be addressed through straightforward methods such as catch reporting or creel surveys to estimate removals and dockside sampling to collect length measurements and age samples. Creel surveys and dockside sampling approaches can miss information for fish that are released on the water. Using the South Atlantic as an example, limited information is available to classify the size composition of released fish in the commercial snapper grouper hook and line fleet, the private recreational fleet, or the charter fleet. Fisheries observers are used to collect information on released fish, but observer coverage is limited due in part to high cost. Even if funding were available, logistics and liabilities can be a concern for some fisheries due to the small size of some commercial and most private recreational vessels as well as lack of safety gear requirements on private recreational vessels. Limited observer coverage is available for the headboat fleet and charter fleet, but changes in fleet size, targeted species, and behavior underscore the value of collecting additional data to characterize removals across fishery sectors. This lack of information can be a major source of stock assessment uncertainty, and assumptions must be made to assign released fish into length and thus age classes.

In years past, the lack of accurate information on discarded fish was not a major assessment concern or source of uncertainty as landed fish generally accounted for the majority of stock removals. However, this is changing as regulations and fishing behavior are leading to increased discarding. The number and percentage of released fish have increased over the past decade as management has implemented accountability measures to shorten landings seasons when annual catch limits are exceeded. The most recent Red Grouper assessment (SEDAR 2017) indicated that over fifty percent of the fishing mortality experienced by Red Grouper is due to discard losses. Given that this stock was found to be overfished and overfishing was occurring, these discard removals are significant, and therefore the assumptions made regarding their size and composition are critical. In this instance, the length composition and selectivity for the discard losses were based on observer records from the headboat fishery and it was assumed these data were representative of all fishery sectors. As noted above, there are limited data to test this assumption so its impact on assessment uncertainty and bias is

unknown. The most recent assessment of South Atlantic Gag Grouper (SEDAR 2021b) indicated the stock was overfished and overfishing was occurring. Although discards accounted for a small proportion of fishing mortality in the assessment, the restrictive management measures implemented in response to the assessment through SAFMC's Snapper Grouper Amendment 53 will likely increase the proportion of discards within the fishery. SEDAR 71 relied on limited headboat observer data to characterize the size of discards from the recreational fleet. Having additional data sources to supplement these data will become increasingly important as the discards in the Gag fishery likely increase. In SEDAR 73, the most recent completed South Atlantic Red Snapper assessment, the stock was found to be overfished and undergoing overfishing. In recent years, discards have accounted for over 90% of removals so characterizing their size is critical. Length compositions and selectivity for discards were based on limited commercial, headboat, and charter (Florida only) observer data. Sampling recommendations in the report noted that it remains important to monitor discards year-round and any potential methodological or sampling improvements should be implemented if possible. Having additional information to help characterize the substantial discards would help address this critical need.

A similar lack of information exists to classify the depth where fish are captured and released as well as the use of barotrauma mitigation techniques, such as venting tools and descending devices. Fishing depth is positively correlated with release mortality rates for most species due to the impacts of barotrauma. However, it is challenging to estimate release mortality for use in a stock assessment without information on the depths at which fish are caught and when the species is impacted by barotrauma.

The SAFMC's Snapper Grouper Regulatory Amendment 29, which required a descending device be rigged and ready on-board any vessel fishing for or possessing snapper grouper species, was implemented in July 2020. Many stakeholders regarded this as a positive management action. However, more information is needed on when and where barotrauma mitigation techniques, like descending devices, are being used. When reviewing the SEDAR 73 (South Atlantic Red Snapper) assessment at their April 2021 meeting, the SAFMC's Science and Statistical Committee raised concerns about the level of descending device usage due to the lack of information on how widespread usage is in the fishery. This is of note since the assumed descending device usage level has an impact on recommended catch levels, highlighting the need for these data.

The *SAFMC Release* data were presented for consideration at the SEDAR 90 (South Atlantic Red Snapper) Data Workshop in April 2025 (Byrd et al. 2025). *SAFMC Release* and another citizen science project, MyFishCount (data available from 2017-2020), were the only Red Snapper release length data available for charter boats north of Florida and from the private recreational sector. *SAFMC Release* and MyFishCount Red Snapper release length data were both recommended for use in the assessment by the SEDAR 90 Data Workshop Panel. *SAFMC Release* data were also considered in the development of release mortality estimates for SEDAR 90. Additionally, SEDAR 90 Data Workshop research recommendations include developing more opportunities (e.g., citizen science, catch cards) to collect release lengths from the recreational fleet, gathering more information on hook type usage or hooking location and distribution of release depths in the general recreational fleet, and gathering more information on barotrauma mitigation technique usage rates (SEDAR 2025). These recommendations support the continuation and expansion of the *SAFMC Release* project. The SEDAR 90 assessment is still underway and data providers, including *SAFMC Release*, were requested to submit an additional year of data (2025). The assessment is scheduled to be completed at the end of 2026.

Bold text indicates text that helps with the ranking process.
Yellow highlighted text indicated changes from initial submission.

Additionally, *SAFMC Release* data will be presented for consideration at the South Atlantic Gag assessment which is tentatively scheduled to begin in 2027.

Additional Project Benefits

***SAFMC Release* also provides valuable insight into effective volunteer recruitment and retention strategies for citizen science programs.** The project team has actively evaluated and adapted its outreach approaches over time, including implementation of participant recognition initiatives, targeted partnerships, and short-term participation campaigns designed to improve retention and submission rates. **Lessons learned from these efforts can inform the design and implementation of other fisheries citizen science programs throughout the Atlantic region.**

Additionally, *SAFMC Release* provides broader benefits by strengthening relationships within the fishing community. Lack of trust in fisheries science and management can limit public participation in these processes. By directly involving fishermen in data collection and building meaningful connections with volunteers, *SAFMC Release* supports improved communication between managers and community members. This work helps to increase angler participation in science and management, build a trained volunteer network that can support future fisheries research needs, and foster long-term stewardship.

DATA DELIVERY PLAN:

The SciFish application for the *SAFMC Release* project will collect and deliver data directly to ACCSP through the SciFish API, where the data are received through the SAFIS database. Data can be entered by fishermen when no internet connection is available and later uploaded to SAFIS when a connection becomes available. Project staff conduct QA/QC weekly and follow up with participants regarding any unusual or incomplete records.

APPROACH:

Task A: Continue and expand current *SAFMC Release* recruitment strategies

Roles of Collaborators

SAFMC

- Visit tackle shops in South Atlantic states (NC, SC, GA, and FL) to distribute *SAFMC Release* and Best Fishing Practices materials for project promotion and recruitment
- Participate in relevant fishing expos, seminars, and collaborations with fishing organizations to promote *SAFMC Release* and best fishing practices as well as recruit new project participants
- Collaborate with state partners to share information on *SAFMC Release* at events and via other outreach efforts and communication platforms, as appropriate
- Share *SAFMC Release* project information at Council related meetings and via Council communication platforms (e.g., South Atlantic Bite newsletter, social media)
- Explore collaborations with fishing clubs and/or other partners on release focused challenges
- Set up and monitor *SAFMC Release* project sign up forms
- Create user accounts and onboard new participants (sharing login details, training materials, add to *SAFMC Release* email list & Participant Recognition Program (PRP) if opt in, troubleshoot SciFish login/app issues)

SCDNR & GADNR

- Consult on participant recruitment strategies

Task B: *SAFMC Release* Participant Retention Strategies

Overview

- The *SAFMC Release* team will employ a multi-pronged approach to support year-round participant engagement with the project, including regular participant communications, development of data summaries, and the expansion of the PRP.
- To support engagement with the *SAFMC Release* project year-round, recognition program milestones will reward participants using multiple strategies. Figure 8 outlines the proposed strategies for milestones, associated rewards, and other forms of recognition.

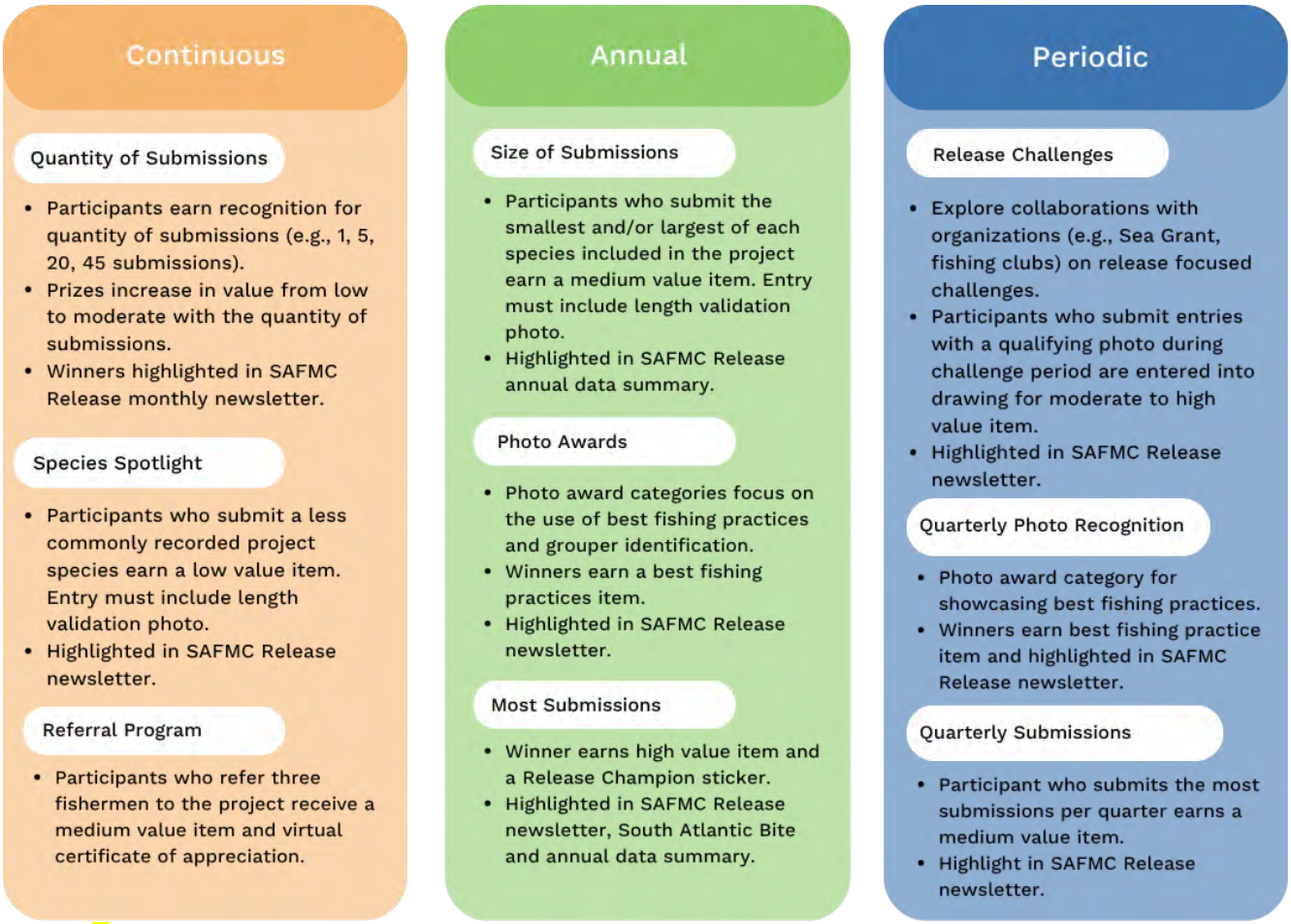


Figure 8. *SAFMC Release* proposed PRP milestones, rewards, and recognitions.

Roles of Collaborators

SAFMC

- Participant Communications
  - Distribute monthly e-newsletters to participants
  - Email and phone communication with participants to thank them for submissions, troubleshoot issues, etc.
- Annual Data Summary
  - Provide to participants and post to project webpage
  - Explore additional data summary options for participants
- Participant Recognition Program (PRP)
  - Monitor participant progress

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- Provide participant awards for PRP milestones

SCDNR & GADNR

- Consult on participant retention strategies

Task C: Data collection, QA/QC, and analysis

Roles of Collaborators

SAFMC

- Facilitate data being submitted automatically via app to SAFIS/Data Warehouse
- Provide QA/QC for data collected through project; edit/correct as necessary
- Share summary data with project partners
- Make data available for assessment and management, as necessary
- Continue to explore long term solutions for addressing QA/QC and validation needs of the data (e.g., photographic and species identification), considering volunteers and citizen science approaches
- Review success of recruitment and retention strategies and make recommendations for future efforts

GEOGRAPHIC LOCATION:

The *SAFMC Release* project partners with fishermen to collect data on released fish in South Atlantic waters in North Carolina, South Carolina, Georgia and the east coast of Florida through the Florida Keys. Project consultants include SCDNR and GADNR. Letters of support have been provided by Florida Fish and Wildlife Commission (FL FWC), SCDNR, and North Carolina Division of Marine Fisheries (NCDMF; see Appendix 1). Data collected through the project will be available for consideration in South Atlantic stock assessments and management.

In addition to contributing data for consideration in stock assessments and management, this project will continue to collect information on the effectiveness of various recruitment and retention strategies for *SAFMC Release*. With the growing interest in using citizen science as a tool to help supplement marine fisheries data collection, the information gained on volunteer recruitment and retention could be informative for other citizen science projects being pursued by partners along the Atlantic coast.

FUNDING TRANSITION PLAN:

Project PI's have been exploring other funding opportunities to help support additional years of funding for this project and are currently developing an additional proposal to help fund this project in the future.

MILESTONE SCHEDULE:

Table 4. Milestone Schedule

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
SAFMC Release Opportunistic Recruitment Outreach Strategies: Tackle shop outreach, seminars, fishing expos, etc.	x	x	x	x	x	x	x	x	x	x	x	
SAFMC Release Retention Strategies: Regular Communication, Newsletters, PRP coordination & implementation	x	x	x	x	x	x	x	x	x	x	x	
Data Collection, QA/QC & Analysis	x	x	x	x	x	x	x	x	x	x	x	
Semi & Annual Report Writing						x					x	x

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PROJECT ACCOMPLISHMENTS MEASUREMENTS:

Table 5. Project Accomplishments Measurements

Project Component	Deliverables
SAFMC Release Opportunistic Recruitment Outreach	Continue outreach to promote *SAFMC Release* in South Atlantic states with a target to visit tackle shops and collaborate on a seminar/outreach event at least once per state; new participants recruited to *SAFMC Release* via in-person and online outreach
SAFMC Release Retention Strategies	Monthly newsletters and annual data summary distributed to project participants; continuous, periodic, and annual milestones incorporated into Participant Recognition Program (PRP); increase number of participants submitting data and meeting PRP milestones
Data Collection, QA/QC & Analysis	Participants continue to submit data on target species using the ACCSP SciFish application; QA/QC completed; data available for management and assessment, as needed
Report Writing	Progress and final reports submitted

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FY27 COST SUMMARY (BUDGET):

Item	**ACCSP Share**	**Partner Share**	**Total**
PERSONNEL COSTS			
SAFMC Citizen Science Project Coordinator – 12 months	$52,962		
SAFMC Release hourly position (part-time)	$8,000		
SAFMC Personnel Julia Byrd, Citizen Science Program (10%)		$10,244	
FRINGE			
SAFMC Citizen Science Project Coordinator – 12 months	$33,500		
SAFMC Personnel Julia Byrd, Citizen Science Program (10%)		$7,147	
SUPPLIES			
Promotional materials	$2,000		
Participant Recognition Program incentives	$14,000		
Software packages	$3,300		
TRAVEL			
Travel to support outreach and promotional opportunities for *SAFMC Release*	$5,144		
Indirect Costs (15% of non-contract costs)	$17,836		
TOTAL	**$136,742**	**$17,391**	**$154,133**
Percentage	**89%**	**11%**	**100%**

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FY27 BUDGET NARRATIVE:

Personnel ($60,692): Personnel funds of $52,962 will support 12 months of the SAFMC Citizen Science Project Coordinator position who leads daily project management for the *SAFMC Release* project. The remaining personnel funds ($8,000) will be used by SAFMC to hire a part-time hourly at $20/hour for 400 hours for the *SAFMC Release* project to help with account creation, coordination of the Participant Recognition Program, and QA/QC.

Fringe ($33,500): Fringe funds will support 12 months of benefits for the SAFMC Citizen Science Project Coordinator position. Fringe benefits are charged at 55% of total compensation.

Supplies ($19,300): Funds will be used to print promotional materials (e.g., wallet cards, rack cards, stickers, etc.) to promote and recruit users for *SAFMC Release*. Costs for promotional materials range from wallet cards (~$0.07 each) to stickers (~$1.50 each). Using an average cost of $0.79 per item, $2,000 will allow us to print ~2,532 items for distribution. The PRP will include low, medium, and high value items when participants meet identified milestones:

- Low value: $10-$20 (average $15) purchases ~683 items for $10,244
- Medium value: $25-$150 (average $88) purchases ~12 items for $1,056
- High value: $200-$700 (average $450) purchases 6 items for $2,700

Costs for software include an annual subscription to Wufoo ($330) for account creation online forms and an upgrade to the shiny application (~$,3000) to provide an additional tool for project participants to explore and query their data.

Travel ($5,144): Travel by partners will be used to promote *SAFMC Release* by visiting tackle shops, fishing clubs and expos, and other related venues to allow for distribution of outreach and promotional materials. Funds are requested to support travel for staff members for 4 trips, approximately 2-3 days each. Costs are estimated for a total of 10 hotel nights at $244/night ($2,440), 12 days per diem at $92/day ($1,104), ~1000 miles at $0.70/mile ($700), and two airplane fares at ~$450/ticket ($900). Travel rate estimates are based on federal reimbursement and per diem rates.

Indirect ($17,836): Indirect charges of 15% (per communication with the NOAA Fisheries SERO grants office) are applied to the non-contract budget items for a total of $17,836.

FY26 COST SUMMARY (BUDGET):

Item	**ACCSP Share**	**Partner Share**	**Total**
PERSONNEL COSTS			
SAFMC Citizen Science Project Coordinator – 12 months	$48,965		
SAFMC Release hourly position (part-time)	$10,400		
SAFMC Personnel Julia Byrd, Citizen Science Program (10%)		$9,942	
FRINGE			
SAFMC Citizen Science Project Coordinator – 12 months	$28,268		
SAFMC Personnel Julia Byrd, Citizen Science Program (10%)		$5,772	
SUPPLIES			
Promotional materials	$4,000		
Participant Recognition Program incentives	$15,000		
Software packages	$3,300		
TRAVEL			
Travel to support outreach and promotional opportunities for *SAFMC Release*	$5,714		
Indirect Costs (15% of non-contract costs)	$17,347		
TOTAL	**$132,994**	**$15,714**	**$148,708**
Percentage	**89%**	**11%**	**100%**

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FY26 BUDGET NARRATIVE:

Personnel ($59,365): Personnel funds of $48,965 will support 12 months of the SAFMC Citizen Science Project Coordinator position who leads daily project management for the *SAFMC Release* project. The remaining personnel funds ($10,400) will be used by SAFMC to hire a part-time hourly at $20/hour for 520 hours for the *SAFMC Release* project to help with account creation, coordination of the Participant Recognition Program, and QA/QC.

Fringe ($28,268): Fringe funds will support 12 months of benefits for the SAFMC Citizen Science Project Coordinator position. Fringe benefits are charged at 58% of total compensation.

Supplies ($22,300): Funds will be used to print promotional materials (e.g., wallet cards, rack cards, stickers, etc.) to promote and recruit users for *SAFMC Release*. Costs for promotional materials range from wallet cards (~$0.05 each) to stickers (~$1.50 each). Using an average cost of $0.77 per item, $4,000 will allow us to print ~5,195 items for distribution. The PRP will include low, medium, and high value items when participants meet identified milestones:

- Low value: $10-$20 (average $15) purchases ~790 items for $11,844
- Medium value: $25-$100 (average $63) purchases ~12 items for $756
- High value: $200-$600 (average $400) purchases 6 items for $2,400

Costs for software include an annual subscription to Wufoo ($330) for account creation online forms and an upgrade to the shiny application to provide an additional tool for project participants to explore and query their data.

Travel ($5,714): Travel by partners will be used to promote *SAFMC Release* by visiting tackle shops, fishing clubs and expos, and other related venues to allow for distribution of outreach and promotional materials. Funds are requested to support travel for staff members for 4 trips, approximately 3-4 days each. Costs are estimated for a total of 14 hotel nights at $189/night ($2,646), 16 days per diem at $83/day ($1,328), ~1200 miles at $0.70/mile ($840), and two airplane fares at ~$450/ticket ($900). Travel rate estimates are based on federal reimbursement and per diem rates.

Indirect ($17,347): Indirect charges of 15% (per communication with the NOAA Fisheries SERO grants office) are applied to the non-contract budget items for a total of $17,347.

Table 6. Maintenance Project History

Fiscal Year	Title	Cost	Project Activity Overview
2025	FY25: Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project	$137,356	This project continues data collection through the *SAFMC Release* citizen science project on released shallow water grouper and Red Snapper via the SciFish platform; will use license data from the National Saltwater Angler Registry to recruit private recreational fishermen from SC and GA for the *SAFMC Release* project via a solicitation mailing; continue opportunistic strategies to recruit fishermen to *SAFMC Release* (e.g., tackle shop visits, seminars, fishing expos, social media) and enhance participant retention and reactivation within the project. Since receiving FY25 funding in October 2025, a part-time Citizen Science Assistant was hired, and a planning team of Council and state agency staff has coordinated recruitment and outreach activities. A recruitment mailing was sent in spring 2026, and additional outreach activities have included tackle shop visits; seminars in collaboration with tackle shops, captains, and fishing clubs; tabling events at agency events or fishing expos; and presentations at Council Advisory Panel meetings. Staff support participant engagement by onboarding new volunteers, maintaining one-on-one communication, distributing monthly newsletters, sharing annual data summaries, and recognizing participant achievements through milestone awards. Staff also partnered with Sea Grant on the 2026 South Atlantic Release Rodeo, a three-month challenge (May – July) encouraging anglers to submit entries into *SAFMC Release* with photos for an opportunity to win Sea Grant giveaways. Data collection through *SAFMC Release* continues, with staff conducting weekly QA/QC. Submitted photos are used to verify species identifications and fish lengths when appropriate. *SAFMC Release* length data were recommended for use in SEDAR 90 (South Atlantic Red Snapper) by the Data Workshop Panel. The assessment is still underway and an additional year of data (2025) were provided to the SEDAR 90 data compilers and analysts in June 2026.
2026	FY26: Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project	$132,994	This project will continue data collection through the *SAFMC Release* citizen science project on released shallow water grouper and Red Snapper via the SciFish platform; continue opportunistic strategies to recruit fishermen to *SAFMC Release* (e.g., tackle shop visits, seminars, fishing expos, social media); explore incorporation of short term challenges to increase participation; and enhance participant retention and reactivation within the project.

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			The FY26 project was recommended for funding by the ACCSP Coordinating Council in fall 2025 but funding has not been received.

Table 7. Total Project Cost by Year

Year	Cost
FY25	$137,356
FY26	$132,994
FY27*	$136,742

*Proposed

Table 8. Summary Table of Deliverables and Achieved Goals

The table below summarizes the status of FY25 deliverables. FY26 funding has not been received.

Project Component	FY25 Deliverables	FY25 Status
SAFMC Release NSAR Recruitment Mailing	Total of 24,000 *SAFMC Release* recruitment letters sent to saltwater recreational fishing license/permit holders in SC and GA; new SC and GA participants recruited to *SAFMC Release* via mailing	Recruitment mailing sent to saltwater recreational fishing license holders in SC and GA in Spring 2026 New GA and SC participants from mailing onboarded to the project
SAFMC Release Opportunistic Recruitment Outreach	Continue outreach to promote *SAFMC Release* in South Atlantic states with a target to visit tackle shops and collaborate on a seminar/outreach event at least once per state; new participants recruited to *SAFMC Release* via in-person and online outreach	Tackle shop visits made in SC, GA and FL Participated in tabling events in SC (Haddrell's Expo), GA (GADNR Coastfest), and FL (ICAST) Presented at SCDNR Charter Summits Collaborated with tackle shops or fishing clubs on seminars in SC and NC Project information shared regularly via Council communication channels New participants from outreach efforts onboarded to the project
SAFMC Release Retention Strategies	Monthly newsletters and annual data summary distributed to project participants; continuous, periodic, and annual milestones incorporated into Participant Recognition	Monthly newsletters distributed to project participants 2025 Annual Data Summary distributed to project participants, posted to project

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	Program (PRP); increase in participants submitting data and meeting PRP milestones	webpage, and shared via Council communication channels New 2026 PRP milestones developed (where participants can earn rewards for their participation) and monitored weekly Collaborating with Sea Grant on South Atlantic Release Rodeo Challenge from May – July 2026 Increase seen in number of submissions and numbers of submissions per participant in 2026
Data Collection, QA/QC & Analysis	Participants continue to submit data on target species using the ACCSP SciFish application; QA/QC completed; data available for management and assessment, as needed	Data continue to be submitted via the SciFish app and uploaded to the ACCSP Data Warehouse twice a week QA/QC is completed weekly with project participant follow up as needed Additional year of data (2025) was provided for the SEDAR 90 (South Atlantic Red Snapper) stock assessment that is currently underway
Report Writing	Progress and final reports submitted	Semi-annual progress report submitted in April 2026

Description of Data Delivery to ACCSP

The SciFish application used for the *SAFMC Release* project collects and transmits data directly to ACCSP through the SciFish API, where the data are received through the SAFIS database. Project staff conduct QA/QC weekly and follow up with participants regarding any unusual or incomplete records. At present, there is no functionality for SciFish Project PI's to edit data within SAFIS or the Data Warehouse. Improving this data correction/editing workflow has been identified as a priority for future enhancements to the SciFish platform. Please see the ACCSP memo (Appendix 2) for additional information.

Summary of Proposal for Ranking – Condensed Version

- **<u>Achieved Goals:</u> The 'FY25 Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project' continues data collection through the *SAFMC Release* citizen science project on released shallow water grouper and Red Snapper via the SciFish platform; will use license/permit data to recruit private recreational fishermen from SC and GA for the *SAFMC Release* project via a solicitation mailing; continue opportunistic strategies to recruit fishermen to *SAFMC Release* (e.g., tackle shop visits, seminars, fishing expos, social media) and enhance participant retention and reactivation within the project.**

  Since receiving FY25 funding in October 2025, a part-time Citizen Science Assistant was hired, and a planning team of Council and state agency staff has coordinated recruitment and outreach activities. A recruitment mailing was sent in spring 2026, and additional outreach activities have included tackle shop visits; seminars in collaboration with tackle shops, captains, and fishing clubs; tabling events at agency events or fishing expos; and presentations at Council Advisory Panel meetings. Staff support participant engagement by onboarding new volunteers, maintaining one-on-one communication, distributing monthly newsletters, sharing annual data summaries, and recognizing participant achievements through milestone awards. Staff also partnered with Sea Grant on the 2026 South Atlantic Release Rodeo, a three-month challenge encouraging anglers to submit entries into *SAFMC Release* with photos for an opportunity to win Sea Grant giveaways. Data collection through *SAFMC Release* continues, with staff conducting weekly QA/QC. Submitted photos are used to verify species identifications and fish lengths when appropriate. SEDAR 90 (South Atlantic Red Snapper) data providers, including *SAFMC Release* were recently asked to provide an additional year of data (2025) for the assessment. *SAFMC Release* data from 2025 were provided in June 2026.

- **<u>Data Delivery Plan:</u> The SciFish application for the *SAFMC Release* project will collect and deliver data directly to ACCSP through the SciFish API and will be stored in SAFIS. Data can be entered by fishermen when no internet connection is available and later uploaded to SAFIS when a connection becomes available. Project staff conduct QA/QC weekly and follow up with participants regarding any unusual or incomplete records.**

- **<u>Level of Funding:</u> This is a Year 2 maintenance proposal. The budget for the FY27 proposal increased from the FY26 proposal by approximately 2.8% but remains below the budget from the FY25 proposal.**

- **<u>Properly Prepared:</u> This proposal follows the guidelines under the ACCSP Funding Decision Process Document.**

- **<u>Merit:</u> This project supports the continuation of the *SAFMC Release* citizen science project that addresses key research needs on released shallow water grouper and Red Snapper – helping to characterize the size of released fish and helping better understand how many of those released fish survive. Biological information will be collected on released shallow water grouper and Red Snapper. Of these species, four (Gag Grouper, Red Grouper, Scamp Grouper, and Red Snapper) are in the top 25% of the ACCSP**

biological sampling priority matrix. Data collection is done via the SciFish platform, using ACCSP standards and making the data accessible for assessment and management. *SAFMC Release* data were recommended for use by the SEDAR 90 (South Atlantic Red Snapper) Data Workshop Panel and SEDAR 90 research recommendations include developing more opportunities (e.g., citizen science, catch cards) to collect release lengths from the recreational fleet, gathering more information on hook type usage or hooking location and distribution of release depths in the general recreational fleet, and gathering more information on barotrauma mitigation technique usage rates – supporting the continuation and expansion of the *SAFMC Release* project. *SAFMC Release* data will be presented for consideration at the South Atlantic Gag assessment which is tentatively scheduled to begin in 2027. Additionally, this project collects information on the effectiveness of various recruitment and retention strategies for *SAFMC Release* which could be informative for other citizen science projects along the Atlantic coast.

SUMMARY OF PROPOSAL FOR RANKINGS:

Proposal Type: **Maintenance**

Primary Program Priority: **Biological 85%**
The primary focus of the *SAFMC Release* project is to collect length data on released shallow water grouper (Black, Gag, Red, Scamp, Yellowfin and Yellowmouth Groupers; Red Hind; Rock Hind; Coney and Graysby) and Red Snapper. Through this proposal biological information from the commercial, for-hire, and recreational fisheries will continue to be collected through *SAFMC Release* for these species. Gag Grouper, Red Grouper, Scamp Grouper, and Red Snapper are in the top 25% of the ACCSP biological sampling priority matrix. All of these species are in the 'inadequate sampling' quadrants and Red Snapper is in the 'high priority, inadequate sampling' quadrant. *SAFMC Release* data collection includes:

- **Data collected for each trip: trip type (commercial, recreational, headboat, charter), date, state, user (ACCSP ID);**
- **Data collected for each fish released: species (user's determination), length (based on ACCSP standards), location (state required, specific latitude/longitude optional), depth, time, fate (dead or alive release), hook type, hook location, use of barotrauma mitigation (descending device, venting, line cut), shark depredation, and photograph (to validate and evaluate species IDs and lengths, and when applicable, other details like hook type and hook location); and**
- **Users may also file a 'no fish released' report to share information on harvested fish.**

Data Delivery Plan:
The SciFish application for the *SAFMC Release* project will collect and deliver data directly to ACCSP through the SciFish API and will be stored in SAFIS. Data can be entered by fishermen when no internet connection is available and later uploaded to SAFIS when a connection becomes available. Project staff conduct QA/QC weekly and follow up with participants regarding any unusual or incomplete records.

Project Quality Factors:

- **Multi-partner/Regional impact including broad applications:**
  The *SAFMC Release* project partners with fishermen to collect data on released fish in South Atlantic waters in North Carolina, South Carolina, Georgia and the east coast of Florida through the Florida Keys. Project consultants include SCDNR and GADNR. Letters of support have been provided by FL FWC, SCDNR, and NCDMF. Data collected through the project will be available for consideration in South Atlantic stock assessments and management.

  In addition to contributing data for consideration in stock assessments and management, this project will collect information on the effectiveness of various recruitment and retention strategies for *SAFMC Release*. With the growing interest in using citizen science as a tool to help supplement marine fisheries data collection, the information gained on volunteer recruitment and retention could be informative for other citizen science projects being pursued by partners along the Atlantic coast.

Bold text indicates text that helps with the ranking process.
Yellow highlighted text indicated changes from initial submission.

Additionally, as one of the initial projects in SciFish, *SAFMC Release* continues to help test the SciFish mobile app, project builder, and account creation portal. SAFMC staff work closely with ACCSP to address any issues that arise, helping to improve the platform which will benefit all partners who have or are interested in developing projects within SciFish.

- **Contains funding transition plan:**
  Project PI's have been exploring other funding opportunities to help support additional years of funding for this project and are currently developing an additional proposal to help fund this project in the future.

- **In-kind contribution: 11%**

- **Improvement in data quality/quantity/timeliness**
  - **Provides improvement in data quality and quantity**
  - **There are currently limited data available to assign released shallow water grouper and Red Snapper to length classes other than limited commercial and for-hire observer effort. *SAFMC Release* collects data on length of released shallow water grouper and Red Snapper for commercial, for-hire, and recreational fishermen.**
  - **There are limited data available to classify the depth where fish are captured and released and the use of barotrauma reduction techniques which are significantly correlated with release mortality rates. The data collected through *SAFMC Release* provides finer scale information on released fish which can help inform the overall release mortality estimates applied for a stock assessment.**

<u>Potential secondary module as a by-product: Bycatch (15%)</u>
The snapper-grouper hook and line fleet is ranked in the top quartile of the ACCSP bycatch priority matrix (ranked 2nd out of 17 fleets). Information collected through *SAFMC Release* can help provide information on length of released shallow water grouper and Red Snapper and release treatment (e.g., use of barotrauma mitigation devices) to supplement the data available through observer coverage and discard logbooks to help characterize the bycatch within this fleet.

<u>Impact on stock assessment:</u>
Stock assessment impacts as a result of this project are significant. Assessments rely on accurate catch data for individual species, accurate assignments of catches to length and thus age classes, and accurate estimates of release mortality to develop total fishery removals. The number and percentage of released fish have increased over the past decade as management has implemented accountability measures to shorten landings seasons when annual catch limits are exceeded. One case in the South Atlantic region of particular interest is Red Snapper. Fishing mortality of recreational released Red Snapper exceeded all other sources of mortality (SEDAR 73). This highlights the importance of released fish and the need to accurately characterize the length or age of the released fish and treatment of released fish that can influence the release mortality rate. Limited data are available to classify the size composition of released fish in the commercial snapper grouper hook and line fleet, the private recreational fleet, and the charter fleet. When the SAFMC's SSC reviewed recent stock assessments (SEDAR 73 – South Atlantic Red Snapper), the SSC raised concerns about the level of descending device usage due to lack of information on how widespread usage is in the fishery. *SAFMC Release* will provide data to help

fill these data gaps on the length of fish released, depth of capture, frequency of barotrauma mitigation techniques, hook location, and depredation.

The value of these data has been demonstrated by the SEDAR 90 (South Atlantic Red Snapper) Data Workshop Panel which recommended *SAFMC Release* length data for use in the assessment (SEDAR 2025). *SAFMC Release* data were also considered in the development of release mortality estimates. Additionally, SEDAR 90 research recommendations include developing more opportunities (e.g., citizen science, catch cards) to collect release lengths from the recreational fleet, gathering more information on hook type usage or hooking location and distribution of release depths in the general recreational fleet, and gathering more information on barotrauma mitigation technique usage rates – supporting the continuation and expansion of the *SAFMC Release* project. The SEDAR 90 stock assessment is still underway. Data providers were recently asked to provide an additional year of data (2025) for the assessment. *SAFMC Release* data for 2025 were provided in June 2026, and the assessment is scheduled to be completed in December 2026.

Impact on management:
Management impacts would be significant. In years past, the lack of accurate information on discarded fish was not a major management concern or source of uncertainty as landed fish generally accounted for the majority of stock removals. However, this is changing as regulations and fishing behavior are leading to increased discarding for many species within the South Atlantic. Management reference points (e.g., overfishing limit, allowable biological catch) are driven by stock assessment results – so improving information available to characterize the size of released fish in stock assessments has a substantial impact on management. Additionally, the Council has been discussing actions that could decrease the number of released fish and/or increase survivorship of released fish, within the snapper grouper fishery. Better understanding of the use of barotrauma mitigation techniques, such as those collected through *SAFMC Release*, could be incorporated into management strategy evaluations to help inform those discussions.

Other Factors:

- **Innovative: Interest in using citizen science to help fill data gaps in marine fisheries has been growing in recent years. This project will support the continuation of the *SAFMC Release* citizen science project which is helping address key research priorities on released fish.**
- **Properly prepared: This proposal follows the guidelines under the ACCSP Funding Decision Process Document.**
- **Merit: This project supports the continuation of the *SAFMC Release* citizen science project that addresses key research needs on released shallow water grouper and Red Snapper – helping to characterize the size of released fish and better understand how many of those released fish survive. Data collection is done via the SciFish platform, using ACCSP standards and making the data easily accessible for assessment and management. *SAFMC Release* data were recommended for use by the SEDAR 90 (South Atlantic Red Snapper) Data Workshop Panel and SEDAR 90 research recommendations include developing more opportunities (e.g., citizen science, catch cards) to collect release lengths from the recreational fleet, gathering more information on hook type usage or hooking location and distribution of release depths in the general recreational fleet, and gathering more information on barotrauma mitigation technique usage rates – supporting the continuation and expansion of the *SAFMC Release* project. *SAFMC Release* data will be**

presented for consideration at the South Atlantic Gag assessment which is tentatively scheduled to begin in 2027. Additionally, this project will collect information on the effectiveness of various recruitment and retention strategies for *SAFMC Release* which could be informative for other citizen science projects along the Atlantic coast.

Appendix 1. Letters of Support

State of South Carolina
Department of Natural Resources

Thomas S. Mullikin, PhD, JD, *Director*
Blaik Keppler, *Deputy Director, Marine Resources*

June 5, 2026

Attn: Geoffrey White

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St., Ste 200A-N
Arlington, VA 22201

Dear Mr. White,

The Atlantic Coastal Cooperative Statistics Program recently issued a Request for Proposals to program partners and committees for FY27 funding. Please accept this letter as confirmation that the South Carolina Department of Natural Resources (SCDNR) supports the South Atlantic Fishery Management Council (SAFMC) proposal entitled, "FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project."

The proposal objectives build upon work initiated through previous ACCSP-funded efforts. Specifically, the project will continue data collection on released South Atlantic shallow-water grouper and red snapper through the SAFMC Release citizen science application while expanding recruitment, retention, and reactivation strategies to strengthen long-term engagement in the program. SCDNR supports these efforts to encourage voluntary fisheries-dependent data submissions from the recreational sector and to improve the quantity and consistency of information available for fisheries management.

If funded, SCDNR will directly assist with project implementation through coordinated information exchange and collaboration on participant recruitment and retention strategies. SCDNR will also work with project partners to identify opportunities for outreach, promotion, and continued engagement with recreational anglers participating in SAFMC Release.

If you have any questions, please feel free to contact us at (843) 953-0119.

Sincerely,

Elizabeth Gooding
Fisheries Statistics Section Manager

Amy Dukes
Regional Fisheries Manger

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Yellow highlighted text indicated changes from initial submission.

JOSH STEIN
Governor
D. REID WILSON
Secretary
KATHY B. RAWLS
Director

June 9, 2026

Dear Sir or Madam:

I am writing to express the North Carolina Division of Marine Fisheries' (NCDMF) support for the proposal titled "FY27: Enhancing Recruitment and Retention for the *SAFMC Release* Citizen Science Project".

NCDMF is committed to our mission to ensure sustainable marine and estuarine fisheries and habitats for the benefit and health of the people of North Carolina. Our marine resources provide significant recreational and economic benefits to both residents and visitors of our state. In order to ensure our mission is accomplished, NCDMF seeks ways to incentivize stakeholders to be conservation-minded and abide by laws and regulations.

On December 1, 2025, new legislation in North Carolina mandated the reporting of five specific species of fish that are harvested by recreational anglers. In order to implement this new law, NCDMF is developing a smartphone app that anglers will use to report their harvest. Preliminary data have shown that reporting compliance is low, despite the consequences of illegally not reporting. Because of this, NCDMF is supportive of other projects that would provide insight into innovative tools or strategies that encourage anglers to participate in the scientific process and, ultimately, comply with state law.

Not only would the *SAFMC Release* project offer a new perspective into incentives for recruitment and retention of users, but it would continue to provide discard data for the recreational sector on offshore species; this benefits several states on the East Coast, including our own state of North Carolina.

On behalf of NCDMF, it is my pleasure to fully support the "FY27: Enhancing Recruitment and Retention for the *SAFMC Release* Citizen Science Project" proposal and recommend that the proposal be funded.

Sincerely,

Kathy B. Rawls

Kathy B. Rawls
NC Division of Marine Fisheries Director
(252) 515-5520
Kathy.Rawls@deq.nc.gov

State of North Carolina | Division of Marine Fisheries
1141 Arendell Street | P.O. Box 769 | Morehead City, North Carolina 28557
252-515-5500

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Florida Fish and Wildlife Conservation Commission

Commissioners
Rodney Barreto
Chairman
Coral Gables

Steven Hudson
Vice Chairman
Fort Lauderdale

Preston Farrior
Tampa

Joshua Kellam
Palm Beach Gardens

Gary Lester
Oxford

Albert Maury
Coral Gables

Sonya Rood
St. Augustine

Office of the Executive Director
Roger A. Young
Executive Director

Charles "Rett" Boyd
Assistant Executive Director

George Warthen
Chief Conservation Officer

Jessica Crawford
Chief of Staff

Division of Marine Fisheries Management
Jessica McCawley
Director

850-487-0554

Managing fish and wildlife resources for their long-term well-being and the benefit of people.

620 South Meridian Street
Tallahassee, Florida
32399-1600
Voice: 850-488-4676

Hearing/speech-impaired:
800-955-8771 (T)
800-955-8770 (V)

MyFWC.com

June 11, 2026

Julie DeFilippi Simpson
ACCSP Deputy Director
Atlantic Coastal Cooperative Statistic Program
1050 N. Highland ST., Ste 200A-N
Arlington, VA 22201

Dear Ms. DeFilippi Simpson,

The Florida Fish and Wildlife Conservation Commission (FWC) supports the South Atlantic Fishery Management Council (SAFMC) research proposal entitled, "FY27: Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project," submitted to the Atlantic Coastal Cooperative Statistics Program (ACCSP) for FY27 funding.

This collaborative project will build upon work completed under the FY25–FY26 "Enhancing Recruitment & Retention for the SAFMC Release Citizen Science Project" and the FY20–FY22 ACCSP-funded SciFish projects.

Specifically, funding from this proposal will support the continued expansion of recreational fisheries data collection for shallow-water grouper and red snapper in the South Atlantic through the SAFMC Release application. These efforts help address key research needs that are critical for future stock assessments and fisheries management decisions. In addition, funding will support the continued implementation and long-term sustainability of the SAFMC Release Citizen Science Project while further enhancing participant recruitment, engagement, and retention.

As in previous years, FWC is supportive of the continuation of this project. If funded for FY27, FWC will assist through coordinated information exchange during project implementation and will provide review and feedback on project materials as needed.

If you have any questions, please feel free to contact me at Jessica.McCawley@myfwc.com.

Sincerely,

Jessica McCawley

Jessica McCawley

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Yellow highlighted text indicated changes from initial submission.

Appendix 2. ACCSP staff comments on SciFish.

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200A-N | Arlington, VA 22201
703.842.0780 | 703.842.0779 (fax) | www.accsp.org

TO: ACCSP Operations and Advisors Committee Members

FROM: Julie DeFilippi Simpson, ACCSP Deputy Director

DATE: August 10, 2026

SUBJECT: ACCSP Staff Comments on SciFish

Project Title:
FY27: Enhancing Recruitment and Retention for the SAFMC *Release* Citizen Science Project

Project Type: Maintenance Project

Principal Investigators: Julia Byrd, Meg Withers

ACCSP Staff Workload Comments: *
Release data are submitted to ACCSP via the SciFish API. These data are received through the SAFIS database and made available to the project PIs through the ACCSP Data Warehouse. At this time, there is no functionality for PIs to edit data within either SAFIS or the Data Warehouse. Data can be downloaded. Future development is desired to enhance this data flow so that corrections are made within the ACCSP system; however, the resources are not currently available.

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Yellow highlighted text indicated changes from initial submission.

JULIA ISOBEL BYRD

1489 Littlerock Blvd.
Charleston, SC 29412
Hometown: Asheville, NC

Work: (843)302-8439
Cell: (828)215-1414
Email: julia.byrd@safmc.net

EDUCATION: UNIVERSITY OF CHARLESTON, SC, Charleston, SC
-**Masters of Environmental Studies**, December 2004

WAKE FOREST UNIVERSITY, Winston-Salem, NC
-**Bachelor of Science** in **Biology**, Minor in **Environmental Studies**, May 2000

WORK EXPERIENCE:

Citizen Science Program Manager, South Atlantic Fishery Management Council (SAFMC)
Charleston, SC, March 2019 – present

Adjunct faculty at the College of Charleston
Charleston, SC, 2020 to present

Southeast Data Assessment and Review (SEDAR) Coordinator, SAFMC
Charleston, SC, August 2012 – February 2019

Wildlife Biologist III, Office of Fisheries Management, South Carolina Department of Natural Resources
Charleston, SC, August 2005 – August 2012

MARMAP hourly, South Carolina Department of Natural Resources
Charleston, SC, April 2005 – August 2005

Intern, In-Water Sea Turtle Abundance Study, South Carolina Department of Natural Resources
Charleston, SC, May 2003 – August 2003 and May 2004 – September 2004

Education Coordinator, Conservation International
Washington, DC, January 2002 – July 2002

SELECT GRANT PROPOSALS FUNDED as PI or co-PI:

FY2025. Enhancing Recruitment & Retention for the *SAFMC Release* Citizen Science Project. Julia Byrd (SAFMC), Drew Cathey (NOAA Fisheries) and Lauren Dolinger Few (NOAA Fisheries). Atlantic Coastal Cooperative Statistics Program. $137,356.

FY2024. Expansion of the FISHstory Citizen Science Project. Julia Byrd (SAFMC) and Dr. Jie Caio (NC State University). Atlantic Coastal Cooperative Statistics Program. $123,068.

FY2023. Expansion of the FISHstory Citizen Science Project. Julia Byrd (SAFMC) and Dr. Jie Caio (NC State University). Atlantic Coastal Cooperative Statistics Program. $121,076.

FY2022. SAFIS Expansion of the SciFish Customizable Fisheries Citizen Science Data Collection Application. Julia Byrd (SAFMC) and Dr. Andrew Cathey (NC Division of Marine Fisheries). Atlantic Coastal Cooperative Statistics Program. $116,182.

FY2021. SAFIS Expansion of Customizable Fisheries Citizen Science Data Collection Application. Julia Byrd (SAFMC). Atlantic Coastal Cooperative Statistics Program. $114,792.

FY2020. SAFIS Expansion of "*SAFMC Release*" and "*NC DMF Catch U Later*" Discard Reporting Applications. Atlantic Coastal Cooperative Statistics Program. $118,500.

FY2019. The FISHstory Project - Documenting historical catch and length estimates from historic photos in the for-hire

sector using electronic data collection and imagery analysis platforms and crowdsourcing approaches. Julia Byrd (SAFMC) and Amber VonHarten (SAFMC). NOAA-Fisheries Information Systems. $75,000.

SELECTED PUBLICATIONS:

- Byrd, J. W.R. Collier, and A. Iberle. 2022. Designing the FISHstory project to support fisheries management. Fisheries: 44 (11): 492-498.
- Oremland, L., A. Furnish, J. Byrd, and R. Cody. 2022. How fishery managers can harness the power of the crowd: Using citizen science and non-traditional data sources in fisheries management. Fisheries: 44 (11): 459-462.
- Bonney, R., J. Byrd, J. T. Carmichael, L. Cunningham, L. Oremland, J. Shirk, and A. Von Harten. 2021. Sea Change: Using Citizen Science to Inform Fisheries Management. BioScience: 71(5): 519-530.
- Brown, S.K., M. Shivani, R. Koeneke, D. Agnew, J. Byrd, M. Cryer, C. Dichmont, D. Die, W. Michaels, J. Rive, H. Sparholt, and J. Weiberg. 2020. Patterns and practices in fisheries assessment peer review systems. Marine Policy: 117,103880.
- SEDAR. 2015. SEDAR Procedural Workshop 7: Data Best Practices. SEDAR, North Charleston, SC. 151pp. (editor).

SELECTED PROFESSIONAL PRESENTATIONS:

- Byrd, J. and J. Simpson. 2024. SciFish Platform & Policies. NOAA Enterprise Data Management Workshop. (Oral presentation.)
- Byrd, J., C. Collier, and M. Withers. 2023. Supporting Fisheries with Citizen Science: The South Atlantic Fishery Management Council's Approach. NOAA Central Library Seminar Series. (Oral presentation).
- Byrd, J. C. Collier, and A. Iberle. 2022. FISHstory, using citizen science to describe historic catches. SAFMC Seminar Series. (Oral presentation).
- Byrd, J. A. Iberle, C. Collier, D. Cathey, J. Simpson, F. Karp, B. Spain, K. Knowlton, and M. Bucko. 2021. Development of the SciFish Application, a customizable citizen science project builder. American Fisheries Society Annual Meeting. (Oral presentation).
- Byrd, J. C. Collier, and A. Iberle. 2020. The SAFMC's Citizen Science Program: Designing a program to support fisheries science and management decision making. American Fisheries Society Annual Meeting (held virtually). (Oral presentation).
- Byrd, J., J. Carmichael, and J. Neer. 2017. The Importance of Peer Review in SEDAR Stock Assessments. American Fisheries Society Annual Meeting, Tampa, FL. (Oral presentation).
- Carmichael, J., A. VonHarten, and J. Byrd. 2016. Efforts to Develop a South Atlantic Fishery Management Council Citizen Science Program. NOAA Fisheries Quantitative Ecology and Socioeconomics Training Program Webinar Series. (Webinar presentation).
- VonHarten, A. and J. Byrd. 2016. Building a Fishery Citizen Science Program in the U.S. South Atlantic to Improve Management and Policy. 4th International Marine Conservation Congress. (Oral presentation and helped facilitate focus group).

SELECTED TRAININGS:

- Management Assistance Team (MAT) Leader as Communicator Training
- Smithsonian's Communication & Facilitation Skills for Conservation Managers Course
- Technology of Participation (TOP) Facilitation Methods
- NOAA Coastal Service Center Planning and Facilitating Collaborative Meetings
- Well's National Estuarine Research Reserve Coastal Training Program Collaborative Learning Workshop
- NOAA Coastal Service Center Project Design and Evaluation Workshop
- NOAA Coastal Service Center Public Issues and Conflict Management Workshop
- University of Maryland's Communicating Science Effectively Workshop
- Atlantic States Marine Fisheries Commission Basic Stock Assessment Workshop
- Atlantic States Marine Fisheries Commission Maximum Likelihood Modeling Workshop

PROFESSIONAL MEMBERSHIPS:

- Association for Advancing Participatory Sciences
- American Fisheries Society
- SC Chapter of the American Fisheries Society
- ACCSP Operations Committee (2015-present; Vice Chair 2024-present)

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Megan Nicole Withers

4415 Lambert Street, North Charleston, SC 29405
meg.withers@safmc.net | Work: 843-725-7577 | Cell: 404-435-3411

EDUCATION

University of St Andrews St Andrews, Scotland | December 2021
Master of Science in Marine Ecosystem Management | Awarded with Merit
Dissertation: *The Environmental Conditions Associated with Grey Seal Reproduction Variation in the UK*

Emory University Atlanta, GA | May 2019
Bachelor of Science in Environmental Science and Biology | Summa cum laude
Thesis: *Population Density of the Northern Sea Otter (Enhydra lutris kenyoni) as an Indicator of Strep Syndrome Transmission Mechanism*

WORK EXPERIENCE

Citizen Science Project Coordinator, South Atlantic Fishery Management Council
Charleston, SC | June 2022 – Present

- Lead day-to-day activities for the citizen science project, *SAFMC Release*, engaging and supporting volunteers during every stage of participation
- Develop and execute volunteer recruitment strategies, helping to organize efforts such as tabling at events and presenting at seminars, as well as crafting social media posts and building community partnerships
- Craft and deliver training materials, such as a SciFish entry walkthrough video, to facilitate participant onboarding
- Drive participant retention by engaging with volunteers, responding to project and fisheries management inquiries, implementing the project's recognition program, and crafting monthly newsletters and annual data summaries
- Support data QA/QC protocols and follow ups with participants regarding unusual or incomplete data entries

Science Communication Assistant, National Park Service (AmeriCorps)
Anchorage, AK | October 2021 – April 2022

- Aided the Shared Beringian Heritage Program (SBHP) in educating the public about the ecological and cultural richness shared by Native peoples of the Beringian region
- Supported public programs and educational engagement by developing written panels and video content for an exhibit, created engaging and informative website materials, authored blogs and articles, and executed SBHP's social media strategy

Education Facilitator, Fernbank Museum of Natural History
Atlanta, GA | May 2019 – June 2020

- Delivered natural history educational programming for museum guests of all ages, presenting on subjects ranging from zoology to chemistry while tailoring content for diverse audiences

INTERN AND VOLUNTEER EXPERIENCE

Research Assistant, Emory University (Dr. Tracy Yandle)
January 2016 – May 2019

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Research Ambassador, Emory University Undergraduate Research Programs
August 2017 – May 2019

Marine Mammal Research Intern, Archipelagos Institute of Marine Conservation
Lipsi, Greece | May 2018 – August 2018

Volunteer, Georgia Aquarium
Atlanta, GA | December 2012 – August 2017

Volunteer, Caretta Research Project
Wassaw Island, GA | August 2015 – August 2015

Volunteer, Fernbank Museum of Natural History
Atlanta, GA | July 2011 – May 2015

Environmental Education Intern, Fernbank Museum of Natural History
Atlanta, GA | June 2014 – August 2014

PRESENTATIONS AND PROFESSIONAL MEMBERSHIP

Withers, M. and J. Byrd. 2026. Bridging the Gap: Building Trust and Informing Fisheries Management Through *SAFMC Release*. Conference for Advancing Participatory Sciences (held virtually). (Oral presentation and virtual poster).

Withers, M. and J. Byrd. 2023. Reeling in Anglers: Recruitment and Retention for Fisheries-Based Citizen Science. Conference for Advancing Participatory Sciences, Tempe, AZ. (Oral presentation and poster).

Withers, M. and J. Byrd. 2023. Reeling in Anglers: Recruitment and Retention for Fisheries-Based Citizen Science. American Fisheries Society, Florida Chapter, St. Augustine, FL. (Poster).

Withers, M. 2019. Population Density of the Northern Sea Otter (Enhydra lutris kenyoni) as an Indicator of Strep Syndrome Transmission Mechanism. World Marine Mammal Conference, Barcelona, Spain. (Poster).

Withers, M. 2019. Population Density of the Northern Sea Otter (Enhydra lutris kenyoni) as an Indicator of Strep Syndrome Transmission Mechanism. National Conference for Undergraduate Research, Kennesaw, GA. (Poster).

Professional Membership: Association for Advancing Participatory Sciences

TRAININGS

- NOAA Office for Coastal Management, Facilitation Basics for Coastal Managers
- University of Maryland Sea Grant Extension, Social Marketing 101
- DataCamp, Artificial Intelligence Fundamentals

Rhode Island Department of Environmental Management
Division of Marine Fisheries

Office 401.423.1920 | Fax 401.423.1925 | dem.ri.gov/marine

Fort Wetherill Marine Laboratory
3 Fort Wetherill Road, Jamestown, RI 02835

Coastal Fisheries Laboratory
1231 Succotash Road, Wakefield, RI 02879

August 4, 2026

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

Dear ACCSP,

The Rhode Island Department of Environmental Management is pleased to submit the following proposal for the FY27 ACCSP Request for Proposals titled "Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Address Stock Assessment Needs".

This proposal has responded to all proposal feedback including:

- All changes are highlighted in yellow
- All items that address ranking criteria are underlined
- It explicitly labels the percentage amount for the project module
- In-kind and match is clearly labeled
- All major headings are included
- The requested amount in the cover sheet is the amount requested from ACCSP
- This proposal notes this project may continue but that alternative funding will be pursued
- No previous data delivery or achieved goals have been included as we are still awaiting funding from FY26
- A summary of ranking has been included
- Staff salaries and fringe were adjusted as noted in the Spring webinar
- No other proposal-specific comments were received

Thank you for your consideration of this proposal.

Regards,

Nicole Lengyel Costa

Nicole Lengyel Costa

Proposal for funding made to the
Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200A-N
Arlington, VA 22201

FY27: Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Address Stock Assessment Needs

Total Cost: $70,768.81

Submitted By:
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Applicant Name:	Rhode Island Department of Environmental Management (RIDEM), the Commercial Fisheries Research Foundation (CFRF), and the National Oceanic and Atmospheric Administration (NOAA)
Project Title:	Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Address Stock Assessment Needs
Project Type:	Maintenance Project
Requested Award Amount:	$70,768.81
Requested Award Period:	One year upon receipt of funds.
Program Priority:	Biological (100%)
Date Submitted:	August 4, 2026
Principal Investigator:	Nicole Lengyel Costa, RIDEM, nicole.lengyel@dem.ri.gov
Project Staff:	Julia Livermore, RIDEM Alex Denisevich, RIDEM/ASMFC Rich Balouskus, RIDEM Hannah Verkamp, CFRF Elizabeth Soranno, CFRF Dr. David Bethoney, CFRF

Atlantic Coastal Cooperative Statistics Program (ACCSP) Proposal for the State of Rhode Island

Objective:

The goal of this proposed project is to collect biological (age and growth) data on black sea bass from Rhode Island to contribute to the stock assessment to improve age-structured models for northern black sea bass.

This project will address a recognized research need to expand biological data collection programs to support estimation of fishery length and age composition for black sea bass (ASMFC, 2023). The project will leverage and unite existing fishery-dependent and -independent studies to collect black sea bass specimens across broad spatial and temporal ranges throughout Rhode Island.

Specific objectives of the project include:

- Improve the quantity of age and growth data collected on northern stock black sea bass, thereby supporting the stock assessment and sustainable management of the stock.
- Continue a biological sampling program that will lay the foundation for improved assessment of black sea bass that leverages existing studies using a combination of fishery-independent (Rhode Island Department of Environmental Management (RIDEM) Fish Pot Survey) and -dependent (Commercial Fisheries Research Foundation (CFRF) Black Sea Bass Research Fleet) sampling sources.
- Transmit black sea bass biological data to ACCSP and communicate results with stock assessment scientists and other relevant stakeholders.

Need:

Black sea bass is an important fishery species targeted commercially and recreationally along the east coast of the United States. As asserted in the Atlantic Coastal Cooperative Statistics Program (ACCSP) Biological Review Panel's biological sampling priority matrix, black sea bass is identified as a top priority species for data collection, receiving the highest total priority ranking for inadequate biological sampling (ACCSP, 2025). In recent decades, the distribution and center of biomass of black sea bass has experienced a northward shift, likely due to climate change (Bell et al. 2014). As a result, there has been a lack of adequate biological data collection for northern Atlantic black sea bass in particular, which is an issue of regional importance as this highly valuable stock supports an increasingly important fishery in these regions (ASMFC, 2023).

The black sea bass stock is divided into two subunits north and south of Hudson Canyon, and the majority of landings for the northern subunit occur in Rhode Island (ASMFC, 2023). However, only 20% of the portside sampling lengths used in the stock assessment come from this state. Consequently, there is a critical need to increase biological data collection for black sea bass not only across its northern extent, but also specifically in undersampled states, and to supplement traditional data sources through other means. Recognizing this need, the most recent black sea bass Research Track stock assessment report

included "Enhanced port sampling or similar programs to bolster the data that support estimation of fishery length and age compositions" as a high priority research recommendation (ASMFC, 2023).

Fishery-dependent data has become an important source of information that is used for many stock assessments and is a cost-effective approach to collect large amounts of information. To increase the fishery-dependent data collection on black sea bass in the Mid-Atlantic and Southern New England regions, and with support from the ACCSP, the CFRF and the RIDEM established the Black Sea Bass Research Fleet in 2016 (Heimann et al., 2023). The goal of the Black Sea Bass Research Fleet (hereafter 'Research Fleet') is to advance fishery-dependent data for black sea bass to help improve stock assessments using modern technology and a fishing vessel Research Fleet approach. The Research Fleet comprises citizen scientist fishermen representing multiple gear types (fish pot, lobster-crab traps, rod-and-reel, gillnet, trawl, and aquaculture gear) who collect fishery, size composition, and disposition data on their black sea bass catch using a custom data collection application (Heimann et al., 2023). Historically, the Research Fleet was leveraged to collect whole fish specimens that were used for biological data collection (e.g. diet, sex and maturity, and age and growth data) by the RIDEM and Virginia Institute of Marine Sciences. However, specimen and associated data collection were opportunistic and periodic, as there was no long-term, dedicated funding to support these efforts.

The Research Fleet has become a vetted source of fishery dependent data for the black sea bass stock assessment, contributing to age-length keys (ALKs) and discards-at-length estimations in the most recent Research Track stock assessment (ASMFC, 2023). Upon receiving the maximum allowed years of funding through ACCSP, the CFRF has received alternative funding to continue the Research Fleet's fishery, size composition, and disposition data collection through at least 2029. However, there is still no dedicated funding to support biological data collection, such as age and growth information, on whole fish specimens. Age and growth data are essential to stock assessments and improve understanding of recruitment, age-specific exploitation, population age distribution, cohort tracking, and more. Ensuring that such data are collected with appropriate spatial and temporal coverage is also of utmost importance to ensure results are reflective of both the fishery and population at large.

Despite their advantages, fishery-dependent data sources, such as the Research Fleet, can result in spatial and temporal biases, as fishermen fish in areas and at times where they believe they are most likely to encounter fish of a certain size (Howard et al., 2023). Fishery-independent data sources are able to overcome such limitations through systematic sampling and, when used together, the two types of data can provide a more comprehensive view of a population's dynamics. One source of fishery-independent data on black sea bass in Rhode Island is the annual RIDEM ventless fish pot survey in Narragansett Bay and Rhode Island Sound, RI, which could also be leveraged to collect targeted age and growth data.

This project seeks to leverage and unite fishery-dependent and -independent data sources to collect age and growth data on black sea bass specimens collected by the CFRF Research Fleet and RIDEM Fish Pot Survey to contribute to the stock assessment and ultimately improve age-structured models for black sea bass. Ultimately, the proposed project will help fulfill ACCSP's mission of collecting timely, dependable, and accessible marine fisheries data and will directly address a high priority research recommendation for

black sea bass to enhance sampling programs to bolster data that support fishery length and age composition (ASMFC, 2023).

Results and Benefits:
This project will result in improved quality and quantity of age-at-length data for black sea bass in the northern region. These data will be used to inform the stock assessment and management of this data-poor species. Coordination with the NOAA stock assessment scientists for black sea bass will help address current gaps and sampling deficiencies in ALKs used in the stock assessment for the northern region.

This project also demonstrates a feasible and cost-effective approach for collaborating with the commercial fishery to collect commercial samples, and working with a state agency to collect fishery-independent data. Improved collaboration helps build trust between fishermen, scientists, and managers while improving the accuracy and credibility of the stock assessment and management plan for the black sea bass stock.

This project addresses a species in the upper quartile of the FY27 Biological Review Panel's biological sampling priority matrix, highlighting the need for additional biological data. It also addresses the following research priorities for black sea bass (ASMFC, 2023):

- Development of a reliable index beyond existing surveys
- Use of industry study fleet data
- Sex change, sex ratios, and spawning
- Spatial patterns in growth, recruitment, and mortality

Data Delivery Plan: Biological data will be transmitted to ACCSP via RIDEM. RIDEM is currently working with ACCSP to establish a direct data feed for biological data to the data warehouse.

Approach:

Commercial Sampling Effort

The PIs for this project are working in close cooperation with the lead fisheries stock assessment scientist for black sea bass at NOAA, Dr. Emily Liljestrand. Over the time series used in the black sea bass stock assessment, the only two commercial sources of age-at-length data for the northern region are from the NOAA portside sampling programs and the CFRF Research Fleet. The Research Fleet collected biological samples under alternate funding from 2016 to 2021. Dr. Liljestrand has stated that the CFRF data were useful for filling in gaps in the ALKs developed solely with data from the NOAA portside sampling programs and in some years comprised ~30% of the total commercial sample size in the northern region. It is expected that in future years, the number of samples coming from the NOAA portside sampling programs, and aged by NOAA fisheries will be reduced. With this expected reduction in sampling effort by NOAA, Dr. Liljestrand's analysis of assessment data has identified a target number of 400 commercial samples per year from the Research Fleet as being sufficient for still achieving the minimum number of age-at-length samples needed for the northern region commercial for the black sea bass assessment.

CFRF Commercial Specimen Collection and Delivery

Participant Research Fleet fishermen opportunistically collect fishery (e.g. gear, location, effort, etc.), size, and disposition data on black sea bass at sea using a Samsung Tab A tablet equipped with the On Deck Data application (app), a custom app designed by the CFRF. The app records and stores data at sea and uploads it to an online database owned and managed by the CFRF via Wi-Fi. For the purposes of this project, Rhode Island-based participants will still use the app to collect typical data associated with the Research Fleet on their catch, including fish that will be brought in as laboratory specimens. These fish will be tagged externally using a plastic ziptag with a unique identification number. The app will be updated to include the option to designate a sampled fish as a laboratory specimen and to prompt participants to enter the unique identifier associated with that fish. Fish will be kept on ice until they return to port, at which time specimens will either be picked up at the dock by CFRF staff or delivered to the CFRF office. Research Fleet participants will be asked to complete sampling sessions that include up to 25 additional tagged specimens for age and growth data collection at a time. Over the course of one year, the Research Fleet will aim to complete 16 sessions that include specimen collection for a total of 400 fish collected (25 fish/session * 16 sessions = 400 fish). Participants will be provided with an additional sampling stipend each month they collect laboratory specimens to acknowledge the additional workload for this effort beyond typical Research Fleet data collection. Tagged fish will be kept in the CFRF freezer, and once per month CFRF staff will deliver all specimens to the RI DEM office for processing. CFRF will share all metadata collected by On Deck Data associated with the laboratory specimens with RI DEM at the time of specimen delivery.

Fishery Independent Sampling Effort

Dr. Liljestrand also analyzed fishery-independent data used in the black sea bass assessment to identify the need for additional sampling. In the northern region, fishery-independent age-at-length data is supplied by the NOAABTS, NEAMAP survey, Massachusetts Division of Marine Fisheries (MADMF), and RIDEM. Over 90% of the data used in the stock assessment is from the NOAABTS, NEAMAP survey, and MADMF. RIDEM does currently contribute a limited amount of FI samples collected opportunistically from the RIDEM trawl survey, but has the ability to collect additional FI samples from the RIDEM fish pot survey. The RIDEM ventless fish pot survey began in 2021 and is designed to capture scup, tautog, and black sea bass. A target number of 100 samples per year has been determined as adequate for ensuring comprehensive spatial and temporal sample coverage in future years for the northern region.

RIDEM FI Specimen Collection and Delivery

The RIDEM ventless fish pot survey operates in Rhode Island Sound and Narragansett Bay, RI from May through October annually. Unvented Black Sea Bass Pots (43.5” L, 23” W, and 16” H) are set in five pot trawls at eight randomly selected stations and four fixed stations each month. All trawls target structured bottom. These traps are baited with clam bellies and fished for a one-night soak. Black sea bass samples will be collected from the survey and put on ice until returning to the RIDEM laboratory for either immediate processing or freezing. Sample collection will be distributed both spatially and temporally.

RIDEM will coordinate with Dr. Liljestrand to prioritize length bins to sample in an effort to fill any existing ALK gaps.

Sample Processing

All commercial and FI samples will be processed at the RIDEM laboratory. Each sample will have length, weight (from CFRF samples only), sex, and maturity recorded. Otoliths will be removed, cleaned, dried, and stored for further processing. When processed, otoliths will be mounted in epoxy resin and sectioned using an Isomet low speed saw. Sectioned otoliths will be mounted to microscope slides with mounting media and aged using a Leica stereomicroscope with transmitted light.

All agers contributing data to the black sea bass assessment attend the same quality control and quality assurance ageing workshop annually. This will provide Dr. Liljestrand with precision and bias estimates across labs to inform the stock assessment.

Geographic Location: This project will be conducted by RIDEM DMF staff out of Jamestown, RI and CFRF staff out of Kingston, RI. Samples will be collected at sea on board a RIDEM research vessel or dockside from CFRF research fleet vessels.

Milestone Schedule:

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
RIDEM Sample Collection	X	X	X	X	X	X						
CFRF Research Fleet Sample Collection	X	X	X	X	X	X						
Sample work-up	X	X	X	X	X	X	X	X				
Ageing Structure Processing				X	X	X	X	X	X	X	X	
Ageing									X	X	X	
Data Submission												X

Project Accomplishments Measurement:

Goal	Metric
RIDEM Sample Collection	RIDEM staff collect samples from the fishery-independent fish pot survey
CFRF Research Fleet Sample Collection	CFRF staff collect samples from the black sea bass Research Fleet
Sample work-up	Length, weight, sex, maturity, and ageing structures collected
Ageing Structure Processing	Otoliths mounted and sectioned
Ageing	Otoliths aged
Data Submission	Age data submitted to ACCSP and NOAA

Project History Table:

Funding Year	Title	Funded Amount	Total Project Cost
FY26 - New	FY26: Black Sea Bass (*Centropristis striata*) Age and Growth Data Collection to Address Stock Assessment Needs	$64,993.65	$77,574.74

Description of Completed Data Delivery to ACCSP:
As of the writing of this maintenance proposal, the FY26 funding has not yet been received by RIDEM. As a result, there has been no data collection to submit to ACCSP.

Total Project Cost by Year:

Year	Cost
FY26	$64,993.65
FY27	$70,768.81

Summary Table of Metrics and Achieved Goals:

Goal	Metric	Status
RIDEM Sample Collection	RIDEM staff collect samples from the fishery-independent fish pot survey	Not started – Funds not received
CFRF Research Fleet Sample Collection	CFRF staff collect samples from the black sea bass Research Fleet	Not started – Funds not received
Sample work-up	Length, weight, sex, maturity, and ageing structures collected	Not started – Funds not received
Ageing Structure Processing	Otoliths mounted and sectioned	Not started – Funds not received
Ageing	Otoliths aged	Not started – Funds not received
Data Submission	Age data submitted to ACCSP and NOAA	Not started – Funds not received

FY27 Cost Summary (Budget):

Budget Category	Federal ACCSP	In-Kind	Total
a. Salary			
Deputy Chief J. Livermore (2.5%)	$ -	$ 3,180.05	$ 3,180.05
Principal Biologist R. Balouskus (6%/1%)	$ 5,902.95	$ 983.83	$ 6,886.78
Env. Policy Analyst N. Lengyel Costa (2.5%)	$ 2,901.86	$ -	$ 2,901.86
RIDEM Seasonal Intern (10%)	$ -	$ 1,410.50	$ 1,410.50
b. Fringe			
Deputy Chief J. Livermore (2.5%)	$ -	$ 3,275.45	$ 3,275.45
Principal Biologist R. Balouskus (6%/1%)	$ 6,080.04	$ 1,013.34	$ 7,093.38
Env. Policy Analyst N. Lengyel Costa (2.5%)	$ 1,250.00	$ -	$ 1,250.00
c. Travel	$ -	$ -	$ -
d. Equipment	$ -	$ -	$ -
e. Supplies	$ 600.00	$ 500.00	$ 1,100.00
f. Contractual	$ -	$ -	$ -
ASMFC			
Fisheries Specialist Salary (18%)	$ 14,382.03	$ -	$ 14,382.03
Fisheries Specialist Fringe (18%)	$ 5,342.49	$ -	$ 5,342.49
Indirect (12%)	$ 2,366.94	$ -	$ 2,366.94
CFRF			
Executive Director Salary	$ 1,600.00	$ 1,600.00	$ 3,200.00
Research Biologists Salary	$ 7,500.00	$ -	$ 7,500.00
Business Manager Salary	$ 665.00	$ -	$ 665.00
Fringe	$ 977.00	$ 160.00	$ 1,137.00
Travel	$ 925.00	$ -	$ 925.00
Supplies	$ 1,000.00	$ -	$ 1,000.00
Research Fleet Stipends	$ 4,000.00	$ -	$ 4,000.00
Indirect (16.89%)	$ 2,815.00	$ 297.00	$ 3,112.00
g. Construction	$ -	$ -	$ -
h. Other	$ -	$ -	$ -
i. Total Direct	$ 58,308.32	$ 12,420.16	$ 70,728.48
j. RIDEM Indirect Charges (21.37%)	$ 12,460.49	$ 2,654.19	$ 15,114.68
k. Total	$ 70,768.81	$ 15,074.35	$ 85,843.16
i. Percentage	82%	18%	100%

FY27 Budget Narrative:

Description of budget categories and expenses for this project

Overall in-kind: 18% of the overall budget is being provided as in-kind contribution.

a. **Salary:**

From ACCSP:

i. **RIDEM Principal Biologist Rich Balouskus:** 6% funded position to aid in the dissection of 500 fish. Approximately five fish can be dissected per hour requiring a total of 100 hours or 14.2 working days of staff time; 6% of salary ($98,382.56) for one year = $5,902.95.

ii. **RIDEM Environmental Policy Analyst II Nicole Lengyel Costa:** 2.5% funded position to age 500 fish. It will take approximately 6 working days of staff time; 2.5% of salary ($116,074.35) for one year = $2,901.86.

In-Kind:

i. **RIDEM Deputy Chief:** 2.5% funded to provide project oversight and staff management; 2.5% salary ($127,201.91) for one year = $3,180.05.

ii. **RIDEM Principal Biologist Rich Balouskus:** 1% to provide shipboard processing of black sea bass during fish pot survey; 1% of salary ($98,382.56) for one year = $983.83.

iii. **Intern:** 10% funded seasonal intern to assist on the project. Approximately 10% of six-month salary ($14,105) = $1,410.50.

b. **Fringe:**

Annual fringe benefit rates for employees vary depending upon the employee's pay rate and what the employee chooses for health care. This may include the following:

Retirement 24%
Deferred Compensation 0.4%
FICA 6.2%
Medicare 1.45%
Health care $21,937/year
Dental $1,132/year
Vision $165/year
Assessed Fringe 4.25%
Retiree Health 6.75%

From ACCSP:

i. **RIDEM Principal Biologist Rich Balouskus:** Total annual fringe benefits for the Principal Biologist are $101,334.04. Fringe benefits for 6% of their time are $6,080.04.

ii. **RIDEM Environmental Policy Analyst II Nicole Lengyel Costa:** Total annual fringe benefits for the Environmental Policy Analyst II are $50,000. Fringe benefits for 2.5% of their time are $1,250.00.

In-Kind:

i. **RIDEM Deputy Chief:** Total annual fringe benefits for the Deputy Chief are $131,017.97. Fringe benefits for 2.5% of their time are $3,180.05.

ii. **RIDEM Principal Biologist Rich Balouskus:** Total annual fringe benefits for the Principal Biologist are $101,334.04. Fringe benefits for 1% of their time are $983.83.

c. **Travel:** Travel is not being requested by RIDEM but is being requested by CFRF. Therefore, the only travel requested is included under the Contractual category of this budget.

d. **Equipment:** No equipment is included in this budget.

e. **Supplies:**
From ACCSP: Supplies for RIDEM include two diamond wafering blades at $300 each for sectioning otoliths, total = $600. Supplies requested by CFRF are included under the Contractual category of this budget.

In-Kind: Supplies from RIDEM include glass vials for storing otoliths, epoxy/resin for mounting otoliths, cutting fluid used in the low speed saw for otolith sectioning, microscope slides used for mounting sectioned otoliths, flotex used for mounting sectioned otoliths, and slide boxes for storing sectioned otoliths. Total = $500.

f. **Contractual:**

From ACCSP:

i. **ASMFC Fisheries Specialist Salary:** 18% funded position to aid in the dissection of 500 fish and sectioning of 500 otoliths. Approximately five fish can be dissected per hour requiring a total of 100 hours or 14.2 working days of staff time. Approximately 20 otoliths can be sectioned per day requiring 25 days to process 500 otoliths; 18% of salary ($79,900.19) for one year = $14,382.03.

ii. **ASMFC Fisheries Specialist Fringe:** Total annual fringe benefits for the ASMFC Fisheries Specialist are $29,680.48. Fringe benefits for 18% of their time are $5,342.49.

iii. **ASMFC Indirect:** ASMFC charges an indirect rate of 12% for their contractual role for the Fisheries Specialist. The 12% indirect cost for 18% of the Fisheries Specialist salary and fringe is $2,366.94.

iv. **CFRF Executive Director Salary:** D. Bethoney, CFRF Executive Director, will oversee the project's administration, team communication/coordination, field research, and outreach aspects. He will also directly assist with reports, outreach material development, and communication of project progress and results to the team and fishing industry. 1.0% of salary ($160,000) for one year = $1,600.

v. **CFRF Research Biologists Salary:** The CFRF Research Scientists will be the primary individuals responsible for the fleet organization, maintenance, and support, as well as data management, communication, and analysis. They will also support the Executive Director in project oversight tasks. 10% of salary ($75,000) for one year = $7,500.

vi. **CFRF Business Manager Salary:** T. Winneg, CFRF Business Manager, will carry out all the finance-related aspects of the project, including research budget tracking, invoice processing, administrative support tasks, and purchasing supplies. 1% of their salary ($66,500) for one year = $665.

vii. **CFRF Fringe:** Includes a percentage of personnel costs for payroll taxes and worker's compensation insurance prorated in accordance with the percentage of salary paid from the program. 10% of personnel costs ($9,770) based on 2025 benefits and historical analysis for one year = $977.

viii. **CFRF Travel:** Travel costs for project staff to travel to RI DEM to deliver fish (proposed 12 trips between Kingston, RI (CFRF) and Jamestown, RI (RI DEM) * ~31 miles * $0.725/mile = $270) and to meet fishermen at docks for sample pickup and technical support (proposed 20 trips between Kingston, RI and Pt. Judith docks * ~18.3 miles * $0.725/mile = $266). Additional travel costs for project staff to travel to NOAA management track stock assessment meetings (proposed at 1 trip between Kingston, RI and Woods Hole, MA (NOAA): mileage ~176 miles * $0.725/mile = $128, per diem = 1.5 days x $86 = $129, lodging = $132, Total = $389). Total requested for all travel for one year = $925.

ix. **CFRF Supplies:** Includes $750 for the costs of at-sea research supplies, including fish tags, sharpies, bags, coolers, and ice for transporting fish. Includes $250 for supplies for meetings and outreach materials, including mailings, binders, and posters. Total requested for all supplies for one year = $1,000.

x. **Research Fleet Stipends:** Research Fleet vessels will be asked to complete data and sample collection beyond what is currently completed for the Black Sea Bass Research Fleet project. Specimen collection sessions will include sampling, tagging, and bringing in 25 additional individual black sea bass for ageing purposes. Research Fleet vessels will be provided a $250 stipend each time 25 specimens are processed and brought in, for a total of up to 400 fish over 12 months. Collecting 25 fish/session will require 16 sessions to achieve 400 total fish. Stipends of $250/session for 16 sessions = a total of $4,000.

xi. **CFRF Indirect:** CFRF charges an indirect rate of 16.89% to cover costs associated with the general operations of the CFRF, including accounting services, legal services, maintenance of office space, liability insurance, payroll

fees, phone/fax lines, internet service, board member participation, etc. 16.89% of total CFRF direct costs ($16,667) is $2,815.

In-Kind:

i. **CFRF Executive Director Salary:** This project will overlap the FY24 Earmark Black Sea Bass Research Fleet funding. One goal of that funding is to investigate the long-term feasibility of including additional data parameters in Research Fleet sampling. Time spent on the BSB Research Fleet, including evaluating how long-term age and growth data collection can be incorporated, will contribute to the goals on this project. 1.0% of salary ($160,000) for one year = $1,600.

i. **CFRF Fringe:** Includes a percentage of personnel costs for payroll taxes and worker's compensation insurance prorated in accordance with the percentage of salary paid from the program. 10% of in-kind personnel costs ($1,600) based on 2025 benefits and historical analysis for one year = $160.

ii. **CFRF Indirect:** CFRF charges an indirect rate of 16.89% to cover costs associated with the general operations of the CFRF, including accounting services, legal services, maintenance of office space, liability insurance, payroll fees, phone/fax lines, internet service, board member participation, etc. 16.89% of total CFRF in-kind costs ($1,760) is $297.

g. Construction: No construction is included in this budget.

h. Other: No other costs are included in this budget.

i. Total Direct: Includes $16,734.85 to RIDEM, $22,091.46 to ASMFC, and $19,482 to CFRF. Total direct costs requested from ACCSP are $58,308.32.

RIDEM Indirect: RIDEM charges an indirect rate of 21.37% to all salary, fringe, supplies, and contractual costs. 21.37% of total direct costs ($58,308.32) is $12,460.49.

j. Total:

i. The total requested amount from ACCSP includes $58,308.32 in direct costs and $12,460.49 for RIDEM indirect. Total requested amount = $70,768.81.

ii. The total amount of in-kind is $15,074.35.

iii. Total project costs = $70,768.81 requested + $15,074.35 in-kind = $85,843.16.

k. Percentage:

i. The total requested amount from ACCSP ($70,768.81) divided by the total project cost ($85,843.16) = 82% requested from ACCSP.

ii. The total amount of in-kind ($15,074.35) divided by the total project cost ($85,843.16) = 18% in-kind.

FY26 Budget Narrative:

Description of budget categories and expenses for this project

Overall in-kind: 17% of the overall budget is being provided as in-kind contribution.

l. Salary:

From ACCSP:

iii. **RIDEM Principal Biologist Rich Balouskus:** 6% funded position to aid in the dissection of 500 fish. Approximately five fish can be dissected per hour requiring a total of 100 hours or 14.2 working days of staff time; 6% of salary ($92,811.26) for one year = $5,568.68.

iv. **RIDEM Principal Biologist Nicole Lengyel Costa:** 2.5% funded position to age 500 fish. It will take approximately 6 working days of staff time; 2.5% of salary ($100,217.21) for one year = $2,505.43.

In-Kind:

iv. **RIDEM Deputy Chief:** 2.5% funded to provide project oversight and staff management; 2.5% salary ($114,403.40) for one year = $2,860.09.

v. **RIDEM Principal Biologist Rich Balouskus:** 1% to provide shipboard processing of black sea bass during fish pot survey; 1% of salary ($92,811.26) for one year = $928.11.

vi. **Intern:** 10% funded seasonal intern to assist on the project. Approximately 10% of six-month salary ($14,105) = $1,410.50.

m. Fringe:

Annual fringe benefit rates for employees vary depending upon the employee's pay rate and what the employee chooses for health care. This may include the following:

Retirement 24%
Deferred Compensation 0.4%
FICA 6.2%
Medicare 1.45%
Health care $21,937/year
Dental $1,132/year
Vision $165/year
Assessed Fringe 4.25%
Retiree Health 6.75%

From ACCSP:

i. **RIDEM Principal Biologist Rich Balouskus:** Total annual fringe benefits for the Principal Biologist are $44,113.52. Fringe benefits for 6% of their time are $2,646.81.

ii. **RIDEM Principal Biologist Nicole Lengyel Costa:** Total annual fringe benefits for the Principal Biologist are $47,417.92. Fringe benefits for 2.5% of their time are $1,185.45.

In-Kind:

iii. **RIDEM Deputy Chief:** Total annual fringe benefits for the Deputy Chief are $82,767.05. Fringe benefits for 2.5% of their time are $2,069.18.

iv. **RIDEM Principal Biologist Rich Balouskus:** Total annual fringe benefits for the Principal Biologist are $ 44,113.52. Fringe benefits for 1% of their time are $441.14.

n. Travel: Travel is not being requested by RIDEM but is being requested by CFRF. Therefore, the only travel requested is included under the Contractual category of this budget.

o. Equipment: No equipment is included in this budget.

p. Supplies:

From ACCSP: Supplies for RIDEM include two diamond wafering blades at $300 each for sectioning otoliths, total = $600. Supplies requested by CFRF are included under the Contractual category of this budget.

In-Kind: Supplies from RIDEM include glass vials for storing otoliths, epoxy/resin for mounting otoliths, cutting fluid used in the low speed saw for otolith sectioning, microscope slides used for mounting sectioned otoliths, flotex used for mounting sectioned otoliths, and slide boxes for storing sectioned otoliths. Total = $500.

q. Contractual:

From ACCSP:

xii. **ASMFC Fisheries Specialist Salary:** 18% funded position to aid in the dissection of 500 fish and sectioning of 500 otoliths. Approximately five fish can be dissected per hour requiring a total of 100 hours or 14.2 working days of staff time. Approximately 20 otoliths can be sectioned per day requiring 25 days to process 500 otoliths; 18% of salary ($77,573) for one year = $13,963.14.

xiii. **ASMFC Fisheries Specialist Fringe:** Total annual fringe benefits for the ASMFC Fisheries Specialist are $28,816. Fringe benefits for18% of their time are $5,186.88.

xiv. **ASMFC Indirect:** ASMFC charges an indirect rate of 12% for their contractual role for the Fisheries Specialist. The 12% indirect cost for 18% of the Fisheries Specialist salary and fringe is $2,298.

xv. **CFRF Executive Director Salary:** D. Bethoney, CFRF Executive Director, will oversee the project's administration, team communication/coordination, field

research, and outreach aspects. He will also directly assist with reports, outreach material development, and communication of project progress and results to the team and fishing industry. 1.0% of salary ($160,000) for one year = $1,600.

xvi. **CFRF Research Biologists Salary:** The CFRF Research Scientists will be the primary individuals responsible for the fleet organization, maintenance, and support, as well as data management, communication, and analysis. They will also support the Executive Director in project oversight tasks. 10% of salary ($70,900) for one year = $7,090.

xvii. **CFRF Business Manager Salary:** T. Winneg, CFRF Business Manager, will carry out all the finance-related aspects of the project, including research budget tracking, invoice processing, administrative support tasks, and purchasing supplies. 1% of their salary ($60,400) for one year = $604.

xviii. **CFRF Fringe:** Includes a percentage of personnel costs for payroll taxes and worker's compensation insurance prorated in accordance with the percentage of salary paid from the program. 10% of personnel costs ($9,294) based on 2023 benefits and historical analysis for one year = $929.

xix. **CFRF Travel:** Travel costs for project staff to travel to RI DEM to deliver fish (proposed 12 trips between Kingston, RI (CFRF) and Jamestown, RI (RI DEM) * ~31 miles * $0.70/mile = $260) and to meet fishermen at docks for sample pickup and technical support (proposed 20 trips between Kingston, RI and Pt. Judith docks * ~18.3 miles * $0.70/mile = $256). Additional travel costs for project staff to travel to NOAA management track stock assessment meetings (proposed at 1 trip between Kingston, RI and Woods Hole, MA (NOAA): mileage ~176 miles * $0.70/mile = $123, per diem = 1.5 days x $86 = $129, lodging = $132, Total = $384). Total requested for all travel for one year = $900.

xx. **CFRF Supplies:** Includes $750 for the costs of at-sea research supplies, including fish tags, sharpies, bags, coolers, and ice for transporting fish. Includes $250 for supplies for meetings and outreach materials, including mailings, binders, and posters. Total requested for all supplies for one year = $1,000.

xxi. **Research Fleet Stipends:** Research Fleet vessels will be asked to complete data and sample collection beyond what is currently completed for the Black Sea Bass Research Fleet project. Specimen collection sessions will include sampling, tagging, and bringing in 25 additional individual black sea bass for ageing purposes. Research Fleet vessels will be provided a $250 stipend each time 25 specimens are processed and brought in, for a total of up to 400 fish over 12 months. Collecting 25 fish/session will require 16 sessions to achieve 400 total fish. Stipends of $250/session for 16 sessions = a total of $4,000.

xxii. **CFRF Indirect:** CFRF charges an indirect rate of 20.23% to cover costs associated with the general operations of the CFRF, including accounting services, legal services, maintenance of office space, liability insurance, payroll fees, phone/fax lines, internet service, board member participation, etc. 20.23% of total CFRF direct costs ($16,123) is $3,261.68.

In-Kind:

ii. **CFRF Executive Director Salary:** This project will overlap the FY24 Earmark Black Sea Bass Research Fleet funding. One goal of that funding is to investigate the long-term feasibility of including additional data parameters in Research Fleet sampling. Time spent on the BSB Research Fleet, including evaluating how long-term age and growth data collection can be incorporated, will contribute to the goals on this project. 1.0% of salary ($160,000) for one year = $1,600.

i. **CFRF Fringe:** Includes a percentage of personnel costs for payroll taxes and worker's compensation insurance prorated in accordance with the percentage of salary paid from the program. 10% of in-kind personnel costs ($1,600) based on 2023 benefits and historical analysis for one year = $160.

ii. **CFRF Indirect:** CFRF charges an indirect rate of 20.23% to cover costs associated with the general operations of the CFRF, including accounting services, legal services, maintenance of office space, liability insurance, payroll fees, phone/fax lines, internet service, board member participation, etc. 20.23% of total CFRF in-kind costs ($1,760) is $356.05.

r. Construction: No construction is included in this budget.

s. Other: No other costs are included in this budget.

t. Total Direct: Includes $12,506.37 to RIDEM, $21,448.02 to ASMFC, and $19,384.68 to CFRF. Total direct costs requested from ACCSP are $53,339.07.

u. RIDEM Indirect: RIDEM charges an indirect rate of 21.85% to all salary, fringe, supplies, and contractual costs. 21.85% of total direct costs ($53,339.07) is $11,654.59.

v. Total:

i. The total requested amount from ACCSP includes $53,339.07 in direct costs and $11,654.59 for RIDEM indirect. Total requested amount = $64,993.65.

ii. The total amount of in-kind is $12,581.08.

iii. Total project costs = $64,993.65 requested + $12,581.08 in-kind = $77,574.74.

w. Percentage:

i. The total requested amount from ACCSP ($64,993.65) divided by the total project cost ($77,574.74) = 84% requested from ACCSP.

ii. The total amount of in-kind ($12,581.08) divided by the total project cost ($77,574.74) = 16% in-kind.

SUMMARY OF PROPOSAL FOR RANKING

Proposal Type: Maintenance

Primary Program Priority: Biological (100%). This project will be collecting data identified as a stock assessment research need for black sea bass, a species in the top quartile of the FY26 Biological Matrix.

Data Delivery Plan: Data will be submitted to ACCSP annually. RIDEM and ACCSP are currently working on upgrading the data load process between both agencies.

Multi-Partner/Regional Impact: This project is a collaboration between RIDEM, CFRF and NOAA. The project will collect biological data critical for the northern region in the black sea bass stock assessment. Therefore, all the states in the northern region, and the stock assessment as a whole, will benefit from this data.

Contains Funding Transition Plan: This was a new proposal for FY 26 and is now being submitted as a maintenance proposal for FY27. Project staff will continue to seek alternate funds for the future. If alternate funds cannot be identified by the FY28 ACCSP RFP, this project may be submitted again as a maintenance project.

In-Kind Contribution: In-kind contribution for this project is 18% as stated in the budget table.

Improvement in Data Quality/Quantity/Timeliness: This project will be improving data quantity and quality by collecting age-at-length data for the northern region of the black sea bass stock assessment. This data will be even more critical as NOAA port-side sampling and NOAA bottom trawl survey efforts decrease in subsequent years.

Impact on Stock Assessment: This project is collecting data for the black sea bass stock assessment and addressing stock assessment research needs.

Impact on Management: The data collected in the project will increase our knowledge about the age-at-length composition of black sea bass in the northern region. It may allow for different modeling approaches (e.g., sex-based modeling) that could impact overall commercial quotas for all states in the stock unit.

Innovative: This project is collaborative and cost-effective effort to address a multitude of research needs for a species that is inadequately sampled. Our approach is combining fisheries-dependent and fisheries-independent data to satisfy multiple needs. We are also working directly with the NOAA stock assessment scientist to ensure gaps and needs for age-at-length data are addressed.

Properly Prepared: This proposal followed the guidelines of the FY27 Request for Proposals and Funding Decision document.

Merit: This project is addressing a critical stock assessment need for and undersampled species, black sea bass.

References:

ASMFC, 2023. Report of the Black Sea Bass (*Centropristis striata*) Research Track Stock Assessment Working Group. November 20, 2023.

ACCSP, 2025. Biological Sampling Priority Matrix. March, 2025. Available at: https://www.accsp.org/wp-content/uploads/2025/05/Attachment_VI_BRP_Matrix_Presentation_FY2026.pdf

Bell RJ, Richardson DE, Hare JA, Lynch PD, Fratantoni PS. Disentangling the effects of climate, abundance, and size on the distribution of marine fish: an example based on four stocks from the Northeast US shelf. ICES J Mar Sci. 2014; fsu217. doi: 10.1093/icesjms/fsu217

Heimann, T., Verkamp, H., McNamee, J., Bethoney, N.D. Mobilizing the fishing industry to address data gaps created by shifting species distribution. Front. Mar. Sci. 2023; 10, 1043676. doi: 10.3389/fmars.2023.1043676

Howard, R.A., Ciannelli, L., Wakefield, W.W., Haltuch, M.A. Comparing fishery-independent and fishery-dependent data for analysis of the distributions of Oregon shelf groundfishes.Fish. Res. 2023; 258, 106553. doi: 10.1016/j.fishres.2022.106553

Appendix A: Abbreviated Curriculum Vitae for Principal Investigators

Nicole Lengyel Costa nicole.lengyel@dem.ri.gov 401-423-1940

PROFESSIONAL EXPERIENCE

RI Department of Environmental Management, Jamestown, RI, 05/10/09 – Present
Principal Biologist (Marine)
Environmental Policy Analyst II

University of Rhode Island Graduate School of Oceanography, Narragansett, RI, Feb. 2004 – 05/09/09
Laboratory Technician/Marine Research Assistant I

RI Department of Environmental Management, Providence, RI, June 2005 -August 2005
Seasonal Policy Intern

EDUCATION

University of Rhode Island, Kingston, RI
PhD, Marine Affairs – September 2022 - Present

University of Rhode Island, Graduate School of Oceanography, Narragansett, RI
Master of Science Degree, Biological Oceanography - May 2013

University of Rhode Island, Kingston, RI
Bachelor of Science Degree, Biological Sciences - December 2005

The School for Field Studies (Boston University), Queensland, Australia
Rainforest Studies – September 2004 – December 2004

PROFESSIONAL PUBLICATIONS AND PRESENTATIONS

- Fishery Management Plans and Stock Assessments:
  - ASMFC Addendum II to Amendment 7 to the Interstate Fishery Management Plan for Atlantic Striped Bass (2024), ASMFC Addendum I to Amendment 7 to the Interstate Fishery Management Plan for Atlantic Striped Bass (2023), ASMFC Amendment 7 to the Interstate Fishery Management Plan for Atlantic Striped Bass (2022), ASMFC Atlantic Striped Bass Stock Assessment Update (2024), ASMFC Atlantic Striped Bass Stock Assessment Update (2022), ASMFC Atlantic Striped Bass Benchmark Stock Assessment (2018), ASMFC Addendum I to Amendment 3 to the Interstate Fishery Management Plan for Atlantic Menhaden (2022), ASMFC Amendment 3 to the Interstate Fishery Management Plan for Atlantic Menhaden (2017), NEFSC Bluefish Benchmark Stock Assessment (2015), ASMFC Atlantic Striped Bass Benchmark Stock Assessment (2013).
- Age and Growth:
  - 2025 Atlantic Menhaden Ageing Exchange Report (November 2025), 2025 Report of the Quality Assurance/Quality Control Fish Ageing Workshop (November 2025), 2024 Report

of the Quality Assurance/Quality Control Fish Ageing Workshop (March 2024), 2023 Report of the Quality Assurance/Quality Control Fish Ageing Workshop (March 2023), Summary of the 2020-2021 Tautog Ageing Sample Exchange (September 2021), A Practical Handbook for Determining the Ages of Gulf of Mexico and Atlantic Coast Fishes (November 2020), 2019 Report of the Quality Assurance/Quality Control Fish Ageing Workshop (March 2019), 2018 Report of the Quality Assurance/Quality Control Fish Ageing Workshop (March 2018), 2017 Report of the Quality Assurance/Quality Control Fish Ageing Workshop (May 2017), Report of the Quality Assurance/Quality Control Fish Ageing Workshop (March 2016), Atlantic Menhaden Ageing Workshop Report (June 2015), Proceedings of the 2013 Black Sea Bass Ageing Workshop (December 2013), Tautog Ageing Workshop Report (May 2012)

- Schiano, S., Nesslage, G., Collie, J., **Lengyel Costa, N.L.**, Drew, K., Latour, R.J., McNamee, J., Schueller, A., & Wilberg M.J. (2025). Trends in Atlantic Striped Bass Growth in the Mid-Atlantic, U.S.A. *Transactions of the American Fisheries Society*, 154:3, 262 – 277.
- Remick, A., & **Lengyel Costa, N.** (2024, January 9). Pilot observer program for Rhode Island State Waters Gillnet Fishery [Poster Presentation]. American Fisheries Society Southern New England Chapter, Storrs, CT.
- Smith, B. E., Collie, J. S., & **Lengyel, N. L.** (2014). Fish trophic engineering: Ecological effects of the invasive ascidian Didemnum vexillum (Georges Bank, northwestern Atlantic). *Journal of Experimental Marine Biology and Ecology*, *461*, 489–498. https://doi.org/10.1016/j.jembe.2014.09.009
- Smith, B., Collie, J., & **Lengyel, N**. (2013). Effects of chronic bottom fishing on the benthic epifauna and diets of demersal fishes on northern Georges Bank. *Marine Ecology Progress Series*, *472*, 199–217. https://doi.org/10.3354/meps10031
- **Lengyel, N.,** Collie, J. S., & Valentine, P. C. (2009). The invasive colonial ascidian Didemnum vexillum on Georges Bank — Ecological effects and genetic identification. *Aquatic Invasions*, *4*(1), 143–152. https://doi.org/10.3391/ai.2009.4.1.15

Hannah Verkamp
Commercial Fisheries Research Foundation
P.O. Box 278 Saunderstown, RI
401-515-4892, hverkamp@cfrfoundation.org

Education:

University of New England
M.S. Marine Science 2017-2019
Thesis: The nonlethal assessment of reproductive parameters in sharks: Case studies on blacktip (*Carcharhinus limbatus*) and white (*Carcharodon carcharias*) sharks.

Relevant Work Experience:

Commercial Fisheries Research Foundation
Senior Research Associate February 2024 - Present
Research Biologist February 2021 - February 2024

Research project management position working collaboratively with the Rhode Island fishing industry as well as state and federal fisheries management bodies. Responsible for management of the Black Sea Bass Research Fleet and associated extension projects, bay scallop research projects, and supervising assistant research biologist. Also responsible for managing outreach activities for all of the organization's funded research projects, including tracking deliverables and reporting to funding agencies

Relevant Publications:

Verkamp, H.J., Soranno, E., and Bethoney, N.D. (In review). Characterizing the composition of commercial black sea bass (Centropristis striata) catch and discards in the Mid-Atlantic and Southern New England regions. In Revision: *Frontiers in Marine Science*.

Verkamp, H.J., Heimann, T., McNamee, J., Jones, A. and Bethoney, N.D. 2023. An overview of the Commercial Fisheries Research Foundation and Rhode Island Department of Environmental Management Black Sea Bass Research Fleet. 2023 Black Sea Bass Research Track Stock Assessment Working Paper. Available at: https://apps-nefsc.fisheries.noaa.gov/saw/sasi.php.

Heimann, T., **Verkamp, H.J.**, McNamee, J., and Bethoney, N.D. 2023 Mobilizing the fishing industry to address data gaps created by shifting species distribution. *Frontiers in Marine Science*. 10:1043676.

Verkamp, H.J., Nooj, J., Helt, W., Ruddick, K., Gerber-Williams, A., McManus, M.C., and Bethoney,
N.D. 2022. Scoping bay scallop restoration in Rhode Island: a synthesis of knowledge and recommendations for future efforts. *Journal of Shellfish Research* 41(2):153–171

Relevant Presentations:

Verkamp, H.J, McNamee, J., and Bethoney, N.D. 2024. Empowering fishermen to fill data gaps for a rapidly changing fishery: The Black Sea Bass Research Fleet. World Fisheries Congress. Seattle, WA. Poster.

Verkamp, H.J., Huntsberger, C., and Bethoney, N.D. 2023. Augmenting an offshore wind farm monitoring survey to incorporate biological condition monitoring. Annual Meeting of the American Fisheries Society. Grand Rapids, MI. Poster.

Verkamp, H.J., Heimann, T., McNamee, J., and Bethoney, N.D. 2021. Using a fishery-dependent research fleet approach to characterize the composition of black sea bass (*Centropristis striata*) discards in the Southern New England and Mid-Atlantic fishery. Annual Meeting of the American Fisheries Society. Baltimore, MD. Oral.

Atlantic Coastal Cooperative Statistics Program
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June 12, 2026

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

Dear ACCSP:

We are pleased to submit the proposal titled "**FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies**" for your consideration. This is a new proposal which is being proposed by the ACCSP Information System (IS) Committee with input from Maine, Massachusetts, and Rhode Island. The expectation from the IS Committee is that all partners using the harvester reporting API will participate in the proposed project. The need for a method to update electronically submitted catch and effort reports in SAFIS has been ongoing for several years. While states operate differently, some states have indicated they do not have the ability to correct the records in SAFIS applications (i.e., eTRIPS) due to the cumbersome methods currently available and only make corrections in locally housed or final dataset(s). This results in differences between datasets from different partners, ACCSP, and even within the ACCSP data collection program, depending on the partner and source location. Each year more and more reports are submitted electronically and the time spent updating records on a record-by-record basis continues to not be sustainable for many partners.

The Information Systems Committee is proposing that interested partners will work alongside ACCSP staff and their contractors to develop a web-based tool that will allow ACCSP Partners and possibly industry to perform bulk updates to data currently submitted to SAFIS. Additionally, improved flow within the application is needed for partners and industry members to edit individual trips. This proposal addresses the following 2027 ranking criteria: catch and effort, data delivery plan, regional impact, funding transition plan, in kind contribution, improvement in data quality and timeliness, impact on stock assessment and properly prepared.

We will address questions and comments received from the preproposal process here and within the proposal where appropriate.

1. On page 116 (combined document) in Table 2, under Contractual description, the total should be $67,500 (rather than $135,000)
   This has been fixed, thank you.
1. Is there a need to code to be retained for ACCSP? Language should be included that these funds should go through the ASMFC/ACCSP contract. This and other details will be included in the contract. ASMFC will need to be added to the budget.
   If this proposal is funded, it would be added to the overall Admin Grant. ACCSP would be the lead on contracting the work with Karen Cannell and would use language that will mirror other contracts that provides ACCSP with the code ownership.

2. Why is this not in the Admin Grant?
   Coordinating Council has asked that separate committee projects are individual proposals so that the project is independent and eliminates the "options" within the Administrative Grant.
3. Please include information documenting who is making changes. Will this include metadata on if end user has been contacted and what interactions have occurred with them? – This differs by partner, which is why it may not be included here, but the committee will expand on this in the proposal. They will also note that the database already records every change and what user makes that change.
   Changes will primarily be made by partner staff; however, industry can make changes to their data. ACCSP does not have the ability to track interactions with individuals or dealers so that information will not be included. How data are changed are partner specific. The database does track when and who made a data change. The ability to edit data already exists; this project is needed to increase the efficiency that large amounts of data are able to be modified after all appropriate audits are completed.

For a summary of the proposal for ranking purposes, please see page 6. ACCSP provided a letter of support that can be found on page 7. Please contact Robert Watts, Information Systems Chair, at Rob.Watts@maine.gov with any questions. Thank you for your consideration of this proposal.

Sincerely,

ACCSP Information Systems Committee

Atlantic Coastal Cooperative Statistics Program (ACCSP)
1050 N. Highland Street. Suite. 200A-N
Arlington, VA 22201

FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies

Total Cost: $74,250

Submitted by:

ACCSP Information System Committee

Applicant Name: ACCSP Information Systems Committee (IS Committee)

Principal Investigator: Robert Watts, ME DMR (IS Committee Chair)

Project Title: FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies

Project Type: New Project

Requested Award Amount (without the NOAA administration fee): $74,250

Requested Award Period: One year after receipt of funds

Objectives:

- Create a bulk update tool for the SAFIS eTRIPS application to be used by partner staff
- Create an improved and streamlined trip editing path for end users to update their trip submissions

Need:

In recent years, Atlantic Coastal Cooperative Statistics Program (ACCSP) partners observed, and in some cases required, a shift from harvester paper reporting to electronic reporting. In turn, this shift relieved some former challenges such as staffing levels to enter the amount of paper harvester data received. However, these same partners identified new challenges regarding electronically entered harvester data quality; partners are now spending significant time fixing incorrectly entered data that reside in the database upon trip submission. This is in contrast to previous processes that included quality control conducted on paper catch and effort reports prior to loading into the database.

The need to create a bulk update tool for ACCSP partners to update harvester data and improvements to single trip editing for industry within the eTRIPS application is long overdue and having this ability as soon as possible is important. Editing paper trip report submissions prior to entry is a common practice for many partners. As more harvesters switch to eTRIPS reporting, it is necessary to have the tools to efficiently edit these trips. This proposal does not aim to change the logic or justification for editing a trip report, rather it intends to increase the efficiency of the editing process. Currently, if a partner or industry member needs to update one or more trips, they must fix each report individually, and each individual update requires the user to move through three to six, or more, screens to complete each update. These line-by-line updates take significant staff time and are often not completed because of the necessary time commitment. Each year over 200,000 harvester records land in the Warehouse from Maine alone, another 83,000 on average from Massachusetts, and many more from other partners. Each year this tool does not exist is another year of data errors remaining in the database that could result in incorrect analyses by Data Warehouse users once these data become available to them.

Data-entry validations are a great tool that catch many predetermined common data entry errors (e.g., gear and species combinations, reported quantity maximums by species and unit, etc.). Once implemented within the SAFIS eTRIPS environment and harvester reporting API in 2026 (funded by previous administrative proposals), application validations are expected to improve incoming data quality but only to an extent.

Unfortunately, data that pass these validations may still be incorrect for many reasons including but not limited to the desire to balance the validations impact with the user's experience of receiving warning messages during the data entry process and the inability to apply complex data validations. These errors will continue to be identified through post-hoc quality control processes and thus, a need for improving the ability to edit submitted data even with extensive data-entry validations applied to application remains. Additionally, data submitted before the validations are in place still contain inaccuracies that need to be corrected and need the proposed bulk tool to be completed.

Results and Benefits:

This proposal would create a tool that could be used by all ACCSP partners and industry members that submit electronic harvester catch and effort reports to the SAFIS harvester reporting API and improve the overall editing experience for end users. This tool would allow for bulk updates to previously submitted reports and improved single trip editing which will save significant staff time and remove the bottleneck of updating data in the SAFIS database. Data quality of historical data, at least back to 2021 when database structures changed, will also be able to be improved.

A simple and intuitive user experience is important for retention in the electronic reporting user group, especially when electronic reporting is not required by the partner agency. Even when it is required, a smoother and easier user experience will result in improved communication with end users and ideally, better data and data products. It can be difficult for partner staff to instruct users to edit trip reports in the application's current state, and simplification of that process will only benefit those conversations and improve data quality. Training materials will also be easier to create and maintain.

Ultimately, this tool will help partners provide cleaner data for consumption by the variety of users pulling catch and effort information from the Data Warehouse via non-confidential, confidential, and custom data queries, including for stock assessments and fishery management decision making processes.

Data Delivery Plan:

Data being utilized in this project are in the ACCSP databases. No data delivery plan is needed.

Approach:

ACCSP will contract a developer to build a web-based audit tool for harvester catch and effort data residing in Standard Atlantic Fishery Information System (SAFIS). The "web-based" tool will require utilization of ACCSP's harvester reporting API and all the validations built into it. This is essential so any corrected data flows through the same pathway that all data submitted to ACCSP flow. As a model, the electronic dealer reporting application (eDR) released in January 2026 contained a bulk update tool that can be expanded for this work.

The bulk update tool for harvester data will need the capability to bulk update single elements of a set of specific harvester's trips based on a date range and given a set of input criteria. For example, if the incorrect vessel was entered on a state partner agency trip for a single harvester for a month, a single submission through the tool should update all trips within that month to the correct vessel. However, this tool must also accommodate a series of changes to multiple trips and/or harvesters that may not be an identical change for

each trip. For example, if we have 100 harvesters who entered a total of 300 catch sources incorrectly, or if a single harvester entered something incorrectly on many trips but each trip had a unique change we could use this tool to update all those elements at once. To do this, the existing upload feature may be utilized as a model for submitting data.
Partners will be tasked with identifying errors, receiving harvester approval for changes, and tracking changes for their permit holders. Tracking the changes to data submitted through this tool is also necessary. Data changes must be identified to the individual account, submitting the changes and retrieval of the changes made is important. Lastly, this tool must allow partner agencies to update trip data only when a trip has a matching confirmed validating agency. The opportunity to open this tool to harvesters to edit their own data will also be investigated, but additional controls may be required for this action.

To improve single trip edit capabilities within the eTRIPS application, ACCSP and their contractor will develop simple methods for harvesters to edit previously submitted reports within eTRIPS Online. This work will improve the current edit reports feature to allow users to navigate through elements of a report and update values efficiently rather than click through each screen for every trip. Exact methods will be developed with the contractor and will consider best practices for online applications such as this.

Geographic Location:
Operations will be based out of ACCSP Headquarters in Arlington, VA; however, the project will take place along the entire East Coast.

Milestone Schedule:

Table 1. Monthly milestone schedule for various project metrics. An "**X**" indicates the metric is expected to occur during that month.

Metric	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Contract with Programmer	**X**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Programming of Application	n/a	**X**	**X**	**X**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Testing of Application by Partners	n/a	n/a	n/a	n/a	**X**	**X**	**X**	**X**	**X**	**X**	**X**	n/a
Modifications to Application	n/a	n/a	n/a	n/a	n/a	**X**	**X**	**X**	**X**	**X**	**X**	n/a
Release of Application to Website	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**X**
Semi-annual Reports	n/a	n/a	n/a	n/a	n/a	**X**	n/a	n/a	n/a	n/a	n/a	**X**
Annual/Final Report	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**X**

Project Accomplishments Measurement:
This project will be considered finished when the web-audit tool for data in SAFIS is complete

Cost Summary:

Table 2. Summary of itemized projected costs for the proposal by funding category and in-kind versus amount requested.

Description and Calculation	In-Kind	Requested from ACCSP
Personnel (a)	**$5,000.00**	**$0.00**
Estimated 100 hours of testing by all affected partners at an average of $50/hour	**$5,000.00**	**$0.00**
Fringe (b)	**$0.00**	**$0.00**
Supplies (c)	**$0.00**	**$0.00**
Contractual (d)	**$0.00**	**$67,500.00**
ACCSP Contractors Development for 500 hours @ $135/hour = $67,500	**$0.00**	**$67,500.00**
Other (e)	**$0.00**	**$0.00**
Total Direct Charges	**$0.00**	**$67,500.00**
Indirect Charges (f)	**$0.00**	**$6,750.00**
Sub-Totals	**$5,000.00**	**$74,250.00**

Table 3. Summary of total project cost and amount requested.

Description	Cost
Total Project Cost	**$79,250.00**
In-kind Percent Contribution	**6.3%**
Direct Percent Contribution	**93.7%**
Requested Amount	**$74,250.00**

Budget Narrative for FY2027 proposal:

Contractual: All costs associated with this proposal are dedicated to contracted development work to build the bulk update tool and modify single trip edit capabilities. This includes 500 hours at $135/hour.

Personnel and Fringe Benefits: No personnel costs will be requested for this project. However, we are including a general amount for personnel time for testing purposes at $50/hour for 100 hours as in kind.

Travel: There will be no travel costs associated with this project.

Supplies: There will be no supply costs associated with this project.

Other: There will be no "other" costs associated with this project.

Indirect costs: The ASMFC overhead for this project is 10%.

Summary of Proposal for ACCSP Ranking

Proposal Type: New Proposal

Primary Program Priority and Percentage of Effort to ACCSP Modules:

Catch and Effort (8 points): The data management tool being developed within this proposal will allow partners and industry to quickly and effectively correct erroneous data located in SAFIS. This will provide better data to all partners and fisheries managers to make better management decisions.

Data Delivery Plan (2 points): All data associated with this project are housed within SAFIS. Any modifications to data in SAFIS would occur though the ACCSP Harvester Data API.

Project Quality Factors:

Regional Impact (5 points): All partners will benefit from the tool developed from this proposal. If a partner has data stored in SAFIS they will be able to utilize this tool to audit vast quantities of data quickly through a secure web interface. If partners do not have harvester data currently stored within SAFIS, they will still benefit because the data stored within SAFIS will have been updated to correct any erroneous entries.

Funding Transition Plan (4 points): This is a one-time proposal that has a defined end date and product. No additional funding requests beyond this proposal are anticipated.

In-Kind Contribution (1 point): Partners will test the application during the build process and provide feedback to help ensure the project's success (estimated 100 hours at $50/hour).

Improvement in Data Quality/Timeliness (4 points): The tool being developed by this project will allow all partners and industry to perform bulk updates to data previously submitted through the ACCSP Harvester Data API. The need to have a bulk update tool has been around for several years as SAFIS currently houses data that are not accurate because the time required to edit data line by line is great and staff do not have the capacity to spend several hours fixing few lines. This tool will allow for the updating of large volumes of data with a few clicks, saving staff time and improving the accuracy of the data currently in SAFIS.

Potential secondary module as a by-product (in program priority order) (3 points): The audit tool being developed by this proposal could eventually lead other partners to request similar tools be developed for data their programs stored in SAFIS.

Impact on Stock Assessment (3 points): Having thoroughly audited data for stock assessments are of upmost importance. Having data that fisheries researchers and managers are confident are as accurate as possible allows for better decision making for the stocks in question. This tool will allow for the data to be as clean as possible.

Impact on Management (3 Points): Fisheries Managers rely on these data daily to make decisions about quota monitored fisheries. Data submitted to SAFIS must be as accurate as possible because it is used to inform State and Federal regulatory authorities about where fishing activity and the effort of fishing activities to make management decisions.

Properly Prepared (1 Points): The Information Systems Committee followed ACCSP guidelines and pertinent documents when preparing this proposal.

Merit (3 points): This proposal will positively impact all ACCSP partners and anyone that utilizes data from ACCSP.

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200A-N | Arlington, VA 22201
703.842.0780 | 703.842.0779 (fax) | www.accsp.org

TO: ACCSP Operations and Advisors Committee Members

FROM: Julie DeFilippi Simpson, ACCSP Deputy Director

DATE: June 10, 2026

SUBJECT: ACCSP Staff Workload for Proposed Project

Project Title:
FY27: Improving Harvester Reporting Edit Capabilities for End Users and Partner Agencies

Project Type: New Project

Principal Investigator: Information Systems Committee - Robert Watts (ME DMR) Chair

ACCSP Staff Workload Comments: *
ACCSP anticipates minor impact on staff workload from this project. Coordinating with partner staff and committee members is part of daily activities and the expected surge in workload will be spread over time and within current capacity at peak. Additionally, there will be a minor workload to manage the contract and contractor. This additional workload will primarily fall on the Software Team and ACCSP Deputy Director. It is not anticipated that this will be at all prohibitive.

* Comments and opinions are based on evaluation of this project individually as opposed to all proposed projects as all projects have yet to be submitted.

Robert B. Watts II
Maine Department of Marine Resources
(207) 350-7154
rob.watts@maine.gov
June 2026

PROFILE:

- Knowledge of Maine and federal regulations pertaining to commercial fishing and associated reporting requirements through working with the Department of Marine Resources and the National Marine Fisheries Service.
- Knowledgeable of Maine's fishing industries and how they operate.

EDUCATION:

B.S. Marine Science, Maine Maritime Academy, Castine, ME 2002

EMPLOYMENT EXPERIENCE:

May 2025 – Present **Marine Resource Scientist IV**
May 2016 – May 2025 **Marine Resource Scientist III**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.
- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversees DMR's landings suspension authority and process.
- Oversees DMR's swipe card reporting program.
- Oversees MEDMR's MARVIN database.
- Maintains dealer and harvester auditing databases.
- Oversaw Maine's Interactive Voice Response (IVR) reporting program (IVR reporting ended in 2019)
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP), serving on the Operations Committee, Commercial Technical Committee, Information Systems Technical Committee, Standard Codes Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

Jan 2014 – Jan 2016 **Marine Resource Scientist III (Acting Capacity)**
June 2015 – Apr 2016 **Marine Resource Scientist II**
Feb 2012 – Apr 2015 **Marine Resource Scientist I**

Maine Department of Marine Resources
West Boothbay Harbor, ME

- Manages daily operations of Maine's Commercial Landings Program, which collects, compiles and distributes commercial fishery statistics for Maine's commercial fisheries.

- Supervises Landings Program personnel.
- Maintain Microsoft Access databases for licensing information, compliance and data entry.
- Communicates with industry regarding reporting requirements, monitors reporting compliance and works with the licensing division in order to ensure all mandatory reporting requirements are met and licenses are issued accordingly.
- Oversees DMR's landings suspension authority and process.
- Oversees DMR's swipe card reporting program.
- Maintains dealer and harvester auditing databases.
- Oversees Maine's Interactive Voice Response (IVR) reporting program.
- Serves as key contact for Maine commercial landings information.
- Promotes Maine's partnership with Atlantic Coastal Cooperative Statistical Program (ACCSP) through serving on the Commercial Technical Committee, Information Systems Technical Committee and Outreach Committee; working to bring the Landings Program into compliance with ACCSP standards.

Oct 2007 – Jan 2012 **Marine Resource Specialist II**
Maine Department of Marine Resources

- Oversee daily operations of the harvester landings program.
- Notify new harvesters about reporting requirements.
- Maintain databases used for data audits and data entry.
- Monitor reporting compliance database and notifies harvesters if they are delinquent.
- Supervise two Landings Program personnel.
- Oversees IVR reporting.
- Prepare data requests from various sources

Jul 2005 – Oct 2007 **Marine Resource Specialist I**
Maine Department of Marine Resources

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Created publications, updated regulation handouts and updated the recreational fishing website as needed.

May 2001 – Jun 2005 **Conservation Aid**
Maine Department of Marine Resources

- Interviewed marine recreational anglers all over the Maine coast to help determine fish stocks. Identified, weighed, measured and recorded fish caught by anglers.
- Acted as a liaison between the State of Maine and the recreational anglers, answered anglers questions about fishing regulations.

SELECTED PUBLICATIONS:

Watts, Robert B, Bartlett, J., Bates, E., Bray, H., Brown, M., Cieri, M., ... & Wilson, C. (2023). Reflecting on the recent history of coastal Maine fisheries and marine resource monitoring: the value of collaborative research, changing ecosystems, and thoughts on preparing for the future. *ICES Journal of Marine Science*, 80(8), 2074-2086.

NEW 2 - WITHDRAWN

NCDMF

FY27: Estimating recreational hook and line discard mortality for Black Sea Bass *Centropristis striata*

NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

August 14, 2026

To the ACCSP Operations and Advisory Committees:

Title: Fishery Dependent Biological Sampling of Federal and State Permitted Vessels in New York.
On behalf of the New York Department of Environmental Conservation (NYSDEC) and Cornell Cooperative Extension (CCE), we are pleased to submit our revised proposal for Fishery Dependent Biological Sampling of Federal and State Permitted Vessels in NY. We have carefully reviewed and addressed each of the committee's comments as detailed below:

Overall Proposal Modification

- **Split Proposal:** We have split the original proposal that included biological sampling and VTR reporting, into two separate proposals each of which remains within the original scope. This cover letter and the attached proposal are for Biological Sampling. On advice from ACCSP we did not highlight changes.

Budget and Personnel

- **Position Descriptions:** Detailed descriptions and costs have been added for Budget Positions.
- **Overhead and Administrative Grant:** As requested by NYSDEC, we explicitly request that these funds go through the **ACCSP Administrative Grant** directly to CCE. Consequently, we have maintained the 10% ASMFC/ACCSP indirect charge as previously recommended by ACCSP.
- **Personnel Overlap:** We have addressed potential personnel overlap by detailing the specific time allocations for each CCE staff member. The project utilizes a **team-based approach** where staff members contribute fractions of their annual effort, ensuring that total commitments across all active proposals do not exceed 100%.

Approach

- **Sampling Plan:** The document has been updated to clarify and stress that the Sampling Plan is specifically based directly on stock assessment scientist input through current assessment recommendations and assessment priorities for sampling. Additional details on the Sampling Plan have been provided. This has been clarified in the narrative and in Appendix Tables 1 and 2.
- **Sample Numbers:** Sample numbers by quarter are detailed in Appendix Table A2.
- **Hard Parts:** Hard parts for biological sampling are focused on and based on otoliths, not scales. This has been clarified in the proposal.

We believe these revisions strengthen the proposal and demonstrate our commitment to a successful, cost-effective pilot program.

Sincerely,
Jesse Hornstein
Marine Biologist II
New York State Department of Environmental Conservation

Division of Marine Resources
123 Kings Park Blvd, Kings Park, NY 17754 | dec.ny.gov | FW.Marine@dec.ny.gov | 631-444-0430

Proposal for funding made to the
Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200A-N
Arlington, VA 22201

FY27: Fishery Dependent Biological Sampling of Federal and State Permitted Vessels In New York

Submitted By:
Jesse Hornstein
New York State Department of
Environmental Conservation
Division of Marine Resources
123 Kings Park Blvd.
Kings Park, NY 11754

Applicant Name:	New York State Department of Environmental Conservation, Division of Marine Resources
Project Title:	Fishery Dependent Biological Sampling of Federal and State Permitted Vessels in New York
Project Type:	New Project
Requested Award Amount:	$166,887.00
Requested Award Period:	One year after receipt of funds
Primary Program Priorities:	Primary-Biological Sampling
Date Submitted:	June 12, 2026 – Updated August 14, 2026 Based on Reviewer Comments
Project Supervisor:	Jesse Hornstein
Principal Investigators:	Jesse Hornstein, John Maniscalco, Maureen Davidson, New York State Department of Environmental Conservation Emerson Hasbrouck, Cornell Cooperative Extension-Marine Program, ech12@cornell.edu Scott Curatolo-Wagemann, Cornell Cooperative Extension-Marine Program, sw224@cornell.edu
Project Staff:	Tara McClintock, taf4@cornell.edu Cornell Cooperative Extension- Marine Program, Fisheries Manager Kristin Gerbino, kk334@cornell.edu ; Alex Mercado, ajm425@cornell.edu; Cornell Cooperative Extension-Marine Program, Fisheries Specialists Tyler Guteres, rg699@cornell.edu Cornell Cooperative Extension- Marine Program, Fisheries Technician
Project Partner:	Cornell Cooperative Extension - Marine Program (CCE)

Objectives:

The overall objective of this project is to supplement and expand federal and New York State fishery dependent data with commercial biological sampling. Samples will be collected from state and federally licensed fishermen and dealers. The sample data will be reviewed, processed, and entered into appropriate databases to be made available for use by the New York State Department of Environmental Conservation (DEC), Atlantic Coastal Cooperative Statistics Program (ACCSP), the National Marine Fisheries Service (NMFS), Mid-Atlantic Fishery Management Council (MAFMC), New England Fishery Management Council (NEFMC), and the Atlantic States Marine Fisheries Commission (ASMFC). This data serves as input to a variety of studies, including biological analyses and stock assessments.

To meet our objectives, we propose completing the following:

- Collect fishery dependent information dockside and other locations to fill gaps in declining biological sample collections.
- Collect lengths, weights, and age samples for various species including high priority species in the top 25% of the ACCSP biological sampling matrix such as black sea bass, blueline and golden tilefish, American lobster, Spanish mackerel, Atlantic halibut, grey triggerfish, cobia, American eel, winter flounder, shortfin squid, scup, bluefish and others.
- Implement a biological sampling plan and program with ACCSP, NMFS, and DEC to ensure sampling goals meet necessary thresholds and targets to fill critical data gaps and improve stock assessment outputs.
- Sampling goals and targets based on stock assessment needs as identified by stock assessment scientists.

Need:

Biological sampling of the catch provides important basic data for stock assessments. Among the basic biological information that fisheries scientists need to assess fish stocks are the age structure of the stock and the relation between fish length and age (Walace et al., 1997). Equally important are the age and length selectivity of fish removals by fishing gears (Kilduff et al., 2009). Total age estimates are a key input in analytical age-based stock assessment models (NRCC, 2024).

The Mid-Atlantic Fishery Management Council's Scientific and Statistical Committee (SSC) recently reviewed commercial port sampling in the northeast and concluded that the *low overall number of samples was alarming and is a critical issue for stock assessments* (MAFMC-SSC, 2023). They noted that the current sampling program has experienced severe cutbacks in the number of sampling events and numbers of length and age samples since 2017. They also noted that increased costs and reduced budgets, among other factors, have caused significant declines in the numbers of samples taken. The SSC suggested several ways to revisit the efficacy of

sampling programs, including close collaboration with various state focused programs. The SSC highlighted that less sampling means greater uncertainty and ultimately lower Acceptable Biological Catch values (ABCs) (MAFMC- SSC, 2023).

The Northeast Regional Coordinating Council (NRCC) also recently reviewed the Northeast Port Biological Sampling Program (NEPBSP) (NRCC, 2024). They noted that there has been a significant reduction in biological sampling from an average of 221,558 lengths annually from FY 2017 through FY2019 to 64,690 lengths in 2023, a *71% reduction*. There has also been an associated reduction in age samples. Although this large reduction is for the NOAA funded NEPBSP program, it includes samples for ASMFC managed and co-managed species (e.g. black sea bass, bluefish, etc.) and has a direct impact on ASMFC management measures. Further, ASMFC required biological sampling relies on NEPBSP for filling needed samples for some species (e.g. black sea bass, scup, and others) rather than state specific sampling requirements as required for solely ASMFC managed species. There is thus a direct impact to ASMFC managed species as well as MAFMC managed species, NEFMC managed species, and co-managed species. The NRCC (2024) concluded that there has been a marked decline in biological samples from the relatively stable base period of FY 2017 – FY 2019 and that *this decline has been prevalent across all sampled species and impacted species managed by the three management bodies (ASMFC, MAFMC, NEFMC) by a similar magnitude.* New York State currently collects sufficient samples to satisfy its ASMFC-FMP required state sampling for ASMFC-only managed species. However, not all species have minimum sampling requirements and some ASMFC species rely on NEPBSP sampling to provide commercial age and length information (which as stated above has been significantly reduced).

The NRCC (2024) review of biological sampling also highlighted that reductions in sampling will impede future efforts to address issues such as stock movements or exclusion from wind energy areas, and that the implications of reduced port sampling are not fully known. The NRCC further mentions that the decline in sampling threatens to undermine the integrity of analytic stock assessments used to assess stocks managed by ASMFC, MAFMC, and NEFMC. The NRCC (2024) review suggests that supplemental sampling by the states would help address these issues and further *identifies New York as a "key state" where supplemental sampling would be beneficial.*

In order to pursue and encourage expansion of state programs for biological sampling, the Northeast Fisheries Science Center (NEFSC) and Greater Atlantic Regional Fisheries Office (GARFO) have put together a proposal for greater state and federal coordination of commercial landings sampling (NRCC, 2025). In support of this effort, the following have occurred:

- 2024 NRCC formally expressed interest in enhanced coordination among state and federal agencies collecting biological data from commercial landings.

- August 2024 ASMFC state directors endorsed the concept of organizing a regional workshop to exchange information about sampling of commercial fisheries landings among state and federal programs, and to explore opportunities for greater collaboration to improve the efficiency of regional resources.
- February – March 2025 ASMFC state directors provided agency contacts to organize and participate in the proposed workshop.
- The workshop was held in September of 2025 and a summary of the workshop recommendations included adoption of technology to improve efficiency and accuracy of data collection, maintaining and improving communication and outreach strategies, standardizing data collection and centralizing collection of data for efficient use by partners, and working cooperatively with non-governmental organizations to meet sampling goals with reduced resources (Brown 2025).

Also, the current ACCSP request for proposals for FY 2027 lists improvements in biological data as one of the top priorities. Within biological sampling, the biological priority matrix lists 25 species that are in the top quartile of the matrix. Of those 25 listed species, we identified 16 that are landed by, and can be sampled from, the New York commercial fishing industry. We will focus sampling efforts on 13 of the 16 that are higher priority and not adequately sampled as outlined in the biological priority matrix. The other species on the biological priority matrix are not landed in New York. Although not the primary focus of our sampling, we will also sample species that are of lower priority as opportunities present themselves. We will also focus on sampling species identified by stock assessment scientists as needing additional samples.

The following are from Brown (2025). Of the 27 ASMFC managed and jointly managed species, 16 currently incorporate size and age composition data into their stock assessments. Also, as the number of commercial length samples collected by the Northeast Port Biological Sampling Program (NEPBSP) decreases, the uncertainty in commercial catch at age and commercial catch at length estimates created from those data are likely to increase. Estimates of commercial catch at age and length are key inputs to age and size structured assessment models, and increased uncertainty in those estimates over multiple years may result in the eventual downgrading of some age and size structured assessments to index-based assessments. This increase in uncertainty would be due to an increased inability to track cohorts over time in the assessment models.

As mentioned above, fishery dependent biological sampling is a critical input to inform most stock assessments. Appendix Table A1 details the specific sampling needs by species from recent stock assessment reports. Source: NOAA Fisheries, 2026 and ASMFC, 2026. **Appendix Table A1 was put together by reviewing the most recent stock assessment report for each of listed species. The information in the Table is a summary by species of what the stock assessment scientists at NMFS and ASMFC deem the most important biological sampling needs. This is direct input from assessment scientists on sample needs by species.**

Results and Benefits:

This project will provide results and benefits directly applicable to the Ranking Guide for New Projects. The proposed project directly addresses the high priority goals of the RFP by developing and implementing improvements in:

- **1b. Biological data (equal to 1a.) 100%**

The project will be for biological sampling of commercial species landed in New York to support stock assessments for these species. The upper quartile of the ACCSP Biological Sampling Matrix will be the primary focus of biological sampling. We will be able to sample 16 species of the 25 priority species listed in the matrix, as these 16 are landed in NY. The other 9 are not landed in NY. Of the 16 species that are landed in New York, 13 will be the priority as these are not adequately sampled. See Table 1 below. As mentioned above, the sampling requirements for some of these species are also required in the FMP for those species. However, the sampling requirement for those species, rather than requiring state specific sample goals, the FMP simply states that "biological samples for the commercial fishery are collected through the NEFSC weighout system". As pointed out above under Need, there has been a significant reduction in all samples collected through that program as evaluated by the NRCC. In fact, the NRCC (2024) specifically pointed out that *the reduction in samples from the baseline was 58.1% for ASMFC managed species.* There has been a significant reduction in ACCSP required biological samples that will be addressed by this project. Samples will also be collected for species not in the priority list as time and opportunity allow. See Table 2 below. **Based on previous successful port biological sampling programs conducted by CCE for both NMFS and NYDEC, as well as the sampling plan detailed below (based on stock assessment needs), we anticipate that we can collect a total of around 5,000 individual lengths and 1,200 otolith pairs for aging (see Approach below). Otoliths will be the primary hard part used for aging in this project and the focus will be collecting otoliths. Scales will only be collected when identified in the stock assessment specified needs in Appendix Table A1 (e.g. striped bass for scale-otolith comparisons).**

Support for the proposed project will allow New York to expand and improve data collection efforts and fill critical data gaps in biological sampling of fisheries landed in New York. **Improvements in biological sampling will provide information crucial to stock assessments (see Appendix Table A1). The biological sampling plan described below will ensure that data collected are sound and representative of federal and state fisheries. Biological samples will be representative of state and federal fisheries and will provide catch at age data for stock assessments for species managed by ASMFC, MAFMC and NEFMC. These samples will help meet ASMFC required sampling and will help to address the significant reduction in NMFS-sponsored sampling in the Greater Atlantic region. This project can**

help address the sample deficiency issues identified above by the MAFMC, SSC, and the NRCC, and increase overall sampling of commercial fisheries.

Black Sea Bass	Blueline Tilefish
Golden Tilefish	Atlantic Halibut
Spanish Mackerel	Northern Shortfin Squid
American Lobster	Grey Triggerfish
Cobia	Scup
American Eel	Bluefish
Winter Flounder	

Table 1. Priority species to be sampled in NY

Summer Flounder	Red Hake
Longfin Squid	Windowpane Flounder
Butterfish	Yellowtail Flounder
Spiny Dogfish	Tautog
Striped Bass	Skates (various)
Weakfish	Horseshoe crab
Silver Hake	Atlantic menhaden
Ocean Pout	

Table 2. Additional species to be sampled in NY

The major benefits of this proposal will be the expansion of a uniform dockside biological sampling program across New York fisheries (including federal vessels) that satisfies ASMFC/ACCSP guidelines as well as MAFMC, NEFMC and NMFS sampling needs to help inform stock assessments and as identified by stock assessment scientists.

New York fisheries biological data collected through the proposed activities will contribute to and improve stock assessments and fishery management plans. Fisheries data collected and processed ensures adherence to ACCSP reporting standards and ASMFC FMP requirements and will improve the overall quality of fisheries management decisions. Since all priority species are managed on a regional basis, biological data collected on these species will have broad reaching regional benefits. Collecting high quality, comprehensive fisheries data is essential to successful fisheries assessment and management. Additionally, once in the ACCSP data warehouse, the biological sampling data provided by New York can be utilized by other partners and stock assessment scientists for regional scientific assessment of important fish populations. Although the work outlined in this proposal is specific to New York, it can also provide many benefits to regional partners. These benefits

include increased coordination between state and federal program partners, increased technical assistance, as well as the sharing of data collection methodology and troubleshooting techniques.

Data Delivery Plan:

Length frequency data for federal vessels will be uploaded directly by CCE to the NEFSC. During biological sampling we will be using the same electronic measuring boards and software (Biological Information Systems) as NEFSC sampling, which will facilitate direct upload to NEFSC. We have already had discussions with NEFSC to verify direct upload (C. Keith, pers. comm.). Length frequency and age data from state vessels will be incorporated into the DEC state sampling database and then uploaded to ACCSP. We have a commitment from the NMFS NEFSC Age and Growth Program to age 1200 otolith samples collected in this project (E. Robillard, pers. comm.). That age data will be directly incorporated by NEFSC with the length frequency data. Any age samples worked up locally by CCE and/or DEC will be integrated into ACCSP and NEFSC databases. Both DEC and CCE have abundant experience in data management and quality assurance procedures. CCE will coordinate with state partners to have this data available upon request. Additionally, all data will be available so that it may be included in individual species stock assessments.

Approach:

Biological Sampling

We propose to develop and implement a dockside biological sampling program that will supplement and greatly expand the presently reduced (see above) biological sampling program of federal commercial vessels landing food fish and squid in New York. This will help to fill gaps in declining biological sampling over recent years and will provide additional needed data on the length and age structure of landings for stock assessments. This sampling program will also supplement the DEC state vessel sampling program that addresses ASMFC FMP-required biological sampling.

The Sampling Plan for this project will be based on the Northeast Port Biological Sampling Program Requirements (NEPBSP) as established annually by NMFS NEFSC with input from Population Dynamics Branch (Pop Dy) stock assessment scientists for priority sampling to support stock assessments. Our Sampling Plan also includes ASMFC FMP-required state level sampling and the Biological Sampling Matrix. The Sampling Plan is provided in Appendix Table A2. The upper part of Appendix Table A2 is directly from the NEPBSP sampling requests for FY 2026. These requests are put together by the NEFSC Fishery Monitoring and Research Division based on assessment directed age and length biological sampling needs by species, market category, gear, stock area and quarter. Our Sampling Plan will be updated with the FY 2027 sampling requests when they are released by NEFSC. We will

coordinate with Brian Linton, NEFSC Population Dynamics. Sampling will focus on the NY/LI NEPBSP requirements as well as the NEPBSP required samples for "Any" region if sample opportunities present themselves for the "Any" category. We will also focus on the ASMFC-required NY state samples listed in the lower portion of Appendix Table A2. ASMFC sample requirements are set by the individual Species Boards and are made through individual stock assessments thus incorporating input from the stock assessment scientists. Sampling will further be prioritized as listed in Table 1 above (Priority Species) and Table 2 above (Additional Species) as designated by the ACCSP Biological Sampling Matrix. For the NEPBSP samples, we will closely coordinate sampling activities and sample priorities with the NEFSC Fisheries Monitoring Operations Branch (FMO) to avoid duplicate sampling. The NMFS fishery dependent biological sampling program is currently being reorganized. On August 1, 2026 the NMFS sampling program was transferred from GARFO to FMO. As FMO develops the sampling program we will communicate with them and coordinate our sampling program into a cooperative effort to meet sample requirements as well as additional samples as requested by NEFSC Population Dynamics. We have discussed this approach with FMO and they will coordinate with us to work out the details of sampling in New York as the NMFS sampling program transitions to them (C. Keith, pers. comm.). New York sampling for ASMFC samples will be coordinated between DEC and CCE. **Thus, our Sampling Plan will be to collect the age (otolith) and length samples detailed in the upper and lower sections of Appendix Table A2, as well as in the Biological Sampling Matrix, with the sample targets detailed below.**

Sampling will be carried out with established sampling protocols set up for port biological sampling within the NMFS FMO. Sampling staff for this project will participate in FMO biological sampling training and will be trained by DEC for state vessels. Species that will be sampled in New York are shown in Table 1 for Priority Species and in Table 2 for Additional Species (tables are above) and will follow the Sampling Plan detailed above and in Appendix Table A2. We will also be able to accommodate additional special sampling requests by NMFS and DEC as they arise during the project period. **The sampling targets for numbers of samples by species/market category, gear, stock area and annual quarter will be based on the Sampling Schedule (Appendix Table A2) established with the NMFS Northeast Fishery Science Center and DEC (for ASMFC) (updated for 2027 when available from NMFS) and will be coordinated with CCE, NMFS and DEC. Based on the Sampling Plan targets and the results of prior projects, we estimate that this project will generate up to 5,000 individual lengths and 1,200 otolith pairs and a very small number of scales for aging.** The NMFS sampling standard of 50 lengths and 10 otolith pairs or 30 lengths and 10 otolith pairs, depending on species, will be maintained for this project. We will also maintain the ASMFC-required sampling standards, which vary species by species. **NMFS no longer uses scales for aging – only otoliths. We have a commitment from the NMFS NEFSC Age and Growth Program to age 1,200 otolith pairs at no cost to the project (E. Robillard, pers. comm.)**. However, they cannot age all of the species listed in Table 1 and Table 2 above. We will

coordinate with DEC about any additional required age samples. We will build in the ability for CCE to help age otoliths or scales for this project by working with NYSDEC staff. Note that some species in Tables 1 and 2 cannot be aged (e.g. squid, lobster) or do not require aging since their assessment is not age-based (e.g. windowpane flounder). CCE has conducted extensive dockside and market biological sampling programs in the past for NYSDEC and for NMFS. Based on the species to be sampled and the sampling goals mentioned above, our experience allows us to estimate the staff needed to successfully implement this program.

Biological sampling will be conducted wherever the fish are available. CCE has a long history of working collaboratively with the fishing industry on a large range of issues including port biological sampling programs. We are confident that we can access fish and meet sampling goals. Fish will be sampled at the following locations: aboard vessels dockside; unloading docks; refrigerated storage facilities; dealers and processors; wholesalers; and distribution/holding facilities. CCE surrently has long-term established working relationships with individual fishermen, unloading docks, dealers, processors, wholesalers and distribution facilities. As with our previous biological sampling programs, we will coordinate with these entities on a daily basis to efficiently facilitate sampling opportunities. Additionally, we will make monthly sampling visits to the New Fulton Fish Market in the Bronx – the largest wholesale fish market in the US. Much of the fish landed in NY is shipped into Fulton and we have sampled there for previous sampling projects. During all sampling events we will link the fish sampled to a vessel trip report (VTR), state or federal, to identify the vessel and fishing location. Sampling will be carried out throughout the year from all ports of landing in NY for the commercial fleet. Samples will be collected in accordance with NMFS/ACCSP standards.

All sampling will be conducted by trained and experienced CCE personnel. Aging of otoliths or scales, beyond NMFS capacity, as needed, will also be performed by trained and experienced CCE and DEC personnel. **We will use sampling equipment standardized by NMFS as part of the NMFS port sampling data collection system: Big Fin Scientific Data Collection System 5 Fish and Field electronic measuring board and Galaxy Tab Active 3 tablet driven by Biological Information System (BLISS) software. This system facilitates sampling by recording lengths and directly linking to collected hard parts via a barcoding system. Collected data will be directly uploaded to NMFS and DEC/ACCSP.**

We will also collect individual fish weights with lengths. This will be done on a subset of samples as time allows. **We will coordinate with NMFS, FMO, and DEC to identify which species have a need for individual fish weights. This information will be used to help inform stock assessment models by providing more accurate length-weight and mean weight-at-age relationships.**

Education and Outreach

Education and outreach are an essential component of this program. CCE will educate the NY stakeholders on the importance of accurate fishery-dependent data for the sustainable management of marine resources. Much of the information needed for successful resource management is fishery dependent. The industry will be educated on the issues of why biological sampling needs to accurately reflect commercial landings. This project will be actively marketed to fishermen and fish docks, dealers, wholesalers and processors. Information detailing the project will be posted on the CCE website, social media outlets and published in local NY papers. The CCE website and Facebook pages will be used to communicate project activities to the general public and the fishing industry. Through the outreach component, CCE will address the need for increased awareness of improving the best available biological data to maintain sustainable fish stocks. We will also work with DEC and ACCSP staff on a coordinated outreach strategy.

Geographic Location:

Biological sampling will be conducted regularly at commercial fishing ports within the State of New York aboard vessels dockside; unloading docks; refrigerated storage facilities; dealers and processors; wholesalers; and distribution/holding facilities. Monthly visits to the Fulton Fish Market Cooperative in the Bronx will supplement the samples collected at commercial fishing docks.

Milestone Schedule:

Activity	**Month**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Establish biological sampling priorities	**X**											
Collect biological samples	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Upload data to NMFS, NYDEC, ACCSP	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Report writing										**X**	**X**	**X**

Project Accomplishments Measurement:

Goal	**Metric**
Establish biological sampling priorities	**Meaningful targets for each species.**
Biological sample collection	**Number of individual fish measured, and age samples collected and processed, by species**

Data entry/analysis	**Percentage of biological sampling targets met, data meets ACCSP and NMFS standards**
Report writing	**Report submitted to ACCSP**

Cost Summary (Budget):

Personnel: $103,036.49

Fringe Benefits: PROVIDED AS IN-KIND NOT CHARGED TO THIS PROJECT ($63,907.56)

Travel: $6,200.00

Equipment: $10,720.00

Supplies: $4,270.00

Contractual:

Other: $7,700.00

Total Direct Charges: $131,926.49

Indirect Charges: $19,788.97 (CCE)

CCE Charges: $151,715.46

ACCSP 10% Administrative: $15,171.55

Total Project Cost: $166,887

Requested Budget FY 2027
(January 1, 2027 to December 31, 2027)

PERSONNEL COSTS:

Item	ACCSP Share	In-Kind (CCE Covered Fringe Benefits)	Total
Co-Principal Investigator (14.18% of annual salary)	$7,504.80	$4,760.29	$12,265.09

Co-Principal Investigator (14.18% of annual salary)	$7,504.80	$4,760.29	$12,265.09
Fisheries Manager (37% of annual salary)	$29,820.74	$18,915.30	$48,736.04
Fisheries Specialist (32% of annual salary)	$22,956.53	$14,561.33	$37,517.86
Fisheries Specialist (32% of annual salary)	$22,956.53	$14,561.33	$37,517.86
Fisheries Technician (22% of annual salary)	$9,409.50	$5,968.45	$315,377.95
Administrative Assistant (2% of annual salary)	$600	$380.58	$980.58
Worker's Compensation/Unemployment Insurance	$2,518.82		
Total Personnel	$103,036.49	$63,907.56	$166,944.05

TRAVEL:

Item	ACCSP Share	In-Kind	Total
Travel Mileage	$2,000		$2,000
Lodging	$4,200		$4,200
Total Supply	$6,200		$6,200

EQUIPMENT & SUPPLY:

Item	ACCSP Share	In-Kind	Total
Bluetooth Scale	$5,000		$5,000
Big Fin Electronic Board	$5,000		$5,000
Big Fin Data Subscription	$720		$720
Outreach printing	$750		$750
Office Supplies	$400		$400
Portable Label Printer	$120		$120
Sampling gear	$1,000		$1,000

Computer (laptop)	$2,000		$2,000
Total Equipment & Supply	$14,990		$14,990.00

OTHER:

Item	ACCSP Share	In-Kind	Total
Vehicle Lease	$7,200		$7,200
Communications	$500		$500
Total Other	$7,700.00		$7,700.00

INDIRECT

Item	ACCSP Share	In-Kind	Total
Total Direct Charges: $131,926.49			
Indirect Charge (15% de minimis)	$19,788.97		$19,788.97
Project Total: $151,715.46			
ASMFC ACCSP Indirect (10%)	$15,171.55		$15,171.55
Total Indirect	$34,960.52		$34,960.52

TOTAL:

Item	ACCSP Share	In-Kind	Project Total
Total Charges	$166,887.00	$63,392.34	$230,279.34
Percentage	72%	28%	

COST DETAILS:

Description of Budget categories and expenses for this project.

a. Salary

Each person spends a fraction of their time working on this grant in a team effort. The annual salaries for personnel and the percentage of their time spent on this project are as follows:

a. **Co-Principal Investigators: (Emerson Hasbrouck, Scott Curatolo-Wagemann)**7% each, of salary for one year ($105,830) = $7,504.80 x 2=$15,009.60. Will be responsible for overall program development, management, and execution, report submission, staff supervision, publication of results, and fiscal oversight.

b. **Fisheries Manager (Tara McClintock):** Approximately 37% of annual salary ($79,726) equals $29,820.74. Arrange for the collection of fishery-dependent information (dockside, Fulton Fish Market Cooperative, and other locations). Oversee collections of lengths, weights, and age samples for species sampled. QA/QC of data entry.

c. **Fisheries Specialist (2 positions- Kristin Gerbino, Alex Mercado)** : Each specialist is approximately 32% of annual salary ($72,238) equals $22,956.53x2=$45,913.06. Field visits for fishery-dependent information (dockside, Fulton Fish Market Cooperative, and other locations). Collections of lengths and weights. Collection and processing of age samples for species sampled.

d. **Fisheries Technician (Tyler Guteres):** Approximately 22% of annual salary ($42,640) equals $9,409.50. Field visits for fishery-dependent information (dockside, Fulton Fish Market Cooperative, and other locations). Collections of lengths and weights. Collection and processing of age samples for species sampled. Data Entry.

e. **Administrative Assistant (Darci Bielenda):** Approximately 1% of annual salary ($52,000) equals $600. Will be responsible for general project support and administrative duties including ordering supplies, proofreading, mailing, printing, copying, assistance with report preparation, accounts payable, website updates, travel requests and newsletter dissemination.

f. **Workers Compensation and Unemployment Insurance**: $4,523.20

From CCE as in-kind:

i. Fringe benefits paid for by Cornell and provided as in-kind (63.43 % of employee salaries)= $63,907.56

Annual fringe benefits rates for all employees include the following:

	FY 2026
July 1, 2025 - June 30, 2026	Federal Funds
Health Insurance	27.14%
Retirement	20.96%
Social Security	7.08%
Worker's Compensation	2.97%
Employee Benefit Funds	0.98%
Dental Insurance	0.33%
Unemployment Benefits	0.07%
Vision Benefits	0.05%
Survivor's Benefits	0.01%
Total Rate	59.59%

b. Travel

$2,000.00 used for mileage at 70 cents per mile. Mileage will include trips to commercial docks and dealers, as well as monthly travel to the Fulton Fish Market Cooperative. $4,200 will be used for 2 hotel rooms, @$175/per night, each month when staff visit the Fulton Fish Market Cooperative

c. Equipment

a. A Bluetooth scale will be used to integrate with the electronic measuring board ($5,000).
b. Big Fin Electronic DCS5 Measuring Board Set Up ($5,000): Micro control box ($650), 100cm Measurement Deck ($916), Micro Battery Kit ($270.50), 100cm Linear Sensor Kit ($1,113.50), Micro Nose Stop ($120), Measurement Stylus Pen ($75), Rail Mount Kit ($735), Carry Handle ($55), Samsung Galaxy Tab ($675), Extended Warranty ($750)
c. License Subscription for Measuring Board ($720)

d. **Supplies**

a. **Office Supplies** for printer ink, pens, pencils, paper. ($400)
b. **Sampling Gear** for boots, bibs, traditional measuring boards, clip boards ($1,000)
c. **Printing** for flyers and handouts electronic reporting ($750.00)
d. **Computer laptop** for use with electronic measuring boards and upload of data. ($2,000)

e. Other

a. Vehicle Lease- A truck will be leased for this project at $600 per month=$7,200
b. Communications- cost of monthly cellphone service plan ($1,000)

f. Total Direct Charges

$131,926.49

g. Indirect Charges.

Indirect charges are only calculated using the federal de minimis rate of 15% on direct charges= **$19,788.97**

Also, there is an ASMFC/ACCSP indirect of 10%. The intention is that funds will go to CCE from ASMFC rather than through NY. This indirect rate was provided by Geoff White. $15,171.55.

Funding Transition Plan:

New York's Fishery Dependent Sampling Program has grown over the last couple of years, which is helping to improve sampling of species required by ASMFC management plans. As more staff are hired, our goal is to increase port sampling efforts. We anticipate that the program will continue to grow and, in the future, will be big enough to handle robust port and market sampling components. **While additional staff for the Program is dependent on state funding, it is a goal of NEFSC to improve state port sampling efforts. Furthermore, this project will create efficiencies for the New York Program by improving outreach and sampling opportunities. Improved coordination and support will require fewer resources for New York to take on additional sampling responsibilities in the future.** Under current staffing levels, we anticipate that we will be able to take on up to 25% of the sampling when the project ends. In the meantime, funding provided through ACCSP will support both state and federal biological sampling programs.

SUMMARY OF PROPOSAL FOR RANKING

Proposal Type: New

Primary Program Priority: Biological Sampling:

- **Collect fishery dependent biological information dockside and other locations to fill gaps in declining biological sample collections.**
- **Collect lengths, weights, and age samples for various species including high priority species in the top 25% of the ACCSP biological sampling matrix such as black sea bass, blueline and golden tilefish, American lobster, Spanish mackerel, Atlantic halibut, grey triggerfish, cobia, American eel, winter flounder, shortfin squid, scup, and bluefish.**
- **Establish biological sampling priorities and targets with ACCSP, NMFS, and DEC to ensure sampling goals meet necessary thresholds to fill critical data gaps and improve assessment outputs.**
- **Biological sampling priorities and targets are based directly on stock assessment scientist input through current assessment recommendations and NEFSC/ASMFC priorities for sampling.**

Data Delivery Plan:
Length frequency data for federal vessels will be uploaded directly by CCE to the NEFSC. During biological sampling we will be using the same electronic measuring boards and software (Biological Information Systems) as NEFSC sampling, which will facilitate direct upload to NEFSC. We have already had discussions with NEFSC to verify direct upload. Length frequency data from state vessels will be incorporated into the DEC state sampling database and then uploaded to ACCSP. We have coordinated with the NEFSC Age and Growth Program to age the otolith samples collected in this project. That age data will be directly incorporated by NEFSC with the length frequency data. Any age samples worked up locally by CCE and/or DEC will be integrated into ACCSP and NEFSC databases. Both DEC and CCE have abundant experience in data management and quality assurance procedures. CCE and project partners will coordinate with state partners to have this data available upon request. Additionally, all data will be available so that it may be included in individual species stock assessments.

Multi-Partner/Regional Impact:
Data collected through the proposed activities will fill data gaps in fishery dependent sampling programs which will improve stock assessments and management of these fisheries. This will have broad reaching regional benefits for all users and managers of these resources. Other benefits include increased coordination between state and federal program partners, increased technical assistance, as well as the sharing of data collection methodology and troubleshooting techniques. This project will be a partnership with

ACCSP, ASMFC, DEC, NMFS and CCE. Since all priority species are managed on a regional basis, all data collected on these species will have broad reaching regional benefits.

Funding Transition Plan:

New York's Fishery Dependent Sampling Program has grown over the last couple of years, which is helping to improve sampling of species required by ASMFC management plans. As more staff are hired, our goal is to increase port sampling efforts. We anticipate that the program will continue to grow and, in the future, will be big enough to handle robust port and market sampling components. **While additional staff for the Program is dependent on state funding, it is a goal of NEFSC to improve state port sampling efforts. Furthermore, this project will create efficiencies for the New York Program by improving outreach and sampling opportunities. Improved coordination and support will require fewer resources for New York to take on additional sampling responsibilities in the future.** Under current staffing levels, we anticipate that we will be able to take on up to 25% of the sampling when the project ends. In the meantime, funding provided through ACCSP will support both state and federal biological sampling programs.

In-Kind Contribution: The in-kind contribution for this project is (27%). This is generated from:

- **Fringe benefits paid for by Cornell (63.43% of employee salaries) = $63,907.56**
- **New York staff will support this study through project supervision, staff time to participate in data collection and entry, and compliance monitoring.**
- **NMFS may be able to provide tablet computers, BLISS software (and training), bar coded coin envelopes for hard parts and possibly Big Fin electronic measuring boards (subject to available funding).**
- **NMFS NEFSC Age and Growth Program will age 1,200 pairs of otoliths at no cost to this project.**

Improvement in Data Quality/Quantity/Timeliness

Biological data will be made available in a timely manner through direct upload of federal samples to NEFSC using Biological Information System software, and state samples from New York to ACCSP. Based on previous sampling programs, it is anticipated that this project will generate up to 5,000 additional measurements and 1,200 hard parts for aging. Aging will be accomplished by the NMFS NEFSC Age and Growth Program.

Impact on Stock Assessment and Management:
This project will provide high quality, comprehensive fisheries biological data which is essential to successful fisheries assessment and management. Biological samples will be representative of state and federal fisheries and will provide catch at age data for species managed by ASMFC, MAFMC and NEFMC. By filling critical data gaps in biological sampling, it will improve future assessments for various species. Appendix Tables A1 and A2 detail sample needs as identified by stock assessment scientists through species stock assessments.

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Appendix A: Tables

Table A1. Biological sampling needs by species from the most recent stock assessment reports for each species. Sampling requirements as reported by stock assessment scientists during the assessment process. See narrative p. 4 for further detail.

Species	Recommendations
American Lobster	Temporally and spatially explicit landings data, and complementary data to characterize the sex ratio and size distribution of landings, are the principal data needed to assess the impact of fishing on lobster populations.
Atlantic Halibut	The Atlantic halibut assessment could be improved with additional age and length composition data.
Black Sea Bass	A source of uncertainty stemmed from the lack of length information on landings in the unclassified market category. The Black Sea Bass assessment could be improved with sampling the length composition of the unclassified market category. Likewise, the portside sampling program provides essential length information of the commercial landings and if the volume of these data diminish, it would need to be supplemented by additional sampling programs.
Bluefish	Develop fishery dependent sampling programs to provide information on larger, older bluefish. continue coastwide collection of length and age samples from fishery-independent and -dependent sources.
Cobia	More, randomly-collected age samples throughout the range of Cobia are needed.
Horseshoe Crab	Continue biosampling for sex and weight, particularly by primiparous and multiparous, and expand where possible, using standardized protocols across regions and surveys.
Scup	Sufficient length and age sampling of the fishery catch needs to be maintained.
Shortfin Squid	Develop a standardized data set of northern shortfin squid body weights and mantle lengths throughout the fishing season from the freezer and wet boat fleets.
Skate Complex	Catch by species is not well characterized due to low length sampling of commercial landings.
Spanish Mackerel	Implement systematic age sampling for the general recreational and commercial sectors.
Spiny Dogfish	The Atlantic Spiny Dogfish assessment could be improved with age and growth data.
Striped Bass	Continue collection of paired scale and otolith samples from fishery dependent sources, particularly from larger striped bass, to facilitate development of otolith-based age-length keys and scale-otolith conversion matrices.
Summer Flounder	Sufficient length and age sampling of the fishery catch needs to be maintained. The summer flounder assessment could be improved with more intensive and comprehensive sampling of the fishery catch by sex to allow for applications of sex-based models.
Tautog	High priority needs included improved biological collections across sectors and size ranges.
Winter Flounder (Southern New England/Mid-Atlantic)	The Southern New England Mid-Atlantic Winter Flounder assessment could be improved with additional studies on maximum age.
Yellowtail Flounder	The Southern New England - Mid-Atlantic Yellowtail Flounder assessment could be especially improved with increased biological sampling efforts.

Table A2. Numbers of samples to be collected in this project by species, market category, gear, stock area and quarter. Sample requirements by species specified by NMFS NEPBSP and ASMFC as directed by stock assessment scientists for each species. See narrative p.7-8 for further detail.

Sampling Plan for NY Fishery Dependent Biological Sampling Program														
Region	*PSREGION code*	*Species*	*Species ITIS*	*Mkt Cat*	*PSMKTGRP code*	*Grade*	*Grade Code*	*Gear*	*Stock Area*	*Oct-Dec*	*Jan-Mar*	*Apr-Jun*	*Jul-Sep*	*TOTAL*
ANY	8	AMERICAN LOBSTER	097314	UNC	0	UNGRADED	00	LP	515	2	3	2	3	**10**
ANY	8	AMERICAN LOBSTER	097314	UNC	0	UNGRADED	00	LP	464, 465	2	3	2	3	**10**
ANY	8	AMERICAN LOBSTER	097314	UNC	0	UNGRADED	00	LP	613, 615, 616, 622, 626	2	2	2	2	**8**
ANY	8	ATLANTIC COD	164712	ALL	7	UNGRADED	00	ANY	465,467,511,512	2	2	2	2	**8**
ANY	8	ATLANTIC COD	164712	ALL	7	UNGRADED	00	ANY	53,6	2	2	2	2	**8**
ANY	8	ATLANTIC SURFCLAM	080946	UNC	0	UNGRADED	00	CD	521,526,53,6	17	15	15	15	**62**
ANY	8	ATLANTIC SURFCLAM	080945	UNC	0	UNGRADED	00	CD	522,525,56	7	5	5	6	**23**
ANY	8	JONAH CRAB	098678	UNC	0	UNGRADED	00	LP	515, 465, 466	2	2	1	1	**6**
ANY	8	JONAH CRAB	098678	UNC	0	UNGRADED	00	LP	616, 622	2	2	2	1	**7**
ANY	8	OCEAN QUAHOG	081345	UNC	0	UNGRADED	00	CD	521,526,53,6	19	17	17	17	**70**
ANY	8	OCEAN QUAHOG	081344	UNC	0	UNGRADED	00	CD	522,525,56	9	5	5	6	**25**
ANY	8	TILEFISH, BLUELINE	168543	ALL	9	UNGRADED	00	ANY	52-63	2	2	2	2	**8**
ANY	8	WINTER FLOUNDER	172905	ALL	2	UNGRADED	00	ANY	51	2	2	2	2	**8**
ANY	8	WINTER FLOUNDER	172905	ALL	1	UNGRADED	00	ANY	521,526,53,61-63	2	2	2	2	**8**
ANY	8	YELLOWTAIL FLOUNDER	172909	ALL	1	UNGRADED	00	ANY	5,6	1	1	1	1	**4**
ANY	8	YELLOWTAIL FLOUNDER	172909	ALL	1	UNGRADED	00	ANY	522,56,525	2	2	2	2	**8**
ANY	8	YELLOWTAIL FLOUNDER	172909	ALL	1	UNGRADED	00	ANY	526, 530, 537-539, 6	1	1	1	1	**4**
									TOTAL	**76**	**68**	**65**	**68**	**277**
NY/LI	5	ATLANTIC MACKEREL	172414	UNC	0	UNGRADED	00	ANY	5,6	1	1	1	1	**4**
NY/LI	5	ATLANTIC SURFCLAM	080944	UNC	0	UNGRADED	00	CD	61,53	4	2	2	2	**10**
NY/LI	5	BLACK SEA BASS	167687	JUM	1	UNGRADED	00	ANY	5,6	1	1	2	1	**5**
NY/LI	5	BLACK SEA BASS	167687	LRG	2	UNGRADED	00	ANY	5,6	1	1	2	1	**5**
NY/LI	5	BLACK SEA BASS	167687	MED	3	UNGRADED	00	ANY	5,6	1	1	1	1	**4**
NY/LI	5	BLACK SEA BASS	167687	UNC	0	UNGRADED	00	ANY	5,6	1	1	1	1	**4**
NY/LI	5	BLUEFISH	168559	LRG	1	UNGRADED	00	ANY	52,53,56,6	1	0	0	1	**2**
NY/LI	5	BLUEFISH	168559	MED	2	UNGRADED	00	ANY	52,53,56,6	1	0	0	1	**2**
NY/LI	5	BLUEFISH	168559	SM	3	UNGRADED	00	ANY	52,53,56,6	1	0	0	1	**2**
NY/LI	5	BLUEFISH	168559	UNC	0	UNGRADED	00	ANY	52,53,56,6	1	0	1	1	**3**
NY/LI	5	BUTTERFISH	172567	UNC	0	UNGRADED	00	OT	5, 6	1	1	1	1	**4**
NY/LI	5	GOOSEFISH	164499	ALL	5	GUT, HEAD ON	23	ANY	46,5,6	2	2	3	2	**9**
NY/LI	5	LONGFIN SQUID (Loligo)	082372	ANY	0	UNGRADED	00	OT	5,6	0	0	1	0	**1**
NY/LI	5	OCEAN POUT	630979	UNC	0	UNGRADED	00	OT	53,6	0	0	0	0	**0**
NY/LI	5	OFFSHORE HAKE	164793	UNC	0	UNGRADED	00	OT	52,53,61,62	0	0	0	0	**0**
NY/LI	5	RED HAKE	164730	UNC	0	UNGRADED	00	OT	52,53,56,6	3	0	2	2	**7**
NY/LI	5	SCUP	169182	JUMBO	6	UNGRADED	00	OT	52,53,56,6	0	1	1	0	**2**
NY/LI	5	SCUP	169182	LRG	1	UNGRADED	00	OT	52,53,56,6	1	2	2	1	**6**
NY/LI	5	SCUP	169182	MED	2	UNGRADED	00	OT	52,53,56,6	1	1	1	0	**3**
NY/LI	5	SCUP	169182	SM	3	UNGRADED	00	OT	52,53,56,6	0	0	0	0	**0**
NY/LI	5	SCUP	169182	UNC	0	UNGRADED	00	HOOKS	52,53,56,6	0	0	0	0	**0**
NY/LI	5	SCUP	169182	UNC	0	UNGRADED	00	OT	52,53,56,6	0	0	1	0	**1**
NY/LI	5	SILVER HAKE	164791	JUV	4	UNGRADED	00	OT	525-526, 533-534, 537-539, 541-543, 562, 6	0	2	1	1	**4**
NY/LI	5	SILVER HAKE	164791	KING	5	UNGRADED	00	OT	525-526, 533-534, 537-539, 541-543, 562, 6	2	0	1	0	**3**
NY/LI	5	SILVER HAKE	164791	LRG	1	UNGRADED	00	OT	525-526, 533-534, 537-539, 541-543, 562, 6	2	0	1	0	**3**
NY/LI	5	SILVER HAKE	164791	MED	2	UNGRADED	00	OT	525-526, 533-534, 537-539, 541-543, 562, 6	0	0	0	0	**0**
NY/LI	5	SILVER HAKE	164791	SM	3	UNGRADED	00	OT	525-526, 533-534, 537-539, 541-543, 562, 6	0	0	0	0	**0**
NY/LI	5	SILVER HAKE	164791	UNC	0	ROUND	01	OT	525-526, 533-534, 537-539, 541-543, 562, 6	0	0	0	0	**0**
NY/LI	5	SUMMER FLOUNDER	172735	JUMBO	4	UNGRADED	00	OT	53,6	0	0	0	0	**0**
NY/LI	5	SUMMER FLOUNDER	172735	LRG	1	UNGRADED	00	OT	53,6	1	1	1	1	**4**
NY/LI	5	SUMMER FLOUNDER	172735	MED	2	UNGRADED	00	OT	53,6	0	0	0	0	**0**
NY/LI	5	SUMMER FLOUNDER	172735	UNC	0	UNGRADED	00	OT	53,6	0	1	0	0	**1**
NY/LI	5	TILEFISH, GOLDEN	168546	EXTRA SM	8	UNGRADED	00	LL	52-62	1	1	1	1	**4**
NY/LI	5	TILEFISH, GOLDEN	168546	LRG	1	UNGRADED	00	LL	52-62	2	2	2	2	**8**
NY/LI	5	TILEFISH, GOLDEN	168546	LRG MED	9	UNGRADED	00	LL	52-62	2	1	2	2	**7**
NY/LI	5	TILEFISH, GOLDEN	168546	MED	2	UNGRADED	00	LL	52-62	1	2	1	1	**5**
NY/LI	5	TILEFISH, GOLDEN	168546	SM/KIT	3	UNGRADED	00	LL	52-62	2	2	2	2	**8**
NY/LI	5	TILEFISH, GOLDEN	168546	UNC	0	UNGRADED	00	ANY	52-62	0	0	0	0	**0**
NY/LI	5	TILEFISH, GOLDEN	168546	XL	5	UNGRADED	00	LL	52-62	1	1	1	2	**5**
NY/LI	5	WINDOWPANE	172746	UNC	0	UNGRADED	00	OT	5,6	0	0	0	0	**0**
									TOTAL	**35**	**27**	**35**	**29**	**126**

ASMFC NY-Specific Sample Requirements	
American Lobster/Jonah Crab	10 sampling trips per year
Atlantic Menhaden	One 10 fish sample per 300mt landed and 100 individuals on ten sampling trips
Bluefish	100 samples per year
Tautog	200 samples per year
Weakfish	6 lengths for each metric ton landed commercially and 3 ages for each metric ton of total landings (Targeting around 131 samples based on previous landings)
Striped Bass	600 samples per year
American Eel	100 samples per year
American Lobster/Jonah Crab	10 sampling trips per year

Appendix B: Letters

From: Eric Robillard - NOAA Federal <eric.robillard@noaa.gov>
Date: Monday, June 8, 2026 at 10:09 AM
To: Emerson C. Hasbrouck, Jr <ech12@cornell.edu>
Subject: Re: Port Sampling Project Proposal - revisited

We are still good to age the 1200 samples. Just keep me posted.

eric

On Fri, Jun 5, 2026 at 3:57 PM Emerson C. Hasbrouck, Jr <ech12@cornell.edu> wrote:

Hi Eric,

I am re-submitting the biological sampling proposal that we discussed last year. Please see emails below. I just want to verify if you can still accommodate 1200 otolith pairs for the species you mention below.

Please call me at the number below if you would like to discuss.

Thank you,

Emerson

Emerson Hasbrouck
Cornell University Cooperative Extension
Marine Program
423 Griffing Ave., Suite 100
Riverhead, N.Y. 11901
631-965-1422 Cell

Subject: Re: Biological sampling

Date: Thursday, August 13, 2026 at 5:20:31 PM Eastern Daylight Time **From:** Charles Keith - NOAA Federal

To: Emerson C. Hasbrouck, Jr

CC: Scott Curatolo-Wagemann, KB McArdle

Hi Emerson,

Thank you for reaching out to discuss the potential biological sampling program for New York. I cc'd our FMRD Chief to keep our team informed.

We are willing to coordinate sampling efforts between our teams; however, we believe using independent lists for any biological port sampling of commercially landed species in New York would be important. The New York program should supplement the Northeast Fisheries Science Center's Biological Port Sampling Program, which currently contracts BPS data collection with our NEFOP Observer Provider AIS, Inc. We would request that you coordinate any additional sampling needs directly with the NEFSC's Population Dynamics team or other interested groups.

FMRD will do its best to accommodate your staff's training needs to ensure data collection consistency between our programs. Please note that providing this support requires coordination and commitment from multiple NEFSC groups that have not yet been fully consulted.

For future requests we would appreciate a little more lead time so we can fully coordinate across all necessary teams.

Thank you again and we look forward to collaborating. Best regards,

Chad

--

Charles (Chad) Keith

Supervisory Natural Resource Management Specialist

Fisheries Monitoring & Operations (FMO) Branch
Supervisor NOAA Fisheries, Northeast Fisheries Science Center

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Street Woods
Hole, MA
02543

(401) 366-4851

Appendix C: Curriculum Vitae for Principal Investigators

Jesse Hornstein, NYSDEC, 123 Kings Park Blvd, Kings Park, NY 11754
jesse.hornstein@dec.ny.gov , (631)-444-0714

Education
M.S. Marine Science, 2010
Stony Brook University (Stony Brook, NY)

B.A. Environmental Studies, 2006
Stony Brook University (Stony Brook, NY)

Experience
Marine Biologist 2, April 2018-Present
New York State Department of Environmental Conservation (Kings Park, NY)

- Manage New York's commercial fishing quotas.
- Serve on various ASMFC Management Boards as a proxy to New York's Administrative Commissioner.
- Oversee the NYS DEC marine fishery dependent sampling programs.
- Administer the NYS DEC Division of Marine Resources response to fish kills including coordinating with partners, and collecting/synthesizing information on reported fish kills.
- Serve on the ASMFC Striped Bass Plan Review Team.
- Serve as an alternate member of the Atlantic Large Whale and Harbor Porpoise Take Reduction teams for New York.
- Oversee New York's Artificial Reefs and Marine Waterway Access programs.

Marine Biologist 1, February 2014-April 2018
New York State Department of Environmental Conservation (East Setauket, NY)

- Managed New York's Western Long Island juvenile striped bass seine survey, striped bass trawl survey, striped bass fish market sampling, striped bass cooperative angler program, and a juvenile American eel fyke net survey.
- Served as New York's representative on the ASMFC Atlantic Menhaden Technical Committee and the Atlantic Menhaden Plan Development Team.
- Served as the Fish Kill Coordinator for the NYS DEC Division of Marine Resources, which included responding to and collecting/synthesizing information on reported fish kills.
- Operated and maintained a 21' vessel and associated sampling gears/equipment.
- Collected fishery dependent (fish market sampling) and fishery independent data, which included collecting striped bass/Atlantic menhaden scales for aging, tagging striped bass, recording environmental conditions, identifying marine/estuarine species and taking biological measurements of various species.
- Entered, analyzed/synthesized data, and wrote reports for ASMFC and grant reporting requirements.

Fish and Wildlife Technician 1, May 2010-February 2014, February 2007-August 2007
New York State Department of Environmental Conservation (East Setauket, NY)

- Collected biological and environmental data from the field.
- Entered and analyzed fishery and environmental data.
- Created biological/environmental assessment maps with ArcGIS.
- Assisted with Atlantic surfclam population assessments and aging of surfclam shells.
- Co-authored technical reports.

Graduate Assistant, August 2007-August 2010
School of Marine and Atmospheric Sciences (Stony Brook, NY)

- Designed and conducted studies (energy balance, growth, immune function) to understand how temperature stress impacts the physiology of the Atlantic surfclam, *Spisula solidissima*.
- Utilized biochemical, immunological, and histological laboratory techniques to monitor the health of the surfclam population.
- Statistically analyzed experimental and environmental data.

Research Assistant, May 2009-January 2010; Research Aide, September 2005-December 2006; Internship, June 2005-August 2005
Functional Ecology Research and Training Laboratory (Stony Brook, NY)

- Processed hard clams in the laboratory to monitor their spawning condition.
- Assisted with field sample collections and preparation of water samples for chlorophyll analysis.
- Processed benthic core samples for enumeration and taxonomic classification of benthic infauna.
- Entered/organized data and maintained laboratory equipment.

Teaching Assistant, August 2009-May 2010, August 2007-May 2008
School of Marine and Atmospheric Sciences (Stony Brook, NY)

- Led two undergraduate biology laboratory classes.
- Prepared quizzes, graded reports/quizzes, and held office hours for several courses: Environmental Problem Solving, Long Island Sound: Science and Use, and Diseases of Aquatic Organisms

Publications

- Anadón, J.D., Piñero, O., Ruhi, A., **Hornstein, J.**, Waldman, J. (2024) Decoupled shifts of dominant and rarer fish species as a response to warming and extreme events in a large estuary. Ecosphere 15(7).
- **Hornstein, J.**, Pales Espinosa, E., Cerrato, R.M., Lwiza, K., Allam, B. (2018). The influence of temperature stress on the physiology of the Atlantic surfclam, *Spisula solidissima*. Comparative Biochemistry and Physiology, Part A 222: 66-73.
- Doall, M.H., Padilla, D.K., Lobue, C.P., Clapp, C., Webb, A.R., **Hornstein, J.** (2008). Evaluating Northern Quahog (=hard clam, *Mercenaria mercenaria* L.) restoration: Are transplanted clams spawning and reconditioning? Journal of Shellfish Research 27(5): 1069-1080.

Technical Reports

- **Hornstein, J.** (2019). Artificial reef usage in New York: An analysis of aerial survey data from 1995-2016. New York State Department of Environmental Conservation. 17 pp.
- O'Dwyer, J.L., **Hornstein, J.** (2013). 2012 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 68 pp.
- Dahl, S.F., **Hornstein, J.** (2010). 2008 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 69 pp.
- Davidson, M., Pales Espinosa, E., Monsen, P., Perretti, C., **Hornstein, J.** (2007). 2006 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 75 pp.

Computer Skills

- MS Access, Excel, PowerPoint, and Word, SigmaStat, ArcGIS, Survey 123, and R.

Certifications

- PADI Open Water Scuba Certification; CPR/First Aid/AED Certified; New York State Safe Boater Certification

MAUREEN C. DAVIDSON

Division of Marine Resources, New York State Department of Environmental Conservation
123 Kings Park Blvd, Kings Park, New York | 631-444-0483 | maureen.davidson@dec.ny.gov

EDUCATION

MASTER OF SCIENCE
Marine Environmental Sciences
School of Marine and Atmospheric Sciences (SOMAS)
Stony Brook University, Stony Brook, NY

BACHELOR OF SCIENCE
Biology
Southampton College, Long Island University, Southampton, New York

EMPLOYMENT

BIOLOGIST 3 MARINE 2018 - PRESENT
Division of Marine Resources
New York State Department of Environmental Conservation (DEC), Kings Park, New York

- Participate as a state administrative representative on the Mid-Atlantic Fishery Management Council. Seek equitable allocations of important marine species from NOAA Fisheries and the Mid-Atlantic Fishery Management Council; and advocate for NYS commercial fishermen and recreational anglers; and represent the best interests of New York State.
- Oversee the activities and functions in the DEC Marine Permit Office, a license issuing office that issues fishing licenses to commercial fishermen, party and charter boat operators, recreational lobster harvesters and other harvesters of marine animals; issues Licenses to Collect and Possess (e.g., scientific collection licenses); and releases required data as required by Freedom of Information Law
- Oversee the activities and functions in the DEC Fishery Data Management Unit, an office that collects, processes, and manages fishery data collected from state fishermen.
- Furnish support for staff members who provide GIS and data management assistance to the Division of Marine Resources.
- Collaborate with DEC and NY Office of Information Technology Services staff on the development of a new database system that will integrate the data needs and functions of the Marine Permit Office, the Fisheries Data Management Unit and the Commercial Fisheries Management Unit.

BIOLOGIST 2 MARINE 2014 - 2018
Division of Marine Resources
New York State Department of Environmental Conservation (DEC), East Setauket, New York

- Provided oversight of all activities and operations in the DEC Marine Permit Office, a license issuing office that issues fishing licenses to commercial fishermen, party and charter boat operators, and recreational lobster harvesters.
- Supervised office staff members, including a biologist, an environmental program specialist, and two clerks.

- Developed guidelines and procedures to ensure that licenses and permits are issued properly and fairly and in accordance with the Environmental Conservation Law and New York State regulations.
- Provided review and approval of DEC Licenses to Collect and Possess that allow scientists, researchers, and teachers to collect marine organisms for scientific or educational purposes.
- Served as the Division regulatory coordinator, managing the rule making process for the Division of Marine Resources and working cooperatively with DEC staff to draft rule makings and properly proceed through the state rule making process.

BIOLOGIST 2 MARINE 2008 - 2014
Bureau of Marine Resources *East Setauket, New York*
New York State Department of Environmental Conservation, East Setauket, New York

- Administered New York State commercial fishery quota management programs for summer flounder, bluefish, black sea bass, and scup.
- Developed annual quota management strategies in consultation with the New York State fishing industry.
- Served as the Bureau regulatory coordinator, managing the rule making process for the Bureau of Marine Resources and working cooperatively with DEC staff to draft rule makings and properly proceed through the rule making process.

BIOLOGIST 1 MARINE 1999 - 2008
Bureau of Marine Resources *East Setauket, New York*
Division of Fish, Wildlife and Marine Resources
New York State Department of Environmental Conservation (DEC)

- Conducted population surveys of the Atlantic surfclam in New York State marine waters. Prepared reports evaluating population data, age structure, and size distribution of the surfclam population.
- Represented DEC at Surfclam/Ocean Quahog Management Advisory Board meetings and worked cooperatively with surfclam harvesters and processors in the drafting of surfclam management measures.
- Drafted fishery management plans for the mechanical harvest of the Atlantic surfclam in New York State waters of the Atlantic Ocean and Long Island Sound.

John Maniscalco
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(631) 444-0437

Professional History

2017 – present	Bureau Chief, Marine Fisheries	NYS DEC	
2010 – 2017	Unit Leader, Marine Finfish	NYS DEC	
2006 - 2010	Biologist, Crustaceans	NYS DEC	
2001 - 2003	Aquarist		WCS NYA

NYS DEC – New York State Department of Environmental Conservation
WCS NYA – Wildlife Conservation Society New York Aquarium

Educational History

2006	Master of Science	Marine Environmental Science	Stony Brook University
	MS Advisor: Dr. David O. Conover		
1999	Bachelor of Arts	Env. and Evol. Biology	Dartmouth College

Synergistic Activity

Chair, Delaware River Basin Fish and Wildlife Management Cooperative Policy Committee (2021-2022), Atlantic States Marine Fisheries Commission (ASMFC) Summer Flounder, Scup and Black Sea Bass Technical Committee (2014-2016), Black Sea Bass Benchmark Stock Assessment Working Group (2016)

Member, ASMFC Commissioner (proxy) for New York (2022-present), Golden Tilefish Research Track Assessment Working Group (2022–2024), Delaware River Basin Fish and Wildlife Management Cooperative Policy Committee (2021-present), MAFMC MC for Blue and Golden Tilefish (2018-present),ASMFC (and Mid-Atlantic Fishery Management Council Monitoring Committee MAFMC MC) Summer Flounder, Scup and Black Sea Bass Technical Committee (2010-2020), ASMFC (and MAFMC MC) Bluefish Technical Committee (2010-2017), Atlantic Coastal Cooperative Statistics Program (ACCSP) Recreational Technical Committee (2011-2017), ASMFC Horseshoe Crab Technical Committee (2006-2010)

Collaborations

2023–2025	M.S. Graduate Committee Member	Cornell University
2024–present	Ph.D. Dissertation Committee Outside Scholar	Stony Brook University

Presentations & Publications

Maniscalco, John (2019). Fish on the move – one manager's perspective. Presented at NY AFS Plenary Session, Poughkeepsie, NY.

Chang, H.Y., Pendleton, R., Kenney, G., McKown, K., Eakin, W., Maniscalco, J., and Chen, Y. (2024). Spatiotemporal dynamics of spawning habitat distribution of American shad (*Alosa sapidissima*) in the Hudson River Estuary under multi stressors. Canadian Journal of Fisheries and Aquatic Sciences. 00:1-14.

EMERSON C. HASBROUCK, JR.
Cornell University Cooperative Extension of Suffolk County - Marine Program
423 Griffing Avenue, Suite 100 Riverhead, NY 11901
631-965-1422 (cell), ech12@cornell.edu

EDUCATION

Master of Science Degree in Marine Environmental Sciences, State University of NY/Stony Brook, NY
Bachelor of Science Degree in Marine Science, Southampton College, Long Island University

PROFESSIONAL EXPERIENCE

Atlantic States Marine Fisheries Commission
Governor's Appointee Commissioner for NY 2014 – Present

Appointed by the Governor to represent the people of New York in the sustainable management of Atlantic coast marine fisheries. Work with all ASMFC Commissioners to develop Fishery Management Plans that: Rebuild, maintain, fairly allocate and promote Atlantic coastal fisheries; Provide effective stewardship of marine resources through strong partnerships; Make decisions based on sound science; Balance resource conservation with the economic successes of coastal communities.

Cornell University Cooperative Extension of Suffolk County - Marine Program
Riverhead, NY
Senior Natural Resources Specialist 1988 – 2008 and 2013- Present

Plan, develop and implement an extension program with the NY and the Mid-Atlantic and Southern New England fishing industries relative to cooperative demonstration fisheries research, fisheries data, fisheries management and fisheries economic development. Plan, develop and implement effective fishery cooperative research, data and biological sampling programs to satisfy regulatory requirements and to quantify New York and regional fisheries and harvested resources. Provide fishermen with information necessary to positively interact with local, state, regional, national and international regulatory regimes. Assist fishermen in organizational development and in understanding fisheries management principles and goals. Plan, develop and implement economic development programs for the fishing industry to improve profitability and competitiveness. Conduct applied cooperative research and implementation programs and demonstration projects with the fishing industry that help address critical fisheries, fisheries management and natural resource issues. Secure funding sources for extension programming activities. Many of these activities are carried out in cooperation with, and aboard, commercial fishing vessels. Develop, oversee and manage budgets.

Cornell University Cooperative Extension of Suffolk County - Marine Program
Riverhead, NY
Marine Program Director 2009 – 2013

Responsible for all administrative, fiscal and program components of the Cornell Marine Program. Supervise over 35 professional and support employees located at five separate facilities. Responsible for providing in-depth program leadership for the planning, coordination, implementation, management and evaluation for the entire CCE Marine Program. Responsible for fiscal management of the Marine Program budgets, totaling over $2.5 million annually, and provide leadership in obtaining grant funding for the Marine Program. Supervise a large and diverse professional staff that conducts research and provides educational opportunities regarding fisheries resources, habitat restoration, water quality protection, pollution control and environmental preservation in support of the vital marine related industries and natural resources of Long Island.

QUALIFICATIONS

I have been involved in fisheries research and fisheries issues in the Mid-Atlantic and New England regions for well over 35 years. I have conducted numerous cooperative fisheries research projects with fishermen from Massachusetts to N. Carolina. I have a thorough working knowledge of fisheries throughout these regions as well as an understanding of the problems, issues, dynamics and politics of the fisheries and their underlying fishery resources. My work has been with commercial and recreational fisheries and I have earned the respect and cooperation of both groups with the goal of sustainable harvest and management of our marine resources. I have developed close relationships with fishermen and fishery managers from North Carolina to Maine and have often assisted these groups to seek common ground and interact with each other. I also have considerable experience working with fisheries agencies such as: the NY Dept. of Environmental Conservation; the Mid-Atlantic and New England Fishery Management Councils; The Atlantic States Marine Fisheries Commission.

SELECTED PUBLICATIONS AND REPORTS

Reisman, H.R. and E. Hasbrouck. 2024. The Marine Fishes and Fisheries of New York. 296pp. Cornell Univ. Press.

Curatolo-Wagemann, E. Hasbrouck, K. Gerbino, P. Sullivan, M. Bowen, T. McClintock, A. Mercado, A. Dauman, T. Guteres, I. Rivera. 2024. Quantifying Bycatch Reduction Benefits of an Excluder in the Small Mesh Fisheries of the Northeast With a Focus on Red Hake. NOAA S-K Program. Final Report.

Hasbrouck., E., S. Curatolo-Wagemann, P. Sullivan., T. McClintock, K. Gerbino, A. Mercardo, A. Dauman, P. Duckworth. 2022. Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets. NMFS Monkfish RSA Program – Final Report.

Hasbrouk, E., I. Wirgin, S. Curatolo-Wagemann, T. McClintock, K. Gerbino, J. Scotti, D. Kuehn. 2021. Fine Scale Genetic Population Structure of Monkfish. Final Report NOAA Grant NA16NMF4540109, Monkfish RSA Program.

Hasbrouck, E., S. Curatolo-Wagemann, J. Scotti, T. Froehlich, K. Gerbino, D. Kuehn. P. Sullivan. 2019. Evaluation of Conservation Gear Technology to Reduce Black Sea Bass Bycatch in the Small Mesh Longfin Squid Fishery. NOAA S-K Program. Final Report.

Hasbrouck, E., S. Curatolo-Wagemann, T. Froehlich, K. Gerbino, D. Kuehn, P. Sullivan. 2018. Determining Mesh Selectivity and Optimum Mesh Size to Harvest Three Commercially Important Mid- Atlantic Species. MAFMC. Final Report.

Hasbrouck, E., J. Scotti, S. Curatolo-Wagemann, T. Froehlich, K. Gerbino, D. Kuehn. 2016. Small Mesh Fishery Bycatch Reduction in the Southern New England/Mid-Atlantic Windowpane Stock Area. Final Report. NEFMC Groundfish Research Program Through the Northeast Consortium.

Morson, J.M., E. Bochenek, E. Powell, E. Hasbrouck, J. Gius, C. Cotton, K. Gerbino, T. Froehlich. 2015. Estimating the Sex Composition of the Summer Flounder Catch using Fishery Independent Data. Marine and Coastal Fisheries, 7:1, 393-408.

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, J. Costanzo, P. Sullivan. 2015. Evaluation of the Large Mesh Belly Panel in Small Mesh Fisheries as a Method to Reduce Yellowtail Flounder Bycatch on Cultivator Shoals. Final report to the Northeast Cooperative Research Program. February 2015

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, J. Costanzo, P. Sullivan. 2014. Evaluation of the Large Mesh Belly Panel in Small Mesh Fisheries as a Method to Reduce Yellowtail Flounder Bycatch on Southeast Georges Bank. Final report Submitted to the Northeast Cooperative Research Program. July 2014

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, P. Sullivan. 2013. A Method to Reduce Winter Flounder Retention Through the Use of Avoidance Gear Adaptations in the Small Mesh Trawl Fishery Within the Southern New England/Mid-Atlantic Winter Flounder Stock Area. Final Report - Commercial Fisheries Research Foundation. NOAA Award NA09NMF4720414

Morson, J., E. Bochenek, E. Powell, E. Robillard, E. Hasbrouck, J. Gius, K. Gerbino, T. Froehlich, E. G. Hasbrouck. 2013. Sex Ratio and Age-at-length of Summer Flounder (Paralichthys dentatus) from Recreational and Commercial Landings. NMFS- SARC 57 Working Paper.

McHugh, J.L. and E. Hasbrouck, 1990. Fishery Management in New York Bight: Experience Under the Magnuson Act. Fisheries Research, 8:205-221

Scott Curatolo-Wagemann

Cornell Cooperative Extension of Suffolk County
423 Griffing Avenue, Suite 100
Riverhead, New York 11901

Tel: (631) 727-7850 x.318
Cell Phone: (631) 278-4260
Email: sw224@cornell.edu

A. PROFESSIONAL PREPARATION:

Southampton College of Long Island University	Marine Science Biology	B.S.	1994
State University of New York- Stony Brook	Environmental Management	M.P.S.	2010

B. APPOINTMENTS:

2024-present: Atlantic States Marine Fisheries Commission- New York State Governor's Appointee proxy 2021-present: Responsible Offshore Science Alliance Research Advisor

2020-present: New York Seafood Direct Marketing Task Force

2020-present: Long Island Sound Marine Debris Action Plan-Abandoned and Lost Fishing/Aquaculture Gear Working Group 2019-present: New York State Fisheries Technical Working Group

2019-present: Mid-Atlantic Marine Debris Action Plan

2018-present: Mid-Atlantic Fishery Management Council- Advisory Panel for spiny dogfish

2015-present: NOAA, National Marine Fisheries- Advisory Panel for Atlantic Highly Migratory Species Southeast Data, Assessment, and Review (SEDAR) Workshops

1999-present: Senior Extension Resource Educator, Fisheries and Stormwater Specialist Cornell University Cooperative Extension, Riverhead, NY 11901

C. **PRODUCTS: Significant Products**

Conservation Gear Technology- Quantifying Bycatch Reduction Benefits of an Excluder in the Small Mesh Fisheries of the Northeast with Focus on Red Hake (NOAA-Saltonstall-Kennedy Program). June 28, 2004. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera Reducing Marine Debris by Removing Derelict Lobster Gear from Long Island Sound-II (NFWF-Long Island Sound Future Funds). April 5, 2024. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera

Continuation of "Choose Local F.I.S.H." Marketing and Education Campaign to Promote Locally Caught and Grown Seafood on Long Island. (USDA- Farmers Market and Local Food Promotion Program). February 28, 2023. Emerson Hasbrouck, **Scott Curatolo- Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman, Richard Guteres, Michael Bowen

New York Fleet Wide Electronic Vessel Trip Reporting and Education Initiative (NFWF-Electronic Monitoring and Reporting Grant Program 2020). November 2022. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets (RSA- Monkfish 2018). October 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Advancing Bycatch Reduction Technology in New England Small Mesh Fisheries. (NOAA-Bycatch Reduction Engineering Program 2019). April 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Implementing a Bycatch Avoidance Communication Network in RI, MA, NJ, NY. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Amanda Dauman

Reducing Discard Mortality in the NY Recreational Atlantic Striped Bass Fishery. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Kaitlyn Boyle, Alex Mercado

Fine Scale Genetic Population Structure of Monkfish (MAFMC Research Set Aside Program 2016). March 25, 2021. Emerson Hasbrouck, I.Wirgin, John Scotti, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn

Determining Mesh Selectivity and Optimum Mesh Size to Harvest Three Commercially Important Mid- Atlantic Species (MAFMC/ASMFC). March 1, 2018. Emerson Hasbrouck-Principal Investigator; **Scott Curatolo-Wagemann**, John Scotti, Tara Froehlich, Kristin Gerbino, Daniel Kuehn, Patrick Sullivan.

D. SYNERGISTIC ACTIVITIES:

1. Stakeholder Engagement: Engage with fishermen, fishing associations, industry representatives, and other relevant stakeholders to foster dialogue, understand their perspectives, and build trust and collaboration.
2. Data Collection and Analysis: Work together with the fishing industry to collect accurate and comprehensive data on fish stocks, fishing effort, and ecological indicators. This collaborative approach enhances the quality and reliability of the data, enabling informed decision-making.
3. Scientific Research and Monitoring: Collaborate with the fishing industry to support scientific research initiatives, including stock assessments, ecosystem monitoring, and studies on fishing gear technology. By combining industry knowledge with scientific expertise, a more comprehensive understanding of the ecosystem and its dynamics can be achieved.
4. Adaptive Management: Jointly develop and implement adaptive management strategies that incorporate feedback from fishermen. This iterative process allows for continuous evaluation and adjustment of fisheries management measures based on real-time observations and stakeholder input.
5. Compliance and Enforcement: Collaborate with the fishing industry to promote compliance with fishing regulations and foster a culture of responsible fishing practices. Encourage industry-led initiatives for self-regulation, monitoring, and reporting to improve compliance rates and reduce illegal, unreported, and unregulated (IUU) fishing activities.
6. Innovation and Technology: Partner with the fishing industry to explore innovative and sustainable fishing technologies, gear modifications, and fishing practices. This collaboration can lead to the development and adoption of more selective and eco- friendly fishing methods, minimizing bycatch and ecosystem impacts.
7. Education and Capacity Building: Collaboratively develop training programs, workshops, and educational materials to enhance the industry's understanding of sustainable fishing practices, ecosystem conservation, and compliance with regulations. This empowers fishermen with the knowledge and skills necessary for responsible resource management.
8. Market-based Approaches: Collaborate with the fishing industry to promote and certify sustainable fishing practices,

   facilitating access to markets that prioritize sustainable seafood. These partnerships can create economic incentives for the industry to adopt sustainable practices while meeting consumer demand for environmentally friendly products.

By engaging in these synergistic activities, individuals working collaboratively with the fishing industry in fisheries management can foster a cooperative and inclusive approach that supports the long-term sustainability of fish stocks, preserves marine ecosystems, and ensures the viability of the fishing industry.

E. COLLABORATORS & OTHER AFFILIATIONS:

Collaborators Over the Last 48 Months: J. Abrams (Gershow Recycling); M. Albino (NYSDEC); D. Aripotch (F/V Caitlin & Mairead); J. Best (NYSDEC); J. Bourque (NYSDEC); B. Brady (Long Island Commercial Fishing Association); A. Clemetson (NY SeaGrant); M. Ciaramella (NY SeaGrant); C. Coyne (Sea-Trade Consulting); S. Crosby (The Maritime Aquarium); J. Davis (CT DEEP); N. Delanoy (F/V Laura Lee); Doll (F/V Christine & Jennifer); M. Early (Covanta Energy); R. Enever (FishTek); K. Fullam (New York State Department of Agriculture and Markets) J. German (F/V Suzanne Marie); N. Grant (Ct SeaGrant); R. Harrington (F/V Spirit); H. Hart (Mid-Atlantic Fishery Management Council); E. Hasbrouck (CCE); J. Hoey (National Marine Fisheries Service, Northeast Fisheries Science Center); D. Hudson (The Remote Ecologist); G. Kenney (NYSDEC); M. King (F/V Timtarah);J. Knight (Superior Trawl); W. Lucey (Save the Sound); M. McClintock (F/V Bulldog); K.McKowan (NYSDEC); C. McCandless (NOAA Apex Predators Program); J. Maniscalco (NYSDEC); Milliken (National Marine Fisheries Service, Northeast Fisheries Science Center); On the Water Magazine; M Passerotti (NOAA Apex Predators Program); W. Richter (NYSDEC); E. Rodman (F/V Veronica Ann); C. Roebuck (F/V Karen Elizabeth); P. Ruhle Jr (F/V Sea Breeze Too); E. Reid (NEFMC); M. Sclafani (CCE); C. Scott (NYSDEC); J. Scotti (CCE); C. Scheetz (Project Oceanology); S. Sethi (Alaska Pacific University); J. Sulikowski (Univ. of New England); P. Sullivan (Cornell Univ., College of Agriculture and Life Sciences, Dept. of Natural Resources); V.Vecchio (NOAA); I. Wirgin, (NYU, School of Medicine)

NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

August 14, 2026

To the ACCSP Operations and Advisory Committees:

Title: Electronic Reporting Initiatives for New York Fisheries

On behalf of the New York Department of Environmental Conservation (NYSDEC) and Cornell Cooperative Extension (CCE), we are pleased to submit our revised proposal. This proposal was initially a component of a submission titled "Fishery Dependent Sampling of Federal and State Permitted Vessels and Electronic Reporting Initiatives in New York". During the review, it was suggested that the submission be split into 2 separate projects and guidance from ACCSP indicated that with the split, it be done so without tracking, since the changes in both new proposals would be challenging to look at. Rather, we should specifically highlight and include in this cover page and the one for biological sampling is how we addressed the committee feedback. We have reviewed and addressed each of the committee's comments as they pertain to this project as detailed below:

Overall Proposal Modification

- **Split Proposal:** We have split the original proposal that included biological sampling and VTR reporting, into two separate proposals each of which remains within the original scope. This cover letter and the attached proposal are for VTR reporting. On advice from ACCSP we did not highlight changes.

Permitting and Sampling Scope

- **Purchase of iPADs-** Over the course of 3 other eVTR projects that CCE has conducted over the past seven years, we have found that providing iPADs to industry members is a great incentive for them to adopt electronic reporting technologies.
- While it may be difficult to purchase iPADs, CCE has the ability to leverage it's connection to Cornell University. has an agreement with Apple.

Budget and Personnel

- **Staffing:** More detailed descriptions have been added for **Budget Positions.** We describe which positions are CCE, and have named employees along with their positions, roles, and time allocation to address the question of potential personnel overlap.

- **Overhead and Administrative Grant:** We explicitly request that these funds be directed through the **ACCSP Administrative Grant** to streamline the distribution of

funding across the three states. Consequently, we have maintained the 10% ASMFC/ACCSP indirect charge as previously coordinated.

Sampling Design

- **Support for non-iPad users**- Recognizing that not every participant is in need of another electronic device, or that some users may be more comfortable using an Android device, CCE will still offer support. As with past eVTR projects that CCE has conducted, this support includes the initial transitioning to eVTR as well as any questions a user may have as they report electronically, whether they received a complimentary iPAD or not.
- **Reduction of staff time on data entr**y- The comment on the proposal was to address the statement that electronic reporting reduces staff time on data entry but also creates new tasks. The section about reducing staff time was directly related to reducing staff time on checking and correcting paper data entry errors. Since established electronic reporting programs include a number of automated data audits designed to restrict the entry of erroneous or incomplete data, this will reduce the staff time required to conduct quality assurance on these parameters.
- **Number of Commercial Fishermen reporting**: As of 2025, in New York approximately 25.8% of the commercial fishers submit paper Vessel Trip Reports. About 52.8 % of all permit holders submit negative paper reports only (NYSDEC, pers. Comm.). The project requests the purchase of 50 iPADs. If the project were funded and we were not able to give out all of the iPADs, then any extra would be handed over to the NYSDEC for future distribution.

We believe these revisions strengthen the proposal and demonstrate our commitment to a successful, cost-effective pilot program.

Sincerely,

Jesse Hornstein
Marine Biologist II
New York State Department of Environmental Conservation

Proposal for funding made to the

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200A-N
Arlington, VA 22201

FY27: Electronic Reporting Initiatives for New York Fisheries

Submitted By:
Jesse Hornstein
New York State Department of
Environmental Conservation
Division of Marine Resources
123 Kings Park Blvd.
Kings Park, NY 11754

Applicant Name:	New York State Department of Environmental Conservation, Division of Marine Resources
Project Title:	Electronic Reporting Initiatives for New York Fisheries
Project Type:	New Project
Requested Award Amount:	$135,721.70
Requested Award Period:	One year after receipt of funds
Primary Program Priorities:	Primary-Catch, effort, and landings data (100%)
Date Submitted:	August 14, 2026
Project Supervisor:	Jesse Hornstein
Principal Investigators:	Jesse Hornstein, John Maniscalco, Maureen Davidson, New York State Department of Environmental Conservation Emerson Hasbrouck, Cornell Cooperative Extension-Marine Program, ech12@cornell.edu Scott Curatolo-Wagemann, Cornell Cooperative Extension-Marine Program, sw224@cornell.edu
Project Staff:	Cornell Cooperative Extension- Marine Program Staff: Kristin Gerbino, kk334@cornell.edu- Fisheries Specialist Michael Bowen, mb2735@cornell.edu- Fisheries Coordinator Tyler Guteres, rg699@cornell.edu- Fisheries Technician

Objective:

The overall objective of this project is to supplement and expand New York State electronic vessel trip reporting:

- Expand electronic reporting goals for New York State, by providing training and support for electronic reporting requirements and compliance for dealers, the for-hire, and commercial fishing industries. Support and training will also be provided for any food fish licensees voluntarily adopting electronic reporting.

Need:

The NOAA Fisheries Electronic Technology Policy Directive on Electronic Technologies (ET) and Fishery-Dependent Data Collection (2019) encourages the consideration of ET to complement and/or improve existing fishery-dependent data collection programs to achieve the most cost effective and sustainable approach that ensures alignment of management goals, data needs, funding sources, and regulations. To achieve this directive, NOAA Fisheries encourages all fishery stakeholders to consider implementing ET options, where appropriate, to meet science, management, and compliance data needs.

According to NOAA Fisheries Electronic Technology Implementation Plan (2021), the vision of ET for 2021-2025 is ensuring data content, quality, integrity, and traceability requires that all fishery-dependent data collection programs fully transition to electronic data collection and processing systems. Many of the regional data collection programs have already transitioned to electronic data collections including seafood dealer reporting and biological sampling. The use of electronic vessel trip reports (eVTR) is recommended in this vision for a number of important reasons including One Stop Reporting for dual-permitted entities; integration with Pre-Trip Notification System for Universal Trip Identifier generation and transmission; and developing a modernized eVTR database model that has the flexibility to address a wide range of requirements including: customized logbooks, better support of One Stop Reporting requirements, and the ability to more quickly adapt to ever changing reporting requirements. Data collection programs which continue to utilize paper-based data collection can be costly and lack the flexibility to adapt to highly dynamic fishery management and monitoring needs. The demand for more timely and frequent data has increased in response to required state and federal fisheries quota monitoring, and the need for more efficiently integrated regional fishery-dependent data streams will allow for informed management decisions (NOAA Fisheries Technology Implementation Plan, 2021).

DEC has already invested significant time, effort, and resources implementing a mandatory reporting system for New York state dealers and for-hire vessels. However, there is still a lag in compliance by some dealers. By broadening our outreach efforts and including individualized training, we anticipate being able to have 100% dealer electronic reporting. The electronic reporting for the for-hire fleet is a relatively new requirement. As such, many for-hire captains

are still becoming aware of the requirements and are trying to learn how to transition to electronic reporting. As of 2025, in New York approximately 25.8% of the commercial fishers submit paper Vessel Trip Reports. About 52.8 % of all permit holders submit negative paper reports only (NYSDEC, pers. Comm.). As with dealers, by broadening our outreach efforts and including individualized training, we will be able to have more captains comply with electronic reporting. Harvesters also have the option to report electronically, and although it is not mandatory, New York continues to encourage harvesters to transition from paper reporting to electronic reporting. As with dealers and the for-hire fleet, by broadening our outreach efforts and including individualized training, we will be able to have more harvesters become comfortable with, and transitioning to, electronic reporting.

Results and Benefits:

This project will expand electronic reporting of fishery dependent data from commercial and for-hire fishers and dealers. Based on CCE's various other successful electronic reporting programs implemented in recent years (detailed below), we estimate that with the program described in this proposal, we can transition at least 50 individuals to electronic reporting and reach/train/re-train at least 50 additional harvesters/for-hire/dealers. Also, our experience allows us to estimate the staff that will be needed to successfully implement this program.

This will bring the State fishery dependent data collection program up to ACCSP electronic reporting standards. The electronic reporting program proposed here will provide complete data coverage for most state licensed commercial fishermen, for-hire permit holders, and all food fish dealers at the trip level. Further, it will facilitate the collection and processing of data from marine bait fisheries and bring those fisheries up to ACCSP standards while concurrently providing more complete and accurate landings information for bait fisheries. The electronic reporting program proposed here will process data collected from only New York State permitted fishermen and dealers. The program will provide extensive hands-on one-on-one training in electronic reporting for harvesters, dealers, and for-hire operators.

The value of electronic logbook data is the improvement in accuracy and timeliness of data. Moving away from paper-based logbook systems will significantly reduce both data entry and transcription errors. This reduces time spent on contacting fishermen to correct errors. The established electronic reporting programs include a number of automated data audits designed to restrict the entry of erroneous or incomplete data, which greatly improves overall data quality compared to paper reports. The New York data to be collected electronically through this project can be uploaded and made directly available to ACCSP's database as a complete dataset. The adoption of electronic logbooks makes it practical to collect and record more detailed catch by area and can improve the quality of

stock assessments and the outcomes of management for managed species. Collecting data in this format makes it more usable and can have increased benefits for management and decision-making for quota monitored species such as summer flounder, scup, black sea bass, striped bass, bluefish, spiny dogfish, longfin squid, horseshoe crabs and Atlantic menhaden. There is also the potential for data to be used to understand and track migration and range shifts of certain species such as black sea bass. This new capability allows the industry to contribute more directly to the quality and utility of NOAA Fisheries' science.

Data for the harvest of fish, lobster, crabs and other seafood species will continue to be collected at the trip level from dealers and fishermen, and include, either through direct reporting by the entity engaged in the activity, or through subsequent data processing, all ACCSP standard data elements.

Data Delivery Plan:

Currently, in New York approximately 39% of the commercial fishers submit fishing data directly into SAFIS eTRIPS. About 51% of the for-hire fleet submit fishing data directly into SAFIS eTRIPS. Electronically reported data are being uploaded instantaneously into the ACCSP databases. **The training made available through this program will hasten the availability of fishery dependent data to ACCSP and its state partners.**

At this time, vessel trip report data submitted to DEC on paper are entered into a DEC proprietary database by data entry technicians. Twice a year the stored and processed data are uploaded into the ACCSP database. Any reduction in the amount of paper handling and data transcription from paper reports will minimize errors and reduce delays in the delivery of data to ACCSP.

Approach:

Electronic Reporting

Since 2019, CCE has been funded for three electronic monitoring projects, designed to help fishermen transition from paper to electronic reporting. In all three of these projects CCE has provided workshops and individualized training not only to demonstrate how to report, but also as a means to incentivize training, provide free reporting platforms, in the form of free iPads.

In 2019, Cornell Cooperative Extension Marine Program (CCE), in coordination with the New York State Department of Environmental Conservation (NYSDEC) and the Atlantic Coastal Cooperative Statistics Program (ACCSP), implemented an eVTR training program that has improved trip reporting for New York's state-licensed commercial fisheries compared to the paper-based reporting system. CCE distributed 30 free iPads to fishermen and conducted

personalized training sessions with these fishermen as an incentive to switch from paper to electronic reporting using the eTRIPS/mobile app. CCE also conducted a series of four group outreach and training sessions and distributed training materials to fishermen which allowed CCE to successfully reach 286 NY fishermen and industry members and greatly increase the number of trip reports submitted electronically.

Building on the success of this project, in 2020, CCE, coordinated with prior project partners ACCSP and NYSDEC, as well as NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO), the Mid-Atlantic Fishery Management Council (MAFMC), and the Atlantic States Marine Fisheries Commission (ASMFC) and implemented a new electronic vessel trip report (eVTR) training program. This project focused on assisting fisherman with federal permits transitioning from paper-based reporting to mandatory electronic reporting (November 10, 2021), as well as incentivize the switch to electronic reporting for NY state fishermen for which electronic reporting is not mandatory, but preferred. CCE distributed 60 free iPads and conducted one-on-one training sessions for fishermen as they successfully transitioned from paper to electronic reporting using both the NOAA Fish Online and eTRIPS/mobile apps. CCE also conducted a series of 8 group training sessions and distributed training materials to fishermen, which allowed CCE to successfully reach 244 NY fishermen and significantly increase the number of vessel trip reports submitted electronically. This project has taken significant steps toward expanding and modernizing New York’s fishery-dependent data collection process, leading to improved timeliness and data quality needed for informed fisheries management decisions.

Currently, CCE, with continued coordination with NYSDEC, ACCSP, and inclusion of the NY Marine Resources Advisory Council (MRAC), and Electronic Technology (ET) specialists, was awarded a project to prepare the New York state for-hire fishing fleet for anticipated mandatory electronic VTR reporting that went into effect in January 2025. This project will also improve voluntary electronic VTR adoption rates for the New York state commercial fleet with a goal of achieving 50% electronic reporting rates. CCE will provide support, training, education and outreach for a total of 340 for-hire and commercial fishermen at 15 group training workshops across Long Island as well as at one-on-one training sessions and during weekly "office hours". CCE will outfit the fleet with the technology needed to adopt and support electronic reporting of fisheries-dependent data using ACCSP's eTRIPS/mobile application. This is in the form of 188 iPads to be distributed to the New York for-hire and commercial fleet to incentivize and ensure successful adoption of electronic vessel trip reporting. This technology transfer and extensive training program will result in more timely, accurate and inclusive data collection and overall improved fishery management and conservation for New York State.

Over the course of the three projects, CCE will have distributed 278 iPads to industry members to help modernize fishery-dependent data collection. Providing an iPad to fishermen provides an incentive to report electronically but also helps CCE facilitate training. By providing the iPad, staff only need to be familiar with one platform when conducting training for multiple fishermen.

Training and guides that cover step-by-step instructions on how to report electronically can be more easily communicated and shared when it is done on one type of device. The requirements of eTRIPS/Mobile - version 2 require specific versions of their respective operating systems. It may be that personal devices may not be able to meet these requirements, and by giving out free iPads, CCE can be sure that a fisherman has access to a platform that can be used to report electronically. CCE certainly helps those industry members who feel more comfortable using their own phones/tablets/computers, provided they meet the requirements for the eTrips application.

The inclusion of funds to purchase iPads for this proposal will continue CCE's ability to provide these incentives to switch to electronic reporting, while we continue to hold workshops and trainings for eVTR. As part of Cornell University, CCE has the ability to take advantage of Cornell's purchase agreement with Apple, which allows for bulk ordering.

There are several components to the electronic reporting portion of this proposal:

Training Sessions (group and one-on-one)

To facilitate the shift from a paper-based system to an electronic-based data collection system on a large scale, CCE will coordinate with NY fishermen and dealers, DEC, and ACCSP for a series of extensive training workshops at various ports to engage and educate dealers and fishermen about the use and benefits of the user-friendly programs. Training for the for-hire and commercial fleets, as well as food fish dealers, will be conducted in both group settings and in one-on-one trainings to demonstrate the use and handling of the provided equipment and web application. CCE will provide initial and on-going training and support in the use of eTRIPS to advance the initiatives of the ET Implementation Plan. To incentivize the use of electronic reporting, CCE will provide 50 iPads to fishermen who voluntarily switch from paper to electronic reporting.

CCE will arrange for monthly group outreach and education training sessions to be conducted at various locations across Long Island. Training presentations will be held at libraries and public facilities that are in coastal communities and are close to fishing ports from New York City to Montauk. This will include ports with high party/charter fishing activity including Captree, Montauk, Port Jefferson, Freeport, Orient, Brooklyn, and commercial ports in Montauk and Shinnecock. Trainings will also be held at the CCE facility in Riverhead, NY and DEC Division of Marine Resources Headquarters in King's Park, NY. Training can also be held during scheduled captain's meetings for local fishing associations. Training presentations will include background, DEC reporting requirements, App installation, logging in, setting up "favorites", starting trip, entering trip details (including gear, effort, catch, offloading catch), sign and submit, gear field definitions, special reporting requirement (striped bass, blackfish), did not fish reports, installing updates, help desk info, CCE staff contact info, and office hours info. DEC has special reporting requirements for striped bass and tautog (blackfish). Fishermen are allocated a certain

number of tags for these species based on their fishing history. All striped bass and tautog are required to be tagged prior to sale and commercial fishermen must individually report each fish with the tag number and weight of each fish into the eVTR system. CCE will coordinate and publicize group training sessions with DEC, ACCSP, ASMFC, the New York State Marine Resources Advisory Council (MRAC) and project partners. CCE has created and conducted these presentations for previous NFWF-funded projects which provides efficiency and cost savings to the proposed project.

As stated above, CCE will coordinate with ACCSP in conducting this project. We will work with fishermen/dealers to establish SAFIS accounts, if needed. We will also promote the use of the SAFIS Helpdesk to all individuals that are trained in this program as an additional means of support.

On an as-needed basis, CCE staff will be available to conduct more personalized, one-on-one training sessions to address the unique needs of each fisherman to ensure full competency with use of eTRIPS. CCE staff will conduct these meetings either in-person, by phone or by Zoom. Following all trainings, CCE aims to have all participants be fully competent in entering and exporting VTR data. A follow-up survey will be developed to gauge the success of the training sessions as well as identify any further needs.

Technical Support

CCE will continue to provide technical support to the fishing industry as any electronic reporting changes and updates are implemented. CCE will coordinate with harvesters, for-hire businesses, and seafood dealers to ensure data quality and educate on proper procedures to correct submission errors. CCE will communicate with ACCSP for the latest updates to software and identify any issues that occur. CCE will provide continued technical support to all fishermen and dealers on an as needed basis for the project duration. CCE will offer personal support over the phone or by conducting Zoom video meetings to fully educate new users.

“Office Hours”

CCE will schedule “office hours” once per week for 2 hours per session. **This is a scheduled time for fishermen to ask any relevant questions regarding electronic reporting procedures to ensure confidence and accuracy in their reports.** Office hours will be held in person as well as by phone and Zoom online conferencing. This will allow CCE staff to see the reporting screen for more accurate suggestions. It is expected that “office hours” will be held once per week but if increased need arises, CCE staff will accommodate the need. Office hours also help support those fishermen unable to attend in-person meetings.

Education and Outreach

Education and outreach are an essential component of this program. CCE will educate the NY stakeholders on the importance of accurate fishery-dependent data for the sustainable management of marine resources. Much of the information needed for successful resource management is self-reported by fishermen. The industry will be educated on the issues of why data needs to accurately reflect the fisheries, the importance of accurate and timely scientific data, and how to accurately supply the needed information. This project will be actively marketed to food fish dealers and the entire NY for-hire and commercial fishing communities. Information detailing the project will be posted on the CCE website, social media outlets and published in local NY papers. Project info and advertisements promoting the training sessions will be supplied to The Fisherman, On The Water and The National Fisherman magazines as well as local publications including the Montauk Sun and East Hampton Star. Informational flyers will be distributed at bait and tackle shops, docks and gear suppliers. The CCE website and Facebook pages will be used to communicate project activities to the general public and the fishing industry. The series of outreach and education training workshops will be vigorously promoted using the named outlets as well as a group mailing to all NY state party/charter and food fish permit holders. Through the outreach component, CCE will address the need for increased awareness of improving the best available data to maintain sustainable fish stocks. We will also work with DEC, MRAC and ACCSP staff on a coordinated outreach strategy. **At the conclusion of the project, an informational Fact Sheet will be produced and targeted to the fishing industry and fisheries managers in other states. This Fact Sheet will contain details and results of the current project, lessons learned, and suggested practices that can facilitate industry wide electronic transmission of VTRs with the goal of enhancing transferability of our results and encouraging other states to adopt successful electronic reporting programs in their area.**

Geographic Location:

Electronic reporting trainings and outreach will take place not only in fishing ports but at a variety of locations throughout Long Island, NY that will be easily accessible to fishermen and dealers.

Milestone Schedule:

Activity	**Month**											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Electronic reporting initiatives	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Report writing										**X**	**X**	**X**

Project Accomplishments Measurement:

Goal	Metric
Report writing	**Report submitted to ACCSP**
Electronic reporting initiatives	**Increase in the number of harvesters, dealers and for-hire captains reporting electronically**

Cost Summary (Budget):

CCE Personnel: $82,414.88

Fringe Benefits: PROVIDED AS IN-KIND NOT CHARGED TO THIS PROJECT ($50,885.17)

Travel: $1,150.00

Supplies: $23,225.00

Contractual:

Other: $500.00

Total Direct Charges: $107,289.88

Indirect Charges: $16,093.48 (CCE)

CCE Charges: $123,383.36

ACCSP 10% Administrative: $12,338.34

Total Project Cost: $135,721.70

Requested Budget FY 2027
(January 1, 2027 to December 31, 2027)

PERSONNEL COSTS:

Item	ACCSP Share	In-Kind (CCE Covered Fringe Benefits)	Total
Co-Principal Investigator (14.18% of annual salary)	$7,504.80	$4,760.29	$12,265.09
Co-Principal Investigator (14.18% of annual salary)	$7,504.80	$4,760.29	$12,265.09
Fisheries Specialist (46% of annual salary)	$26,487.02	$16,800.72	$43,287.74
Fisheries Coordinator (44% of annual salary)	$28,669.14	$18,184.84	$46,853.98
Fisheries Technician (44% of annual salary)	$9,409.50	$5,968.45	$15,377.95
Administrative Assistant (2% of annual salary)	$600	$380.58	$980.58
Worker's Compensation/Unemployment Insurance	$2,239.62		
Total Personnel	$82,414.88	$50,855.17	$133,270.05

TRAVEL:

Item	ACCSP Share	In-Kind	Total
Travel Mileage	$1,150		$1,150
Total Supply	$1,150		$1,150.00

EQUIPMENT & SUPPLY:

Item	ACCSP Share	In-Kind	Total

Outreach printing	$250		$250
Office Supplies	$100		$100
iPads w/covers	$22,875		$22,875
Total Equipment & Supply	$23,225.00		$23,225.00

OTHER:

Item	ACCSP Share	In-Kind	Total
Communications	$500		$500
Total Other	$500.00		$500.00

INDIRECT

Item	ACCSP Share	In-Kind	Total
Total Direct Charges: $107,289.88			
Indirect Charge (15% de minimis)	$16,093.48		$16,093.48
Project Total: $123,383.36			
ASMFC ACCSP Indirect (10%)	$12,338.34		$12,338.34
Total Indirect	$28,431.82		$28,431.82

TOTAL:

Item	ACCSP Share	In-Kind	Project Total
Total Charges	$135,721.70	$50,855.17	$186,576.87
Percentage	73%	27%	

COST DETAILS:

Description of Budget categories and expenses for this project.

a. Salary (Cornell Cooperative Extension)

Each person spends a fraction of their time working on this grant in a team effort. The annual salaries for personnel and the percentage of their time spent on this project are as follows:

From ACCSP:

a. **Co-Principal Investigators (Scott Curatolo-Wagemann, Emerson Hasbrouck):** 7% each, of salary for one year ($105,830) = $7,504.80 x 2=$15,009.60. Will be responsible for overall program development, management, and execution, report submission, staff supervision, publication of results, and fiscal oversight.

b. **Fisheries Specialist I (Kristin Gerbino):** Approximately 46% of annual salary ($57,548) equals $26,487.02. : Responsible for fleet recruitment; distributing and tracking iPads; preparing and conducting outreach and training workshops; coordinating activities with fishing associations, NYSDEC, ACCSP, and MRAC; installment of application; conducting "office hours", continued technical support for fishermen; website communication; outreach; agreement processing; advertising and promotion in press and social media; mailings; and report writing.

c. **Fisheries Coordinator (Michael Bowen):** Approximately 44% of annual salary ($64,958) equals $28,669.14. Will be responsible for assisting in trainings and "office hours"; tabulation of results; promotion and advertising; assistance with report writing.

d. **Fisheries Technician (Tyler Guteres):** Approximately 22% of annual salary ($42,640) equals $9,409.50. Will be responsible for assisting in trainings and "office hours"; tabulation of results; promotion and advertising; assistance with report writing.

e. **Administrative Assistant (Darci Bielenda):** Approximately 1% of annual salary ($52,000) equals $600. Will be responsible for general project support and administrative duties including ordering supplies, proofreading, mailing, printing, copying, assistance with report preparation, accounts payable, website updates, travel requests and newsletter dissemination

f. **Workers Compensation and Unemployment Insurance**: $2,004.38

From CCE as in-kind:

i. Fringe benefits paid for by Cornell and provided as in-kind (63.43 % of employee salaries)= $50,855.17

Annual fringe benefits rates for all employees include the following:

	FY 2026
July 1, 2025 - June 30, 2026	Federal Funds
Health Insurance	27.14%
Retirement	20.96%
Social Security	7.08%
Worker's Compensation	2.97%
Employee Benefit Funds	0.98%
Dental Insurance	0.33%
Unemployment Benefits	0.07%
Vision Benefits	0.05%
Survivor's Benefits	0.01%
Total Rate	59.59%

b. Travel

$1,150 used for mileage at 70 cents per mile. Mileage will include trips to commercial docks and other locations to provide distribution of iPads and eVTR training.

c. Equipment

No equipment

d. Supplies

a. **Office Supplies** for printer ink, pens, pencils, paper. ($100)
b. **Printing** for flyers and handouts electronic reporting ($250)
c. **iPads with covers** for electronic reporting as incentives (50 units @ $457.50 each=$22,875). As part of Cornell University, CCE has access to University resources which has contract in place for bulk purchases of iPads.

e. Other

a. Communications- cost of monthly cellphone service plan ($500)

f. Total Direct Charges

$107,289.88

g. Indirect Charges.

Indirect charges are only calculated using the federal de minimis rate of 15% on direct charges= $**16,093.48**

Also, there is an ASMFC/ACCSP indirect of 10%. The intention is that funds will go to CCE from ASMFC rather than through NY. This indirect rate was provided by Geoff White. $12,338.34.

Funding Transition Plan:

While New York continues to build on electronic reporting initiatives, the support provided through ACCSP will help us transition a greater number of permit holders to electronic reporting than we could without the support. New York will continue building and encouraging electronic reporting for all fisheries related reporting in the future.

SUMMARY OF PROPOSAL FOR RANKING

Proposal Type: New

Primary Program Priority: Catch, effort, and landings data (100%)

- **Expand electronic reporting goals for New York State, by providing training and support for electronic reporting requirements and compliance for dealers, the for-hire, and commercial fishing industries. Support and training will also be provided for any food fish licensees voluntarily adopting electronic reporting.**

Data Delivery Plan:

Currently, in New York approximately 39% of the commercial fishers submit fishing data directly into SAFIS eTRIPS. About 51% of the for-hire fleet submit fishing data directly into SAFIS eTRIPS. Electronically reported data are being uploaded instantaneously into the ACCSP databases. The training made available through this program will hasten the availability of fishery dependent data to ACCSP and its state partners.

At this time, vessel trip report data submitted to DEC on paper are entered into a DEC proprietary database by data entry technicians. Twice a year the stored and processed data are uploaded into the ACCSP database. Any reduction in the amount of paper handling and data transcription from paper reports will minimize errors and reduce delays in the deliverance of data to ACCSP.

Multi-Partner/Regional Impact:

Funding Transition Plan:
While New York continues to build on electronic reporting initiatives, the support provided through ACCSP will help us transition a greater number of permit holders to electronic reporting than we could without the support. New York will continue building and encouraging electronic reporting for all fisheries related reporting in the future.

In-Kind Contribution: The in-kind contribution for this project is ($50,855.17). This is generated from:

- **Fringe benefits paid for by Cornell (59.59% of employee salaries) = $50,855.17**
-

Improvement in Data Quality/Quantity/Timeliness

The value of electronic logbook data is the improvement in accuracy and timeliness of data. Moving away from paper-based logbook systems will significantly reduce data entry and transcription errors. This reduces time spent on contacting fishermen to correct errors. The established electronic reporting programs include a number of automated data audits designed to restrict the entry of erroneous or incomplete data, which greatly improves overall data quality compared to paper reports. The NY data to be collected electronically though this project can be uploaded and made directly available to ACCSP's database as a complete dataset. The adoption of electronic logbooks makes it practical to collect and record more detailed catch by area and can improve the quality of stock assessments and the outcomes of management for managed species.

Potential Secondary Module:
It is anticipated that discard data collection will be improved through outreach on electronic reporting, and improved reporting from the fishing industry. Additionally, economic data will be generated from dealer reports.

Impact on Stock Assessment and Management:
The adoption of electronic logbooks makes it practical to collect and record more detailed catch by area and can improve the quality of stock assessments and the outcomes of management for managed species. Collecting data in this format makes it more usable and can have increased benefits for management and decision-making for quota monitored species such as summer flounder, scup, black sea bass, striped bass, bluefish, spiny dogfish, longfin squid, horseshoe crabs and Atlantic menhaden. There is also the potential for data to be used to understand and track migration and range shifts of certain species such as black sea bass. This new capability allows the industry to contribute more directly to the quality and utility of NOAA Fisheries' science.

LITERATURE CITED:

National Marine Fisheries Service Policy on Electronic Technologies and Fishery-Dependent Data Collection (04-115). 2019.

National Marine Fisheries Service Greater Atlantic Regional Fisheries Office and Northeast Fishery Science Center Electronic Technologies Implementation Plan. 2021. 43pp.

New York State Department of Environmental Conservation (NYSDEC), Personal Communication Fisheries Data Management Unit. August 13, 2026

Appendix B: Curriculum Vitae for Principal Investigators

Jesse Hornstein, NYSDEC, 123 Kings Park Blvd, Kings Park, NY 11754
jesse.hornstein@dec.ny.gov , (631)-444-0714

Education
M.S. Marine Science, 2010
Stony Brook University (Stony Brook, NY)

B.A. Environmental Studies, 2006
Stony Brook University (Stony Brook, NY)

Experience
Marine Biologist 2, April 2018-Present
New York State Department of Environmental Conservation (Kings Park, NY)

- Manage New York's commercial fishing quotas.
- Serve on various ASMFC Management Boards as a proxy to New York's Administrative Commissioner.
- Oversee the NYS DEC marine fishery dependent sampling programs.
- Administer the NYS DEC Division of Marine Resources response to fish kills including coordinating with partners, and collecting/synthesizing information on reported fish kills.
- Serve on the ASMFC Striped Bass Plan Review Team.
- Serve as an alternate member of the Atlantic Large Whale and Harbor Porpoise Take Reduction teams for New York.
- Oversee New York's Artificial Reefs and Marine Waterway Access programs.

Marine Biologist 1, February 2014-April 2018
New York State Department of Environmental Conservation (East Setauket, NY)

- Managed New York's Western Long Island juvenile striped bass seine survey, striped bass trawl survey, striped bass fish market sampling, striped bass cooperative angler program, and a juvenile American eel fyke net survey.
- Served as New York's representative on the ASMFC Atlantic Menhaden Technical Committee and the Atlantic Menhaden Plan Development Team.
- Served as the Fish Kill Coordinator for the NYS DEC Division of Marine Resources, which included responding to and collecting/synthesizing information on reported fish kills.
- Operated and maintained a 21' vessel and associated sampling gears/equipment.
- Collected fishery dependent (fish market sampling) and fishery independent data, which included collecting striped bass/Atlantic menhaden scales for aging, tagging striped bass, recording environmental conditions, identifying marine/estuarine species and taking biological measurements of various species.
- Entered, analyzed/synthesized data, and wrote reports for ASMFC and grant reporting requirements.

Fish and Wildlife Technician 1, May 2010-February 2014, February 2007-August 2007
New York State Department of Environmental Conservation (East Setauket, NY)

- Collected biological and environmental data from the field.
- Entered and analyzed fishery and environmental data.
- Created biological/environmental assessment maps with ArcGIS.
- Assisted with Atlantic surfclam population assessments and aging of surfclam shells.
- Co-authored technical reports.

Graduate Assistant, August 2007-August 2010
School of Marine and Atmospheric Sciences (Stony Brook, NY)

- Designed and conducted studies (energy balance, growth, immune function) to understand how temperature stress impacts the physiology of the Atlantic surfclam, *Spisula solidissima*.
- Utilized biochemical, immunological, and histological laboratory techniques to monitor the health of the surfclam population.
- Statistically analyzed experimental and environmental data.

Research Assistant, May 2009-January 2010; Research Aide, September 2005-December 2006; Internship, June 2005-August 2005
Functional Ecology Research and Training Laboratory (Stony Brook, NY)

- Processed hard clams in the laboratory to monitor their spawning condition.
- Assisted with field sample collections and preparation of water samples for chlorophyll analysis.
- Processed benthic core samples for enumeration and taxonomic classification of benthic infauna.
- Entered/organized data and maintained laboratory equipment.

Teaching Assistant, August 2009-May 2010, August 2007-May 2008
School of Marine and Atmospheric Sciences (Stony Brook, NY)

- Led two undergraduate biology laboratory classes.
- Prepared quizzes, graded reports/quizzes, and held office hours for several courses: Environmental Problem Solving, Long Island Sound: Science and Use, and Diseases of Aquatic Organisms

Publications

- Anadón, J.D., Piñero, O., Ruhi, A., **Hornstein, J.**, Waldman, J. (2024) Decoupled shifts of dominant and rarer fish species as a response to warming and extreme events in a large estuary. Ecosphere 15(7).
- **Hornstein, J.**, Pales Espinosa, E., Cerrato, R.M., Lwiza, K., Allam, B. (2018). The influence of temperature stress on the physiology of the Atlantic surfclam, *Spisula solidissima*. Comparative Biochemistry and Physiology, Part A 222: 66-73.
- Doall, M.H., Padilla, D.K., Lobue, C.P., Clapp, C., Webb, A.R., **Hornstein, J.** (2008). Evaluating Northern Quahog (=hard clam, *Mercenaria mercenaria* L.) restoration: Are transplanted clams spawning and reconditioning? Journal of Shellfish Research 27(5): 1069-1080.

Technical Reports

- **Hornstein, J.** (2019). Artificial reef usage in New York: An analysis of aerial survey data from 1995-2016. New York State Department of Environmental Conservation. 17 pp.
- O'Dwyer, J.L., **Hornstein, J.** (2013). 2012 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 68 pp.
- Dahl, S.F., **Hornstein, J.** (2010). 2008 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 69 pp.
- Davidson, M., Pales Espinosa, E., Monsen, P., Perretti, C., **Hornstein, J.** (2007). 2006 Atlantic Ocean surfclam population assessment survey. New York State Department of Environmental Conservation. 75 pp.

Computer Skills

- MS Access, Excel, PowerPoint, and Word, SigmaStat, ArcGIS, Survey 123, and R.

Certifications

- PADI Open Water Scuba Certification; CPR/First Aid/AED Certified; New York State Safe Boater Certification

EMERSON C. HASBROUCK, JR.
Cornell University Cooperative Extension of Suffolk County - Marine Program
423 Griffing Avenue, Suite 100 Riverhead, NY 11901
631-965-1422 (cell), ech12@cornell.edu

EDUCATION

Master of Science Degree in Marine Environmental Sciences, State University of NY/Stony Brook, NY
Bachelor of Science Degree in Marine Science, Southampton College, Long Island University

PROFESSIONAL EXPERIENCE

Atlantic States Marine Fisheries Commission
Governor's Appointee Commissioner for NY 2014 – Present

Appointed by the Governor to represent the people of New York in the sustainable management of Atlantic coast marine fisheries. Work with all ASMFC Commissioners to develop Fishery Management Plans that: Rebuild, maintain, fairly allocate and promote Atlantic coastal fisheries; Provide effective stewardship of marine resources through strong partnerships; Make decisions based on sound science; Balance resource conservation with the economic successes of coastal communities.

Cornell University Cooperative Extension of Suffolk County - Marine Program
Riverhead, NY
Senior Natural Resources Specialist 1988 – 2008 and 2013- Present

Plan, develop and implement an extension program with the NY and the Mid-Atlantic and Southern New England fishing industries relative to cooperative demonstration fisheries research, fisheries data, fisheries management and fisheries economic development. Plan, develop and implement effective fishery cooperative research, data and biological sampling programs to satisfy regulatory requirements and to quantify New York and regional fisheries and harvested resources. Provide fishermen with information necessary to positively interact with local, state, regional, national and international regulatory regimes. Assist fishermen in organizational development and in understanding fisheries management principles and goals. Plan, develop and implement economic development programs for the fishing industry to improve profitability and competitiveness. Conduct applied cooperative research and implementation programs and demonstration projects with the fishing industry that help address critical fisheries, fisheries management and natural resource issues. Secure funding sources for extension programming activities. Many of these activities are carried out in cooperation with, and aboard, commercial fishing vessels. Develop, oversee and manage budgets.

Cornell University Cooperative Extension of Suffolk County - Marine Program
Riverhead, NY
Marine Program Director 2009 – 2013

Responsible for all administrative, fiscal and program components of the Cornell Marine Program. Supervise over 35 professional and support employees located at five separate facilities. Responsible for providing in-depth program leadership for the planning, coordination, implementation, management and evaluation for the entire CCE Marine Program. Responsible for fiscal management of the Marine Program budgets, totaling over $2.5 million annually, and provide leadership in obtaining grant funding for the Marine Program. Supervise a large and diverse professional staff that conducts research and provides educational opportunities regarding fisheries resources, habitat restoration, water quality protection, pollution control and environmental preservation in support of the vital marine related industries and natural resources of Long Island.

QUALIFICATIONS

I have been involved in fisheries research and fisheries issues in the Mid-Atlantic and New England regions for well over 35 years. I have conducted numerous cooperative fisheries research projects with fishermen from Massachusetts to N. Carolina. I have a thorough working knowledge of fisheries throughout these regions as well as an understanding of the problems, issues, dynamics and politics of the fisheries and their underlying fishery resources. My work has been with commercial and recreational fisheries and I have earned the respect and cooperation of both groups with the goal of sustainable harvest and management of our marine resources. I have developed close relationships with fishermen and fishery managers from North Carolina to Maine and have often assisted these groups to seek common ground and interact with each other. I also have considerable experience working with fisheries agencies such as: the NY Dept. of Environmental Conservation; the Mid-Atlantic and New England Fishery Management Councils; The Atlantic States Marine Fisheries Commission.

SELECTED PUBLICATIONS AND REPORTS

Reisman, H.R. and E. Hasbrouck. 2024. The Marine Fishes and Fisheries of New York. 296pp. Cornell Univ. Press.

Curatolo-Wagemann, E. Hasbrouck, K. Gerbino, P. Sullivan, M. Bowen, T. McClintock, A. Mercado, A. Dauman, T. Guteres, I. Rivera. 2024. Quantifying Bycatch Reduction Benefits of an Excluder in the Small Mesh Fisheries of the Northeast With a Focus on Red Hake. NOAA S-K Program. Final Report.

Hasbrouck., E., S. Curatolo-Wagemann, P. Sullivan., T. McClintock, K. Gerbino, A. Mercardo, A. Dauman, P. Duckworth. 2022. Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets. NMFS Monkfish RSA Program – Final Report.

Hasbrouk, E., I. Wirgin, S. Curatolo-Wagemann, T. McClintock, K. Gerbino, J. Scotti, D. Kuehn. 2021. Fine Scale Genetic Population Structure of Monkfish. Final Report NOAA Grant NA16NMF4540109, Monkfish RSA Program.

Hasbrouck, E., S. Curatolo-Wagemann, J. Scotti, T. Froehlich, K. Gerbino, D. Kuehn. P. Sullivan. 2019. Evaluation of Conservation Gear Technology to Reduce Black Sea Bass Bycatch in the Small Mesh Longfin Squid Fishery. NOAA S-K Program. Final Report.

Hasbrouck, E., S. Curatolo-Wagemann, T. Froehlich, K. Gerbino, D. Kuehn, P. Sullivan. 2018. Determining Mesh Selectivity and Optimum Mesh Size to Harvest Three Commercially Important Mid- Atlantic Species. MAFMC. Final Report.

Hasbrouck, E., J. Scotti, S. Curatolo-Wagemann, T. Froehlich, K. Gerbino, D. Kuehn. 2016. Small Mesh Fishery Bycatch Reduction in the Southern New England/Mid-Atlantic Windowpane Stock Area. Final Report. NEFMC Groundfish Research Program Through the Northeast Consortium.

Morson, J.M., E. Bochenek, E. Powell, E. Hasbrouck, J. Gius, C. Cotton, K. Gerbino, T. Froehlich. 2015. Estimating the Sex Composition of the Summer Flounder Catch using Fishery Independent Data. Marine and Coastal Fisheries, 7:1, 393-408.

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, J. Costanzo, P. Sullivan. 2015. Evaluation of the Large Mesh Belly Panel in Small Mesh Fisheries as a Method to Reduce Yellowtail Flounder Bycatch on Cultivator Shoals. Final report to the Northeast Cooperative Research Program. February 2015

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, J. Costanzo, P. Sullivan. 2014. Evaluation of the Large Mesh Belly Panel in Small Mesh Fisheries as a Method to Reduce Yellowtail Flounder Bycatch on Southeast Georges Bank. Final report Submitted to the Northeast Cooperative Research Program. July 2014

Hasbrouck, E., J. Scotti, T. Froehlich, K. Gerbino, P. Sullivan. 2013. A Method to Reduce Winter Flounder Retention Through the Use of Avoidance Gear Adaptations in the Small Mesh Trawl Fishery Within the Southern New England/Mid-Atlantic Winter Flounder Stock Area. Final Report - Commercial Fisheries Research Foundation. NOAA Award NA09NMF4720414

Morson, J., E. Bochenek, E. Powell, E. Robillard, E. Hasbrouck, J. Gius, K. Gerbino, T. Froehlich, E. G. Hasbrouck. 2013. Sex Ratio and Age-at-length of Summer Flounder (Paralichthys dentatus) from Recreational and Commercial Landings. NMFS- SARC 57 Working Paper.

McHugh, J.L. and E. Hasbrouck, 1990. Fishery Management in New York Bight: Experience Under the Magnuson Act. Fisheries Research, 8:205-221

Scott Curatolo-Wagemann

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423 Griffing Avenue, Suite 100
Riverhead, New York 11901

Tel: (631) 727-7850 x.318
Cell Phone: (631) 278-4260
Email: sw224@cornell.edu

A. PROFESSIONAL PREPARATION:

Southampton College of Long Island University	Marine Science Biology	B.S.	1994
State University of New York- Stony Brook	Environmental Management	M.P.S.	2010

B. APPOINTMENTS:

2024-present: Atlantic States Marine Fisheries Commission- New York State Governor's Appointee proxy 2021-present: Responsible Offshore Science Alliance Research Advisor

2020-present: New York Seafood Direct Marketing Task Force

2020-present: Long Island Sound Marine Debris Action Plan-Abandoned and Lost Fishing/Aquaculture Gear Working Group 2019-present: New York State Fisheries Technical Working Group

2019-present: Mid-Atlantic Marine Debris Action Plan

2018-present: Mid-Atlantic Fishery Management Council- Advisory Panel for spiny dogfish

2015-present: NOAA, National Marine Fisheries- Advisory Panel for Atlantic Highly Migratory Species Southeast Data, Assessment, and Review (SEDAR) Workshops

1999-present: Senior Extension Resource Educator, Fisheries and Stormwater Specialist Cornell University Cooperative Extension, Riverhead, NY 11901

C. **PRODUCTS: Significant Products**

Conservation Gear Technology- Quantifying Bycatch Reduction Benefits of an Excluder in the Small Mesh Fisheries of the Northeast with Focus on Red Hake (NOAA-Saltonstall-Kennedy Program). June 28, 2004. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera Reducing Marine Debris by Removing Derelict Lobster Gear from Long Island Sound-II (NFWF-Long Island Sound Future Funds). April 5, 2024. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera

Continuation of "Choose Local F.I.S.H." Marketing and Education Campaign to Promote Locally Caught and Grown Seafood on Long Island. (USDA- Farmers Market and Local Food Promotion Program). February 28, 2023. Emerson Hasbrouck, **Scott Curatolo- Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman, Richard Guteres, Michael Bowen

New York Fleet Wide Electronic Vessel Trip Reporting and Education Initiative (NFWF-Electronic Monitoring and Reporting Grant Program 2020). November 2022. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets (RSA- Monkfish 2018). October 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Advancing Bycatch Reduction Technology in New England Small Mesh Fisheries. (NOAA-Bycatch Reduction Engineering Program 2019). April 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Implementing a Bycatch Avoidance Communication Network in RI, MA, NJ, NY. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Amanda Dauman

Reducing Discard Mortality in the NY Recreational Atlantic Striped Bass Fishery. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Kaitlyn Boyle, Alex Mercado

Fine Scale Genetic Population Structure of Monkfish (MAFMC Research Set Aside Program 2016). March 25, 2021. Emerson Hasbrouck, I.Wirgin, John Scotti, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn

Determining Mesh Selectivity and Optimum Mesh Size to Harvest Three Commercially Important Mid- Atlantic Species (MAFMC/ASMFC). March 1, 2018. Emerson Hasbrouck-Principal Investigator; **Scott Curatolo-Wagemann**, John Scotti, Tara Froehlich, Kristin Gerbino, Daniel Kuehn, Patrick Sullivan.

D. SYNERGISTIC ACTIVITIES:

1. Stakeholder Engagement: Engage with fishermen, fishing associations, industry representatives, and other relevant stakeholders to foster dialogue, understand their perspectives, and build trust and collaboration.
2. Data Collection and Analysis: Work together with the fishing industry to collect accurate and comprehensive data on fish stocks, fishing effort, and ecological indicators. This collaborative approach enhances the quality and reliability of the data, enabling informed decision-making.
3. Scientific Research and Monitoring: Collaborate with the fishing industry to support scientific research initiatives, including stock assessments, ecosystem monitoring, and studies on fishing gear technology. By combining industry knowledge with scientific expertise, a more comprehensive understanding of the ecosystem and its dynamics can be achieved.
4. Adaptive Management: Jointly develop and implement adaptive management strategies that incorporate feedback from fishermen. This iterative process allows for continuous evaluation and adjustment of fisheries management measures based on real-time observations and stakeholder input.
5. Compliance and Enforcement: Collaborate with the fishing industry to promote compliance with fishing regulations and foster a culture of responsible fishing practices. Encourage industry-led initiatives for self-regulation, monitoring, and reporting to improve compliance rates and reduce illegal, unreported, and unregulated (IUU) fishing activities.
6. Innovation and Technology: Partner with the fishing industry to explore innovative and sustainable fishing technologies, gear modifications, and fishing practices. This collaboration can lead to the development and adoption of more selective and eco- friendly fishing methods, minimizing bycatch and ecosystem impacts.
7. Education and Capacity Building: Collaboratively develop training programs, workshops, and educational materials to enhance the industry's understanding of sustainable fishing practices, ecosystem conservation, and compliance with regulations. This empowers fishermen with the knowledge and skills necessary for responsible resource management.
8. Market-based Approaches: Collaborate with the fishing industry to promote and certify sustainable fishing practices,

   facilitating access to markets that prioritize sustainable seafood. These partnerships can create economic incentives for the industry to adopt sustainable practices while meeting consumer demand for environmentally friendly products.

By engaging in these synergistic activities, individuals working collaboratively with the fishing industry in fisheries management can foster a cooperative and inclusive approach that supports the long-term sustainability of fish stocks, preserves marine ecosystems, and ensures the viability of the fishing industry.

E. COLLABORATORS & OTHER AFFILIATIONS:

Collaborators Over the Last 48 Months: J. Abrams (Gershow Recycling); M. Albino (NYSDEC); D. Aripotch (F/V Caitlin & Mairead); J. Best (NYSDEC); J. Bourque (NYSDEC); B. Brady (Long Island Commercial Fishing Association); A. Clemetson (NY SeaGrant); M. Ciaramella (NY SeaGrant); C. Coyne (Sea-Trade Consulting); S. Crosby (The Maritime Aquarium); J. Davis (CT DEEP); N. Delanoy (F/V Laura Lee); Doll (F/V Christine & Jennifer); M. Early (Covanta Energy); R. Enever (FishTek); K. Fullam (New York State Department of Agriculture and Markets) J. German (F/V Suzanne Marie); N. Grant (Ct SeaGrant); R. Harrington (F/V Spirit); H. Hart (Mid-Atlantic Fishery Management Council); E. Hasbrouck (CCE); J. Hoey (National Marine Fisheries Service, Northeast Fisheries Science Center); D. Hudson (The Remote Ecologist); G. Kenney (NYSDEC); M. King (F/V Timtarah);J. Knight (Superior Trawl); W. Lucey (Save the Sound); M. McClintock (F/V Bulldog); K.McKowan (NYSDEC); C. McCandless (NOAA Apex Predators Program); J. Maniscalco (NYSDEC); Milliken (National Marine Fisheries Service, Northeast Fisheries Science Center); On the Water Magazine; M Passerotti (NOAA Apex Predators Program); W. Richter (NYSDEC); E. Rodman (F/V Veronica Ann); C. Roebuck (F/V Karen Elizabeth); P. Ruhle Jr (F/V Sea Breeze Too); E. Reid (NEFMC); M. Sclafani (CCE); C. Scott (NYSDEC); J. Scotti (CCE); C. Scheetz (Project Oceanology); S. Sethi (Alaska Pacific University); J. Sulikowski (Univ. of New England); P. Sullivan (Cornell Univ., College of Agriculture and Life Sciences, Dept. of Natural Resources); V.Vecchio (NOAA); I. Wirgin, (NYU, School of Medicine)

NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

August 14, 2026

To the ACCSP Operations and Advisory Committees:

On behalf of the New York State Department of Environmental Conservation (NYSDEC), the New Jersey Department of Environmental Protection (NJDEP), the Delaware Department of Natural Resources and Environmental Control (DNREC), and Cornell Cooperative Extension (CCE), we are pleased to submit our revised proposal titled Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries. We have carefully reviewed and addressed each of the committee's comments as detailed below:

Documentation and Formatting

- **Curriculum Vitae:** All Principal Investigator CVs included in Appendix A have been reduced to a maximum of two pages.
- **Results and Benefits:** The numbering in the "Results and Benefits" section has been corrected to ensure clarity and consistency with RFP guidelines.

Permitting and Sampling Scope

- **Vessel Selection:** We have clarified the permitting requirements. While the project focuses on state waters, we have updated the approach to confirm that sampling will include federally permitted vessels, provided they are participating in state-water trips. This ensures a more representative sample of the regional gillnet fleet.

Budget and Personnel

- **Position Descriptions:** Detailed descriptions have been added for Budget Positions (Fisheries Specialist and Technicians). The technician will provide essential at-sea monitoring support, while the specialists will provide at-sea support as well as assistance coordinating schedules associated with a multi-state program.
- **Overhead and Administrative Grant:** We explicitly request that these funds be directed through the ACCSP Administrative Grant to streamline the distribution of funding. Consequently, we have maintained the 10% ASMFC/ACCSP indirect charge as previously coordinated.
- **Personnel Overlap:** We have addressed potential personnel overlap by detailing the specific time allocations for each CCE staff member. The project utilizes a team-based approach where staff members contribute fractions of their annual effort, ensuring that total commitments across all active proposals do not exceed 100%.

Travel and Logistics

- **Regional Staffing Model:** To address logistical concerns and reduce costs, CCE will now look for a part-time technician in participating states (NJ and DE). This shift toward more localized staffing will reduce the frequency of long-distance travel for routine observations.

Division of Marine Resources
123 Kings Park Blvd, Kings Park, NY 11754 | dec.ny.gov | FW.Marine@dec.ny.gov | 631-444-0430

- **Travel Validation:** While local technicians will handle much of the field sampling, the majority of technical coordination will remain centralized at the CCE office in Riverhead, NY. Travel between states is still required and validated by the need for in-person industry outreach, including a minimum of three meetings per state. Maintaining a "valuable rapport" with commercial fishermen is a cornerstone of CCE's 50-year history and is essential for the success of an observer program.

Sampling Design

- **Coverage Justification:** The minimum 2% coverage rate is proposed as a pilot baseline to determine the practical feasibility of establishing a long-term program and inform future sampling effort. To ensure high-quality data, we will stratify observer effort with fishing effort rather than using an even distribution, allowing us to capture representative data during peak seasonal activity.

We believe these revisions clarify and strengthen the proposal and demonstrate our commitment to a successful, cost-effective pilot program. Thank you for the time and effort committee members spent reviewing our initial submission and we appreciated this opportunity to improve upon it.

Sincerely,



John Maniscalco
Bureau Chief, Marine Fisheries

Proposal for funding made to the
Atlantic Coastal
Cooperative Statistics
Program 1050 N. Highland
Street, Suite 200A-N
Arlington, VA 22201

FY27: Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries

Total Cost: $266,442.89

Submitted By:
John Maniscalco
New York Department of Environmental Conservation
Division of Marine Resources
123 Kings Park Blvd.
Kings Park, NY 11754
john.maniscalco@dec.ny.gov

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Applicant Name:	New York Department of Environmental Conservation Division of Marine Resources
Project Title:	Comprehensive Outreach and Pilot Observer Program for New York, New Jersey and Delaware State Waters Gillnet Fisheries
Project Type:	New Project
Requested Award Amount:	**$266,442.89**
Requested Award Period:	One year after receipt of funds
Program Priority:	Primary: Releases, Discards and Protected Species Data (60%) Secondary: Catch, Effort and Landing Data (30%) and Biological Data (10%)
Date Submitted:	June 12, 2026
Project Supervisor:	John Maniscalco (NY) john.maniscalco@dec.ny.gov
Co-Principal Investigators:	Jeffery Brust (NJ) Jeffrey.Brust@dep.nj.gov Ian Park (DE) ian.park@delaware.gov Cornell Cooperative Extension Marine Program: Scott Curatolo-Wagemann sw224@cornell.edu Tara McClintock taf4@cornell.edu Also: Heather Corbett (NJ), Richard Wong (DE), and Jesse Hornstein (NY)
Project Staff:	Cornell Cooperative Extension Marine Program: Alex Mercado, ajm425@cornell.edu Michael Bowen, mb2735@cornell.edu

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Objectives:

- **Conduct a multi-state outreach program for state waters gillnet fishermen** to present data needs and recruit voluntary participants for a pilot observer program.
- **Implement a pilot observer program for the gillnet fisheries within New York (NY), New Jersey (NJ), and Delaware (DE) state waters for evaluation and proof of concept.**
- **Begin collecting bycatch and gear interaction data for Endangered Species Act and Marine Mammal Protection Act requirements.** Focus on Atlantic sturgeon, sea turtles, cetaceans and pinnipeds.
- Utilize data to better understand gillnet fishing effort in state waters including time, space, quantity, mesh size, duration and target species.
- **Collect biological data on landed and discarded catch of high-priority species.**
- Contribute current data to inform fishery specific estimates of take for protected species to support a multi-state Incidental Take Permit (ITP).
- Assess the viability of a multi-state observer program for state waters monitoring for gillnet and potentially other commercial gear types.
- **Develop an understanding from both industry and the States' perspective of the feasibility, costs, pros, and cons of alternative observer platforms: onboard, shadow-vessel and drone based (or other video) formats.**

Needs:

The States of New York, New Jersey and Delaware are currently pursuing an ITP for interactions that may be occurring between their commercial fisheries and species listed under the Endangered Species Act, including but not limited to sea turtle and sturgeon species. **Mid-Atlantic Gillnet is a high-priority gear type in the ACCSP's Bycatch Sampling Matrix due to its interaction with protected species and need for more data on discards. It is a gear type common to the State waters fisheries of all three states. Current data on state waters gillnet fisheries is needed to better quantify the level of interaction that occurs with protected species.**

Observer programs have been a required monitoring component in Habitat Conservation Plans (HCP) developed by other states as part of their ITP application. None of the states listed above currently have observer programs dedicated to their state water's fisheries and lack the authority to require commercial fisheries to take observers onboard. In addition to collecting data needed to inform estimates of take, this project would serve as a pilot for future programs encompassing gillnets and additional gear types.

Many species/fisheries managed by the Atlantic States Marine Fisheries Commission and its State and Federal partners are lacking sufficient data on the size distribution of landed and discarded catch and the magnitude of discards. Sampling of regional gillnet fisheries through observation of catch and discards can fill in some of these data gaps among Mid-Atlantic States.

As noted above, the States of New York, New Jersey and Delaware are currently pursuing

an ITP for their state waters commercial fisheries. The process will take multiple years and if reductions in take of protected species are required, they could impact the livelihoods of commercial fishermen. Dedicated outreach is necessary to inform the commercial fishing industry of the States' pursuit of an ITP and increase voluntary cooperation with the proposed observer program. This outreach effort is intended to provide transparency and multiple opportunities for fishery participants to engage in the process. It also provides the States and their cooperators an opportunity to pilot an observer program, including assessing the feasibility of formats other than onboard observers (e.g. drones, shadow vessel), and gather feedback for future planning purposes.

Results and Benefits:
This project will provide results and benefits directly applicable to the Ranking Guide for New Projects. The proposed project directly addresses the high-priority goals of the RFP (re-ordered to reflect proposal focus) by developing and implementing improvements in:

- **Releases, discards and protected species data (priority 2);**
- **Catch, effort and landings data (including licensing, permit and vessel registration data) (priority 1a);**
- **Biological data (priority 1b);**

The benefits of this outreach and observer program include improvements to: data collection; regulatory compliance; conservation efforts; scientific research; and industry relations and transparency.

Increased Data Collection: This regional project will focus entirely on the Mid-Atlantic gillnet fishery, which is at the top of the Bycatch Sampling Priority Matrix. Through this effort, data will be primarily collected on protected species interactions that occur in the state waters of New York, New Jersey and Delaware.

Current data on gillnet fisheries (effort in space and time, gear characteristics) in State waters will be used to help quantify interactions with protected species and identify fair and effective mitigation measures, if necessary, as required by the HCP. **The data will be important inputs into a predictive analytical model currently being developed by the three states to estimate take of protected species.**

In addition to data on protected species interactions, observer sampling of gillnet trips will yield biological data (primarily length and weight) on landed and discarded catch. Sampling the state waters' gillnet fisheries of New York, New Jersey, and Delaware is likely to generate data on a large number of ACCSP Biological Review Panel's (BRP) top priority species such as black sea bass (*Centropristis striata*), bluefish (*Pomatomus saltatrix*), American shad (*Alosa sapidissima*), river herring (*Alosa* spp.), Spanish mackerel (*Scomberomorus maculatus*) and scup (*Stenotomus chrysops*) in addition to Atlantic menhaden (*Brevoortia tyrannus*), horseshoe crab (*Limulus polyphemus*) and striped bass (*Morone saxatilis*). Although not ranked highly by the BRP, data on discards of Atlantic croaker

via an observer program was listed as a high priority in the 2017 Atlantic Croaker Benchmark Stock Assessment. Similarly, the 2016 Benchmark Assessment for Weakfish identified increasing observer coverage to identify the magnitude of discards for all commercial gears. Croaker and weakfish are caught and landed by gillnet fishermen in the region of this program. Once biological data is provided to ACCSP and made available to partners this data will be used to inform future assessments and management decisions. **Data on all these species is needed and catch data (including discards) combined with gear and effort details collected by direct observation could be utilized in several ways in the future.**

Regulatory Compliance: A significant element of the proposed project is to increase self-reporting among fishermen within the inshore gillnet fisheries for improved data quality. Self-reported rates of protected species interactions and discards will be evaluated before and after the program and against the observer data to determine its future usefulness. It is hoped that educating and informing fishermen as to the importance of this data and how it could be used in management decisions will increase compliance by industry members.

Conservation Efforts: By improving communication pathways between management and industry, this project will provide opportunities to improve data quality, timeliness and quantity. Enhanced conservation efforts and outcomes in relation to priority fisheries and protected species will be a priority of the proposed multi-state program.

According to the 2024 stock assessment update, Atlantic Sturgeon are considered depleted coastwide. Bycatch in commercial fisheries is considered one of the main factors contributing to low abundance. New estimates show that bycatch of sturgeon in gillnet gear have exceeded the level exempted in the Incidental Take Statement (ITS) of the 2021 Batched Fisheries Biological Opinion. Estimated take of Atlantic sturgeon in US gillnet fisheries according to the stock assessment update is 1077 for 2021 and 561 for 2022 (ASMFC 2024). On NOAA observed Mid-Atlantic gillnet trips north of 37° latitude, there was a total estimated take of 230 sea turtles from 2017 to 2021 (Murray 2023). Mid-Atlantic sink gillnet trips also have occasional interactions with cetacean and pinniped species. For example, in 2023 NOAA observed 33 takes of cetaceans and pinniped (15 common dolphin, 4 gray seals, 8 harbor porpoise, 5 harbor seals and 1 harp seal) (Precoda 2025).

Gaining a more detailed understanding of protected species interactions with gillnet fisheries in state waters will allow the States to develop targeted conservation approaches (e.g. bycatch reduction methods and technologies) sufficient to meet the needs of an HCP, that can be recommended for the fisheries.

Scientific Research:
This project will collect much needed data on protected species interactions and provide improved quality and quantity of fisheries dependent data necessary for assessing stocks and making informed management decisions. Increased observer coverage will also help management identify pressing scientific research needs through observed interactions and discussions with industry members. CCE has a long history of conducting cooperative

research, much of which is inspired or directly developed in collaboration with the industry. Utilizing local knowledge and understanding of region-specific fishery needs within the industry helps identify and inspire meaningful and grounded scientific research.

Industry Relations and Transparency: The outreach portion of this project will inform commercial fishery participants of ongoing efforts by New York, New Jersey and Delaware to secure an ITP for its commercial fisheries, providing transparency for those likely to be impacted. It will provide an opportunity to encourage self-reporting of protected species interactions, and it should also increase participation in a voluntary observer program and provide the States with better data for informed decisions. Finally, industry participants will help shape any future observer programs, a potential requirement of the HCP. This grant may also demonstrate the efficacy of voluntary compliance with observer requirements and self-reporting catch of protected species.

Data Delivery Plan: Data will be collected in accordance with ACCSP Data Standards and made available to the ACCSP and its state partners in a timely manner. Data will be submitted twice yearly for inclusion in ACCSP's Biological Data Warehouse. Data will be submitted as an Excel document that is consistent with the formatting, fields and elements described in ACCSP's biological data transfer format (currently v4).

Approach: The NYSDEC, NJDEP, DNREC and CCE will follow the approach outlined below involving personnel, outreach, data collection, and analysis.

Personnel: To support field operations for this project, the NYDEC, DNREC, and NJDEP will contract with Cornell Cooperative Extension of Suffolk County's Marine Fisheries Program. Staff assigned to project activities are currently certified or will undergo comprehensive training in vessel safety, fisheries data collection, species identification, data entry and QA/QC procedures and standardized protocols for at-sea operations. All personnel involved in at-sea activities will be equipped with appropriate field gear, including safety equipment (PFD, Survival suit, and personal EPIRB), foul weather gear and electronic data collection tools to ensure safe and effective performance in the field.

Outreach: An extensive outreach program will be an important component of a successful launch of the multi-state pilot observer program. **Project partners will coordinate a comprehensive outreach plan in efforts to educate and notify fishers of current conservation and management needs and observer program goals. CCE along with state partners will engage the gillnet fishing industry by fostering open communication from program start. This project will create opportunities for stakeholder involvement** through in-person and virtual meetings at primary ports within the three states in addition to attending local fishery management council meetings. A minimum of 3 in-person meetings will occur per state. CCE and state partners will coordinate appropriate location based on fishing activity. Stressing the importance of shared responsibility in fisheries conservation, this project will engage with industry throughout the region to support and strengthen science-based decision making for long-term resource health.

Outreach Strategies

1. Education and Awareness

- Develop brochures, infographics for protected species ID, fact sheets and meeting announcements
- Informational mailing to all fishermen currently reporting the use of gillnet gear inshore
- Initial dockside visits in a program announcement effort and recruitment for industry input meetings
- Host in-person/virtual industry input meetings in major ports of NY, NJ and DE

2. Stakeholder Engagement

- Organize dockside listening sessions and share common practices and concerns
- Recruit observer program industry participants
- Quarterly electronic program newsletter to maintain and bolster industry participation
- Discuss alternative observer technology feasibility

3. Digital Tools

- Develop a dedicated outreach website
- Responsible use of social media outreach

4. Partnerships

- Partner with fishermen, fishing industry businesses, NY, NJ, DE marine natural resource agencies, ACCSP, NOAA fisheries managers and academic institutions.

Outreach efforts will also include identifying and discussing alternatives to onboard observations with fishermen such as drone usage, electronic monitoring and shadow vessels. This innovative component of the project will begin the conversations and develop a feasibility document utilizing industry and resource agency input and a cost/benefit analysis for alternate methods of fishery dependent at-sea data collection.

Data Collection:

The at-sea observer program for this project will occur from March of 2027 through December 2027. This start date will remain flexible based on distribution of project funds. **This proposed project will strive for a minimum of 2% observer coverage overall as a pilot program.** Two percent coverage was identified by Wigley et al. (2007) as sufficient trips to calculate variance estimates and inform future sampling effort. **The number of trips was determined by the average number of gillnet trips reported in state waters per year for the years 2020-2024.** Outreach will be first priority to identify volunteer participants and sampling scheduling will be based on conversations with fisherman to target high effort time periods. Sampling will be stratified to mirror changes in fishing effort in each state over the course of the year, informed by analyses of past and current fishery performance. Gear mesh size will be part of the data collected but will not be considered as a factor in initial trip stratification.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

State	Average Annual Effort (Trips/Year)	% coverage	Number of Trips for Pilot Study
New York	1,000	2	20
New Jersey	800	2	16
Delaware	685	2	14

This coverage rate aligns with regional fisheries data standards and represents a minimum threshold for generating representative bycatch and discard information. Observer trip targets will be based on a five-year average of effort data.

While conducting the at-sea sampling, CCE will collect both effort data (location, soak time, gear specifics) and biological data such as length and total sample weight of target species and discards, and reason(s) for discarding catch. CCE staff will follow NEFOP protocols for at-sea biological sampling and sub-sampling of high-volume catches.

Protected species data collection will also follow NEFOP protocols. Upon protected species interaction, basic data will be collected including species ID, estimated length, estimated weight, sex, and health condition (dead/alive/injury incurred). All protected species interactions will be documented, and any additional collection permits needed from NOAA's protected species branch will be obtained. CCE staff hold Protected Species Sampling Certification through AIS and have attended the Atlantic Shark Identification Workshop and have experience in taking proper samples and reporting protected species interactions while working on commercial fishing vessels.

Fishing Industry Recruitment Selection

Through initial outreach mailing efforts and follow-up phone calls with fishermen expressing reluctance, CCE will maintain a list of voluntary participants within each state. Random selection will occur from the pool of voluntary participants per state. Each week, observers will be assigned to trips selected at random from the pre-registered pool of volunteer fishers. These volunteers will be identified in advance through outreach efforts and agreements to participate in the program. Once enrolled, each fisher will be assigned a random number and included in the selection pool for their state. Weekly selections will use a stratified random sampling approach to ensure geographic and gear-type representation. However, for the pilot program, working with as many different voluntary participants as possible will be prioritized over a sampling scheme weighted solely by fishing effort in time and space. Selected fishers will be contacted in advance to coordinate observation, and project staff will maintain close communication to confirm trip plans. If a selected volunteer is not fishing during the designated week, an alternate from the same pool will be selected.

Sampling will include state and federally permitted fishermen/vessels working in state waters. This project will be mindful not to duplicate federal at-sea monitoring efforts by direct communication with fishermen, the Northeast Fisheries Observer Program and verification that all trips are occurring within state waters only.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Analysis:
All data collected through this proposed project will be entered, quality assured, encrypted, and backed up into a Microsoft SQL Server by CCE staff. In addition to all data being made available to ACCSP and its partners in a timely manner, data will be analyzed using software such as Microsoft Excel, R, and ArcGIS. Statistical analyses will be completed to describe bycatch and discard levels and summarize protected species interactions spatially, temporally, by gear characteristics, target species and to find correlations with factors such as oceanographic or other environmental conditions. Self-reporting of discarded catch will be compared with observed discards and with pre-pilot rates of discard reporting.

For development of the HCP, data collected on fishery interactions with sturgeon, sea turtles, and other protected species will be provided to the States to be used as inputs, in addition to the NEFOP dataset, into a predictive analytical model used to estimate take of these species.

Regulatory discards are a primary concern in NY, NJ, and DE gillnet fisheries as outlined in the Bycatch Sampling Priority Matrix. The data collected on regulatory discards of each target species will be analyzed to determine how current management may drive discards and explore more adaptive, less wasteful alternatives.

Geographic Location: The regional scope of this project will encompass major commercial fishing ports in New York, New Jersey and Delaware. These ports will include Montauk, East Hampton, Shinnecock, Mattituck, Greenport, Islip (NY); Cape May, Barnegat Light, Point Pleasant (NJ); Lewes, Bowers Beach, Cedar Creek (DE). Additional ports will be incorporated into the project based on participant feedback and industry input.

Milestone Schedule:

Activity	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Evaluation of Methods	X	X										
Industry outreach	X	X	X	X	X	X	X	X	X	X	X	X
Purchase Equipment/Develop Protocols/Staff Training	X	X										
Conduct at-sea sampling			X	X	X	X	X	X	X	X		
Data Entry and Quality Control				X	X	X	X	X	X	X	X	
Analyze data										X	X	X
Report writing										X	X	X

Project Accomplishments Measurement:

Goal	Metric

Bold Comments indicate sections that help with the ranking process.
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Assemble multi-state database of gillnet fishermen for information transfer and participation	100% Contact made through email and phone calls
Perform outreach meetings	A minimum of 3 per state = 9 total outreach meetings
At-sea sampling	2% coverage of state gillnet fisheries
Data analysis	Analysis and modeling of protected species interactions for ITP, percentage of biological sampling targets met, data meets ACCSP and NMFS standards
Report writing	Report submitted to ACCSP

Cost Summary (Budget):

Personnel Costs	**ACCSP Share**	**Match (CCE Covered Fringe Benefits)**	**Total**
CCE Fisheries Department Director	$5,495.04	$3,151.41	$8,646.45
CCE Fisheries Manager	$19,931.50	$11,430.72	$31,362.22
CCE Fisheries Specialist 1	$36,119.00	$20,714.25	$56,833.25
CCE Fisheries Specialist 2	$36,119.00	$20,714.25	$56,833.25
CCE Fisheries Technician 1	$25,000.00	$14,337.50	$39,337.50
CCE Fisheries Technician 2	$25,000.00	$14,337.50	$39,337.50
CCE Administrative Assistant	$1,200.00	$688.20	$1,888.20
Worker's Compensation	$1,488.00	$0	$1,488.00
Unemployment Insurance	$3,584.75	$0	$3,584.75
Total Personnel	**$153,937.29**	**$85,373.83**	**$239,311.12**
Personnel Match	**ACCSP Share**	**Match**	**Total**
DNREC – Ian Park	$0	$12,690.00	12,690.00
NJDEP – Jeffrey Brust	$0	$10,700.00	$10,700.00
NJDEP – Field Biologist	$0	$6,300.00	$6,300.00

Bold Comments indicate sections that help with the ranking process.
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Total Personnel	**$153,937.29**	**$115,063.83**	**$269,001.12**
Additional Costs by Item	**ACCSP Share**	**Match**	**Total**
Travel to Multi-State Ports for Outreach and At-Sea Observations	$7,567.50		$7,567.50
3-Electronic Measuring Boards, Tablets and software licenses	$16,146.00		$16,146.00
2 Marel motion compensated-Bluetooth Scales	$6,676.00		$6,676.00
Outreach Printing and Publishing	$1,500.00		$1,500.00
Office Supplies	$500.00		$500.00
At-Sea Sampling and Safety Gear	$4,200.00		$4,200.00
2-Laptop Computers	$3,600.00		$3,600.00
Vehicle Lease Cost	$7,200.00		$7,200.00
Insurance Costs	$5,000.00		$5,000.00
Communications	$1,800.00		$1,800.00
Meals – Travel & At-Sea	$2,500.00		$2,500.00
Total Additional Costs	**$56,689.50**		**$56,689.50**

Indirect	**ACCSP Share**	**Match**	**Total**
Total Direct Charges:	**$210,626.79**		
Indirect Charge (15% de minimis)	**$31,594.02**		**$31,594.02**
Total	**$242,220.81**		
ASMFC ACCSP Indirect (10%)	**$24,222.08**		**$24,222.08**
Total Indirect	**$55,816.10**		**$55,816.10**

Bold Comments indicate sections that help with the ranking process.
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	ACCSP Share	Match	Project Value
Total Charges	**$266,442.89**	**$115,063.83**	**$381,506.72**
Percentage	**70%**	**30%**	

COST DETAILS:

Description of budget categories and expenses for this project
Salary - ($153,937.29)
Each person spends a fraction of their time working on this grant in a team effort. The annual salaries for personnel and the percentage of their time spent on this project are as follows:
From ACCSP:

1. **CCE Fisheries Director:** CCE Fisheries Program Director, Scott Curatolo-Wagemann will oversee all Fisheries Program projects and is responsible for management and execution of all programs. For this project approximately 5% of annual salary ($105,830) equals **$5,495.04**

2. **Fisheries Manager:** Fisheries manager Tara McClintock will lead the outreach, data collection and at-sea components of the project and will be responsible for management and execution of these elements. The manager will also have primary responsibility for the program's design and implementation, report writing and publication of results. McClintock will directly supervise all CCE employees, prepare reports, manuscripts, and presentations. Approximately 25% of annual salary ($79,726) equals **$19,931.50**

3. **2 - Fisheries Specialists:** Fisheries specialists Alex Mercado and Michael Bowen will be responsible for coordination of fishermen and will serve as the primary fisheries observers. Specialists will be responsible for ordering, maintenance and inspection of scientific and safety equipment, mobilization and de-mobilization of all at-sea gear, on board performance of at-sea research, and data entry. Approximately 50% of annual salary ($72,238) equals $36,119.00 x 2 = **$72,238.00**

4. **2 - Fisheries Technicians:** Fisheries technicians will provide additional staffing support during at-sea monitoring activities and data collection. Approximately 50% of annual salary ($50,000) equals $25,000 x 2= **$50,000.00**
   Note: CCE will hire two part time technicians for this project – One position will be located in New Jersey and one position will be in Delaware.

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5. **Administrative Assistant:** Approximately 2% of annual salary ($52,000) equals $**1,200**

6. **Workers Compensation:** Required for all CCE salaries equals **$1,488.00**

7. **Unemployment Insurance:** Required for all CCE salaries equals **$3,584.75**

CCE has over 50 years of experience working cooperatively with commercial fishermen in the Greater Atlantic Region and have built a valuable rapport with these fishermen. CCE staff have completed several cooperative research projects, working on commercial fishing vessels and following the same protocols and procedures used by the Northeast Fisheries Observer Program (NEFOP). Additionally, multiple CCE staff have Standards of Training and Certification of Watch Keeping (STCW) from Northeast Maritime Institute. This will allow for efficient, accurate, and safe at-sea data collection.

From CCE as match:
Fringe benefits paid for by Cornell (57.35% of employee salaries) ($85,373.83)

Travel - ($7,567.50)

- **Mileage expenses (6,525 miles x .70/mile)**: Mileage expenses (9,600 miles x .70/mile) for project staff to travel from the CCE office in Riverhead, New York to ports in New York, New Jersey, and Delaware for at-sea activities and outreach. The project will require at minimum of 5 round trips from Riverhead, New York to New Jersey (~500 miles round trip, 2,500 miles total); five round trips from Riverhead to Delaware (~550 miles round trip, 2,750 miles total); and 15 round trips from Riverhead to New York Ports (~85 miles round trip, 1,275 miles total). **($4,567.50)**
- **Hotel**: 20 days lodging for NJ & DE at-sea observations to complete two days of observer coverage per week. $150/stay **20 days equals attendance by 2 CCE staff at 3 individual outreach program meetings in both NJ & DE (12 days), 2 CCE staff travel to support initial on location technicians, 4 days in NJ & DE (8 days) ($3,000.00)**
- **On Travel Costs:** Less than 5% of Direct Charges are for travel. To support the multi-state scope of the pilot observer program, Cornell Cooperative Extension (CCE) will look for a part-time technician in each state, although the **majority of the project's coordination and technical activities will be performed from the CCE office in Riverhead, New York**. The necessity for staff to **travel between states is validated by the program's outreach and coordination requirements**, which include a minimum of three in-person meetings per state to foster open communication and recruit voluntary participants from local gillnet industries. Budgetary provisions specifically account for **mileage and lodging for project staff to travel from the New York hub to ports in New Jersey and Delaware** for both outreach and at-sea observations, ensuring

representative coverage across the regional fleet. This travel facilitates the "valuable rapport" CCE maintains with commercial fishermen, which is essential for the successful execution of field operations across the three states.

Equipment - ($22,822)

- Purchase **3 Big Fin electronic Measuring Boards**, software licenses and accessories **($16,146)**. (See attached quote)
- **2 Marel M1100 P2220 motion compensated scales** will be used to integrate with the electronic measuring board during at-sea sampling ($3,338/scale x 2 = **$6,676**) (price based upon recent communications)

Supplies - ($9,800)

- **Office Supplies** for printer ink, pens, pencils, paper. **($500)**
- **Sampling Gear and Safety Gear** for boots, bibs, clip boards, Rite-In-The Rain® waterproof paper, PFD's, personal EPIRBs, 3-survival suits, valet life raft **($4,200)**
- **Printing & Publishing** for flyers and handouts, mailings, Project advertisement and articles in Fishing industry publications. **($1,500)**
- **Computers -** Panasonic Toughbook or Dell Rugged for use with electronic measuring boards and data entry QA/QC and analysis. ($1,800 x 2 = **$3,600**)

Other - ($16,500)

- V**ehicle Lease** - A truck will be leased for this project at $600 per month (**$7,200**)
- **Communications** - cost of monthly cellphone service plan and internet hotspot ($**1,800)**
- **Meals - Travel/At-Sea** - $50 per day over 50 days **($2,500**)
- **Liability/at-sea insurance** – CCE holds a current Maritime Employers Liability (MEL) policy that offers necessary coverage for CCE Marine Program staff to conduct on-board at-sea research **($5,000**)

Total Direct Charges - $210,626.79

Indirect Charges - ($55,816.10)

CCE indirect are calculated using the federal de minimis rate of 15% = **$31,594.02**

ACCSP/ASMFC indirect charge for funding administration to CCE 10% = **$24,222.08**

(New York requests that the funds pass through the ACCSP Administrative grant directly to CCE, hence the additional indirect)

Total Project Cost - $266,442.89

Matching Contribution- ($115,063.83)

Bold Comments indicate sections that help with the ranking process.
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CCE- Fringe benefits paid for by Cornell (57.35% of employee salaries) = **$85,373.83**

State partners from NY, NJ, and DE are prepared to offer project guidance and expertise as in-kind match. Resource managers for the different states can offer match on different levels depending on funding sources as follows:

NYDEC – New York cannot provide specific match, in part because involved staff are federally funded, but John Maniscalco will commit 20 hours/month to support this project when attending industry meetings, coordinating with the other States and Cornell, reviewing data analysis, and helping to develop materials.

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DNREC- Ian Park of DNREC will commit 20 hours per month providing project insight, outreach, and gillnet fishery information. Effort contribution plus fringe benefits = **$12,690**

NJDEP - Jeffrey Brust of NJDEP will commit 10 hours per month providing project insight, outreach and industry information. Effort contribution plus fringe benefits = **$10,700**.
NJDEP will also commit 10 hours per month from designated Field Biologist. Effort contribution plus fringe benefits = **$6,300**

SUMMARY OF PROPOSAL FOR RANKING

Proposal Type: New

Primary Program Priority: Releases, discards and protected species data (60%)

- Protected species interactions and regulatory discards will be collected from the NY, NJ and DE state gillnet fisheries. This will be completed through a pilot observer program with a focus on sturgeon, sea turtles, cetaceans and pinnipeds. This effort will assist in developing ITP metrics needed for all project states.
- The Mid-Atlantic Gillnet Fleet is in the top quartile of the FY26 ACCSP Bycatch Sampling Priority Matrix. This proposal will focus a multi-state effort on this identified gear type to determine bycatch interactions within the state waters of NY, NJ and DE.
- Several of our target and bycatch species, black sea bass, bluefish, American shad, river herring, Spanish mackerel and scup are high-priority species in the FY27 Biological

Sampling Priority Matrix contained in the ACCSP RFP. See Results and Benefits section for a more complete species listing.

Data Delivery Plan: Data will be collected in accordance with ACCSP Data Standards and made available to the ACCSP and its state partners in a timely manner. Data will be submitted twice yearly for inclusion in ACCSP's Biological Data Warehouse. Data will be submitted as an Excel document that is consistent with the formatting, fields and elements described in ACCSP's biological data transfer format (currently v4).

Multi-Partner/Regional Impact: The regional scope of this project is substantial, involving coordination between three state agencies (NYDEC, DNREC, NJDEP) and CCE, and covering over 4,333 miles of coastline. Collectively, the project has the potential to interact with the 250 commercial fishermen between these three states, and to fill much needed data gaps that exist within the gillnet fishery.

Funding Transition Plan: This multistate pilot effort, carried out by Cornell Cooperative Extension (CCE) in collaboration with Delaware, New York, and New Jersey, is designed to evaluate the practicality of establishing a comprehensive at-sea observer program for state-managed gillnet fisheries. While initially focused on one year of implementation, the nature of fisheries and the need for representative data across seasons and gear types suggest that additional years of data collection, inclusive of more gear types, will be necessary to fully assess future program needs. Alternative observation formats (shadow vessel, drones, etc.) may also become a larger portion of future funding requests, depending on what is learned during the first year+ of the proposed pilot.

The project is therefore envisioned as a multi-year initiative, beginning with a one-year pilot and potentially continuing for up to two additional years in the pilot phase to maintain program momentum and expand coverage. During this time, the team will refine operational procedures, build a trained observer workforce, and generate a core dataset to inform protected and target species management and long-term fishery monitoring strategies.

At the end of the pilot period, partner agencies will jointly assess the viability of scaling up to a full regional observer program. To support long-term continuity, the project team will explore additional funding sources beyond the pilot phase – such as federal conservation funding programs or state-level initiatives – to ensure sustainable program development and ongoing coverage. This phased approach will allow the program to evolve based on lessons learned, while maintaining consistent field operations and minimizing disruption between funding cycles.

In-Kind Contribution: The in-kind contribution for this project is 30%. This is generated from the CCE fringe benefits package and state agency contributions.

Improvement in Data Quality/Quantity/Timeliness: This pilot project will enhance data collection in state-managed gillnet fisheries by expanding observer coverage across Delaware, New York, and New Jersey. Increased rates of self-reporting of discarded catch will directly improve data quality. Standardized protocols and digital tools will improve the consistency and accuracy of data. A regional effort such as proposed increases the volume and representativeness of data collected, supporting more informed fishery management decisions.

Potential Secondary Module: Additional modules supported by this project include catch, effort

and landings data (30%) and biological data collection (10%). Accurate catch and effort data is a primary goal of any observer program. It is anticipated that biological information will be obtained through outreach with the industry. The benefits of collecting biological data during this observer program will improve conservation efforts, scientific research and stock assessments.

Impact on Stock Assessment: This project will provide high quality, comprehensive fisheries-dependent data which is essential to effective and successful fisheries stock assessments and management. This pilot project will provide much needed observer coverage in the NY, NJ, and DE gillnet fleets. Catch, bycatch, and discard data gathered by CCE staff will be used to inform assessments for species managed by the ASMFC, MAFMC, and NEFMC. Additionally, data from this program will be imperative to develop a multi-state HCP for protected species. By filling critical data gaps in observer coverage and fisheries-dependent sampling, it will improve future assessments for various species.

Innovative: Observer programs typically employ trained individuals placed on fishing vessels to collect data and monitor fishing activity. While this method allows for direct onboard observation, it can also be disruptive to fishing operations. To minimize potential disruptions, this proposal will investigate and evaluate the feasibility, effectiveness, and applicability of alternative monitoring approaches, including shadow vessels, drones, onboard video systems, and other emerging technologies, in addition to improved self-reporting, as potential tools for achieving program objectives.

Properly Prepared: This proposal meets the requirements outlined in the proposal guidelines.

Merit: This proposed project is essential to provide much-needed observer coverage in the NY, NJ, and DE state water gillnet fisheries, that are part of the Mid-Atlantic gillnet fleet. In the Bycatch Sampling Priority Matrix, this fleet was deemed the highest priority due to the abundance of regulatory discards and protected species interactions. This project will obtain high-quality fisheries-dependent data directly on board these vessels through a comprehensive observer program. This will include data on landed and discard catch, and protected species interactions. Additionally, extensive outreach at all major ports in NY, NJ, and DE will be conducted to inform commercial gillnet fishermen about this project and to collect stakeholder input. From this data, analyses will be performed to advise the development of a multi-state HCP. This project will share the data with the ACCSP and its state partners, to be incorporated into fisheries stock assessments[1].

LITERATURE CITED

Atlantic States Marine Fisheries Commission. (2024). Atlantic Sturgeon Stock Assessment Update, 2024.

Murray, K.T. (2023). Estimated magnitude of sea turtle interactions in US sink gillnet gear,

[1] State waters bycatch interactions are not currently broadly accounted for in the Atlantic sturgeon assessment (aside from North and South Carolina), and so this project can help quantify those interactions for the Atlantic sturgeon assessment (in addition to being used to help minimize interactions in the future).

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

2017-2021.

Precoda K. (2025). Estimates of cetacean and pinniped bycatch in the New England gillnet and Mid-Atlantic gillnet fisheries, 2023. US Dept Commerce, Northeast Fish Sci Cent Ref Doc. 25-04; 27 p.

Wigley, S.E., Rago, P. J., Sosebee, K.A. and Palka, D. L. (2007). The Analytic Component to the Standardized Bycatch Reporting Methodology Omnibus Amendment: Sampling Design and Estimation of Precision and Accuracy (2nd edition). US Dept Commerce, Northeast Fish Sci Cent Ref Doc. 07-09; 156 p.

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Appendix A: Curriculum Vitae for Principal Investigators

John Maniscalco
123 Kings Park Blvd. Nissequogue River Park, Kings Park, NY 11754
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(631) 444-0437

Professional History

2017 – present	Bureau Chief, Marine Fisheries	NYS DEC
2010 – 2017	Unit Leader, Marine Finfish	NYS DEC
2006 - 2010	Biologist, Crustaceans	NYS DEC
2001 - 2003	Aquarist	WCS NYA

NYS DEC – New York State Department of Environmental Conservation
WCS NYA – Wildlife Conservation Society New York Aquarium

Educational History

2006	Master of Science	Marine Environmental Science	Stony Brook University
	MS Advisor: Dr. David O. Conover		
1999	Bachelor of Arts	Env. and Evol. Biology	Dartmouth College

Synergistic Activity

Chair, Atlantic States Marine Fisheries Commission (ASMFC) Summer Flounder, Scup and Black Sea Bass Management Board (2025-present), Delaware River Basin Fish and Wildlife Management Cooperative Policy Committee (2021-2022), ASMFC Summer Flounder, Scup and Black Sea Bass Technical Committee (2014-2016), Black Sea Bass Benchmark Stock Assessment Working Group (2016)

Member, MAFMC Recreational Sector Separation Amendment Fishery Management Action Team (2024-present), ASMFC Commissioner (proxy) for New York (2022-present), Golden Tilefish Research Track Assessment Working Group (2022–present), Delaware River Basin Fish and Wildlife Management Cooperative Policy Committee (2021-present), MAFMC MC for Blue and Golden Tilefish (2018-present),ASMFC (and Mid-Atlantic Fishery Management Council Monitoring Committee MAFMC MC) Summer Flounder, Scup and Black Sea Bass Technical Committee (2010-2020), ASMFC (and MAFMC MC) Bluefish Technical Committee (2010-2017), Atlantic Coastal Cooperative Statistics Program (ACCSP) Recreational Technical Committee (2011-2017), ASMFC Horseshoe Crab Technical Committee (2006-2010)

Collaborations

2025 – Present	Outside Scholar Dissertation Committee Member	Stony Brook University
2024 – Present	Outside Scholar Dissertation Committee Member	Stony Brook University
2023 – March 2026	M.S. Graduate Committee Member	Cornell University

Presentations

Maniscalco, John (2019). Fish on the move – one manager's perspective. Presented at NY AFS Plenary Session, Poughkeepsie, NY.

Publications

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Alvarez del Castillo, K., Sethi, S. A., Won, E., Maniscalco, J., Pendleton, R., Ryan, E., & Rudstam, L. G. (2025). Salinity tolerance of Round Goby: Informing invasion potential in North American coastal watersheds. PLoS ONE, 20, Article e0316327.

Alvarez del Castillo, K., Sethi, S.A., Won, E., Maniscalco, J., Rudstam, L.G. (2026). Assessing Round Goby invasion risk in the Hudson River estuary and adjacent coastal waters. Transactions of the American Fisheries Society. vnag004, https://doi.org/10.1093/tafafs/vnag004

Chang, H.Y., Pendleton, R., Kenney, G., McKown, K., Eakin, W., Maniscalco, J., and Chen, Y. (2024). Spatiotemporal dynamics of spawning habitat distribution of American shad (*Alosa sapidissima*) in the Hudson River Estuary under multi stressors. Canadian Journal of Fisheries and Aquatic Sciences. 00:1-14.

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Jeffrey C. Brust
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EDUCATION

University of Florida – Graduate Certificate in Quantitative Fisheries Science, 2016.
Virginia Institute of Marine Science, College of William and Mary – MA Fisheries Science, 1996.
University of Miami – BS Marine Biology, 1992.

EMPLOYMENT HISTORY

NJ DEP Fish and Wildlife – Bureau Chief (12/2017 to present)
Direct operations of the Bureau of Marine Fisheries, consisting of a staff of 25 with a $5M annual budget. Directs staff in planning, development, and implementation of programs to monitor important marine resources and commercial and recreational fisheries of the state. Represents the Division on state and regional management committees. Recommends and implements fisheries management measures based on sound scientific data and stakeholder input that ensure sustainability and maintain compliance with state and federal fishery management plans.
NJ DEP Fish and Wildlife – Research Scientist (4/2004 to 11/2017)
Provide technical and analytical support to management of marine fisheries resources of New Jersey and the Atlantic coast. Contribute to regional fisheries stock assessments; conduct analyses to support state-specific management measures; summarize and present results for different levels of audience; provide oversight and training to staff in fisheries data analysis and population modeling.
ENTRIX, Inc. – Senior Staff Biologist (12/02 to 4/2004)
Provide analytical and logistical support to identify environmental solutions to industrial activities, including Natural Resource Damage Assessment (NRDA); prepare Environmental Impact Statement (EIS); evaluate environmental consequences of power plant impingement and entrainment.
Atlantic States Marine Fisheries Commission - Statistics Specialist (1/97 – 12/02)
Development and coordination of regional and coastwide fisheries research initiatives, such as regional survey design and implementation, data compilation and standardization, and training programs for state agency personnel.
Virginia Institute of Marine Science - Graduate Research Assistant (8/93 - 12/96)
Assist ongoing population research studies, including development and execution of research strategies, collection and analysis of biological data, maintenance of sampling gear, and training and oversight of research assistants.
Alaskan Observers, Inc. - Domestic Fisheries Observer (6/92 - 9/92; 3/93 - 6/93)
Collection and interpretation of commercial fishing effort and harvest information, and timely submission of trip reports.

OTHER RELEVANT EXPERIENCE

Co-developer and co-instructor, ASMFC Intermediate Stock Assessment Training Course (three-part series, conducted 2011-2012 and 2016-2017)
Co-instructor, ASMFC Data Poor Modeling Workshop (2012)
Contractor, Sustainable Fisheries Partnership - Sustainability profiles for English sole (2012), Greenland Halibut (2012), and Orange Roughy (2014).

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Contractor, Seven Holdings – Sustainability profile for flathead mullet (2015)
Contractor, Atlantic States Marine Fisheries Commission – Chairman of SEDAR peer review for red drum stock assessment (2016)
Contractor, Sustainable Fisheries Partnership and Monterey Bay Aquarium - Sustainability profiles for seven US South Atlantic and Gulf of Mexico grouper species (2018).
Meeting co-chairman, American Fisheries Society Annual Meeting held August 2018 in Atlantic City, NJ

AWARDS and CERTIFICATIONS
Certified Fisheries Professional, American Fisheries Society (2000 - 2017)
ASMFC Annual Award of Excellence for Scientific and Technical Contribution (2015)
AFS Northeast Division Past President's Award (2019)

SELECTED ASMFC STOCK ASSESSMENT CONTRIBUTIONS
American Eel – 2014, 2017 (chair)
Atlantic Menhaden – 2010, 2012, 2019, 2020, 2022
Black Sea Bass – 2009, 2012, 2016, 2019
Horseshoe Crab – 1998, 2009
Summer Flounder – 2005, 2007, 2013, 2019
Tautog – 2005, 2001, 2015 (chair)
Weakfish – 2006, 2009 (chair), 2016 (chair)

SELECTED PUBLICATIONS
Anstead, K.A. and 31 co-authors. 2021. The Path to an Ecosystem Approach for Forage Fish Management: A Case Study of Atlantic Menhaden. Frontiers in Marine Science. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2021.607657

DePiper, G., Gaichas, S., Muffley, B., Ardini, G., Brust, J., Coakley, J., Dancy, K., Elliott, G. W., Leaning, D. C., Lipton, D., McNamee, J., Perretti, C., Rootes-Murdy, K., and Wilberg, M. J. 2021. Learning by doing: collaborative conceptual modelling as a path forward in ecosystem-based management. – ICES Journal of Marine Science, doi:10.1093/icesjms/fsab054.

Kasper, Jacob M., Brust, Jeffrey, Caskenette, Amanda, McNamee, Jason, Vokoun, Jason C., and Schultz, Eric T. 2020. Using Harvest Slot Limits to Promote Stock Recovery and Broaden Age Structure in Marine Recreational Fisheries: a case study. https://opencommons.uconn.edu/eeb_articles/48

McGowan, Conor P. and 11 co-authors. 2011. Multispecies Modeling for Adaptive Management of Horseshoe Crabs and Red Knots in the Delaware Bay. Natural Resource Modeling 24(1): 117-156.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Ian A. Park Curriculum Vitae August 2026
Chestertown MD 21620

EDUCATION:
B.S. in Fishery Science, May 2006
Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg, VA
M.S. in Natural Resources, Anticipated Spring 2027 Delaware State University, Dover, DE

PROFESSIONAL EXPERIENCE:
Oct 2014-Present
Environmental Scientist IV, Delaware Department of Natural Resources and Environmental Control, 3002 Bayside Drive, Dover DE Supervisor: Edna Stetzar 302-735-8654 Work Schedule: Full Time, Permanent
Project Specific Job Functions and Assigned Duties:

1. Atlantic and Shortnose Sturgeon Population Assessments
2. Delaware Striped Bass Spawning Stock Assessment
3. Alosine Abundance Survey Christina River 2014-2024

Aug 2005 – October 2014
Fisheries Biologist GS-11(final), U.S. Fish and Wildlife Service, Maryland Fishery Resources Office, 177 Admiral Cochrane Dr., Annapolis, MD 21401 Supervisor: Steve Minkkinen (410)573-4506 Work Schedule: Full Time (40hrs/wk), Term Appointment
Project Specific Job Functions and Assigned Duties:

1. American Shad – Susquehanna River Anadromous Fish Restoration Cooperative (SRAFRC) Project
2. Atlantic and Shortnose Sturgeon Population Assessments – United States Geological Survey (USGS) Project
3. American Eel Upstream Passage – Susquehanna River Anadromous Fish Restoration Cooperative (SRAFRC) and Army Corp of Engineers Projects
4. Northern Snakehead Population Assessments and Management – U.S. Fish and Wildlife Service (USFWS), Maryland Fisheries Resource Office Project
5. Striped Bass Cooperative Tagging Program – Atlantic States Marine Fisheries Commission (ASMFC) Project

Publications

Coleman, N., Fox, D., Horne, A., Hostetter, N. J., Madsen, J., O'Brien, M., Park, I., Stence, C., & Secor, D. (2024). Spawning run estimates and phenology for an extremely small population of Atlantic Sturgeon in the Marshyhope Creek–Nanticoke River system, Chesapeake Bay. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science, 16, e10292. https://doi.org/10.1002/mcf2.10292

Hale, E., I., Park, M.T. Fisher, R.A. Wong, M.J. Stangl and J.H. Clark. (2016) Abundance Estimate for and Habitat Use by Early Juvenile Atlantic Sturgeon within the Delaware River Estuary, Transactions of the American Fisheries Society 145(6): 1193-1201.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Hale, E. A., I. Park, G. Glanden. 2022. Living Resources: Striped Bass. Technical Report for the Delaware Estuary and Basin, J. Shinn, L. Haaf, L. Morgan, and D. Kreeger (eds). Partnership for the Delaware Estuary. Report #22-05.

Kahn, D., I. Park. 2022. Living Resources: Atlantic Sturgeon. Technical Report for the Delaware Estuary and Basin, J. Shinn, L. Haaf, L. Morgan, and D. Kreeger (eds). Partnership for the Delaware Estuary. Report #22-05.

Mathews, J., E. Hale, O. Haley, J. Clark, I. Park, M. Greco, and P. Petrone. (2022). Exploring Trends in Abundance of Young-of-the-Year and Age-1 Atlantic Croaker, Black Drum, Spot, and Weakfish in Relation to Salinity, Temperature, and Large-Scale Climatic Signals in a Mid-Atlantic Estuary. Transactions of the American Fisheries Society 151: 150-171.

Park, I. A. 2020. Conservation and Recovery of Juvenile Sturgeons in the Delaware River. Delaware Division of Fish and Wildlife. Final Report to National Marine Fisheries Service. Award NA16NMF4720072

Roday, R. E., Park, I. A., Moore, J. E., Feris Serrano, R. J., Fox, D. A., & Hale, E. A. (2024). Acoustic-tagged American Shad utilize historic habitat following dam removal in northern Delaware. Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science, 16, e10323. https://doi.org/10.1002/mcf2.10323

Rothermel E.R, M.T. Balazik, J.E. Best, M.W. Breece, D.A. Fox, B.I. Gahagan, D.E. Haulsee, A.L. Higgs, M.H. O'Brien, M. J. Oliver, I.A. Park, D.H. Secor (2020) Comparative migration ecology of striped bass and Atlantic sturgeon in the US Southern mid-Atlantic bight flyway. PLoS ONE 15(6): e0234442

Secor D. H., M. H. P. O'Brien, N. Coleman, A. Horne, I. Park, D. C. Kazyak,D. G. Bruce & C. Stence (2021): Atlantic Sturgeon Status and Movement Ecology in an Extremely Small Spawning Habitat: The Nanticoke River-Marshyhope Creek, Chesapeake Bay, Reviews in Fisheries Science & Aquaculture, DOI: 10.1080/23308249.2021.1924617

White, S.L., N M. Sard, H M. Brundage III, R.L. Johnson, B. A. Lubinski, M.S. Eackles, I. A. Park, D. A. Fox, D. C. Kazyak. 2022. "Evaluating Sources of Biasin Pedigree-Based Estimates of Breeding Population Size." Ecological Applications e2602.https://doi.org/10.1002/eap.2602

White, S.L., M.W. Breece, D.A. Fox, D. C. Kazyak, A. Higgs, I.A. Park, C. Busch, B. A. Lubinski, R.L. Johnson, A. Welsh (2024). Spatiotemporal patterns in habitat use of natal and non-natal adult Atlantic sturgeon in two spawning rivers. Animal Biotelemetry. 12.10.1186/s40317-024-00366-1.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Scott Curatolo-Wagemann

Cornell Cooperative Extension of Suffolk County 423 Griffing Avenue, Suite 100 Riverhead, New York 11901

Tel: (631) 727-7850 x.318
Cell Phone: (631) 278-4260
Email: sw224@cornell.edu

A. PROFESSIONAL PREPARATION:

Southampton College of Long Island University	Marine Science Biology	B.S.	1994
State University of New York- Stony Brook	Environmental Management	M.P.S.	2010

B. APPOINTMENTS:

2024-present: Atlantic States Marine Fisheries Commission- New York State Governor's Appointee
proxy 2021-present: Responsible Offshore Science Alliance Research Advisor
2020-present: New York Seafood Direct Marketing Task Force
2020-present: Long Island Sound Marine Debris Action Plan-Abandoned and Lost Fishing/Aquaculture Gear Working Group 2019-present: New York State Fisheries Technical Working Group
2019-present: Mid-Atlantic Marine Debris Action Plan
2018-present: Mid-Atlantic Fishery Management Council- Advisory Panel for spiny dogfish
2015-present: NOAA, National Marine Fisheries- Advisory Panel for Atlantic Highly Migratory Species Southeast Data, Assessment, and Review (SEDAR) Workshops
1999-present: Senior Extension Resource Educator, Fisheries and Stormwater Specialist Cornell University Cooperative Extension, Riverhead, NY 11901

C. PRODUCTS: Significant Products

Conservation Gear Technology- Quantifying Bycatch Reduction Benefits of an Excluder in the Small Mesh Fisheries of the Northeast with Focus on Red Hake (NOAA-Saltonstall-Kennedy Program). June 28, 2004. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera

Reducing Marine Debris by Removing Derelict Lobster Gear from Long Island Sound-II (NFWF-Long Island Sound Future Funds). April 5, 2024. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Kristin Gerbino, Michael Bowen, Tara McClintock, Alex Mercado, Amanda Dauman, Tyler Guteres, Illusion Rivera

Continuation of "Choose Local F.I.S.H." Marketing and Education Campaign to Promote Locally Caught and Grown Seafood on Long Island. (USDA- Farmers Market and Local Food Promotion Program). February 28, 2023. Emerson Hasbrouck, **Scott Curatolo- Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman, Richard Guteres, Michael Bowen

New York Fleet Wide Electronic Vessel Trip Reporting and Education Initiative (NFWF-Electronic Monitoring and Reporting Grant Program 2020). November 2022. **Scott Curatolo-Wagemann**, Emerson Hasbrouck, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets (RSA- Monkfish 2018). October 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Advancing Bycatch Reduction Technology in New England Small Mesh Fisheries. (NOAA-Bycatch Reduction Engineering Program 2019). April 2022. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Alex Mercado, Amanda Dauman

Implementing a Bycatch Avoidance Communication Network in RI, MA, NJ, NY. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Amanda Dauman

Reducing Discard Mortality in the NY Recreational Atlantic Striped Bass Fishery. (NFWF-Fisheries Innovation Fund 2019. February 28,2021. Emerson Hasbrouck, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn, Kaitlyn Boyle, Alex Mercado

Fine Scale Genetic Population Structure of Monkfish (MAFMC Research Set Aside Program 2016). March 25, 2021. Emerson Hasbrouck, I.Wirgin, John Scotti, **Scott Curatolo-Wagemann**, Tara McClintock, Kristin Gerbino, Daniel Kuehn

Determining Mesh Selectivity and Optimum Mesh Size to Harvest Three Commercially Important Mid- Atlantic Species (MAFMC/ASMFC). March 1, 2018. Emerson Hasbrouck-Principal Investigator; **Scott Curatolo-Wagemann**, John Scotti, Tara Froehlich, Kristin Gerbino, Daniel Kuehn, Patrick Sullivan.

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

D. SYNERGISTIC ACTIVITIES:

1. Stakeholder Engagement: Engage with fishermen, fishing associations, industry representatives, and other relevant stakeholders to foster dialogue, understand their perspectives, and build trust and collaboration.
2. Data Collection and Analysis: Work together with the fishing industry to collect accurate and comprehensive data on fish stocks, fishing effort, and ecological indicators. This collaborative approach enhances the quality and reliability of the data, enabling informed decision-making.
3. Scientific Research and Monitoring: Collaborate with the fishing industry to support scientific research initiatives, including stock assessments, ecosystem monitoring, and studies on fishing gear technology. By combining industry knowledge with scientific expertise, a more comprehensive understanding of the ecosystem and its dynamics can be achieved.
4. Adaptive Management: Jointly develop and implement adaptive management strategies that incorporate feedback from fishermen. This iterative process allows for continuous evaluation and adjustment of fisheries management measures based on real-time observations and stakeholder input.
5. Compliance and Enforcement: Collaborate with the fishing industry to promote compliance with fishing regulations and foster a culture of responsible fishing practices. Encourage industry-led initiatives for self-regulation, monitoring, and reporting to improve compliance rates and reduce illegal, unreported, and unregulated (IUU) fishing activities.
6. Innovation and Technology: Partner with the fishing industry to explore innovative and sustainable fishing technologies, gear modifications, and fishing practices. This collaboration can lead to the development and adoption of more selective and eco- friendly fishing methods, minimizing bycatch and ecosystem impacts.
7. Education and Capacity Building: Collaboratively develop training programs, workshops, and educational materials to enhance the industry's understanding of sustainable fishing practices, ecosystem conservation, and compliance with regulations. This empowers fishermen with the knowledge and skills necessary for responsible resource management.
8. Market-based Approaches: Collaborate with the fishing industry to promote and certify sustainable fishing practices,

facilitating access to markets that prioritize sustainable seafood. These partnerships can create economic incentives for the industry to adopt sustainable practices while meeting consumer demand for environmentally friendly products.

By engaging in these synergistic activities, individuals working collaboratively with the fishing industry in fisheries management can foster a cooperative and inclusive approach that supports the long-term sustainability of fish stocks, preserves marine ecosystems, and ensures the viability of the fishing industry.

E. COLLABORATORS & OTHER AFFILIATIONS:

Collaborators Over the Last 48 Months: J. Abrams (Gershow Recycling); M. Albino (NYSDEC); D. Aripotch (F/V Caitlin & Mairead); J. Best (NYSDEC); J. Bourque (NYSDEC); B. Brady (Long Island Commercial Fishing Association); A. Clemetson (NY SeaGrant); M. Ciaramella (NY SeaGrant); C. Coyne (Sea-Trade Consulting); S. Crosby (The Maritime Aquarium); J. Davis (CT DEEP); N. Delanoy (F/V Laura Lee); Doll (F/V Christine & Jennifer); M. Early (Covanta Energy); R. Enever (FishTek); K. Fullam (New York State Department of Agriculture and Markets) J. German (F/V Suzanne Marie); N. Grant (Ct SeaGrant); R. Harrington (F/V Spirit); H. Hart (Mid-Atlantic Fishery Management Council); E. Hasbrouck (CCE); J. Hoey (National Marine Fisheries Service, Northeast Fisheries Science Center); D. Hudson (The Remote Ecologist); G. Kenney (NYSDEC); M. King (F/V Timtarah);
J. Knight (Superior Trawl); W. Lucey (Save the Sound); M. McClintock (F/V Bulldog); K.McKowan (NYSDEC); C. McCandless (NOAA Apex Predators Program); J. Maniscalco (NYSDEC); Milliken (National Marine Fisheries Service, Northeast Fisheries Science Center); On the Water Magazine; M Passerotti (NOAA Apex Predators Program); W. Richter (NYSDEC); E. Rodman (F/V Veronica Ann); C. Roebuck (F/V Karen Elizabeth); P. Ruhle Jr (F/V Sea Breeze Too); E. Reid (NEFMC); M. Sclafani (CCE); C. Scott (NYSDEC); J. Scotti (CCE); C. Scheetz (Project Oceanology); S. Sethi (Alaska Pacific University); J. Sulikowski (Univ. of New England); P. Sullivan (Cornell Univ., College of Agriculture and Life Sciences, Dept. of Natural Resources); V.Vecchio (NOAA); I. Wirgin, (NYU, School of Medicine)

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

Tara McClintock
Cornell University Cooperative Extension of Suffolk
Marine Program
423 Griffing Ave., Suite 100 Riverhead, NY 11901
631-740-6486
taf4@cornell.edu

Work Experience

Fisheries Program Manager, Marine Program
1997 – Present Cornell University Cooperative Extension

- Provide direct responsibility and oversight for field operations of fisheries research demonstration projects
- Provide technology transfer and training for electronic trip reporting for for-hire and commercial fishing fleets of NY
- Conduct field applied research projects for the NYS Department of Environmental Conservation and NOAA NMFS
- Developed and implemented a biological sampling program in Fulton Fish Market, NY.
- Provide dockside educational opportunities for the fishing industry on topics such as: fisheries management; life history of important species; gear modification and selectivity; changes in regulations, permits, exemptions, etc.
- Developed a network of commercial and recreational fishers throughout Long Island to sample striped bass.
- Participation in NYSDEC/NMFS fish tagging projects.
- Attend organizational meetings with NYSDEC, NMFS, ASMFC, ACCSP and other government agencies to make sure that educational and contractual goals are attained.
- Coordination and interaction with The Long Island Commercial Fisherman's Association (LICFA) and other fishing industry organizations educational program delivery.

Recent Research Experience

1. 2024- Present - Transitioning NY For-hire and Commercial Fleets to Electronic Vessel Trip Reporting- Tech Transfer and Education Initiative-National Fish and Wildlife Foundation
2. 2022-2024- Sampling of Striped Bass from NY's Marine Waters for PCB's and PFAS- NYSDEC
3. 2022 –Present- A Collaborative Research Assessment and Outreach Program for Turtle Excluder Devices (TEDs) within the Longfin Squid Fishery of the Greater Atlantic Region-NOAA's Bycatch Reduction Engineering Program (BREP)
4. 2021-Present-South Fork Wind Farm Export Cable Bottom Trawl Survey -East Hampton Town - Orsted
5. 2020-Present – Testing Alternate Frequency Pinger in Monkfish Gillnet Fishery – Saltonstall-Kennedy Grant
6. 2018-2023 -LI Sound Derelict Lobster Gear Removal- NOAA Marine Debris Program & NFWF LIS Futures Fund
7. 2018-2021- Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Gillnets- Monkfish RSA Program
8. 2012-2017 - Butterfish/River Herring, Yellowtail and Windowpane Flounder Bycatch Avoidance Network Projects – NFWF/BREP
9. 2015-2017 Temporal Stability of the Genetic Population Structure of Monkfish- NOAA/NEFMC/Monkfish RSA Program

Education

Bold Comments indicate sections that help with the ranking process.
Highlighted text indicates changes from the first submission.

1991-1995 Southampton College of Long Island University, Southampton, New York
• Bachelor of Science – Biology / Psychology

Certifications

- IACUC Training- Module 1 and Introduction to Fish – July 2022
- Protected Species Sampling Training Certification – by AIS, Inc. – March 2022
- Basic Training per STCW Certification – Northeast Maritime Institute – October 2021
- Advanced PADI Diver-Divers Way- 1995

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Highlighted text indicates changes from the first submission.



Big Fin Scientific
Cary, NC 27519 US
5128080346
service@bigfinscientific.com

ADDRESS
Scott Curatolo-Wagemann
Cornell Cooperative Extension - Curatolo-Wagemann
Marine Program, Stormwater & Fisheries Management
423 Griffing Ave
Riverhead, NY 11901
United States

SHIP TO
Alex Mercado
Cornell Cooperative Extension
Marine Program, Stormwater & Fisheries Management
423 Griffing Ave
Riverhead, NY 11901
United States

Quote 4737

DATE 06/02/2026

SHIP VIA
ups ground

DATE	ACTIVITY	QTY	RATE	AMOUNT
	DCS5 Micro Controller DCS5 Control Box - Micro Edition	3	750.00	2,250.00
	DCS5 Linear Sensor Kit for 100cm Boards Linear Sensor Kit for DCS5 Systems (100cm sensor); Includes cable. Sensor and cable are IP67 waterproof when connected.	3	1,113.50	3,340.50
	DCS5 Micro Battery Kit The DCS5 Micro Battery kit includes a Battery and a connection cable for the DCS5 Micro Control box.	3	310.00	930.00
	Measure Deck Kit - 100cm Measure Length - 3D Printed Measure Deck Kit for 100cm measure length. Assemble the measure deck from the provided segments and hardware.	3	867.00	2,601.00

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DATE	ACTIVITY	QTY	RATE	AMOUNT
	DCS5 Tablet Mount Kit (Rail Mount) - 8" Tablets Track mounting kit for 8" tablets such as the Samsung Galaxy Tab Active series (8"). Includes track, mounting hardware for track, track-mounted ball, double-ball arm, top of arm ball-mount and dock for the Tab Active 2,3 or 5. Kit includes: 8" Track (rail), track-mounting hardware, ball-joint base, articulating arm, ball-mount tablet cradle and rubber tablet retainer.	3	240.00	720.00
	Samsung Galaxy Tab Active 5 Samsung Galaxy Tab Active 5 Android Tablet (WiFi / 128GB)	3	675.00	2,025.00
	Magnetic Stylus - Directional Pen type DCS Measurement Stylus - Directional Pen type (narrow measurement tip) - One spare	6	75.00	450.00
	USB Cable - Waterproof Mini to Standard Type A, P/N 21310 Rev A USB Cable - Waterproof Mini to Standard Type A	3	71.50	214.50
	DCS Extended Warranty - 1 YR to 5YR Extend the standard one year warranty to five years. The warranty covers all components from failures during normal use.	3	750.00	2,250.00
	DCSLinkStream 1.x (Annual License) DCSLinkStream 1.x (Annual License)	3	360.00	1,080.00
	Shipping:Shipping Shipping	3	95.00	285.00

A credit-card payable invoice will be sent separately upon request.

SUBTOTAL	16,146.00
TAX	0.00
TOTAL	**$16,146.00**

Bold Comments indicate sections that help with the ranking process.
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STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
MARINE RESOURCES LABORATORY
P.O. BOX 8, 194 MCKOWN POINT RD
W. BOOTHBAY HARBOR, MAINE
04575-0008

JANET T. MILLS
GOVERNOR

CARL J. WILSON
COMMISSIONER

August 7, 2026

Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St. Ste. 200 A-N
Arlington, VA 22201

Dear ACCSP:

Thank you for the review of the proposal titled “Expanding the Commercial Fisheries Research Foundation’s Black Sea Bass Research Fleet into the Gulf of Maine”. The comment from the review on July 13, 2026 has been addressed, and the following change was made: the typo in Table 1, page 5 was corrected so that it now reads "Number."

This new project proposal will provide funding to support adding Maine fishing vessels using lobster gear and/or hook and line gear to the Commercial Fisheries Research Foundation’s (CFRF) Black Sea Bass Research Fleet. The data collected from this project will expand the biological sampling for black sea bass into Maine state waters. Black sea bass has been identified as the highest priority species for additional biological sampling according to the ACCSP Biological Review Panel and this project will provide data on the spatial and temporal distribution of black sea bass in Maine as well as provide data on sizes of black sea bass that are being seen in the Gulf of Maine.

The Maine Department of Marine Resources does not currently have the funding to support this type of data collection for black sea bass. Current fishery-independent surveys encounter black sea bass; however, they use gear that may not effectively capture black sea bass and occur at times of the year when black sea bass may not be migrating or in high abundance in the Gulf of Maine. The expansion of CFRF’s research fleet would pilot a fishery-dependent sampling program for black sea bass. CFRF’s research fleet is a proven, efficient, and cost-effective way to collect biological information on black sea bass. This proposal addresses the following 2027 ranking criteria: biological sampling, data delivery plan, regional impact, funding transition plan, in kind contribution, improvement in data quality and timeliness, potential secondary module as by-product in catch and effort, impact on stock assessment, innovative, properly prepared, and merit.

For a summary of the proposal for ranking purposes please see page 16. Thank you for your consideration of this proposal.

Sincerely,

Rebecca Peters
Marine Resource Scientist IV
Rebecca.j.peters@maine.gov
(207) 557-5276

Proposal for Funding made to:

Atlantic Coastal Cooperative Statistics Program
Operations and Advisory Committees
1050 N. Highland Street, Suite 200 A-N
Arlington, VA 22204

Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine

Submitted By:

Rebecca Peters
Maine Department of Marine Resources
PO Box 8
W. Boothbay Harbor, ME 04575

Hannah Verkamp
Commercial Fisheries Research Foundation
P.O. Box 278
Saunderstown, RI 02874

Applicant Name: Maine Department of Marine Resources, Bureau of Marine Science and the Commercial Fisheries Research Foundation

Project Title: Expanding the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet into the Gulf of Maine

Project Type: New Project

Requested Award Amount: $59,452

Requested Award Period: March 1, 2027 – February 28, 2028

Primary Program Priority: Biological Sampling

Date Submitted: 8/7/2026

Principal Investigators: Rebecca Peters, Marine Resource Scientist IV, Maine Department of Marine Resources

Jesica Waller, Marine Resource Scientist IV, Maine Department of Marine Resources

Corrin Flora, Marine Resource Management Coordinator, Maine Department of Marine Resources

Hannah Verkamp, Senior Research Associate, Commercial Fisheries Research Foundation

N. David Bethoney, Executive Director, Commercial Fisheries Research Foundation

Objective:

The goal of this proposed project is to pilot the expansion of the Commercial Fisheries Research Foundation's (CFRF) Black Sea Bass Research Fleet into the Gulf of Maine by adding five vessels from the lobster fleet and hook and line industry in Maine State waters through a partnership with Maine Department of Marine Resources (ME DMR).

The species distribution of black sea bass has expanded northward; however, little is known about the leading edge of this black sea bass biomass in the Gulf of Maine. To enhance biological data collection in an under-sampled region and support sustainable management of the stock, ME DMR requests funds to support a pilot project in which Gulf of Maine vessels are added to the CFRF Black Sea Bass Research Fleet. Sampling through CFRF is possible year-round; however, ME DMR anticipates the greatest sampling effort will take place in the summer, corresponding to when fishermen are participating in other fisheries.

Specific objectives of the project include:

- Expand the CFRF Black Sea Bass Research Fleet into the Gulf of Maine, an under-sampled area, with the addition of five vessels.
- **Improve the quantity of biological data collected on black sea bass in the Gulf of Maine, thereby supporting the stock assessment and sustainable management of the stock.**
- Better characterize the black sea bass biomass off Maine's coast, including understanding the northern extent of black sea bass, their size distribution, and seasonal patterns.
- **Establish a fishery-dependent sampling program that will lay the foundation for improved management of black sea bass in Maine as the species biomass is expected to increase.**
- **Transmit black sea bass biological data to ACCSP and communicate results with partners**.

Need:

Black sea bass is a species that has become synonymous with the impacts of environmental change on spatial distribution. The 2023 Research Track Assessment for black sea bass found that the range of black sea bass has shifted poleward, with relative increases in biomass in the northern region and stable biomass levels in the southern region[1]. Further, spatiotemporal modeling of trawl survey data found that the effective area occupied by black sea bass in the northern region has increased, indicating black sea bass have experienced "a general northeastward shift in center of gravity with a range expansion in the Gulf of Maine" [2]. Given the expanding black sea biomass in the northern region; the shift to higher landings by states such as New York, Rhode Island, and Massachusetts over the last 15 years[3]; and the fact that New Hampshire recently declared an interest in black sea bass via the Atlantic States Marine

[1] Report of the Black Sea Bass (Centropristis.striata).Research Track Stock Assessment Working Group. 2023. Page 12.
[2] Report of the Black Sea Bass (Centropristis.striata).Research Track Stock Assessment Working Group. 2023. Page 39.
[3] Report of the Black Sea Bass (Centropristis.striata).Research Track Stock Assessment Working Group. 2023. Page 57.

Fisheries Commission, it is highly likely that black sea bass are off of Maine's coast and will be increasing in biomass.

Black sea bass have been identified as the highest priority species for additional biological sampling according to the ACCSP Biological Review Panel. This is in part driven by the limited data on black sea bass at their northern extent. ME DMR has very little information on the black sea bass resources in its waters, including how far east black sea bass can be found in the Gulf of Maine, the size distribution of black sea bass off Maine's coast, and their seasonality. This type of information will be critical to effectively manage a fishery in the future. The Research Track Assessment made significant advancements to incorporate spatial patterns into the assessment model, including developing regionally specific age-length keys. However, the Assessment Report noted that while there were efforts to determine whether growth in the Gulf of Maine differed from the broader northern region, there was insufficient age and length data from the Gulf of Maine to support this analysis.[4]

As the range of black sea bass expands, sampling efforts must be initiated at the leading edge of the range. Existing fishery-independent trawl surveys can serve as a starting point; however, the timing of these surveys in the spring and fall are often mis-aligned with the presence of black sea bass in the Gulf of Maine, which are thought to be most prominent in the summer. Ventless trap surveys are another source of potential data and were recently explored in the Research Track Assessment; however, it was determined that a longer time-series is needed before this data can be incorporated as indices of abundance.

Fishery-dependent data represents another avenue to collect data on the leading end of a species' range expansion. While Maine has no substantial directed fishery for black sea bass, there is significant commercial fishing effort throughout state waters. The extensive footprint of Maine's fisheries in both time and space provides a unique opportunity to broadly conduct sampling. Some lobstermen, such as those in Maine's western lobster zones, anecdotally report black sea bass bycatch in their traps, indicating that the species is present in portions of the state.

This proposal seeks to pilot a fishery-dependent sampling program for black sea bass by expanding the CFRF Black Sea Bass Research Fleet into the Gulf of Maine. The CFRF Research Fleet approach is a proven, efficient, and cost-effective way to collect biological information. It leverages fishermen participation to effectively collect information on landings and discards. Data collected through the CFRF Research Fleet was considered in the recent Research Track Assessment, and size information on discarded fish as well as age-length data were incorporated to support expanded discard-at-lengths and the development of age-length keys. There is currently no participation from the Gulf of Maine in the CFRF Black Sea Bass Research Fleet. As a result, this proposal would support enhanced sampling of black sea bass in an under-sampled region, while also collecting baseline data that will be essential to support future management in Maine. **Further, the proposal will directly address a high priority research recommendation in the Research Track Assessment to**

[4] Report of the Black Sea Bass (Centropristis.striata).Research Track Stock Assessment Working Group. 2023. Page 28.

enhance sampling to support estimation of fishery length and age compositions, with an emphasis on spatial coverage.[5]

Results and Benefits:

The results of this proposed project are:

- Improved quantity of biological data for black sea bass in the Gulf of Maine.
- Expanded data collection via a proven method that allows for sampling outside of the spring and fall trawl surveys.
- Increased biological data being sent to ACCSP via an established process for data transmission with CFRF.

The benefits of this proposed project are:

- **Address ACCSP's highest priority species for biological sampling, black sea bass, to support assessment and management efforts.**
- Fill data gaps on the leading edge of the black sea bass spatial distribution.
- Involve fishermen in the collection of biological data and support strong partnerships between fishermen, scientists, and managers.
- **Support partner collaboration between ME DMR and CFRF by expanding regional extent of an existing fishery-dependent data fleet to which many jurisdictions contribute.**
- **Support future improvements to the black sea bass stock assessment model by collecting biological data from an under sampled region.**
- Support sustainable management of black sea bass at various levels, including ME DMR and via the interstate fishery management plan at ASMFC and MAFMC.

Data Delivery Plan:

This project includes a data delivery plan through which CFRF will regularly share data with ACCSP, ME DMR, fishing industry participants, stock assessment scientists, and managers. CFRF already has an established data sharing process for data collected via the Black Sea Bass Research Fleet and this pilot project will follow the same process.

Vessels participating in the pilot Gulf of Maine Black Sea Bass Research Fleet will utilize the CFRF's custom fishery dependent data collection application On Deck Data. Data collected via the application will be uploaded and integrated into the existing CFRF SQL database like all existing Research Fleet participants. CFRF staff will audit data regularly and perform quality control checks. Project staff from ME DMR will be granted database credentials to view and export data collected by the five Gulf of Maine vessels supported by this project. **CFRF will include the data collected by this project in their ongoing biannual data submissions to ACCSP, which occur in January and July**. A vessel ID system will be used to maintain the confidentiality of participant fishing vessels. The CFRF will maintain open communication with the ACCSP data coordinator and will remain available to provide any necessary metadata along with data submissions. The data submission format and process were established in consultation with ACCSP staff, and all data collected by the existing Black Sea Bass Research Fleet has been

[5] Report of the Black Sea Bass (Centropristis.striata).Research Track Stock Assessment Working Group. 2023. Page 120.

successfully transmitted and accepted into the ACCSP bio samples database. In addition, fishing industry participants will retain joint ownership of the data they collect. CFRF will send participants quarterly data reports in the same manner as existing Research Fleet participants receive. The quarterly reports contain summaries of the data collected by each participant, and participants can request all of the raw data they have collected at any time. Finally, **data collected via this pilot program will be made available to fishery scientists at the NEFSC in support of future stock assessment work**.

Approach:

The proposed project seeks to collect, communicate, and analyze critically needed biological, catch, and bycatch data on northern Atlantic black sea bass. Project components include: 1) Leveraging the project approach established by the CFRF Black Sea Bass Research Fleet 2) Collection of fishery-dependent biological (sex and length) black sea bass data and fishery characteristics for up to 12 months in the Gulf of Maine region; 3) Internal data analysis to address research questions about spatiotemporal patterns in the black sea bass population and fishery; 4) Compilation and communication of project data and results to ACCSP, stock assessment scientists, and fisheries managers; and 5) Outreach and education activities to share findings. Methodological details are outlined below.

Participant Selection:

Project staff will distribute a call for applications to participate in this pilot project from commercial fishing vessels in their networks. For the purposes of this one-year pilot project, applications will be solicited only from fishermen who operate in Maine state waters, ranging from the New Hampshire border to the western end of Penobscot Bay, and utilize lobster pots (lobster fishery) or hook and line gear. Interested fishermen will submit an application (developed by the CFRF) that will be reviewed by the project PIs. This initial pilot project will select five vessels to participate in data collection based on areas fished, months fished, familiarity with the species of focus, and experience with biological data collection and collaborative research, with final approval by project PIs. We are aiming to start with five vessels for data collection to pilot this project in year one with hopes of adding more vessels to the Research Fleet in following years. We are starting with only a small number of vessels to provide initial data on black sea bass and hope this initial start will then also recruit interested fishermen in the future to participate if data shows that fishery-dependent sampling in Maine provides data on black sea bass catch and distribution.

Participant Training

To ensure project participants have access to local project staff for support, CFRF project staff will initially train ME DMR project staff on Research Fleet sampling protocols and data collection using the CFRF's custom data collection application, One Deck Data. CFRF will also provide ME DMR with all necessary sampling supplies for participants. ME DMR will then be primarily responsible for the day-to-day tasks associated with training and supporting Research Fleet participants. Prior to data collection, ME DMR staff will meet with selected participants in person for a training session, which will include an overview of the project, use of the tablet and data collection application, sampling requirements, and invoicing procedures, and to provide them with sampling supplies. Participants will be compensated with a one-time training stipend upon completion of training. This stipend will serve as an incentive to attend the training and

will provide funds to the vessels in the instance that no black sea bass are caught during fishing efforts in the pilot year.

Data Collection

Project staff will apply for a Special License from ME DMR to allow participant vessels to sample black sea bass from Maine state waters. Once participants have received training, they can sample black sea bass during commercial fishing activities on an opportunistic basis. The black sea bass data collection application, On Deck Data, was developed in the first year of the CFRF's Black Sea Bass Research Fleet project to enable participants to collect standardized black sea bass data. On Deck Data will be leveraged by this pilot project to streamline and standardize data collection within the existing database. Participating fishermen will use Samsung Galaxy tablets pre-programmed with the On Deck Data application to efficiently and accurately record and transmit data. As such, the proposed project will also continue to advance the use of electronic technology in at-sea biological data collection, management, and analysis efforts.

When participants choose to sample black sea bass from their catch, they will initialize On Deck Data and begin a sampling session, which is defined as one fishing gear haul in one location. The sampling date, time, and location will be automatically recorded by the internal tablet GPS and calendar. The app will then prompt participant fishermen to record the NOAA statistical area, depth, habitat type, target species, gear type, effort deployed (Table 1), and the total number/pounds of black sea bass retained and discarded. Participants will then record the length, sex, and disposition (kept or discarded) of individual black sea bass. Standardized fish measuring boards will be used to ensure a consistent measure of fish total length to the nearest centimeter. Upon completion of the sampling session, the data will be stored in the tablet's internal storage. Once connected to WI-FI, participants will then wirelessly upload the data to a MySQL database owned and managed by CFRF. Data uploads will be continually monitored by the project team. This data communication, review, management, and storage process was established and vetted during the first year of the CFRF's Black Sea Bass Research Fleet.

Table 1. Summary of fishing effort data collected by the Black Sea Bass Research Fleet.

Commercial Hook & Line	**Lobster/ Crab Traps**
Time Spent Fishing (hours)	Soak Time (days)
Number of Rods Fished	Number of Traps
Number of Hooks Used	Escape Vent Size (inches)
	Escape Vent Shape

The goal for current Black Sea Bass Research Fleet participants in Southern New England and the Mid-Atlantic region is to conduct three at-sea sampling sessions per month, with a target of 50 individual black sea bass sampled per sampling session (resulting in a target of 150 black sea bass sampled per month). The realized sampling frequency, however, varies widely as it depends on a variety of factors, including weather, seasonal black sea bass distribution and catch, and fishery status. For this pilot project, we will maintain this sampling target for the Gulf of Maine

vessels. At the conclusion of the pilot year, PIs will evaluate if this goal is feasible based on project results and participant feedback. Participants will be compensated with a sampling stipend each month they catch and sample black sea bass. Stipend amounts will remain the same as current Black Sea Bass Research Fleet stipends. Participants will receive $600 each month they sample at least half of the targeted number of black sea bass (75 fish). Stipends will be prorated to $300 if the number of sampled fish is at least one but less than 75 fish. Participants will submit invoices to CFRF each month they sample, and CFRF will distribute stipends directly to participants.

Internal Data Analysis:

The data collected during this pilot project will be used to better characterize the biology, catch, bycatch, and fishery characteristics of black sea bass in the GOM region. After the pilot year of the project, PIs will conduct exploratory analyses on the gear-specific and spatiotemporal patterns in catch composition and determine which further analyses may be warranted. As described in the Data Delivery Plan, data will also be regularly shared with ACCSP, participant fishermen, stock assessment scientists, and fisheries managers for further analysis and application.

Outreach:

Education, outreach, and ongoing communication are an integral part of the overall work plan for the proposed project. These components support the goal of fostering collaborative working partnerships among scientists, managers, and members of the fishing industry through all phases of research, as well as the goal of ensuring the project is as impactful as possible.

As described previously, project staff will share project information and data with a variety of interest groups, including the commercial fishing industry, stock assessment scientists, fisheries managers, state and federal agencies, and outside researchers who are interested in using the Research Fleet data or learning more about its methods. To ensure the project is widely accessible and impactful, the CFRF will integrate information about this pilot project on their existing Black Sea Bass Research Fleet webpage (https://www.cfrfoundation.org/black-sea-bass-fleet), which contains an overview of the project's background, objectives, and outcomes. Additionally, the CFRF will prepare a project summary document to be displayed online, at the Commercial Fisheries Center of Rhode Island, and at industry events attended by the CFRF or ME DMR. Project updates will be shared across the CFRF's social media platforms, which have a combined audience of over 2,300, as well as in at least two posts in the CFRF's monthly newsletter, which is sent to over 1,800 subscribers. Further, the project methods and results may be shared at a relevant scientific or management conference. Finally, project staff will host a meeting with members of the research, management, and fishing industries upon completion of the pilot project to share project results, discuss participant experiences, and highlight priorities for moving forward.

This pilot project is within the following program priority module: Biological sampling.

Geographic Location:

This proposed project would take place in Maine state waters, ranging from the New Hampshire border to the western end of Penobscot Bay. The focus of sampling in the western half of Maine

reflects where ME DMR believes black sea bass are more likely within the State and is informed by anecdotal information from fishermen. Should the pilot project indicate the presence of sea bass throughout the study region, future work could include sampling in the eastern half of the State.

Milestone Schedule:

Month	1	2	3	4	5	6	7	8	9	10	11	12
Submit permit to MEDMR	x											
Purchase supplies, recruit, and train industry members for GOM BSB fleet sampling	x	x	x									
BSB fleet data collection			x	x	x	x	x	x				
Data QA/QC and analysis			x	x	x	x	x	x	x	x		
Write and submit progress report							x					
Submit data to ACCSP					x						x	
Report writing										x	x	x

Project Accomplishments Measurement Metrics:

Project Goal	Metrics
Expand CFRF Black Sea Bass Research Fleet into the Gulf of Maine	• Number of vessels engaged in research fleet • Number of months data is collected
Improve quantity of black sea bass biological data collected in the Gulf of Maine in support of future stock assessments	• Numbers of biological data collected (e.g. length, sex)
Better characterize black sea bass biomass off Maine's coast	• Assess spatial and seasonal extent of black sea bass sampled in Maine research fleet • Assess size distribution of black sea bass sampled by Maine research fleet • Compare catches and lengths from CFRF's research fleet to MEDMR fishery independent surveys
Transmit black sea bass biological data to ACCSP	• Successful transmission of biological data from CFRF to ACCSP

Cost Summary (Budget and Budget Narrative):

		ACCSP	DMR-In kind
Personnel:			
	Marine Resource Scientist I – Peter Jordan		$12,551.00
	Marine Resource Scientist IV – Rebecca Peters		$4,732.00
	Marine Resource Scientist IV – Jesica Waller		$5,719.00
	Subtotal		*$23,002.00*
Fringe:			
	Marine Resource Scientist I – Peter Jordan		$8,357.00
	Marine Resource Scientist IV – Rebecca Peters		$3,678.00
	Marine Resource Scientist IV – Jesica Waller		$3,310.00
	Subtotal		*$15,345.00*
Contracts:			
	subaward/contract to CFRF	$44,990	
	Subtotal	*$44,990*	
Travel:			
	Travel	$2000	
	Subtotal	*$2000*	
	Total Subtotal	$46,990	$38,347.00
	26.52% Indirect	$12,462	
	Total Costs (including indirect)	$59,452	

The budget justification for the proposed budget is below:

A. Personnel and fringe: $38,347.00 In-kind (MEDMR). ME DMR staff will play an advisory and support role in the proposed project by recruiting and training the vessels for the project. Staff will be trained by CFRF staff on data sampling procedures and will in turn train the vessel captains and crew on sampling protocols for the survey. They will also coordinate and set up each volunteer vessel with sampling equipment and be available to answer questions. ME DMR staff (Marine Resource Scientist I) will analyze the data produced from this project to evaluate spatial and seasonal trends in the black sea bass catch and will present this data to industry and appropriate management and technical working groups. Fourteen days a year of time will be spent by the Marine

Resource Scientist IVs overseeing and supporting this project by assisting in coordinating training and supervising the Marine Resource Scientist I with data analysis. The Marine Resource Scientist I will spend a week of their time a month within the year analyzing data and writing reports, coordinating and assisting with trainings for the vessels that are sampling, and coordinating with CFRF staff for data sharing.

B. Contracts: $44,990 ME DMR will provide a subaward to the Commercial Fisheries Research Foundation for this project so they can provide ME DMR the training, supplies, and support necessary for this sampling. Data collected from this project is automatically uploaded to CFRF's database and staff will also assist in sharing the data back to ME DMR for additional analysis. CFRF staff will also be responsible for submitting data to ACCSP following their current protocol for data submission with their Black Sea Bass Research Fleet.
C. Travel - $2,000 This will cover potential travel to CFRF offices for an incoming Marine Resource Scientist I and a supervisor from ME DMR for training on the sampling protocols, data collection application, database structure, and related considerations and for potential travel to present results of the work.
D. Indirect: $12,462 The Department of Marine Resources has an indirect cost rate of 26.52%. These indirect funds are a necessity to help defray and offset the administrative costs associated with this project and the associated contracts.

Attachment 1: MEDMR Negotiated Indirect Cost Agreement

U.S. Department of Commerce
Office of Acquisition Management – Grants Management Division
1401 Constitution Ave., NW, HCHB Rm 6412
Washington, DC 20230, Attn: Indirect Cost Program

CERTIFICATE OF INDIRECT COSTS

This is to certify that I have reviewed the indirect cost rate proposal prepared and maintained herewith and to the best of my knowledge and belief:

(1) All costs included in this proposal dated APRIL 24, 2025 to establish indirect cost billing rates for July 1, 2025 through June 30, 2026 are allowable in accordance with the requirements of the federal awards to which they apply and 2 CFR Part 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards". This proposal does not include any costs which are unallowable as identified in the applicable federal cost principles. For example, advertising contributions and donations, bad debts, entertainment costs or fines and penalties.

(2) All costs included in this proposal are properly allocable to federal awards on the basis of a beneficial or causal relationship between the expenses incurred and the agreements to which they are allocated in accordance with applicable requirements. Further, the same costs that have been treated as indirect costs have not been claimed as direct costs. Similar types of costs have been accounted for consistently and the Federal Government will be notified of any accounting changes that could affect the rate.

(3) The indirect cost rate calculated within the proposal is **26.52%** which was calculated using an indirect cost rate base type of Modified Total Direct Costs. The calculations were based on actual costs from fiscal year July 1, 2023 thru June 30, 2024 to obtain a federal indirect cost billing rate for fiscal year beginning July 1, 2025.

Subject to the provisions of the Program Fraud Civil Remedies Act of 1986, (31 USC 3801 et seq.), the False Claims Act (18 USC 287 and 31 USC 3729); and the False Statement Act (18 USC 1001), I declare to the best of my knowledge that the foregoing is true and correct.

Organization Name: State of Maine, Department of Marine Resources

CFO Signature: Gilbert M. Bilodeau Date: 04/24/2025
Gilbert M. Bilodeau (Apr 24, 2025 15:53 EDT)

Name/Title Authorized Official: Gilbert M. Bilodeau, Director, Natural Res Ser Ctr

Dept Head Signature: Carl Wilson Date:
Carl Wilson (Apr 24, 2025 16:04 EDT)

Name/Title Authorized Official: Carl Wilson, Commissioner

The budget and justification for the contract/subaward with CFRF is below:

Budget Table:

Object Class Category		Proposal Cost
a	Personnel	
	- Executive Director (1% of time)	$ 1,600
	- Research Scientists (15% of time)	$ 10,680
	- Business Manager (1% of time)	$ 665
	Total CFRF Personnel Costs	$ 12,945
b	Fringe Benefits Proposed at 10% of Personnel Costs	$ 1,295
c	Travel	$ 1,500
d	Equipment	$ -
e	Supplies	
	- Research Supplies Tablets, waterproof cases, charger, fish measuring boards (5 sets @$550 each)	$ 2,750
	- Project General Supplies Database storage, meeting expenses, etc.	$ 250
	Total Supplies	$ 3,000
f	Contractual	
	- Programmer for On-Deck Data database	$ 500
	Total Contractual	$ 500
g	Construction	$ -
h	Fishing Vessels -5 vessels in fleet for 12 months	
	- Monthly sampling stipends - $600/month @50% sampling rate	$ 18,000
	- Training stipends - $250/vessel one time	$ 1,250
	Total F/V Stipends	$ 19,250
i	Total Direct Charges	$ 38,490
j	Indirect Charges Proposed at 16.89% of CFRF Direct Charges	$ 6,500
k	Total Proposal Costs	$ 44,990

Budget Justification*:*

The total proposed budget requested by the Commercial Fisheries Research Foundation (CFRF) for all components of the work is $44,990 for 12 months. The proposed timeframe is January 1, 2027, to December 31, 2027. The proposed budget justification for all cost items includes the following:

a. Personnel: $12,945. This includes the wages for the following CFRF personnel for time spent working directly on the project:

1. Executive Director – $1,600. D. Bethoney, CFRF Executive Director, will oversee the project's administration, team communication/coordination, field research, and outreach aspects. He will also directly assist with reports, outreach material development, and communication of project progress and results to the team and fishing industry. Proposed at 1.0% of time = $160,000 x 1% = $1,600
2. Research Scientists – $10,680. The CFRF Research Scientists will be the primary individuals responsible for the fleet organization, maintenance, and support, as well as data management, communication, and analysis. They will also support the Executive Director in project oversight tasks. Proposed at 15% of time = $71,200 x 15% = $10,680.
3. Business Manager – $665. T. Winneg, CFRF Business Manager, will carry out all the finance-related aspects of the project, including research budget tracking, invoice processing, administrative support tasks, and purchasing supplies. Proposed at 1.0% of time = $66,500 x 1.0% = $665

b. Fringe Benefits: $1,295. This includes a percentage of Personnel Costs for payroll taxes and worker's compensation insurance prorated in accordance with the percentage of salary paid from the program. Benefits are proposed at 10% of personnel costs based on 2024 benefits and historical analysis.

c. Travel: $1,500. Travel costs for two project staff to travel to Boothbay Harbor, Maine, to train Maine DMR staff. Costs include mileage (265 miles x $0.725 x 2 = $384), lodging ($325/night x 2 = $650), per diem ($68 x 2 days x 2 = $272) and incidentals ($194).

d. Equipment: $0.

e. Supplies: $3,000. This includes costs for project materials for field work, fleets, project meetings, outreach events, and other miscellaneous supplies.

1. Project Office Supplies $250. Costs to cover supplies for meetings and outreach materials, including mailings, binders, and posters. Proposed at $250.
2. Research Supplies $2,750. Costs of at-sea research supplies, including tablets, chargers tablet cases, and fish measuring boards. Proposed total of 5 sets at $550 per set.

f. Contractual: $500. This includes the following costs:

1. Don Coxe Consulting $500. Costs to maintain or modify the On-Deck Data App.

g. Construction. $0. Not applicable.

h. Other Costs: $19,250. This includes the following costs:

1. Fishing Vessel Stipends $18,000. A fleet of 5 vessels will be utilized each month to obtain the proposed biological samples. The total stipend is computed at 50% due to fluctuations in vessel sampling associated with weather, vessel maintenance, and seasonal black sea bass distribution. The costs are proposed for 5 vessels for 12 months at $600 per month at a sampling rate of 50%. (5 vessels x 12 months x $600 x 50% = $18,000)
2. Fishing Vessel Training Stipends $1,250. Each vessel will receive a training stipend of $250.

i. Total Direct Charges: $38,490. This is the total direct charges for cost items a-h.

j. Indirect Charges: $6,500. Indirect general and administrative costs are calculated as 16.89% of the requested Total Direct Charges. Indirect general and administrative costs are used to cover costs associated with the general operations of the CFRF, including accounting services, legal services, maintenance of office space, liability insurance, payroll fees, phone/fax lines, internet service, board member participation, etc. The CFRF Indirect Cost Rate Agreement for FY2026 is 16.89% dated 11/6/25 based on FY2024 actuals.

k. Total Proposal Costs: $44,990.

Attachment 2: CFRF Indirect Cost Negotiation Agreement

United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

Nonprofit Organization
Amended Indirect Cost Negotiation Agreement

EIN: 86-1116341

Date: 11/06/2025

Organization:

Commercial Fisheries Research Foundation
P.O. Box 278
Saunderstown, RI 02874

Report Number: 2026-0066

Filing Ref.:
Last Negotiation Agreement
dated: 06/05/2025

The indirect cost rates contained herein are for use on grants, contracts, and other agreements with the Federal Government to which 2 CFR Part 200 apply subject to the limitations contained in Section II.A. of this agreement. The rates were negotiated by the U.S. Department of the Interior, Interior Business Center, and the subject organization in accordance with the authority contained in applicable regulations.

Section I: Rate

Start Date	End Date	Rate Type	Rate Details				
07/01/2023	06/30/2024	Final	**Name**	**Rate**	**Base**	**Location**	**Applicable To**
			Indirect	16.89 %	(A)	All	All Programs
07/01/2025	06/30/2026	Provisional	**Name**	**Rate**	**Base**	**Location**	**Applicable To**
			Indirect	16.89 %	(B)	All	All Programs

(A) Base: Total direct costs excluding capital expenditures and the portion of subawards in excess of the first $25,000.

(B) Base: Total direct costs excluding capital expenditures and the portion of subawards in excess of the first $50,000.

Treatment of fringe benefits: Fringe benefits applicable to direct salaries and wages are treated as direct costs; fringe benefits applicable to indirect salaries and wages are treated as indirect costs.

Treatment of paid absences: Vacation, holiday, sick leave, and other paid absences are included in salaries and wages and are claimed on grants, contracts, and other agreements as part of the normal cost for the salaries and wages. Separate claims for the costs of these paid absences are not made.

Funding Transition Plan:

This proposal is for a one-year pilot study to pilot the commercial fishing industry-based Black Sea Bass Research Fleet approach to collect biological and fishery data on black sea bass in the Gulf of Maine. If successful, the project team will apply for additional funding to continue and expand data collection beyond the first year (pilot phase). Project staff from the Commercial Fisheries Research Foundation have previously been successful at piloting the Black Sea Bass

Research Fleet in Southern New England and the Mid-Atlantic through ACCSP and securing maintenance funding through ACCSP to continue Black Sea Bass Research Fleet data collection for an additional six years (the maximum allowed through ACCSP). Since then, project staff have secured Congressionally Directed Spending funding to maintain the Black Sea Bass Research Fleet's data collection in Southern New England and the Mid-Atlantic for an additional five years.

Summary of Proposal For Ranking Purposes

Project Type: New

Primary Program Priority *(10 pts)**:*** Biological Sampling

Data delivery plan (2 pts): This project includes a data delivery plan through which CFRF will regularly share data with ACCSP, ME DMR, fishing industry participants, stock assessment scientists, and managers.

Project Quality Factors

Multi-Partner/Regional Impact (3 pts):

This proposal includes a partnership between the Maine Department of Marine Resources, the Rhode Island based Commercial Fisheries Research Foundation, and the Gulf of Maine pot/trap and hook and line fisheries. The results of the proposed project have regional impacts and broad applications, as black sea bass are expanding to inhabit and potentially be harvested from the majority of the US east coast. This project will test the benefit of expanding CFRF's Black Sea Bass Research Fleet to the Gulf of Maine as a way to gain a better understanding in the distributional shift in black sea bass populations. Current fishery-independent surveys that occur in Maine state waters have encountered black sea bass in low numbers, potentially due to the fact these surveys do not cover the habitats black sea bass prefer an/or do not overlap with the timing black sea bass are in coastal Maine waters. Furthermore, the social and economic implications of this work could be extensive, as project data will contribute to the improvement of the northern Atlantic black sea bass stock assessment and management.

Contains Funding Transition Plan (4 pts):

This proposal contains a funding transition plan to evaluate the success of the pilot project and, if deemed appropriate, apply for long-term funding to continue data collection.

In-Kind Contribution (2 pts):

This proposal includes 65% in kind contribution which equates to two points.

Improvement in Data Quality/Quantity/Timeliness (4 pts):

This project will fill data gaps for black sea bass, which are ranked as a high-priority species with inadequate biological sampling by ACCSP. The project will increase fishery-dependent data for the northern stock of black sea bass as a whole as well as specifically increase data in the Gulf of Maine which is currently under sampled for black sea bass. Data will be available for stock assessment and management efforts in near real-time.

Potential Secondary Module as a By-Product (3 pts):

Catch and Effort: This project will start collecting black sea bass catch data in the Gulf of Maine by two industries: lobster pot and hook-and-line. This project will provide insight into the potential availability and catch of legal sized black sea bass by these industries.

Impact on Stock Assessment (3 pts):

Biological data from the Commercial Fisheries Research Foundation's Black Sea Bass Research Fleet was included in the 2023 Research Track Stock Assessment and is currently being included in the 2024 Management Track Stock Assessment for northern black sea bass (NEFSC 2023). The data is used in the assessment model to inform discards-at-length and catch-at-age estimates. As the Research Fleet is now a vetted input for the stock assessment, all biological data collected in this pilot project will be shared with stock assessment scientists moving forward to be directly included in the stock assessment. Research Fleet data is also being evaluated to contribute to a fishery-dependent index of abundance for northern black sea bass, which could be included in future assessments.

Other factors

Innovative (3 pts):

This project will utilize the innovative fishing-industry based Research Fleet approach, which is a demonstrated cost and time-efficient method to collect large amounts of fishery-dependent data for under sampled species and species undergoing rapid changes, such as black sea bass (Heimann *et al.*, 2023). The data from this project will help determine if current fishery-independent surveys are accurately representative of the presence of black sea bass in the Gulf of Maine through comparison of catches from this project to the current surveys ongoing in Maine.

Properly Prepared (1 pt):

This proposal follows the guidelines provided in the ACCSP Funding Decision Document.

Merit (3 pts): The pilot project we propose here would fill a high priority data gap using the already established CFRF Black Sea Bass Research Fleet. This collaboration between CFRF and ME DMR would promote sustainable management of this key indicator species and provide baseline data and framework for potential expansion of this program. ME DMR is always looking to efficiently fill data gaps in support of robust fisheries management.

References

Heimann, T., Verkamp, H., McNamee, J. and Bethoney, N.D. 2023. Mobilizing the fishing industry to address data gaps created by shifting species distribution. Frontiers in Marine Science, 10, p.1043676.

Northeast Fisheries Science Center (NEFSC). 2023. Report of the Black Sea Bass (*Centropristis striata*) Research Track Stock Assessment Working Group. https://apps-nefsc.fisheries.noaa.gov/saw/sasi.php

Rebecca Peters
Maine Department of Marine Resources
rebecca.j.peters@maine.gov

Related Experience

Marine Resource Scientist IV October 2023 - present
Maine Department of Marine Resources, West Boothbay Harbor, ME

- Director for the Division of Ecology and the Environment within the Bureau of Marine Science that oversees research programs surrounding offshore wind, highly migratory species, the ME-NH Inshore Trawl Survey, Maine Coastal Mapping Initiative, halibut, and technology advancements for programs within DMR.

Marine Resource Scientist III May 2022-October 2023
Maine Department of Marine Resources, West Boothbay Harbor, ME

- Groundfish Biologist and lead scientist of the Maine – New Hampshire Inshore Trawl Survey and the trawl survey in Maine's offshore wind research array

Marine Resource Scientist II March 2018-May 2022
Maine Department of Marine Resources, West Boothbay Harbor, ME

- Groundfish Biologist and lead scientist of the Maine-New Hampshire Inshore Trawl Survey

NOAA Sea Grant Knauss Fellow February 2017–January 2018
NOAA Fisheries Office of Science and Technology

- Served as the habitat and ecosystem science coordinator for NOAA Fisheries Office of Science and Technology's Habitat Science program as a NOAA Sea Grant Knauss Fellow
- Updated NOAA Fisheries' Habitat Assessment Improvement Plan to align goals with Ecosystem Based Management, supported the Ecosystem Science and Management Working Group of the NOAA Science Advisory Board, and coordinated a workshop and report to develop recommendations to improve NOAA Fisheries' ability to conduct benthic habitat mapping on fishery survey vessels
- Managed the FY18 Habitat Information for Stock Assessments call for proposals

Research Assistant June 2014 – January 2017
University of Maryland Eastern Shore

- Developed and conducted a research project to assess habitat preference and potential site fidelity of juvenile black sea bass in the Maryland Coastal Bays for completion of a master's degree Thesis titled: "Investigations into the ecology of juvenile black sea bass, *Centropristis striata,* in the Maryland coastal bays"
- Examined spatial and temporal distribution in abundance of black sea bass in the Maryland juvenile finfish trawl survey from 1989-2013
- Supervised two interns during completion of research projects

Education

M.S. Marine, Estuarine, and Environmental Science December 2016
University of Maryland Eastern Shore, Princess Anne, MD

- Thesis title: "Investigations into the ecology of juvenile black sea bass, *Centropristis striata,* in the Maryland coastal bays"

B.S. Biology December 2012
Old Dominion University, Norfolk, VA

Selected Publications and Technical Memos

- Waller, J., Bartlett, J., Bates, E., Bray, H., Brown, M. , Cieri, M., Clark, C., DeVoe,, W. Donahue, B., Frechette, D., Glon, H., Hunter, M., Huntsberger, C., Kanwit, K., Ledwin, S., Lewis, B., **Peters, R**, Reardon, K., Russell, R., Smith, M., Uraneck, C., Watts, R., Wilson, C. 2023. Reflecting on the recent history of coastal Maine fisheries and marine resource monitoring: the value of collaborative research, changing ecosystems, and thoughts on preparing for the future. ICES Journal of Marine Science. https://doi.org/10.1093/icesjms/fsad134
- LaFreniere, B.R., **Peters, R.,** Donahue, B., McBride, R., Mohan, J.A. 2023. What the Hake? Correlating Environmental Factors with Hake Abundance in the Gulf of Maine. Journal of Northwest Fishery Science. In review.
- Chapman, E.J., Byron, C.J., Lasley-Rasher, R., Lipsky, C., Stevens, J.R., **Peters, R**. 2020. Effects of climate change on coastal ecosystem food webs: implications for aquaculture. Marine Environmental Research. 162. https://doi.org/10.1016/j.marenvres.2020.105103.
- **Peters, R.**, A.R. Marshak, M.M. Brady, S.K. Brown, K. Osgood, C. Greene, V. Guida, M. Johnson, T. Kellison, R. McConnaughey, T. Noji, M. Parke, C. Rooper, W. Wakefield, and M. Yoklavich. 2018. Habitat Science is a Fundamental in an Ecosystem-Based Fisheries Management Framework: An Update to the Marine Fisheries Habitat Assessment Improvement Plan. U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-F/SPO-181, 29p.
- **Peters, R.** and P. Chigbu. 2017. Spatial and Temporal Patterns of Abundance of Juvenile Black Sea Bass (*Centropristis striata*) in the Maryland Coastal Bays. Fishery Bulletin. 115(4): 504-516. Doi: 10.7755/FB.115.4.7

Selected Presentations

- **Peters, R**. E. Bates, J. Waller, and C. Guenther (2023, August). "Who's eating juvenile lobsters?": An evaluation of lobster predation in the Gulf of Maine using stomach content analysis. 153rd American Fisheries Society Annual Meeting, Grand Rapids, MI.
- Marshak, A.M., S.K. Brown, and **R. Peters.** (2017, August). Habitat Science is an Essential Element of Ecosystem-Based Fisheries Management. 147th American Fisheries Society Annual Meeting, Tampa, FL.
- **Peters, R.** and P. Chigbu (2016, February). Temporal Variation in Juvenile and Young-of-the-Year Black Sea Bass Abundance in the Maryland Coastal Bays. Ocean Sciences Meeting, New Orleans, LA.

Boards and Committees

- NERACOOS Board – December 2023-present
- Maine Climate Council Coastal and Marine Working Group Staff, 2019-present

Awards and Fellowships

- 2017 NOAA Sea Grant John A. Knauss Marine Policy Fellowship
- American Fisheries Society Tidewater Chapter Eileen Setzler-Hamilton Memorial Scholarship (April 2016)
- NSF CREST-CISCEP Graduate Research Assistantship (2014-2016)

Jesica Waller
Maine Department of Marine Resources
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Jesica.d.waller@maine.gov

PROFILE:

- Knowledge and oversight of the State of Maine's programs to research, monitor, and compile data from commercial and recreational coastal marine fisheries. This includes coordination of research plans across programs and with external research partners.
- Knowledgeable of Maine's fishing industries and how they operate.
- Knowledgeable about state and federal funding structures to support this work.

EDUCATION:

B.S. Marine and Freshwater Biology, University of New Hampshire, Durham, NH 2009
M.S. Marine Biology, University of Maine, Orono, ME 2016

EMPLOYMENT EXPERIENCE:

July 2022 – Present **Marine Resource Scientist IV**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Division Director for the Division of Biological Monitoring and Assessment
- Oversee fishery monitoring and research for commercially important marine species
- Lead research around emerging fisheries and climate related topics
- Supervise a staff of 35 MEDMR researchers and maintain external collaborations
- Hire, train, and supervise research staff and students supported by MEDMR programs
- Write research proposals to federal agencies to obtain funding for MEDMR programs
- Coordinate the drafting and submission of all federal grant reporting requirements
- Conduct research and analyses, and write and review reports on timely research questions
- Work with diverse stakeholders to coordinate research in support of MEDMR priorities
- Represent MEDMR on state, regional, and federal research panels
- Advise senior staff on issues ranging from new research findings to funding opportunities

March 2018 – July 2022 **Marine Resource Scientist III**
Maine Department of Marine Resources
West Boothbay Harbor, ME

- Lead question-based lobster research to support the management of the Maine lobster fishery
- Build research collaborations, submit proposals for funding and author research publications
- Co-develop the MEDMR wet lab and serve as the point person for biosecurity
- Represent MEDMR at regional meetings, research conferences, and the Maine Climate Council
- Coordinated the MEDMR Lobster Research Collaborative and organized quarterly meetings

Jan. 2017 – March 2018 **Research Technician**
Bigelow Laboratory for Ocean Sciences
East Boothbay Harbor, ME

- Designed and performed laboratory and field experiments for grant funded projects
- Contributed to authorship of peer-reviewed publications and federal/state grant proposals
- Led field and lab-based data collection for multiple projects with no supervision
- Supervised and developed research projects for summer undergraduate interns

Sept. 2014 – Dec. 2016 Graduate Student and Canadian American Center Fellow
University of Maine (UMaine), Darling Marine Center
Walpole, ME

- Thesis title: Linking Rising pCO_2 and Temperature to the Larval Development, Physiology and Gene Expression of the American Lobster (*Homarus americanus*)
- Completed all thesis research and coursework and secured fellowship funding annually

Selected Publications

1. **Waller, J.,** Bartlett, J., Bates, E., Bray, H., Brown, M., Cieri, M., ... & Wilson, C. (2023). Reflecting on the recent history of coastal Maine fisheries and marine resource monitoring: the value of collaborative research, changing ecosystems, and thoughts on preparing for the future. *ICES Journal of Marine Science*, *80*(8), 2074-2086.
2. Ellertson, A. A., **Waller, J. D.,** Pugh, T. L., & Bethoney, N. D. (2022). Differences in the size at maturity of female American lobsters (*Homarus americanus*) from offshore Southern New England and eastern Georges Bank, USA. *Fisheries Research*, *250*, 106276.
3. McClenachan, L., Record, N. R., & **Waller, J. D**. (2022). How do human actions affect fisheries? Differences in perceptions between fishers and scientists in the Maine lobster fishery. *FACETS*, *7*(1), 174-193.
4. **Waller, J. D**., Reardon, K. M., Caron, S. E., Jenner, B. P., Summers, E. L., & Wilson, C. J. (2021). A comparison of the size at maturity of female American lobsters (*Homarus americanus*) over three decades and across coastal areas of the Gulf of Maine using ovarian staging. *ICES Journal of Marine Science*, *78*(4), 1267-1277.
5. **Waller, J.D**., Reardon, K.M., Caron, S.E., Masters, H.M., Summers, E.L. & Wilson, C.J. (2019). Decrease in size at maturity of female American lobsters *Homarus americanus* (H. Milne Edwards, 1837) (Decapoda: Nephropidae) over a 50-year period in Maine, USA. *Journal of Crustacean Biology*, *39*(4), 509-519.
6. **Waller, J. D.,** Wahle, R. A., McVeigh, H., & Fields, D. M. (2017). Linking rising pCO_2 and temperature to the larval development and physiology of the American lobster (*Homarus americanus*). *ICES Journal of Marine Science*, *74*(4), 1210-1219.

Synergistic Activities

2021-present *Steering Committee Member,* Maine Ocean and Coastal Acidification Partnership
2021-present *Advisory Committee Member*, Dalhousie University (PhD student, M. Rampual)
2021-present *Reviewer, Journal of Crustacean Biology*
2019-present *Agency support,* Maine Climate Council, Coastal and Marine Working Group
2019-present *Reviewer, Canadian Journal of Fisheries and Aquatic Sciences*
2018-2022 *Coordinator,* Maine Department of Marine Resources Lobster Research Collaborative
2017-present *Reviewer, ICES Journal of Marine Science*

Corrin Flora
Maine Department of Marine Resources
corrin.flora@maine.gov

RELATED EXPERIENCE

Marine Resources Management Coordinator – *Maine Department of Marine Resources, Augusta, ME* **February 2024 – Present**

- Provide policy guidance to department staff, plan and facilitate meetings, public outreach, creating documents, communicating with a wide range of stakeholders and division management.
- Attend and participate in Atlantic States Marine Fisheries Commission and federal council interjurisdictional management meetings, work groups, committees, and teams as needed. Write reports, compliance, plans, and comments. Review and comment on management and rule documents.
- Manage state ground fish permit bank through cooperation with Maine sectors and NOAA fisheries.

Fisheries Management Plan Coordinator - *North Carolina Division of Marine Fisheries, Morehead City, NC* **June 2020 – February 2024**

- Provide leadership and policy guidance throughout the division fishery management plan (FMP) process; including planning and facilitating meetings, public outreach, creating documents, communicating with a wide range of stakeholders and division management, and decision making.
- Develop and ensure FMP schedules and timelines are maintained following internal FMP guidelines. Communicate with staff to facilitate tasks, anticipate problems, and recommend solutions. This includes providing alternative suggestions to how to meet deadlines.
- Hold a monthly virtual meeting to keep DMF staff informed on the status of FMPs.
- Coordinate and participate in Director's Review Team, advisory committees, cross-sectional programs, FMP schedule, strategic planning, meetings, public engagement, and biologist training.
- Serve on committees and workgroups in absence or support of Section Chief.

Biologist I - *North Carolina Division of Marine Fisheries, Elizabeth City, NC* **JUNE 2015 - JUNE 2020**

- Lead biologist for Atlantic Menhaden, Blue Crab, and Invasive Species.
- Member of The Gulf and South Atlantic Regional Panel on Aquatic Invasive Species, Atlantic State Marine Fisheries Commission technical committees, the NC Aquatic Nuisance Species Plan Development Team, and Plan Development Teams.
- Program lead for fisheries-independent and fisheries-dependent surveys
- Member of several division biological review teams; including gear, life history, and commercial fisheries.
- Field work conducting fish/crab house sampling; onboard sampling using water quality monitoring equipment, acoustic monitoring and water quality sondes, trawls, and gillnets; trailering and operating small vessels; and tagging fish. Support fishery data collection.
- Analyze and summarize data for reports, stock assessments, and FMPs using SAS, SQL, Microsoft Excel, PowerPoint, and Word. Using multivariate analysis and modeling to assist in data analysis.

Biological Science Laboratory Technician - *USDA ARS, Stoneville, MS* **JUNE 2013 - JUNE 2015**

- Prepare and maintain fish culture tanks used in research projects through all catfish life stages. This includes light plumbing, biological security, proper cleaning, feeding, monitoring fish health, anesthetizing fish, euthanizing fish, and proper animal handling.
- Coordinate and implement experimental setup, breakdown, and data collection/maintenance.

- Assist in necropsies, biopsies, tissue sampling, sample preparations, and morphological, biochemical, histological, and physiological measurements or analysis.
- Calibrate, perform maintenance, and properly operate laboratory equipment; including spectrophotometers, ion analyzers, osmometers, centrifuges, freezers, and incubators.

Biologist: Vessel Call-in Coordinator - *Integrated Statistics, Falmouth, MA* **JUNE 2006 - JUNE 2011**

- NOAA Fisheries Northeast Fisheries Science Center Industry Funded Scallop Observer Program Vessel Call-In Coordinator. Review, catalog, and select coverage of declared scallop trips through randomized selection process for fair, equitable, and representative coverage. Monitor coverage and compliance across various areas and permit types. Communicate with service providers and the office of law enforcement as needed.
- Prepare outreach materials
- Attend New England Fisheries Management Council, Scallop Committee, and Scallop Plan Development Team meetings as needed. Provide guidance on sea scallop management plans.
- Participate in at sea surveys and commercial scallop trips.

Commercial Fisheries Observer - *AIS inc, New Bedford, MA* **MARCH 2004 - MARCH 2005**

- Accompany commercial fishing operations on 1 to 14 day trips. Record information on vessel, gear, catch/discard information, species identification, measurements, and biological samples.
- Record incidental takes of marine mammals, sea turtles, and sea birds.

EDUCATION

M.S. Wildlife, Fisheries, and Aquaculture, Mississippi State University, Mississippi State, MS - *2013*
B.S. Marine Science, Southampton College Long Island University, Southampton, NY - 2003

SELECTED PAPERS

- Anstead, KA, K Drew, D Chagaris, A Schueller, JE McNamee, A Buchheister, G Nesslage, JH Uphoff Jr, MJ Wilberg, A Sharov, MJ Dean, J Brust, M Celestino, S Madsen, S Murray, M Appelman, JC Ballenger, J Brito, E Cosby, C Craig, C Flora, K Gottschall, RJ Latour, E Leonard, R Mroch, J Newhard, D Orner, C Swanson, J Tinsman, E Houde, TJ Miller, H Townsend. The Path to an ecosystem approach for forage fish management: A case study of Atlantic menhaden. Frontiers in Marine Science, 8 (2021):491.
- Peterson, BC, C Flora, M Wood, BG Bosworth, S Quiniou, TE Greenway, TS Byars, DJ Wise. Vaccination of full-sib channel catfish families against enteric septicemia of catfish with an oral live attenuated Edwardsiella ictalurid vaccine. Journal of the World Aquaculture Society. 47(2). (2016)
- Baker, BH, R Kröger, JD Prevost, T Pierce, JJ Ramirez Avila, JM Prince Czarnecki, D Faust, C Flora. A field scale investigation of nutrient and sediment reduction efficiencies of a low-technology best management practice: low-grade weirs. Ecological Engineering, 91 (2016):240-248.
- Flora C., Kröger K. Use of vegetated drainage ditches and low-grade weirs for aquaculture effluent mitigation: I. Nutrients Aquaculture Engineering 60 (2014) 56-62
- Flora C., Kröger K. Use of vegetated drainage ditches and low-grade weirs for aquaculture effluent mitigation: II. Suspended Sediment Aquaculture Engineering 60 (2014) 68-72
- Kröger R., Prevost D., Littlejohn T., Henderson J., Pierce S., Flora C., Poganski B. Evidence towards sediment accumulation characteristics of slotted pipes as best management practices on agricultural landscapes. Ecological Engineering 51 (2013) 249-255

Hannah J. Verkamp

Commercial Fisheries Research Foundation
hverkamp@cfrfoundation.org
(401) 515-4892

Education

Master of Science, Marine Science. University of New England, Biddeford, ME

Bachelor of Science, Biological Sciences, *summa cum laude*. University of Arkansas, Fayetteville, AR.

Relevant Work Experience

Senior Research Associate February 22, 2024 – Present
Commercial Fisheries Research Foundation
61B East Farm Rd Kingston, RI 02881

- Leading the foundation's research on black sea bass and supervising research biologists
- Developing, managing, and evolving all phases of fisheries research projects
- Managing outreach activities for all of the organization's research projects, including tracking deliverables and reporting to funding agencies
- Expanding and improving the organization's outreach program to reach broader audiences and include new Diversity, Equity, and Inclusion initiatives
- Continuing duties described for the Research Biologist position below

Research Biologist February 21, 2021 – February 21, 2024
Commercial Fisheries Research Foundation
61B East Farm Rd Kingston, RI 02881

- Collaborated with internal and external stakeholders, including scientists, fishing industry members, and fisheries management professionals, to develop and lead research projects
- Collected fishery, biological, and environmental data at-sea and on-land
- Reviewed data and performed quality control/quality assurance checks
- Used statistical programs such as R, SQL, and Excel to manage and analyze data and produce publication-quality figures and tables
- Led meetings and workshops with fishery stakeholders, including fishermen, state and federal agencies, fishery managers, and other academic and nonprofit institutions
- Reported findings and managing deliverables for research projects
- Wrote grant proposals, reports, and scientific publications
- Communicated audience-appropriate scientific, technical, and programmatic information orally and in written format to a variety of audiences

Selected Publications

Verkamp HJ, Heimann T, McNamee J, Jones A, and Bethoney ND. (2023). An Overview of the Commercial Fisheries Research Foundation and Rhode Island Department of Environmental Management Black Sea Bass Research Fleet: A Working Paper for the 2022 Black Sea Bass Research Track Stock Assessment. Report of the Black Sea Bass (*Centropristis striata*) Research Track Stock Assessment Working Group.

Heimann T, McNamee J, **Verkamp HJ**, Bethoney ND. (2023). Mobilizing the Fishing Industry to Address Data Gaps Created by Shifting Species Distribution. *Frontiers in Marine Science*, 10, https://doi.org/10.3389/fmars.2023.1043676

Verkamp HJ, Nooij J, Helt W, Ruddock K, Gerber Williams A, McManus MC, Bethoney ND. (2022). Scoping Bay Scallop Restoration in Rhode Island: A Synthesis of Knowledge and Recommendations for Future Efforts. *Journal of Shellfish Research*, 41(2): 153-171, https://doi.org/10.2983/035.041.0201

Verkamp HJ, Hammerschlag N, Quinlan J, Langan JA, and Sulikwoski JA. (2022). Preliminary investigation of reproductive hormone profiles in the blacktip shark (Carcharhinus limbatus), a placental viviparous species, in southern Florida. *Marine and Freshwater Research*, 73(4), 8pp. doi.org/10.1071/MF21235

Verkamp HJ, Skomal G, Winton M, and Sulikowski JA. (2021) Using reproductive hormone concentrations from the muscle of white sharks (*Carcharodon carcharias*) to evaluate life stage and potential habitat use in the coastal waters of Cape Cod, Massachusetts. *Endangered Species Research*, 44: 231-236 doi.org/10.3354/esr01109

Selected Presentations

Verkamp, HJ, McNamee, J, and Bethoney ND. (2024). Empowering fishermen to fill data gaps for a rapidly changing fishery: The Black Sea Bass Research Fleet. World Fisheries Congress. Seattle, WA. Poster.

Verkamp HJ, Huntsberger C, Bethoney ND. (2023). Augmenting an offshore wind farm monitoring survey to incorporate biological condition monitoring. Annual Meeting of the American Fisheries Society. Grand Rapids, MI. Poster.

Verkamp HJ, Heimann T, McNamee J, Bethoney ND. (2021). Using a fishery-dependent research fleet approach to characterize the composition of black sea bass (*Centropristis striata*) discards in the Southern New England and Mid-Atlantic fishery. Annual Meeting of the American Fisheries Society. Baltimore, MD. Oral.

Verkamp HJ, Skomal G, Winton M, Sulikowski JA. (2019) First observations of reproductive hormone concentrations in white shark (*Carcharodon carcharias*) skeletal muscle tissue. Joint Meeting of Ichthyologists and Herpetologists. Snowbird, UT. Oral.

Dr. NAIFF DAVID BETHONEY
Executive Director
Commercial Fisheries Research Foundation
P.O. Box 278
Saunderstown, RI
401-515-4662, dbethoney@cfrfoundation.org

EDUCATION:

University of Massachusetts at Dartmouth School for Marine Science and Technology
PhD Dissertation: Understanding and avoiding River herring and American shad bycatch in the Atlantic herring and mackerel mid-water trawl fisheries.
Cum. GPA: 3.92 PhD Received 2013

MA Thesis: Association between diet and epizootic shell disease in the American lobster (*Homarus americanus*) around Martha's Vineyard
Cum. GPA: 3.93 M.S. Received 2010

Colby College - Waterville, ME
Major: Biology with Concentration in Environmental Science
Cum. GPA: 3.41, Cum Laude B.A. Received 2008

RECENT WORK EXPERIENCE:

- Commercial Fisheries Research Foundation Spring 2020-Presesent

Executive Director: Responsible for overseeing foundation business manager, scientific staff, interns, and consultants to carry out all tasks associated with ongoing projects and general administration. In addition, responsible for pursuing new partnerships and projects, including proposal development and submission, under the advisement of the foundation Board of Directors. Served on New England Fishery Management Council's Sea Scallop Survey Working Group and serves as a Responsible Offshore Science Alliance research advisor and on the Rhode Island Marine Fisheries Council.

- UMASS-Dartmouth School for Marine Science and Technology Fall 2008-Spring 2020

Research Assistant Professor, Fall 2014-Spring 2020: All responsibilities of research associate position related to drop camera and herring work with the ability to be lead principal investigator on research proposals and serve on student committees.

Research Associate, Summer 2013-Summer 2014: All responsibilities of research assistant position described below with management and development responsibilities for scallop drop camera and groundfish video surveys. Management responsibilities include equipment purchasing and maintenance and oversight of all technical operations and student involvement.

Research Assistant, Summer 2010- Spring 2013: Major responsibilities included coordinating River Herring bycatch avoidance program, assisting the Massachusetts Division of Marine Fisheries port side sampling program, and scallop drop camera survey at-sea data collection and analysis.

Graduate Research Assistant, Fall 2008-2010: Assisted with American lobster research including lobster husbandry, measuring and photographing lobsters, collecting larvae, and setting up housing apparatuses.

SCIENTIFIC JOURNAL PUBLICATIONS (LAST 3 YEARS):

1. Huntsberger CJ, Shank B, McManus MC, Ellertson AE, Bethoney ND. 2024. Industry reported biological data informs population demographics and commercial fleet heterogeneity for American lobster (Homarus americanus). Fisheries Research. 273. DOI: 10.1016/j.fishres.2024.10695

2. Arnott SA, Long MP, Ellertson AE, Bethoney ND. 2023. American lobster and Jonah crab populations inside and outside the Northeast Canyons and Seamounts Marine National Monument, USA. Marine and Coastal Fisheries 15(5). DOI: 10.1002/mcf2.10266.

3. Olsen NA, Bahr F, Bethoney ND, Mercer AM, Gawarkiewicz G. 2023. Integrating fishers' knowledge with oceanographic observations to understand changing ocean conditions in the Northeast United States. Frontiers in Marine Science. 10:1144178.

4. Heimann T, Verkamp HJ, McNamee J, Bethoney ND. 2023 Mobilizing the fishing industry to address data gaps created by shifting species distribution. Frontiers in Marine Science. 10:1043676.

5. Verkamp HJ, Nooj J, Helt W, Ruddick K, Gerber-Williams A, McManus MC, Bethoney ND. 2022. Scoping bay scallop restoration in Rhode Island: a synthesis of knowledge and recommendations for future efforts. Journal of Shellfish Research 41(2):153–171

6. Ellertson AE, Waller JD, Pugh TL, Bethoney ND. Differences in the size at maturity of female American lobsters (Homarus americanus) from offshore Southern New England and eastern Georges Bank, USA. 2022. Fisheries Research. DOI: 106276

GRANTS RECEIVED AS A PRINCIPAL INVESTIGATOR (LAST YEAR):

1. "Exploring the creation of a new seafood market segment that would enhance the resiliency of small-scale commercial fishing industry in Rhode Island" — March 2024
   Awarded from: University of Rhode Island
   Value: $28,387
2. "Mechanical jigs for resilience of sustainable fishing to wind farm development" — January 2024
   Awarded from: New York State Energy Research and Development Authority
   Value: $354,337
3. "Research Agreement" (Squid jigging research) — January 2024
   Awarded from: Park City Wind LLC
   Value: $50,000
4. "Research Agreement" (Squid jigging research) — January 2024
   Awarded from: Commonwealth Wind LLC
   Value: $50,000
5. "FY 2024: Advancing Fishery Dependent Data Collection for Black Sea Bass (Centropristis striata) in the Southern New England and Mid-Atlantic Region Utilizing Modern Technology and a Fishing Vessel Research Fleet Approach" — January 2024
   Awarded from: Rhode Island Department of Environmental Management
   Value: $43,635
6. "Monitoring Technologies for Ghost Gear and Ecosystem Biodiversity" — December 2023
   Awarded from: University of Rhode Island
   Value: $515,000
7. "Determining the dose- and range-dependent impacts of windfarm noise on stress in the American lobster" — September 2023
   Awarded from: Woods Hole Oceanographic Institution
   Value: $19,820
8. "Fishermen on the frontlines of addressing modern ocean problems" — September 2023
   Awarded from: National Oceanic and Atmospheric Administration
   Value: $500,000
9. "Fostering the development of automatic squid jigging" — September 2023
   Awarded from: University of Rhode Island
   Value: $29,621
10. "Reducing small scallop and sand dollar catch through dredge bag modifications" — June 2023
    Awarded from: National Oceanic and Atmospheric Administration
    Value: $171,493
11. "Establishing the Research Fleet approach in the Atlantic sea scallop fishery" — June 2023
    Awarded from: National Oceanic and Atmospheric Administration
    Value: $204,666
12. "SRW01 – Trawl Survey" — June 2023
    Awarded from: Sunrise Wind LLC
    Value: $508,110
13. "REV01 – Trawl Survey" — June 2023
    Awarded from: Revolution Wind LLC
    Value: $508,110
14. "REV01 – Ventless Trap Fisheries Monitoring" — June 2023
    Awarded from: Revolution Wind LLC
    Value: $831,993
15. "Exploring the feasibility of a Common Spider Crab (*Libinia emarginata*) fishery" — May 2023
    Awarded from: Rhode Island Sea Grant
    Value: $5,000

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Wes Moore, Governor
Aruna Miller, Lt. Governor
Josh Kurtz, Secretary
David Goshorn, Deputy Secretary

Geoff White, Director
Julie DeFilippi Simpson, Deputy Director
Atlantic Coastal Cooperative Statistics Program
1050 N. Highland Street, Suite 200 A-N
Arlington, VA 22204

August 13, 2026

Dear Mr. White and Ms. DeFilippi Simpson,

Maryland Department of Natural Resources (MDNR) is pleased to submit this final proposal to the Atlantic Coastal Cooperative Statistics Program titled “Developing Maryland’s Recreational Fishery Data Collection Program”.

The final proposal provides responses to the initial feedback provided by ACCSP Operations and Advisory Committees (highlighted in yellow). Specifically, the final proposal provides additional information on:

- Funding availability and timeline of the RAPID Workshops: A MDNR staff will be able to attend the workshops regardless if the proposal funding is available at the time of the workshop.

- Existing voluntary recreational data collection programs: MDNR has a limited number of small-scale volunteer angler fishing surveys for select species (e.g., striped bass and shad). While the volunteer angler survey data is used to support stock assessments with discard lengths, sample sizes can be very limited and tend to be focused in Chesapeake Bay. The aim of MDNR’s Recreational Fishery Data Collection Program would be to not only increase sample sizes but to expand the number of species data is collected on and collect data that could be used to supplement NOAA Fisheries’ Marine Recreational Information Program (MRIP) effort and catch estimates. MDNR also collects some limited fishing activity information from a Chesapeake Bay and Coastal Sport Boat License Questionnaire but this information is not able to supplement MRIP effort or catch estimates.

- Coordination with neighboring states: MDNR would share all information collected from this project on recreational data collection systems around the country with neighboring fishery management agencies as well as its development/implementation plan. As states

think ahead to what the future of recreational data collection along the Atlantic coast could look like, it is hoped that there would be interest from the neighboring fishery management agencies in developing the data collection system so that it could be used regionally and not just by MDNR.

- Non-marine species: Both tidal fresh and tidal species (as well as coastal species) data would be included in the project information gathering and development/implementation plan. Freshwater fish species would not be included. This will result in a well-rounded, complete data collection system for all tidal and ocean fishery management.

Thank you for the opportunity to submit this proposal for consideration.

Sincerely,



Jodi Baxter, Division Director
Maryland Department of Natural Resources
Fishing and Boating Services
580 Taylor Ave., B-2
Annapolis, Maryland 21401

Proposal for funding made to the:
Coordinating Council and the Operations Committee
Atlantic Coastal Cooperative Statistics Program
1050 N. Highland St., Ste. 200A-N Arlington, VA 22201

Atlantic Coastal Cooperative Statistics Program (ACCSP) FY 2027 Proposal
Developing Maryland's Recreational Fishery Data Collection Program

Submitted By:
Jodi Baxter
Maryland Department of Natural Resources
Fishing and Boating Services
580 Taylor Ave., B-2
Annapolis, Maryland 21401
jodi.baxter@maryland.gov
(410) 279-8219

Applicant Name:	Maryland Department of Natural Resources Fishing and Boating Services
Project Title:	Developing Maryland's Recreational Fishery Data Collection Program
Project Type:	**New Project**
Requested Award Amount:	**$18,873.00**
Requested Award Period:	FY2027 (December 1, 2026 to November 30, 2027)
Primary Program Priority:	**Catch and Effort Module (Recreational) 100%**
Date Re-Submitted:	August 14, 2026
Principal Investigator:	Jodi Baxter, Division Manager, jodi.baxter@maryland.gov

Atlantic Coastal Cooperative Statistics Program (ACCSP) FY 2027 Proposal
Maryland Department of Natural Resources, Fishing and Boating Services
Developing Maryland's Recreational Fishery Data Collection Program

1.0 Objective

The Maryland Department of Natural Resources, Fishing and Boating Services **(MDNR) has created a Recreational Fishery Data Collection Program towards the goal of implementing a recreational catch and effort reporting system which could also supplement NOAA Fisheries' Marine Recreational Information Program (MRIP). This proposal supports phase one of the development of Maryland's program. The project will focus on assessing Maryland's data needs and gaps, examining existing supplemental or alternative recreational data collection programs across the country, understanding lessons learned from the development and implementation of existing systems and creating a plan for the development of a Maryland data collection system.** After this project ends, **phase two under Maryland's Recreational Fishery Data Collection Program will be the actual development and implementation of a data collection system** from the plan drafted during this project.

- Support Maryland's development of a Recreational Fishery Data Collection Program to collect and use effort and catch data in management and assessments.
- **Examine existing recreational data collection programs in other states** and understand lessons learned from when those programs were developed and implemented.
- **Create a plan for the development and implementation of a Maryland Recreational Fishery Catch and Effort Data Collection System that can be used in state assessments, regional assessment, and could supplement MRIP**.

2.0 Need

In recent years the need for recreational fishing catch and effort data is becoming more important within fisheries management and stock assessments. **While Maryland's commercial fishing sector is required by law to submit harvest and effort information, this information is not currently required in Maryland for the recreational sector with the exception of the charter and for-hire sector.**

MDNR currently has limited, small-scale voluntary programs to collect recreational fishing information on striped bass, shad, blue crabs and fish caught over artificial reefs. There is also the Chesapeake Bay and Coastal Sport Boat License Questionnaire which provides general information on effort, demographics, and fish species caught from individuals that renew their licenses annually. Some data from the volunteer angler surveys are used in stock assessments for the discard lengths within the striped bass stock assessment. None of

the data from the Questionnaire is able to be used in stock assessments and management. Furthermore, the small-scale voluntary programs only obtain information when fish were caught but often do not provide information on effort when no fish where caught which needed to determine catch rates. The individuals using the small-scale volunteer programs tend to be anglers that fish very frequently throughout the year, hence the occasional and infrequent angler data is often not being recorded which can over-estimate fishing information. **MDNR's Recreational Fishery Data Collection Program and proposed data collection system aims to overcomes the current challenges within these existing projects. Ultimately the program will collect more data on all tidal and ocean species in a way that could be used to improve stock assessments, setting management limits towards sustainable fisheries and/or understanding fishing effort and demographics.**

Current estimates for recreational catch and effort are calculated using MRIP. While this program is effective and required for fish management, it can be limiting in four ways: (1) assessing species that are not federally managed such as blue crabs, (2) assessing tidal fresh species such as yellow perch and the invasive blue catfish, (3) assessing tidal and coastal species that can be harder for MRIP's Access Point Angler Intercept Survey (APAIS) to intercept fishing trips (e.g., tilefish and cobia) or occur in Wave 1, when APAIS does not conduct intercept surveys in Maryland (e.g., striped bass), and (4) collecting recreational fishing catch and effort data from private residences or departing from private residences within the 11,684 miles of Chesapeake Bay shoreline and 248 miles of Maryland's coastal bay shoreline.

Supplementing the MRIP information collected within Maryland has risen to concern among the public to the point that Maryland legislators have proposed laws in recent years. These **proposed laws include mandatory recreational striped bass reporting, development of a recreational fishing reporting mobile application, and development of a Recreational Fishery Data Collection Program within MDNR**. Both recreational and commercial fisheries sector stakeholders advocate for collecting Maryland-specific recreational fishing catch and effort data. These stakeholders value sustainable fish populations and realize that overcoming current data gaps could improve management and sustainability. Additionally**, the Chesapeake Bay Blue Crab Stock Assessment identified recreational blue crab harvest as a significant data gap impacting the accuracy of assessments. Improving blue crab recreational harvest information would benefit Chesapeake Bay managers in all Bay jurisdictions.**

To address these concerns and the need for recreational fishing catch and effort data, MDNR has **recently created the Recreational Fishery Data Collection Program. MDNR is in the process of hiring a coordinator for the program currently.** One of the first tasks of the coordinator's job will be to examine existing supplemental or alternative recreational data collection programs in other states, understand lessons learned from when those programs were developed, **and ultimately develop a system for data collection in Maryland that will be able to be used in fisheries management and assessments**.

MDNR's proposed project requests funding to support the coordinator's work by conducting information gathering sessions with other state agency staff overseeing their alternative or supplemental data collection systems and, if possible, conduct site visits while the systems are in use. **Travel would also be required to various meetings such as Atlantic, Gulf, and Pacific States Marine Fisheries Commission meetings where the coordinator could interact with multiple state and federal managers.**

The information collected during this project will be critical in assisting MDNR when developing a recreational reporting system that will collect scientifically sound data to be used in management and assessment, as well as supplement the MRIP program.

3.0 Results and Benefits

This project is the first phase of the development of MDNR's Recreational Fishery Data Collection Program. The results of this project will yield a report of existing supplemental or alternative recreational data collection systems and a recommended plan towards the development of an MDNR data collection system. Understanding existing supplemental or alternative systems, and lessons learned while these systems were developed, provides MDNR with a good foundation while formulating a plan for the development of a reporting system that fits MDNR's needs, **collects scientifically sound data utilized in management and assessments, and is easily accessible and user friendly to the recreational anglers themselves**.

This project supports NOAA Fisheries' Recreational Angler Partnership Improvement Directive (RAPID) framework. RAPID's goal as stated by NOAA is to modernize recreational catch data collection within a partnership-driven environment and empower states to implement data collection systems that will be able to improve data and better serve angler communities, fisheries management, and sustainable fish populations. The intent of developing Maryland's Recreational Fishery Data Collection Program is to **complement and supplement the data collected from MRIP, so that all of Maryland's data needs are met.** The data collection system eventually developed under this program, along with MRIP data, should allow Maryland to better manage species of concern like striped bass, blue crabs, and the invasive blue catfish.

Even though this project is required for MDNR's development of a supplemental data collection system, **the project's final report could be of assistance to other states in their initial phases of developing a similar program. North Carolina is currently building a recreational fisheries data system for five species (red drum, flounder, spotted seatrout, striped bass and weakfish), which will be mandatory for anglers to submit catch data. It's likely that other states are in similar situations. Information learned and consolidated into one report could be of assistance to other coastal states besides Maryland. Maryland's neighboring agencies (Virginia Marine Resource Commission and Potomac River Fisheries Commission) could be particularly interested in the outcome of this project**

when it comes to state-managed species and regionally managed species like blue crabs.

During and after this project, the Recreational Data Coordinator, currently being hired to oversee MDNR's program, will be in an effective position to **assist other states developing their program and/or to coordinate with MDNR to perhaps use the same data collection system ultimately developed using information gathered from this project. The Coordinator will be in contact with Maryland's neighboring agencies that manage recreational fisheries to understand their recreational fishery management and data gaps/needs.** Areas of overlap will be assessed and, if possible, built into the data collection system development and implementation plan.

Information collected and synthesized during this project will ultimately be used when developing a recreational catch and effort data collection system. **This system will increase the quantity and quality of data as well as timeliness for when data is received**. Currently only the MRIP program is used to collect Maryland's recreational fishing data which is then later used in assessments and management. **Implementing a new supplemental data collection system would allow for the increase of data collection of species not usually targeted or intercepted by APAIS (such as cobia, tilefish, blue crabs, yellow perch, and blue catfish), catch and effort from private residences, and could supplement MRIP data. The overall data quality would improve as the system would be designed to be used in assessments for state managed species like yellow perch, regionally managed species like blue crabs, and federally managed species like striped bass. The data collection system would be designed so that information collected would be able to be used in a timely manner, incorporating daily trip-level methodology.**

Maryland's management of recreational fish species includes fish residing in the ocean, coastal bays, and Chesapeake Bay. Both tidal fresh and tidal species (as well as ocean species) data would be included in the project information gathering and data collection system development and implementation plan. Freshwater fish species will not be included. **This will result in a well-rounded, complete data collection system for all tidal and ocean fishery management**.

Appendix A provides more information on how the proposed project meets each of the elements outlined in the Proposal Ranking Criteria Document.

4.0 Data Delivery Plan

All information collected during this project will be synthesized into a report, detailing the review of current recreational fishery data collection systems and how the data collected can be used in management and assessments**. A detailed plan on the development and**

implementation of a future recreational data collection system for Maryland will be included. The report will be submitted to ACCSP at the end of the project.

5.0 Approach

This **project occurs during phase one** of the development of MDNR's Recreational Fishery Data Collection Program. The project **will focus on examining existing supplemental or alternative recreational data collection programs and creating a plan for the development of the MDNR data collection system.** To accomplish this, MDNR's recreational data coordinator will **attend fisheries management commission meetings and recreational technical committee meetings, meet with MDNR and neighboring (adjacent) jurisdictional staff to determine data needs for state and regional assessments and management, conduct information gathering sessions with state agencies that have existing reporting systems, and, if possible, conduct site visits when the systems are in use**. Synthesis of this information will be critical to create a plan to develop and implement MDNR's data collection system. After this project ends**, phase two (a separate future project)** under MDNR's Recreational Fishery Data Collection Program **will be the actual development and implementation of a data collection system from the plan drafted during phase one.**

MDNR is currently in the process of hiring a coordinator for the recently created Recreational Fishery Data Collection Program. It will be the coordinator's responsibility to conduct this project under the guidance of the MDNR Commercial and Recreational Fisheries Data Management and Quota Monitoring Division Director.

Step One: Assessing Maryland's Recreational Data Needs

MDNR's recreational data coordinator will meet with MDNR biologists and managers to determine and assess data needs and data gaps with regards to recreational fishing catch and effort. This step will provide a solid foundation when reviewing existing recreational data collection systems in terms of usability for Maryland's needs.

Step Two: Online Information Gathering.

MDNR's recreational data coordinator will conduct an online information search of all existing recreational data collection systems. This step will provide a broad overview of the types of existing systems, state agencies conducting these systems, and guidance on where in-depth information gathering is required. The recent published journal article titled "Characterizing electronic self-reporting programs in United States marine recreational fisheries" will be a good starting point for this step[1].

Step Three: Information Gathering at Fisheries Commission Meeting(s) and NOAA's RAPID Workshop(s).

[1] Wilke, K.M., W.M. Goldsmith, D. Moss, and B.J. Runde. 2026. Characterizing electronic self-reporting programs in United States marine recreational fisheries. Marine Policy 193:107236.

Many state agency staff attend either the Atlantic, Gulf or Pacific States Marine Fisheries Commission meetings. **The coordinator's ability to attend these meetings will provide further gains of information on which states have recreational data collection systems, how the data collected is used, where the data gaps are, networking to determine who is overseeing the systems, and guidance on where individual state information gathering meetings should occur and subsequent site visits.**

The project will also provide funding to attend NOAA Fisheries' RAPID regional workshops[2]. If the workshops occur prior to funding for this project being available, MDNR staff will still attend the workshops, however, may need to attend virtually. These workshops will focus on modernizing recreational fishing surveys, understanding regional capabilities, and co-designing the next iteration of the state-federal data collection system. The final report from these workshops will also be useful in gathering information on other data collection systems currently in use across the country and providing information on data needs and data collection improvements being considered in the Atlantic region.

Step Four: Information Gathering at State Fisheries Agencies and Site Visits.

This step of the project will provide the most in-depth and comprehensive information to help guide MDNR in the development of the data collection system. After determining which state agencies have an existing reporting system collecting data similar to what MDNR requires, the project will fund travel to these state agencies to conduct an in-depth review and observation of the system, how the data collected is used, system development lessons learned, and angler system usage.

For example, Washington Department of Fish and Wildlife has a reporting system documenting recreational catch of salmon, steelhead, sturgeon, halibut and Puget Sound Dungeness crab. If step two and three of the project indicated it would be beneficial to examine this project in greater detail as it could help guide MDNR's system, the project would fund travel expenses to meet with Washington Department of Fish and Wildlife staff and review / observe the system in greater detail.

Questions asked of staff overseeing reporting systems could include: How did they determine what data was required? What does their existing system look like? How do anglers use the system? How do staff use the data collected from the system? What types of outreach was conducted prior to implementing the system and for angler usage / support? What were some of the lessons learned when developing and implementing the system? What are the constraints of the system? How compatible is the data collected with MRIP? How is MRIP data and their data collected by the reporting system used in tandem to manage and assess fishery populations?

Site visits would also be critical in gaining in-depth knowledge of how the anglers themselves use the reporting system. Questions asked of the anglers could include: How did they learn about the system and requirement to use it? What type of training materials were

available and helpful to them? What are their thoughts on how user friendly the system is to use? How would they change the system? Do they think the data collected is useful to fishery management?

Step Five: Synthesis of Information Gathered.
Under this project, MDNR's recreational data coordinator will draft a report that synthesizes all the information collected during steps one through four. **This report will provide Maryland as well as other states interested with an overview of existing systems - the types of data collected, how that data is utilized by managers, how systems were developed and implemented, usability by anglers, and lessons learned throughout.**

Step Six: Development of MDNR's Recreational Fisheries Catch and Effort Data Collection System Plan.
MDNR's recreational data coordinator will draft a plan that lays out the pathway forward for the development and implementation of the data collection system. Incorporating MDNR's data needs and the information synthesized in step five will be critical during this step. The **plan developed will have system goals and objectives, outline the required data fields, collection methodology, overview of the system infrastructure, timeline for development and implementation of the system, and engagement of recreational anglers.**

6.0 Geographic Location

The project will be administered out of the Maryland Department of Natural Resource office in Annapolis, Maryland. **There will be travel within Maryland and outside of Maryland to attend meetings, and conduct information gathering and observation sessions with state agency fishery staff.**

7.0 Milestone Schedule

The proposed project will begin in December 2026 and end in November 2027.

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Assessing Maryland's Recreational Data Needs	X	X	X	X								
Online Information Gathering	X	X	X	X								
Progress Report			X			X						
Information Gathering at Fisheries			X	X	X	X	X	X				

Commission Meeting(s) and NOAA's RAPID Workshop(s)												
Information Gathering at State Fisheries Agencies and Site Visits			X	X	X	X	X	X				
Synthesis of Information Gathered								X	X	X		
Development of MDNR's Recreational Fishery Catch and Effort Data Collection System Plan										X	X	X
Final report										X	X	X

8.0 Project Accomplishments Measurement

The success of this project will be measured by the following metrics:

Goal	Metric	Accomplished
Overview of Existing Recreational Fishery Data Collection Systems	Review and synthesis of current recreational fishery data collection systems including lessons learned while under development and implementation phases.	Final report delivered to ACCSP
Development of plan for MDNR's Recreational Fishery Catch and Effort Data Collection System	Detailed plan outlining data needs, data collection methodology, how data collected from the system can be used in management and assessments, system design, and timeline for development and implementation.	Final report delivered to ACCSP

9.0 Cost Summary

Requested Budget FY2027 (December 1, 2026 to November 30, 2027)

Description	Calculation	Cost	Partner In-Kind Contribution	ACCSP Cost
Personnel (a)			**$84,063.20**	**$0**
Division Director	5 hrs per week x $51.24/hr	$13,322.40	$13,322.40	$0
Rec Data Coordinator	40 hrs per week x $34.01/hr	$70,740.80	$70,740.80	$0
Fringe (b)			**$29,422.12**	**$0**
Division Director	35% of salary	$4,662.84	$4,662.84	$0
Rec Data Coordinator	35% of salary	$24,759.28	$24,759.28	$0
Travel (c)	Cost estimate for 1 to 2 individuals		**$725.00**	**$18,873.00**
Mileage	Estimate 1,600 miles x $0.725/mile	$1,160.00	$725.00	$435.00
Flights	Estimate 12 roundtrip flights x $400	$4,800.00	$0	$4,800.00
Hotels	Estimate 24 nights x $200	$4,800.00	$0	$4,800.00
Per Diem	Estimate 36 days x $178	$6,408.00	$0	$6,408.00
Car Rental	Estimate 27 days x $90	$2,430.00	$0	$2,430.00
Equipment (d)			$0	$0
Supplies (e)			$0	$0
Contractors (f)			$0	$0

Construction (g)	$0	$0
Other (h)	$0	$0
Total Direct Charges (i)	**$114,210.32**	**$18,873.00**
Indirect Charges (j) Current NICRA 25.3% of the total salary and fringe	$28,711.79	$0
Total (sum of Direct and Indirect) (k)	**$142,922.11**	**$18,873.00**
Totals		
Total Project Costs		$161,795.11
In-kind versus Direct Percent Contributions		**88% in-kind**
Requested Amount		$18,873.00

Cost Details

Description of budget categories and expenses for this project

A. Salary ($0 Requested; $84,063.20 In-Kind Contribution)
All salary costs incurred will be an in-kind contribution from MDNR.

1. Division Manager - 12.5% of their annual salary will be dedicated to working on this project.
2. Recreational Fishery Data Coordinator - 100% of their annual salary will be dedicated to working on this project.

B. **Fringe Benefits ($0 Requested; $29,422.12 In-Kind Contribution)**
All fringe benefits rates will be an in-kind contribution from MDNR.

C. **Travel ($18,873.00 Requested; $725.00 In-Kind Contribution)**
Travel cost is for two staff. The division director will have minimal travel for this project. All travel for the recreational fisheries data coordinator will be covered under this project. Travel costs reflect both in-state (in-kind) and out-of-state (requested).

The project budget for travel is estimated. **MDNR will only invoice for actual travel costs incurred during this project and not for the estimated travel amount in this proposed budget.** The three month progress report will provide an updated budget,

which will not exceed the estimated budget presented here, and will detail specifics on travel.

Estimated in-state travel will involve travel around the state to meet managers, biologists and Maryland's APAIS program lead. This will also include site visits where anglers are fishing to engage in outreach and observe how a reporting system could be integrated. One staff (coordinator). Estimated 1,000 miles (100/day) based on using a state-owned pool vehicle or reimbursement for personal vehicle mileage at $0.725 (72.5 cents) per mile. Ten travel days.

Estimated out-of-state travel will include travel to Marine Fisheries Commission meetings, NOAA's RAPID workshop and targeted site visits to other state agencies with supplemental or alternative recreational data collection systems. Three travel events for meetings and the workshop were estimated and up to six targeted site visit travel events were estimated.

Attending the Marine Fisheries Commission meetings and NOAA's RAPID workshop could require flights, hotel, per diem, mileage and car rental (depending on the location).

The site visits will require flights, hotel, per diem, and car rental.

- Flight costs = Typical economy round-trip tickets generally fall between $200 and $400
- Hotel costs = Typical rate for domestic hotels in the United States ranges from $150 to $260 a day
- Car Rentals = Typical economy car rentals range from $40 to $90 per day
- Per Diem = Standard CONUS (Continental United States) federal rate is $178 per day
- Mileage = Standard IRS mileage reimbursement rate for business use is $0.725 (72.5 cents) per mile

Examples site visits could include travel for iSnapper run by the Texas Parks and Wildlife Department, Tails n' Scales run by Mississippi Department of Marine Resources, State Reef Fish Survey run by Florida Fish and Wildlife Conservation Commission, Fish Catch Record Card run by Washington Department of Fish & Wildlife, Maine Volunteer Angler Logbook (VAL) program run by Maine Department of Marine Resources, and Report My Fish run by North Carolina Division of Marine Fisheries.

The coordinator will attend all travel events. The division director will attend three travel events.

D. Equipment ($0 Requested; $0 In-Kind Contribution)
No project-specific equipment is required.

E. Supplies ($0 Requested; $0 In-Kind Contribution)
No project-specific supplies are required.

F. Contractors ($0 Requested; $0 In-Kind Contribution)
No project-specific contractual services are required.

G. Construction ($0 Requested; $0 In-Kind Contribution)
No project-specific construction is occurring.

H. Other ($0 Requested; $0 In-Kind Contribution)
No other project-specific items are required.

J. Indirect Charges ($0 Requested; $28,711.79 In-Kind Contribution)
Current NICRA 25.3% of the total salary and fringe.
Department of Interior Indirect Cost Negotiation Agreement is attached to the proposal email.

Appendix A: Summary of Proposal for Ranking

Proposal Type: New

Primary Program Priority: Catch and Effort (100%)

- This project supports the collection of recreational fishing catch and effort data in Maryland, supplementing data collected by NOAA's MRIP and potentially benefiting other coastal states.
- Current estimates for recreational catch and effort are calculated using MRIP. While this program is effective and required for fish management, it can be limiting in four ways: (1) assessing species that are not federally managed such as blue crabs, (2) assessing tidal fresh species such as yellow perch and the invasive blue catfish, (3) assessing tidal and coastal species that can be harder for MRIP's Access Point Angler Intercept Survey (APAIS) to intercept fishing trips (e.g., tilefish and cobia) or occur in Wave 1, when APAIS does not conduct intercept surveys in Maryland (e.g., striped bass), and (4) collecting recreational fishing catch and effort data from private residences or departing from private residences within the 11,684 miles of Chesapeake Bay shoreline and 248 miles of Maryland's coastal bay shoreline.

Data Delivery Plan:

- All information gathered during the project will be synthesized into a report available for all partners and interested parties. The report will be submitted to ACCSP at the end of the project.
- The report will provide (1) a synthesis of existing alternative and supplemental recreational fishery data collection systems, and (2) Maryland's plan for developing and implementing a system.
- In addition, two progress reports will be submitted to ACCSP; one after three months and another after six months, to provide timely updates on data / project findings.

Multi-Partner/Regional impact including broad applications

- While MDNR is not planning on partnering with others during this project, the results of this project can be utilized by partners and other coastal states interested in supplemental recreational fishing data collection.
- Maryland's neighboring partners could benefit from the outcome of this project for regionally managed species and state-managed species that occur in both Maryland and Virginia waters.

Contains funding transition plan / Defined end point

- This proposed project occurs during phase one of the development of MDNR's Recreational Fishery Data Collection Program.
- After this project ends, phase two under MDNR's Recreational Fishery Data Collection Program will be the actual development and implementation of a data collection system from the plan drafted during phase one. MDNR has committed to legislators and stakeholders to conduct phase two of the project.

In-kind contribution

- MDNR will contribute 88% of the total project budget as an in-kind contribution. These funds are associated with the salaries of the division manager and recreational data coordinator.

Improvement in data quality/quantity/timeliness

- The results of this project and ultimately the development and implementation of Maryland's recreational fishery data collection system will greatly improve data quality, quantity, and timeliness.
- For some species like blue crabs, this data is not currently available. For other species like striped bass, the data collected could supplement MRIPs data, providing better estimates of catch and effort.

Potential secondary module as a by-product

- No second module during this project; phase one of developing Maryland's recreational fishery data collection system.

Impact on stock assessment

- The results of this project and ultimately the development and implementation of Maryland's recreational fishery data collection system will impact many stock assessments. For example, the Chesapeake Bay Blue Crab Stock Assessment would use actual recreational crabbing data collected by this system in the assessment in lieu of estimated data from past studies.

Impact on management

- The results of this project and ultimately the development and implementation of Maryland's recreational fishery data collection system will impact management.
- For example, management of yellow perch could greatly be impacted by this project. Recreational data is unknown currently when assessing the population and setting catch limits due to the species being located in mostly tidal fresh areas and the fishery occurring during Wave 1 of APAIS, when Maryland does not conduct intercept surveys.

Innovative

- Conducting information gathering tasks, identifying data needs and gaps, understanding lessons learned and synthesizing this information will allow for streamlining phase two when developing and implementing the data collection system.

Properly Prepared

- This proposal meets the requirements outlined in the proposal guidelines.

Merit

- This proposed project is essential to provide recreational fishery information to managers and stock assessment scientists to be used for the sustainable management

of fish populations. Recreational fishing and effort data is lacking or limited for many species Maryland manages. The data collected from the eventual data collection system developed and implemented from the plan proposed under this project will be crucial towards supplementing MRIP data and obtaining better recreational harvest data.

Appendix B: Curriculum Vitae for Principal Investigator

Jodi Baxter 410-279-8219
jodi.baxter@maryland.gov 580 Taylor Ave., B-2 Annapolis, Maryland 21401

Education

- M.S. in Fisheries Science, Virginia Polytechnic Institute and State University, 2002
- B.S. in Wildlife and Forestry Science, Virginia Polytechnic Institute and State University, 1999

Work Experience

Maryland Department of Natural Resources, Fishing and Boating Services
Director, Commercial and Recreational Fisheries Data Management and Quota Monitoring Division
August 2024 to present
Duties include: Managing all aspects of work conducted by the Data Management and Quota Monitoring Division including: working with Maryland's commercial and recreational/charter boat fisheries in the Chesapeake Bay and along the Atlantic Coast to collect and record accurate and timely catch and harvest data, coordinating integration and sharing of fisheries data within the Department and with national and regional partners, tracking progress toward fishery quotas for compliance with interstate fishery management plans, and maintaining portals for approved users of stored fisheries data. Provides oversight for the new recreational data program under development within Fishing and Boating Services focused on recreational fishery data needs to assist with fishery management in Maryland and in coordination with partners along the Atlantic coast. Review of technical reports and related Program documents; coordinating with the National Marine Fisheries Service (NMFS) and the Atlantic Coastal Cooperative Statistics Program (ACCSP). Coordinating and facilitating meetings with commercial and recreational fishery advisory groups to obtain input key fishery management issues and synthesizing the results of meetings into policy recommendations. Overseeing the provision of requested fisheries data to constituents including academics, state legislators, NGO representatives and private citizens and therefore has complete knowledge of confidentiality rules and policies. Grant management. Budget submission and management. Staff supervision and hiring.

Maryland Department of Natural Resources, Fishing and Boating Services
Deputy Director, Shellfish Division
November 2014 to August 2024
Duties include: Administration, planning, implementation and supervision of the Shellfish Division's Ecological Restoration, Public Shellfish Fishery, and Monitoring and Assessment programs. Responsible for developing recommendations to support technically sound policy making decisions for the restoration, conservation, management and equitable use of Maryland's shellfish resources in cooperation with other state and federal natural resource

agencies, scientists, and a diversity of stakeholders. Overseeing commercial harvest reporting, fishery and population stock assessments, and restoration of oyster habitat and populations. Budget development and management. Grant management. Contract development and oversight. Development of Request for Proposals. Report and grant writing. Providing requested information to elected officials, media, and Natural Resource Police. Facilitation of various committees and commissions. Presentation to the public, stakeholders, universities, government agencies, and other entities. Staff supervision and hiring.

Versar, Inc.
Senior Environmental Analyst
August 2002 to November 2014
Duties include: Data compilation, analysis, database management, Access database design and development, statistical analysis, modeling, computer programming in SAS, SQL, VBA, and R, and webpage maintenance and design. Specialized in analysis pertaining to natural resource data including but not limited to fisheries, benthos, water quality, and watershed. Management of multiple contracts related to environmental science (e.g. fisheries, watershed, water quality, National Pollutant Discharge Elimination System (NPDES) permit compliance and monitoring). Proposal development and management. Budget tracking. Report writing. Stakeholder outreach and facilitation. Presentations to clients and stakeholders. Staff supervision and hiring.

Atlantic Coastal Cooperative Statistics Program
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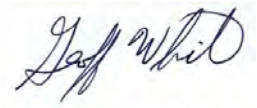
June 12, 2026

To the members of the Operations and Advisory Committees:

The FY2027 Administrative Budget contains minimal changes to the core request. ACCSP leadership continues to make concerted efforts to maximize the value of the administrative budget by finding additional sources of funding and exploring opportunities to gain efficiencies. For example, the IRA funds ($367,822) that were secured to offset the cost of modernizing the ACCSP technological infrastructure have been further delayed, and those savings are realized in this budget. Additionally, the ASMFC overhead has decreased to 10%. These efforts have resulted in a minimal increase in the Administrative Budget compared to FY2026.

Attachment I of the FY2027 Administrative Budget request, the 2024-2028 ASMFC Strategic Plan (Goal 3), provides an overview of the high-level tasks and milestones expected for the coming year.

Sincerely,



Geoff White

ACCSP Director

Response to Initial Feedback

There was no feedback on the initial proposal. As such, no edits have been made to the submission.

Funding Proposal
FY27 ACCSP Administrative Budget

Applicant Name:	Atlantic States Marine Fisheries Commission
Project Title:	Administrative Support to the Atlantic Coastal Cooperative Statistics Program
Principal Investigator:	Geoff White, Director, ACCSP
Requested Award Amount:	$2,489,992
Request Type:	Maintenance/Administrative
Requested Award Period:	March 1, 2027 through February 28, 2028

A. Goals

The Atlantic Coastal Cooperative Statistics Program (ACCSP) is a state-federal cooperative partnership between 23 entities responsible for fisheries management, and fisheries data collection on the Atlantic Coast: the 15 Atlantic coast states and the District of Columbia, two federal fisheries agencies (Commerce's NOAA Fisheries and Interior's U.S. Fish and Wildlife Service), three regional fisheries management councils (New England, Mid-Atlantic, and South Atlantic), the Potomac River Fisheries Commission, and the Atlantic States Marine Fisheries Commission (ASMFC). Partner agencies are listed in the original ACCSP Memorandum of Understanding.

The Program was established in 1995 to design, implement, and conduct marine fisheries statistics data collection programs and to integrate those data into a single data management system that will meet the needs of fishery managers, scientists, and the general public.

By establishing and maintaining data collection standards and providing a data management system that incorporates state and federal data, ACCSP will ensure that the best available statistics can be used for fisheries management.

B. Objectives

1. Manage and expand a fully integrated data set that represents the best available fisheries-dependent data;
2. Continue working with the program partners to improve fisheries data collection and management in accordance with the evolving ACCSP standards within the confines of limited funds;

3. Explore the allocation of existing Program funds and work with partners to pursue additional funding;
4. Maintain strong executive leadership and collaborative involvement among partners at all committee levels;
5. Monitor and improve the usefulness of products and services provided by the ACCSP;
6. Collaborate with program partners in their funding processes by providing outreach materials and other support to demonstrate the value of ACCSP products and the importance of maintaining base support for fishery-dependent data collection programs to state partners and their executive and legislative branches as well as to all other partner agencies; and,
7. Support nationwide systems as defined in the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

C. Need

Various state and federal fishery management agencies on the Atlantic coast collect data on the status and trends of specific fish populations and the fisheries that utilize these resources; however, it is often difficult to develop sound recommendations to fisheries managers due to inconsistencies in the way data are collected and managed. The various data sets often cannot be integrated to provide accurate information at the state, regional, or coast-wide level. In addition, the disparate manner in which these data are collected and managed places duplicative burdens on fishermen and dealers reporting to multiple state and federal agencies and regions. Due to rapidly changing stock conditions, within-season regulatory changes and catch quotas have become common fishery management strategies. Timely and accurate harvest information for both recreational and commercial fisheries is required to determine the need for and effects of these management measures.

The Atlantic Coastal Fisheries Cooperative Management Act of 1993 mandated a cooperative state-federal program for the conservation of Atlantic coastal fisheries. Section 804 of the Act requires the Secretaries of Commerce and the Interior to develop a program to support state fisheries programs and those of the ASMFC, including improvements in statistics programs. Since the mid-1990s, the ASMFC has provided administrative support for this coordinated effort to improve data collection and management activities.

In 1995 the states, the ASMFC, and the federal fishery management agencies on the Atlantic coast entered into a Memorandum of Understanding (MOU) to develop and implement a cooperative state-federal statistics program that would meet the management needs of all participating agencies. All program partners signed the MOU for the ACCSP at the Commission's 54th Annual Meeting in Charleston, SC. Following signing, an Operations Plan was developed to outline the specific tasks and timetables required to develop and initiate implementation of this program. In October of 2016, an updated MOU was approved that made the ACCSP a program of the ASMFC. This governance change integrates the long-term and annual planning processes with those already in existence for the ASMFC and conform to policy as set by the ACCSP Coordinating Council.

D. Results and Benefits

The ACCSP developed and adopted 1999, 2004 and 2012 versions of the Program Design (now renamed Atlantic Coast Fisheries Data Collection Standards), which document the standards and protocols for collection and management of commercial, recreational, and for-hire fisheries statistics. Program partners developed and approved minimum data elements for collection of catch, effort, biological, social, and economic statistics. The ACCSP also developed standard codes and formats to ensure consistency of all data collected under the Program. These standards require periodic review and revision as the needs of fisheries managers and the state of the art of fisheries science change.

In 2000, the first version of the Data Warehouse was made available to the program partners. Since then, it has grown to encompass almost a 70-year time series of fisheries-dependent catch and effort data. Loading of biological data has begun. These data are constantly reviewed and updated as needed.

In 2004, the first version of the Standard Atlantic Fisheries Information System (SAFIS) eDR (electronic dealer reporting) was deployed, followed in 2008, by eTRIPS (electronic trip reporting). This system is used to collect data from commercial and recreational fishermen and dealers and is now deployed from Maine to Georgia. SAFIS is an ongoing and evolving system, requiring support, review, and revision. ACCSP is currently in the process of redesigning SAFIS to modernize technologies, streamline data processing and validation, and increase partner flexibility with respect to data collection through the use of switchboards.

The ACCSP will continue to reduce duplication of effort by dealers and fishermen, make more efficient use of limited funds, promote education of resource users, and provide a more complete information base for formulating management policies, strategies, and tactics for shared resources. An integrated multi-agency program using standard protocols for reporting compatible information will lead to more efficient and cost-effective use of current federally and state funded data collection and management programs. The ACCSP will reduce the burden on the fishing industry to provide information in multiple formats to multiple agencies, in alignment with the coastwide One Stop Reporting initiative, and will provide more accurate and timely information to achieve optimum public benefits from the use of fishery resources along the Atlantic coast. The ACCSP will ensure the timely dissemination of accurate data on commercial and recreational fisheries for use in stock assessments and fisheries management through a comprehensive and easily accessible data management system.

E. Approach

The ACCSP is managed collaboratively by committee: the Coordinating Council, composed of high-level fisheries policy makers from all the program partners, is the governing body; the Operations Committee provides guidance in standards setting and funding priorities. An Advisory Committee provides industry input into the process. A number of other technical committees provide input into various aspects of the process.

Program planning builds on basic principles related to the goals stated in the ACCSP MOU:

- Development of data collection standards and the implementation of data collection programs will be done cooperatively, across jurisdictional lines;
- Consistent coast-wide data collection standards will be implemented by all program partners that include data on all fishing activities -- commercial, recreational and for-hire fisheries;
- Once achieved, data collection improvements will be maintained;
- These data will be loaded and maintained in a central data repository and provided to data users through a user-friendly query system;
- Program planning will be done collaboratively, by consensus;
- The program will be responsive and accountable to partner and end-user needs; and
- Focus on activities that yield maximum benefit.

Goal 3 of the ASMFC Strategic Plan (Attachment I) provides high-level activities to be conducted by ACCSP staff and committees under the FY27 Administrative Budget. As a program of the ASMFC, administrative support of ACCSP activities is funded through indirect charges of all ACCSP awards, including the Administrative Grant. Note that program activities and staff in support of the Marine Recreational Information Program are separately funded and therefore not included in this plan.

The ACCSP initially developed common standards collaboratively, by consensus, then began to work with program partners to implement the standards, according to a commonly agreed upon priority. All ACCSP technical committees, except for the Advisory Committee which is composed of industry and recreational representatives, are comprised of managers and staff of the partner agencies and set policy by consensus. Only the Coordinating Council votes directly on motions.

The standards, known as the Atlantic Coast Fisheries Data Collection Standards, for data collection and management are developed and maintained by ACCSP Technical Committees, with review and oversight by the Operations Committee, and advice from the Advisory Committee. The ACCSP Coordinating Council makes policy level decisions to adopt the program standards. The full-time ACCSP staff coordinates all activities conducted by the ACCSP.

The Atlantic Coast Fisheries Data Collection Standards documents all completed standards and provides the basic framework for full implementation of the ACCSP by all program partners. The ACCSP is continuously evolving as technology and the needs of management and science change over time. Therefore, the *Standards* and supporting systems are always developing. Support for the implementation of ACCSP modules is provided by staff in various jurisdictions. To this end, funding is required to provide for full-time staff for all ACCSP activities, as well as for travel and meeting expenses.

The ACCSP Director, reporting to the Executive Director of the ASMFC, provides leadership for the Program, overall programmatic management and guidance, and is responsible for the day-

to-day operations. The ACCSP Deputy Director supports the ACCSP Director on operation and development of the Program and is responsible for managing the competitive ACCSP funding process, coordinating cross-team project management, and providing support for a wide range of Program activities. The ACCSP Program Assistant aids the ACCSP Director and ACCSP Deputy Director, provides staff support for program and technical committees by drafting, maintaining, and coordinating program documents, and publicizes the availability and benefits of the Program. The Data Team Leader provides guidance for data compilation and dissemination related activities. The ACCSP Deputy Director for Recreational Fisheries coordinates MRIP survey implementation and recreational and for-hire data standards. The Data Coordinators and Developers provide programming services and system support required to develop and fine-tune the data management systems, assist users as they access the system and provide quality management and control. The Data Coordinators also complete custom data requests, QA/QC existing data, maintain data feeds, and directly participate in data intensive activities such as a stock assessment data workshops. The ACCSP Software & IT Manager manages the information systems infrastructure and security and coordinates the development and management of ACCSP data collection systems. The Software Team staff provides expert consultation to partners as they implement new reporting, and licensing/permitting systems. The Software Team will continue to support development of SAFIS.

ACCSP staff will follow Goal 3 of the ASMFC 2024-2028 Strategic Plan during FY27, in consultation with all partners. Specific tasks to be accomplished during the period include initiation and maintenance of Partner data feeds from the commercial, recreational, and biological modules; incorporation of new entity and permit structures into SAFIS applications; maintenance of Federal Information Security Management Act procedures; and support of other partner projects by providing technical expertise as necessary.

The ASMFC has basic responsibility for the logistics of all committee meetings which support the development and ongoing operations of the ACCSP, including: the ACCSP Coordinating Council, the ACCSP Operations Committee, the Advisory Committee, the Recreational Technical Committee, the Commercial Technical Committee, the Information Systems Committee, the Biological Review Panel, the Bycatch Prioritization Committee, the Standard Codes Committee, and the SciFish Advisory Panel. Full-time ACCSP personnel staff these committees for planning of work, providing minutes and other documents, and other follow-up.

The ACCSP has helped foster an improved atmosphere of cooperation among its partners. The Program has succeeded in establishing coast-wide fisheries data standards that all program partners have agreed to adopt. Data collection and management systems will be developed and deployed and maintained as the standards and Partner needs evolve. Program partners remain engaged in the process, and the program has made substantial progress towards its goals.

1. Geographic Location: Atlantic Coast (Maine through Florida)

2. Milestone Schedule: See Goal 3 of the ASMFC 2024-2028 Strategic Plan (Attachment I)

This is a continuation from previous projects. Figure 1 contains the base administrative budget amounts by year since implementation began in 1999.

Figure 1. Administrative funding for ACCSP from 2000-2026



3. Cost Summary: The ACCSP requests $2,263,629 for administrative support, committee travel and systems operations during FY27. The addition of the 10% indirect rate raises the request to $2,489,992. The small increase in request from FY26 reflects an increase in staff salaries and a decrease in the ASMFC overhead. Significant increases in Equipment and Supplies are not necessary due to the IRA funds secured by ACCSP staff.

The funds used for the ACCSP shall be accounted for separately from all other ASMFC funds.

4. Personnel

Program personnel funded through this grant, except the ACCSP Deputy Director for Recreational Fisheries, are dedicated 100% to the ACCSP and are full-time employees of the Atlantic States Marine Fisheries Commission. Note that personnel associated with the MRIP state conduct and 85% of the ACCSP Deputy Director for Recreational Fisheries are funded under separate authority

and not accounted for in this document. Fringe benefits which include health care, vision, dental, annual, and sick leave are calculated at 29%. ASMFC salaries are kept confidential, thus only totals are displayed. Additionally, an agreement has been put in place with NMFS Highly Migratory Species (HMS) to partially fund the Information Systems Specialist responsible for maintaining HMS data feeds.

- ACCSP Director - Geoff White
- ACCSP Deputy Director – Julie DeFilippi Simpson
- Program Assistant – Marisa Powell
- ACCSP Deputy Director for Recreational Fisheries (15%) – Alex DiJohnson
- ACCSP Software & IT Manager – Edward Martino
- Software Developer – Jamal Oudiden
- Software Developer – Daniel Mestawat
- Software Developer – Vacant
- Data Team Lead – Michael Opiekun
- Data Analyst - Jennifer Ni
- Senior Data Coordinator – Vacant
- Senior Data Coordinator – Heather Konell
- Data Coordinator – Anna-Mai Christmas-Svajdlenka
- Data Coordinator – Skye Thomas

Salaries and Wages		
Total Salary	$	1,546,243
Benefits @29%	$	448,411
Total Costs	$	1,994,654

5. Travel

Travel is broken down into two general categories; committee meetings and staff travel. Given shift back to having in-person meetings and supplementing with online meetings has continued, this year's request is level with the previous year for committee travel. In addition to staff travel to support committee meetings, staff travel is needed for implementation planning, data collection activities, outreach efforts, and information system development meetings with partners.

The Program funds fares to and from the meeting site, per diem according to Office of Personnel and Management guidelines and facilities costs for the meeting itself. (The daily rate per meeting includes cost of airfare or mileage, lodging, meals, and other travel related expenses.) Reimbursable participants include state fisheries directors and biologists, state and university scientists, law enforcement personnel and citizen advisors from Maine through Florida. Meetings will be held in various locations on the Eastern Seaboard, including but not limited to: Annapolis,

MD; Norfolk, VA; Charleston, SC; Portland, ME; Alexandria, VA; Providence, RI; Tampa, FL; Washington, D.C.

The travel budget is based on an ASMFC average estimated $325 per day multiplied by meetings multiplied by days multiplied by non-federal membership plus staff.

Committee Travel	**Meetings**	**Days**	**Membership**	**Total**	**Staff**	**Total**	**Grand Total**
Biological Review panel	1	0	15	$0	1	$0	$0
Bycatch Prioritization	1	0	15	$0	1	$0	$0
Commercial Technical Committee	1	2	15	$9,750	1	$650	$10,400
Coordinating Council (with ASMFC)	2	0.5	12	$3,900	2	$650	$4,550
Operations and Advisory Committees	1	2.5	20	$16,250	2	$1,625	$17,875
Recreational Technical	1	1	15	$4,875	1	$325	$5,200
Information Systems Committee	1	1	15	$4,875	1	$325	$5,200
Total Committees				$39,650		$3,575	$43,225
Staff Travel							
Partner Coordination	3	2	2	$3,900			
Data Support (Stock Assessment etc)	1	5	2	$3,250			
IT/SAFIS Support	2	1	1	$650			
Outreach or Partner Training	4	1	2	$2,600			
GulfFIN Coordination	2	1.5	2	$1,950			
Staff Training	2	4	5	$13,000			
Total Staff Travel				$25,350			
Grand Total							$68,575

Attachment II provides the FY26 schedule of the funding cycle and calendar of meetings, which serves as a tentative schedule for FY27.

6. Supplies

Supply costs include supplies not covered by the ASMFC indirect. This includes ACCSP specific materials for outreach, smaller information systems items such as network switches and cables.

Supplies	
Misc Hardware (cables, network switches, etc)	$4,600
Backup Tapes	$1,000
Total	$5,600

7. Equipment

ACCSP maintains several large server systems and related hardware in support of the Data Warehouse, website, SAFIS, and administrative functions. These systems previously had a 5-year life cycle after which they require upgrade or replacement. While ACCSP has historically decreased budget and extended life of servers, there is now a need to shorten refresh cycle to 3-years. This will allow for more capable hardware to meet increasing data flow needs as well as improve performance and support, results in less technical debt.

Included in the costs are normal life cycle replacements of laptop systems, assuming replacement of three (3) systems annually. Costs are based upon current market surveys and an estimate of our needs.

Equipment	
Infrastructure Replacements	$ 14,000
Desktop/Laptop Systems	$ 4,800
Total	**$ 18,800**

8. Other Costs

Hardware and software support are supplied by several different vendors and include costs associated with licensing and maintenance fees (such as *Oracle* licensing).

The Program maintains a high-speed internet connection and associated infrastructure in support of the server systems. The primary internet connection is covered by ASMFC. The second connection, using an entirely different technology and provider provides redundancy to the primary connection in case of failure. The system is configured to automatically fail over in the event of a failure of the primary internet connection. A previously maintained ACCSP funded connection dedicated to the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) to provide full time secure connectivity requested by the Region has been replaced with a VPN

connection through NOAA's OCIO office. Coordination of ACCSP with the OCIO has resulted in a permanent decrease in costs in this area by about $10,000.

Outside vendors include Hewlett Packard for systems hardware and software support; Oracle for database management systems support; DLT Solutions and Trident Solutions for hardware support. All pricing is based on the GSA schedule.

Software maintenance and development workload at times exceeds staff's resources. Contract services will be utilized to provide services that staff may be unable to perform.

E-Reporting Support

Funds are requested for electronic reporting outreach and support activities. Interest among state partners and harvesters is continually rising and a steady stream of new users are adopting the system where agencies will accept electronic reports though SAFIS. SAFIS eTRIPS in both the mobile and on-line versions are likely to be the top applications used by commercial harvesters in the Southeast as voluntary electronic reporting for commercial harvesters is rolled out. This is especially true as eTRIPS is the only application on the east coast that is considered compliant with the One Stop Reporting (OSR) requirements. In addition, most trips will be reported to the SAFIS system (via API) regardless of the tool selected.

Funds requested include both costs associated with initial deployment and ongoing support. Initial startup costs include, but are not limited to, in-person and virtual training workshops for harvesters and partner agency personnel and published training guides and videos that will be available via the ACCSP website. ACCSP continues to contract for help desk support for SAFIS which includes 24/7 helpdesk support, a toll-free number to contact support personnel, and a helpdesk ticketing program designed to keep track of all requests and provide feedback to the Program. The ACCSP Director and ASMFC Executive Director have secured external funding to support the help desk and FISMA costs in FY2027.

Other Expenses	
Software Support	$60,000
Hardware Support	$11,000
Communications/Internet Connectivity	$12,500
Outreach Materials	$2,500
Software Development	$90,000
Help Desk Support	$0
Total	**$176,000**

Budget Summary

Budget Summary	**2027**
Personnel	$1,546,243
Fringe Benefits	$448,411
Travel	$68,575
Equipment	$18,800
Supplies	$5,600
Other	$176,000
Total Program	**$2,263,629**
ASMFC Overhead (10.32%)	**$226,363**
Total Proposal	**$2,489,992**

Resources actively sought to support ACCSP activities in addition to the Administrative Grant

2026-2027 Support	**Coverage**	**Funding Expected**
IRA proposal (FIS) (**Delayed distribution spans FY26-FY27**)	Modernization of ACCSP Technological Infrastructure	$367,822
HMS	Partial Data Analyst	$40,000
NOAA Fisheries Office of Science and Technology	ACCSP SAFIS Help Desk and FISMA Support	$215,000
MRIP	State Conduct of MRIP APAIS, FHTS ME-GA, and additional surveys in some states (LPIS in ME, Catch Cards in MD & NC, and LPBS in NC). Includes Recreational Team Staff (3). The Recreational Angler Partnership Invigoration Directive provided $1.9M for additional APAIS sampling in 2026-27, and $500K for national workshops to develop the co-design framework of future recreational data collection.	Total Grant: $8,812,000 Annual MRIP $6,912,000 RAPID $2,400,000 ACCSP: $600,000

ATLANTIC STATES MARINE FISHERIES COMMISSION

Five-Year Strategic Plan 2024-2028

The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased and not impaired in value.

Theodore Roosevelt

Introduction

Each state has a fundamental responsibility to safeguard the public trust with respect to its natural resources. Fishery managers are faced with many challenges in carrying out that responsibility. Living marine resources inhabit ecosystems that cross state and federal jurisdictions. Thus, no state, by itself, can effectively protect the interests of its citizens. Each state must work with its sister states and the federal government to conserve and manage natural resources.

Beginning in the late 1930s, the 15 Atlantic coastal states from Maine to Florida took steps to develop cooperative mechanisms to define and achieve their mutual interests in coastal fisheries. The most notable of these was their commitment to form the Atlantic States Marine Fisheries Commission (Commission) in 1942, and to work together through the Commission to promote the conservation and management of shared marine fishery resources. Over the years, the Commission has remained an effective forum for fishery managers to pursue concerted management actions. Through the Commission, states cooperate in a broad range of programs including interstate fisheries management, fisheries science, fishery-dependent and fishery-independent data collection and management, habitat conservation, and law enforcement.

Congress has long recognized the critical role of the states and the need to support their mutual efforts. Most notably, it enacted the Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act) in 1993, which built on the success of the Atlantic Striped Bass Conservation Act of 1984. Acknowledging that no single governmental entity has exclusive management authority for Atlantic coastal fishery resources, the Atlantic Coastal Act recognizes the states' responsibility for cooperative fisheries management through the Commission. The Atlantic Coastal Act charges all Atlantic states with implementing coastal fishery management plans that will safeguard the future of Atlantic coastal fisheries in the interest of both fishermen and the nation.

Accepting these challenges and maintaining their mutual commitment to success, the Atlantic coastal states have adopted this five-year Strategic Plan. The states recognize circumstances today make the work of the Commission more important than ever before. The Strategic Plan articulates the mission, vision, goals, and objectives needed to accomplish the Commission's mission. It serves as the basis for annual action planning, whereby Commissioners identify the highest priority issues and activities to be addressed in the upcoming year. With the Commission currently coordinating the management of 27 species/species complexes , finite staff time, Commissioner time and funding, as well as a myriad of other factors impacting marine resources (e.g., ocean conditions, protected species interactions, offshore energy, and aquaculture), Commissioners recognize the absolute need to prioritize activities, dedicating staff time and resources where they are needed most and addressing less pressing issues as resources allow. Efforts will be made to balance the competing needs of stability/predictability in fisheries management and the necessity for adaptability to respond to fishery and environmental conditions. A key to prioritizing issues and maximizing

efficiencies will be working closely with the three East Coast Regional Fishery Management Councils, NOAA Fisheries, US Fish and Wildlife Service and US Geological Survey.

Mission

The Commission's mission, as stated in its 1942 Compact, is:

> *To promote the better utilization of the fisheries, marine, shell and anadromous, of the Atlantic seaboard by the development of a joint program for the promotion and protection of such fisheries, and by the prevention of physical waste of the fisheries from any cause.*

The mission grounds the Commission in history. It reminds every one of the Commission's sense of purpose that has been in place for over 82 years. The constantly changing physical, political, social, and economic environments led the Commission to restate the mission in more modern terms:

> *To promote cooperative management of marine, shell and diadromous fisheries of the Atlantic coast of the United States by the protection and enhancement of such fisheries, and by the avoidance of physical waste of the fisheries from any cause.*

The mission and nature of the Commission as a mutual interstate body incorporate several guiding principles. They include:

- States are sovereign entities, each having its own laws and responsibilities for managing fishery resources within its jurisdiction
- States serve the broad public interest and represent the common good
- Multi-state resource management is complex and dependent upon cooperative efforts by all states involved
- The Commission provides a critical sounding board on issues requiring cross-jurisdictional action, coordinating cooperation, and collaboration among the states and federal government, including NOAA Fisheries, US Fish and Wildlife Service, and US Geological Survey.

Vision

The long-term vision of the Commission is:

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Values

The Commission and its member states have adopted the following values to guide its operations and activities. These values affirm the Commission's commitment to sustainable fisheries management for the benefit of all fisheries participants and coastal communities. They also acknowledge the growing importance of managing fisheries in a more holistic and adaptive way, seeking solutions to cross-cutting resource issues that lead to long-term ecological and socioeconomic sustainability.

- Effective stewardship of marine resources through strong partnerships
- Decisions based on sound science
- Long-term ecological sustainability
- Transparency and accountability in all actions
- Timely response to new information through adaptive management
- Balancing resource conservation with the economic success of coastal communities
- Efficient use of time and fiscal resources
- Work cooperatively with honesty, integrity, and fairness

Driving Forces

The Commission and its actions are influenced by a multitude of factors. These factors are constantly evolving and will most likely change over the time period of this Strategic Plan. However, the most pressing factors affecting the Commission today are the state of the marine environment, fisheries, and coastal communities; resource allocation; the quality and quantity of scientific information; competing ocean uses; a growing need to address ecosystem functions; and interactions between fisheries and protected species. The Strategic Plan, through its goals and broad objectives, will seek to address each of these issues over the next five years.

The Marine Environment

Fluctuating ocean temperatures, sea level rise, and ocean acidification affect nearly every facet of fisheries resources and management at the state, interstate, and federal levels. Potential impacts to marine species include degraded water quality, altered prey and habitat availability, susceptibility to disease, changing migration patterns, and changes to spawning and reproductive potential. It is often difficult for fisheries stock assessments and management to keep pace with changes in distribution and productivity of fishery stocks. Several Commission species, such as northern shrimp, American lobster, Atlantic cobia, Atlantic croaker, Atlantic striped bass, Spanish mackerel, black sea bass, and summer flounder are already responding to changes in the ocean. In the case of northern shrimp and American lobster, current ocean temperatures have created inhospitable environments for reproduction and survivability in some areas. For cobia, black sea bass, and summer flounder, these factors have contributed to altered species distributions, with some species expanding their ranges and others moving into deeper and/or more northern waters to stay within preferred temperature ranges. Where shifts are occurring, the Commission may need to

reconsider state-by-state allocation schemes and make adjustments to our fishery management plans (FMPs). For other species depleted due to factors other than fishing mortality (e.g., habitat degradation and availability, predation), the states will need to explore steps to aid in species recovery. And, if a stock's viability is compromised, Commission resources and efforts should be shifted to other species that can be rebuilt or sustainably maintained.

Since 2021, the Commission and other marine fishery management organizations along the US East Coast have been exploring governance and management issues related to evolving ocean conditions and fishery stock distributions. This effort recognizes the need to plan for how fishery management organizations and coastal communities can best adapt to environmental changes in a thoughtful and deliberate way. Over the span of this Strategic Plan and beyond, the Commission and other East Coast marine fishery management organizations will be prioritizing actions around three overarching themes of cross-jurisdictional governance; managing under increased uncertainty; and data sources and partnerships to plan for possible future outcomes.

Allocation

Resource allocation among the states and between various user groups will continue to be an important issue over the next five years. Many of the Commission FMPs divvy up the available harvestable resource through various types of allocation schemes, such as by state, region, season, or gear type. The changing distribution of many species has further complicated the issue of resource allocation with traditional allocation schemes being challenged and a finite amount of fishery resources to be shared. Discussion may be difficult and divisive, with some states (and their stakeholders) wanting to maintain their historic (traditional) allocations, while others are seeking a greater share of the resource given increased abundance and availability in their waters. States will need to seek innovative ways to reallocate species so that collectively all states feel their needs are met. What will be required to successfully navigate these discussions and decisions is the commitment of the states to work through the issues with honesty, integrity, and fairness, seeking outcomes that balance the needs of the states and their stakeholders with the ever-changing realities of shifting resource abundance and availability.

Science as the Foundation

Accurate and timely scientific information form the basis of the Commission's fisheries management process. Continued investments in the collection and management of fishery-dependent and -independent data remain a high priority for the Commission and its member states. The challenge will be to maintain and expand data collection efforts in the face of shrinking state and federal budgets. Past and current investments by state, regional and federal partners have established the Atlantic Coastal Cooperative Statistics Program (ACCSP) as the principal source of marine fishery statistics for the Atlantic coast. State and regional fishery-independent data collection programs, in combination with fishery statistics, provide the scientific foundation for stock assessments. Many data collection programs will continue to be strained by budget restrictions, scientists' workload capacities, and competing priorities. The

Commission remains committed to pursuing long-term support for research surveys and monitoring programs that are critical to informing management decisions and resource sustainability.

Ecosystem Functions

Nationally, there has been a growing demand for fisheries managers to address broader ecosystem functions such as predator-prey interactions and environmental factors during their fisheries management planning. Ecosystem science has improved in recent years, though the challenges of comprehensive data collection continue. While the majority of the Commission's species are managed and assessed on a single species basis, there have been significant advancements in the development and use of ecological reference points for Atlantic menhaden management. Horseshoe crabs of Delaware Bay origin are also managed in an ecosystem context to account for the forage needs of migratory shorebirds. The Commission remains committed to seeking ecological sustainability over the long-term through continuing its work on multispecies assessment modeling and the development of ecosystem-based reference points in its fisheries management planning process.

Competing Ocean Uses

Marine spatial planning has become an increasingly popular method of balancing the growing demands on valuable ocean resources. More specifically, the competing interests of commercial and recreational fishing, offshore energy development, aquaculture, marine transportation, offshore oil exploration and drilling, military needs, and habitat restoration are all components that must be integrated into successful ocean use policies. The Commission has always emphasized cooperative management with our federal partners; however, the states' authorities in their marine jurisdictions must be preserved and respected. The Commission will continue to prioritize the successful operation of its fisheries, but it will be imperative to work closely with federal, state, and local governments on emerging ocean use conflicts as they diversify into the future.

Protected Species

Like coastal fishery resources, protected species, such as marine mammals, sea turtles, and listed and candidate fish species, traverse both state and federal waters. The protections afforded these species under the Marine Mammal Protection Act and Endangered Species Act can play a significant role in the management and prosecution of Atlantic coastal fisheries. The Commission and the states have a long history of supporting our federal partners to minimize interactions with and bycatch of marine mammals and sea turtles. The listing of Atlantic sturgeon under the Endangered Species Act has added a whole new level of complexity in the ability of the Commission's member states to carry out their stewardship responsibilities for this important diadromous species. The species spends the majority of its life in state waters and depend on estuarine and riverine habitat for their survival. Listing has the potential to jeopardize the states' ability to effectively monitor and assess stock condition, as well as impact fisheries that may encounter listed species. It is incumbent upon the Commission and its federal partners to work jointly to assess stock health, identify threats, and implement effective rebuilding programs for listed and candidate species through the state and federal process.

More recently, the depleted status of the Northern right whale population and the potential impacts to this population by entanglement in fishing gear, particularly lobster and crab gear, has heighted concern for both whales and the lobster industry.

Increased Cooperation and Collaboration among the States and between the States and Our Federal Partners

Demands for ecosystem-based fisheries management, competing and often conflicting ocean uses, and legislative mandates to protect marine mammals and other protected species further complicate fisheries management and require quality scientific information to guide management decisions. Federal agencies have a long track record of providing scientific support to the Commission and collaborations recently expanded in some areas. However, there is a developing trend of reduced support for fundamental data collection and assessment support. Year to year static funding results in decreased scientific support due to inflationary cost increases. There is a growing concern among fishery managers that some "control" over fisheries decisions and status has been diminished by limited data collection efforts and our inability to effect environmental factors that impact marine resources. Fisheries management has never been more complex or politically charged. State members are pulled between what is best for their stakeholders versus what is best for the resource and the states as a whole.

While the issues may seem daunting, they are not insurmountable. In order for the Commission to be successful, the states must recommit to their collective vision of "Sustainable and Cooperative Management of Atlantic Coastal Fisheries," recognizing that their strength lies in working together to address the fisheries issues that lie ahead. Given today's political and environmental realities, the need for cooperation among the states has never been more important. It is also critical the states and their federal partners seek to strengthen their cooperation and working relationships, providing for efficient and effective fisheries management across all agencies. No one state or federal agency has the resources, authority, or ability to do it alone.

GOALS & OBJECTIVES

The Commission will pursue the following eight goals and their related strategies during the five-year planning period from 2024 through 2028. It will pursue these goals through specific objectives, targets, and milestones outlined in an annual Action Plan, which is adopted each year at the Commission's Annual Meeting to guide the subsequent year's activities. Throughout the year, the Commission and its staff will monitor progress in meeting the Commission's goals, and evaluate the effectiveness of the strategies. While committed to the objectives included in this plan, the Commission is ready to adopt additional objectives to take advantage of new opportunities and address emerging issues as they arise.

Goal 1 – Rebuild, maintain, fairly allocate, and promote sustainable Atlantic coastal fisheries

Goal 1 focuses on the responsibility of the states to conserve and manage Atlantic coastal fishery resources for sustainable use. Commission members will advocate decisions to achieve the long-term benefits of conservation, while balancing the socioeconomic interests and needs of coastal communities. Inherent in this is the recognition that healthy and vibrant resources benefit stakeholders. The states are committed to proactive management, with a focus on integrating ecosystem services, socioeconomic impacts, habitat issues, bycatch and discard reduction measures, and protected species interactions into well-defined fishery management plans. Fishery management plans will also address fair allocation of fishery resources among the states. Understanding evolving ocean ecosystems and their impacts on fishery productivity and distribution is an elevated priority. Successful management in an evolving marine environment will depend not only on adjusting management strategies to be more adaptable and flexible, but also in reevaluating and revising, as necessary, the underlying conservation goals and objectives of fishery management plans. Current ocean conditions have a significant impact on fish stocks, fish habitats, and interactions between species and fisheries. The Commission state members will strive to proactively consider ecosystem level impacts when making management decisions to take a more holistic consideration of issues. Improving cooperation and coordination with federal partners and stakeholders can streamline efficiency, transparency and, ultimately, success. In the next five years, the Commission is committed to ending overfishing and working to rebuild overfished Atlantic coast fish stocks, while promoting sustainable harvest of and access to rebuilt fisheries. Where possible, the Commission will seek to aid in the rebuilding of depleted stocks, whose recovery is hindered by factors other than fishing pressure.

Annual action planning will be guided by the following objectives:

- Manage interstate resources that provide for productive, sustainable fisheries using sound science
- Strengthen state and federal partnerships to improve comprehensive management of shared fishery resources
- Create management frameworks that allow for increased resiliency and adaptability to environmental factors
- Practice efficient, transparent, and accountable management processes
- Evaluate progress towards rebuilding fisheries
- Promote sustainable harvest of and access to rebuilt fisheries
- Strengthen interactions and input among stakeholders, technical, advisory, and management groups
- Develop criteria for prioritizing management actions for species that are depleted due to factors other than fishing mortality
- Include environmental considerations in our management strategies

Goal 2 – Provide robust, actionable science to inform management decisions

Sustainable management of fisheries relies on accurate and timely scientific advice. The Commission strives to produce robust, actionable science through a technically rigorous, independently peer-reviewed stock assessment process. Assessments are developed using a broad suite of fishery-independent surveys and fishery-dependent monitoring, as well as research products developed, in cooperation with the fishing industry, by a broad network of fisheries scientists at state, federal, and academic institutions along the coast. This goal encompasses the development of novel and innovative scientific research, modern assessment methodology, and enhancement of the states' stock assessment capabilities. It provides for the administration, coordination, and expansion of collaborative research and data collection programs. Achieving the goal will ensure robust science is available as the foundation for the Commission's evaluation of stock status and adaptive management actions.

Annual action planning will be guided by the following objectives:

- Proactively address research priorities through cooperative state and regional data collection programs; strengthen stakeholder involvement in collaborative research projects
- Explore the use of emerging technologies to improve fishery-independent surveys, monitoring, and the timeliness of scientific products
- Provide training to enhance the expertise and participation of state and staff scientists in conducting stock assessments
- Streamline assessment data assimilation within individual states, and among states and the Commission
- Conduct stock assessments based on comprehensive data sources and rigorous technical analysis; deliver direct, concise scientific advice in order to achieve clear endpoints in the assessment process; generate indicators/rapid assessments for all stocks
- Balance requests from fisheries management with finite assessment workload capacity
- Support the development and utilization of industry-based surveys and other cooperative research opportunities.
- Integrate estuarine/state waters and federal waters environmental data for use in stock assessments to inform fisheries management decisions
- Communicate with stakeholders to ensure scientific advice and on-the-water observations are consistent
- Characterize the risk and certainty associated with the scientific advice provided to decision-makers
- Explore the use of management strategy evaluations to inform management decisions

Goal 3 – Produce dependable and timely marine fishery statistics for Atlantic coast fisheries

Effective management depends on quality fishery-dependent data to inform stock assessments and fisheries management decisions. Goal 3 focuses on providing timely, accurate catch, effort, and biological data on Atlantic coast recreational, for-hire, and commercial fisheries to support fisheries management.

This goal seeks to accomplish this through the activities of the Atlantic Coastal Cooperative Statistics Program (ACCSP), a cooperative state-federal program that designs, implements, and conducts marine fisheries statistics data collection programs and integrates those data into data management systems that will meet the needs of fishery managers, scientists, and fishermen. ACCSP partners include the 15 Atlantic coast state fishery agencies, the three Atlantic Coast Fishery Management Councils, the Potomac River Fisheries Commission, NOAA Fisheries, the US Fish and Wildlife Service, and the US Geological Survey.

Annual action planning will be guided by the following objectives:

- Focus on activities that maximize benefits, are responsive and accountable to partner and end-user needs, and are based on available resources
- Develop, implement, and maintain coastwide data standards through cooperation with all program partners
- Provide electronic applications that efficiently align partner data collection
- Integrate and provide access to partner data via a coastwide repository
- Facilitate fisheries data access through an on-line, user-friendly system while protecting confidentiality
- Support data systems modernization and integration

Goal 4 – Protect and enhance fish habitat and ecosystem health through partnerships and education

Goal 4 aims to conserve and improve coastal, marine, and riverine habitat to enhance the benefits of sustainable Atlantic coastal fisheries and resilient coastal communities in the face of changing ecosystems. Habitat loss and degradation have been identified as significant factors affecting the long-term sustainability and productivity of our nation's fisheries. The Commission's Habitat Program develops objectives, sets priorities, and produces tools to guide fisheries habitat conservation efforts directed towards ecosystem-based management.

The challenge for the Commission and its state members is maintaining fish habitat under limited regulatory authority for habitat protection or enhancement. Therefore, the Commission will work cooperatively with state, federal, and stakeholder partnerships to achieve this goal. Much of the work to address habitat is conducted through the Commission's Habitat and Artificial Reef Committees. In order to identify fish habitats of concern for Commission managed species, each year the Habitat Committee reviews existing reference documents for

Commission-managed species to identify gaps or updates needed to describe important habitat types and review and revise species habitat factsheets. The Habitat Committee also publishes an annual issue of the *Habitat Hotline Atlantic*, highlighting topical issues that affect all the states.

The Commission and its Habitat Program endorses the National Fish Habitat Partnership, and will continue to work cooperatively with the partnership to improve aquatic habitat along the Atlantic coast. Since 2008, the Commission has invested considerable resources, as both a partner and administrative home, to the Atlantic Coastal Fish Habitat Partnership (ACFHP), a coastwide collaborative effort to accelerate the conservation and restoration of habitat for native Atlantic coastal, estuarine-dependent, and diadromous fishes. As part of this goal, the Commission will continue to provide support for ACFHP, under the direction of the National Fish Habitat Partnership Board.

Annual action planning will be guided by the following objectives:

- Identify fish habitats of concerns through fisheries management programs and partnerships
- Educate Commissioners, stakeholders, and the general public about the importance of habitat to healthy fisheries and ecosystems
- Better integrate habitat information and data into fishery management plans and stock assessments
- Engage local, state, and regional governments in mutually beneficial habitat protection and enhancement programs
- Foster partnerships with management agencies, researchers, and habitat stakeholders to leverage scientific, regulatory, political, and financial support
- Work with ACFHP to foster partnerships with like-minded organizations at local levels to further common habitat goals

Goal 5 – Promote compliance with fishery management plans to ensure sustainable use of Atlantic coast resources

Fisheries managers, law enforcement personnel, and stakeholders have a shared responsibility to promote compliance with fisheries management measures. Activities under this goal seek to increase and improve compliance with fishery management plans. This requires the successful coordination of both management and enforcement activities among state and federal agencies. Commission members recognize that adequate and consistent enforcement of fisheries rules is required to keep pace with increasingly complex management activity and emerging technologies. Achieving the goal will improve the effectiveness of the Commission's fishery management plans.

Annual action planning will be guided by the following objectives:

- Develop practical compliance requirements that foster stakeholder buy-in
- Evaluate the enforceability of management measures and the effectiveness of law enforcement programs
- Promote coordination and expand existing partnerships with state and federal natural resource law enforcement agencies
- Enhance stakeholder awareness of management measures through education and outreach
- Use emerging communication platforms to deliver real time information regarding regulations and the outcomes of law enforcement investigations

Goal 6 – Strengthen stakeholder and public support for the Commission

Stakeholder and public acceptance of Commission actions are critical to our ultimate success. For the Commission to be effective, these groups must have a clear understanding of our mission, vision, and decision-making processes. The goal seeks to do so through expanded outreach and education efforts about Commission programs, decision-making processes, and its management successes and challenges. It aims to engage stakeholders in the process of fisheries management and promote the activities and accomplishments of the Commission and its member states. Achieving the goal will increase stakeholder participation, understanding, and acceptance of Commission activities.

Annual action planning will be guided by the following objectives:

- Increase public understanding and support of activities through expanded outreach at the local, state, and federal levels
- Develop proactive communication to directly address issues of public concern
- Clearly define Commission processes to facilitate stakeholder participation, as well as transparency and accountability
- Strengthen national, regional, and local media relations to increase coverage of Commission actions
- Use new technologies and communication platforms to more fully engage the broader public in the Commission's activities and actions

Goal 7 – Advance Commission and member states' priorities through a proactive legislative policy agenda

Although states are positioned to achieve many of the national goals for marine fisheries through cooperative efforts, state fisheries interests are often underrepresented at the national level. This is due, in part, to the fact that policy formulation is often disconnected from the processes that provide the support, organization, and resources necessary to implement the policies. The capabilities and input of the states are an important aspect of developing national fisheries policy, and the goal seeks to increase the states' role in national policy formulation. Additionally, the goal emphasizes the importance of achieving

management goals consistent with productive commercial and recreational fisheries and healthy ecosystems.

The Commission recognizes the need to work with Congress in all phases of policy formulation. Several important fishery-related laws may be reauthorized over the next couple of years (i.e., Atlantic Coastal Act, Magnuson-Stevens Fishery Conservation and Management Act, Interjurisdictional Fisheries Act, Atlantic Striped Bass Conservation Act, and Anadromous Fish Conservation Act). The Commission needs to proactively engage with reauthorization efforts, this includes advocating for increased funding from sources such as Sportfish Restoration Trust Fund and the Atlantic Coastal Act. The Commission will be vigilant in advancing the states' interests to Congress as these laws are reauthorized and other fishery-related pieces of legislation are considered.

Annual action planning will be guided by the following objectives:

- Increase the Commission's profile and support in the US Congress by developing relationships between Members and their staff and Commissioners, the Executive Director, and Commission staff
- Maintain or increase long-term funding for Commission programs through the federal appropriations process and other available sources. This includes funding for non-federal surveys and to support our partnerships with outside organizations such as US Geological Survey
- Engage Congress on fishery-related legislation affecting the Atlantic coast
- Promote member states' collective interests at the regional and national levels
- Promote economic benefits of the Commission's actions (return on investment)

Goal 8 – Ensure the fiscal stability & efficient administration of the Commission

Goal 8 focuses on ensuring the business affairs of the Commission are managed effectively and efficiently, including workload balancing through the development of annual action plans to support the Commission's management coordination process. It also highlights the need for the Commission to efficiently manage its resources. The goal promotes the efficient use of legal advice to proactively review policies and react to litigation as necessary. It also promotes human resource policies that attract talented and committed individuals to conduct the work of the Commission. The goal highlights the need for the Commission as an organization to continually expand its skill set through training and educational opportunities. It calls for Commissioners and Commission staff to maintain and increase the institutional knowledge of the Commission through periods of transition. Achieving this goal will build core strengths, enabling the Commission to respond to increasingly difficult and complex fisheries management issues.

Annual action planning will be guided by the following objectives:

- Conservatively manage the Commission's operations and budgets to ensure fiscal stability

- Utilize new information technology to improve meeting and workload efficiencies, and enhance communications
- Refine strategies to recruit professional staff, and enhance growth and learning opportunities for Commission and state personnel
- Fully engage new Commissioners in the Commission process and document institutional knowledge
- Utilize legal advice on new management strategies and policies, and respond to litigation as necessary

Atlantic Coastal Cooperative Statistics Program

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This list includes dates for calendar year 2027, including ACCSP committee meetings, relevant dates of the funding cycle, as well as meetings or conferences ACCSP typically attends or which may be of interest to our partners. If you have any questions or comments on this calendar, please do not hesitate to contact the ACCSP staff at info@accsp.org.

Jan 28-29:	NEFMC Meeting – Webinar
Jan 28:	2026 FHTS Training - Webinar
Feb 4-5:	ASMFC Meeting – Arlington, VA
Feb 10-11:	APAIS South Atlantic Training- Richmond, VA
Feb 17:	Bycatch Prioritization Committee Meeting – Webinar
Feb 25:	Biological Prioritization Committee Meeting – Webinar
Feb 24-25:	APAIS North Atlantic Training- New Bedford, MA
Feb 10-11:	MAFMC Council Meeting- Webinar
Mar 1:	Start of ACCSP FY26
Mar 2-6:	SAFMC Meeting – Jekyll Island, GA
Mar 4:	Recreational Technical Committee Meeting - Webinar
Mar 24:	Information Systems Committee Meeting – Webinar
Mar 25:	Commercial Technical Committee Meeting – Webinar
Apr 6:	Operations and Advisory Committees Spring Meeting – Webinar
Apr 7-9:	MAFMC Meeting – New York, NY
Apr 14-16:	NEFMC Meeting – Portland, ME
May 4-6:	ASMFC/Coordinating Council Meeting – Arlington, VA
May 11:	ACCSP issues request for proposals
Jun 8-12:	SAFMC Meeting – St. Augustine, FL
Jun 12:	Initial proposals are due
Jun 16-18:	MAFMC Meeting – Alexandria, VA
Jun 19:	Initial proposals are distributed to Operations and Advisory Committees
Jun 23-25:	NEFMC Meeting – Mystic, CT
July 6:	Any initial written comments on proposals due
Week of Jul 13:	Review of initial proposals by Operations and Advisory Committees
July 18:	If applicable, any revised written comments due
Week of Jul 27:	Feedback submitted to principal investigators
Aug 5-7:	ASMFC Meeting – Arlington, VA
Aug 10-13:	MAFMC Meeting – Philadelphia, PA
Aug 14:	Revised proposals due

Aug 21:	Revised proposals distributed to Operations and Advisory Committees
Week of Sep 7:	Ranking exercise for Advisors and Operations Members – Webinar
Sep 14-18:	SAFMC Meeting – Charleston, SC
Sep 15-17:	NEFMC Meeting – Plymouth, MA
Sep 22-23:	Advisors/Operations Committee Joint Meeting (in-person; location TBD)
Oct 6-8:	MAFMC Meeting – Duck, NC
Nov 9-12:	ASMFC Annual Meeting/Coordinating Council – Newport, RI
Dec 2-4:	NEFMC Meeting – Newport, RI
Dec 7-11:	SAFMC Meeting – Beaufort, NC
Dec 14-17:	MAFMC Meeting – Annapolis, MD

Geoff White

ACCSP Director

EXECUTIVE COMPETENCIES

- Committed to excellence and accountability
- Empowering leadership and inclusive management style
- Leveraging technology and cooperative approach
- Belief in holistic and integrated solutions
- Passion for strategic vision
- Project design and oversight
- Financial responsibility and accountability
- Effective communicator, writer and presenter
- Proven ACCSP ambassador

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SELECTED ACHIEVEMENTS

- Supported reduced fishery reporting burden through One Stop Reporting.
- Improved efficiency of APAIS data collection by integrating tablet data capture, Oracle database, SAS processing and delivery.
- Extended state conduct of MRIP FHTS and LPS with integrated web tools.
- Developed budget and managed over $4.5M annual funding for multiple MRIP surveys through ACCSP and 13 State Partners
- Initiated development of comprehensive for-hire data collection methods.
- Developed and implemented the MRIP APAIS Atlantic state conduct transition
- Conceived and implemented changes to improve availability of ACCSP data

EMPLOYMENT EXPERIENCE

***Director, ACCSP* 2019 – Present**
Responsible for ACCSP strategic direction through the Coordinating Council, and management of ongoing projects. Represent ASMFC and Atlantic states on data related topics in regional and national meetings.

***Recreational Program Manager ACCSP* 2015 – 2019**
Responsible for ACCSP's recreational fishery data standards and implementing state conduct of MRIP APAIS and FHTS surveys. Developed coastwide budgets, data collection, processing, and delivery systems. Managed local staff and guided partner staff in survey completion. Represented ACCSP and Atlantic states on MRIP Regional Council and at national meetings.

***Data Team Lead / Systems Admin ACCSP* 2008 – 2015**
Provided data team leadership and subject expertise for ACCSP data projects and priorities. Engineered transition to state conduct of MRIP APAIS. Responsible for ACCSP information systems maintenance including network, servers, oracle databases, and 2010 office relocation.

***Systems Admin -ACCSP* 2004–2008**
Responisble for the ACCSP's IT infrastructure. Provided subject expertise for partner data access, data translations, and development of web-based recreational and commercial queries.

***Fisheries Specialist -ASMFC* 1998–2004**
Coordinated SEAMAP SA, staffed development of two multi-species assessment models, designed and implemented the Lobster Assessment Database, coordinated fisheries research programs and stock assessment reviews supporting fisheries management.

***Marine Scientist -VIMS* 1996–1998**
Estimated fishing mortality of tautog in Virginia waters. Project results accepted as Virginia's fishery status in the ASMFC Tautog FMP.

MANAGEMENT EXPERIENCE

- Managed multiple concurrent projects and contracts to extend ACCSP capabilities.
- Contributing member of MRIP Regional Implementation Council & MRIP NAS reviews.
- Extended development of the MRIP survey state conduct through leadership of three local staff and 160 remote partner staff.
- Coached RecTech Committee development of Atlantic Recreational Implementation Plan.
- Supported Cooperative agreement funding and management, including proposal writing, information gathering, contract oversight, and report submission.
- Demonstrated ability to bring together diverse groups on issues by coordinating and facilitating workshops.

FISHERIES EXPERIENCE

- Deep understanding of the ACCSP mission, activities, and partners gained over 24 years of working in consensus-driven environment of Atlantic coast fisheries management
- Adept at balancing state and federal partner needs in the development of coastwide data standards, data entry and query tools for recreational and commercial fisheries data
- Proven ability to understand fisheries stock assessment data needs

IT EXPERIENCE

Software Development – Strategic priorities for SAFIS capabilities. Managed and programmed projects to create Data Warehouse end user queries, APAIS web interface, APAIS Tablet application, API data transmission and FHTS CATI.

Oracle DBA – Managed 10 DB instances supporting coastwide standardization of fisheries data collection and dissemination.

Systems Administrator– Performed or directed data center implementation and support including network security & system availability.

EDUCATION & AWARDS

- B.S. Dickinson College
- M.S. Virginia Institute of Marine Science
- ASMFC Stock Assessment Training I-III
- Oracle PL/SQL, DB Administration, Windows & Linux Server Administration
- Project Management & Leadership Training
- ASMFC Employee of the Qtr 2003, 2011
- ASMFC Directors Meritorious Service 2017
- ASMFC Science & Technical Excellence 2019
- Eagle Scout, Boy Scouts of America

Guide for Ranking Proposals
FY2027 Edition

INTRODUCTION

Each year, the Atlantic Coastal Cooperative Statistics Program (Program) distributes a Funding Decision Document outlining the priorities for the coming fiscal year. These priorities are reviewed by the Coordinating Council each spring before the request for proposals is distributed. The Funding Decision Document is available to all ACCSP grant applicants.

We cannot assume that all proposals will meet the guidelines set forth by the document. This is precisely why we need a diverse set of eyes to review the proposals so we can distribute the funds in accordance with Program guidelines.

PHILOSOPHY

What is most important to remember as a proposal ranker is that you are consistent when reviewing the proposals. Many people have different viewpoints as to what would receive a high score. For instance, someone might think it is worth 10 points if a proposal states that it will collect all minimum data elements of catch and effort, whereas, someone else might view a proposal that collects all minimum data elements as worthy of 7 points, which would leave room if another proposal went above and beyond with an innovative data verification program.

It is entirely up to you how you view these proposals. We realize each proposal ranker is coming from a different perspective and we look forward to gathering a diverse set of rankings for each proposal. **The most important aspect to ranking proposals is to remain consistent from proposal to proposal.**

CATEGORIES FOR RANKING

For FY2027, there are three categories used to rank the project proposals:
1) *Primary Program Priority*;
2) *Project Quality Factors*; and
3) *Other Factors*.

SCORING

The factors of each category carry a different weight. For instance, when ranking these proposals, the score of the primary module given to the proposal is given a weight of 3 (the score given is multiplied by 3). The funding transition plan, improvement in data quality/quantity/timeliness, impact on stock assessments, and impact on management criteria are given a weight of 2 (the score given is multiplied by 2). Finally, the data delivery plan, multiple partners, in-kind contribution, potential secondary module, merit and properly prepared criteria are all given a weight of 1 (the score given is multiplied by 1).

PRIMARY PROGRAM PRIORITY

Projects must be rated on how well the data being collected by the project fit the current Atlantic Coast Fisheries Data Collection Standards. You will rate only one module in addition to whether the proposal contains a data delivery plan. If a secondary one is recognized, it will be considered during *Project Quality Factors*. The highest possible score for this section (PRIMARY PROGRAM PRIORITY) is 32. The score of this category is 50% of the total score of the project.

A. *Biological Sampling* – ACCSP is principally seeking to collect biological data in FY2027. If a proposal description states that it will primarily collect biological data, the proposal may score a maximum of 10 points.

How does a proposal receive the maximum 10 points? The FY2027 Biological Matrix identifies the top quartile of all species ranked by the Atlantic States Marine Fisheries Commission, regional councils, NOAA Fisheries, and the states. The top quartile species are grouped by average priority and biological sampling adequacy. The proposals should be given a high ranking if data are collected on species with high average priority and inadequate adequacy (FY2027 species: *black sea bass, Spanish mackerel, and red snapper*). A mid-level score would be given to those proposals that have a low average priority and inadequate sampling (FY2027 species: *gag grouper, snowy grouper, American shad, red grouper, river herring, tilefish, scamp, red porgy, American lobster, ocean pout, cobia, American eel, winter flounder, blueline tilefish, Atlantic halibut, N. short-fin squid, gray triggerfish, scup, and bluefish)* or high average priority and adequate sampling (FY2027 species: *none*). A low-level score would go to those species that have a low average priority and are adequately sampled (FY2027 species: *Atlantic menhaden, horseshoe crab, and shortfin mako shark*).

B. *Catch and Effort* – A second priority for FY2027 is catch and effort data. If a proposal description states that it will primarily collect catch and effort data, the proposal may score a maximum of 8 points.

How does a proposal receive the maximum 8 points? The ACCSP standard for commercial catch and effort statistics is mandatory, trip-level reporting of all commercial harvested marine species, with fishermen and/or dealers required to report standardized data elements for each trip by the tenth of the following month.

The ACCSP standard for recreational catch and effort statistics are covered in more detail in the current Atlantic Coast Fisheries Data Collection Standards. Something you may want to consider when ranking proposals is whether or not all data elements outlined in the Atlantic Coast Fisheries Data Collection Standards. To determine scoring for this factor consider the following:
1) If they collect the minimum data elements would the proposal be ranked a 5 and thus for all additional information it would lead up to the highest possible score – a 8?
2) Is the data collection method they used (1 ticket vs. 2 ticket) a determining factor on the final score given in this category?
3) Also, is data validation a consideration for this ranking?

C. *Bycatch/Species Interaction* - A third priority for ACCSP for FY2027 is the collection of bycatch data. If a proposal description states that it will primarily collect bycatch data, the proposal may score a maximum of 6 points.

How does a proposal receive the maximum 6 points? The FY2027 Bycatch Matrix identifies the top quartile of all fisheries fleets ranked by the Atlantic States Marine Fisheries Commission, regional councils, NOAA Fisheries, and the states. The bycatch matrix was revised to use a fleet-based approach in 2021. The top fleets are ranked by scoring protected species interactions, amount of regulatory discards, amount of non-regulatory discards, significant changes in management in the past 36 months, total number of trips, and total landings. The fleets in the top quartile of the matrix for FY2027 ranked from highest to lowest include: Mid-Atlantic gillnet, snapper grouper H&L fleet, South Atlantic shrimp trawl, New England otter trawl, Mid-Atlantic pound net, American lobster pots, pelagic H&L fleet (North), New England gillnet, New England extra-large mesh gillnet, Mid-Atlantic small-mesh otter trawl (bottom), Mid-Atlantic large-mesh otter trawl (bottom), Mid-Atlantic fish pots and traps, South Atlantic large-mesh gillnet, HMS pelagic longline (Southeastern, Atlantic, and Gulf), Mid-Atlantic dredge (other), New England crab pots, South Atlantic blue crab. Points should be given according to how the fleet was ranked in top quartile with the most points going towards a proposal studying the fleet with the highest ranking.

The Definition of bycatch as defined in the Atlantic Coast Fisheries Data Collection Standards includes:
a. Fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program. From Magnuson-Stevens Fishery Conservation and Management Act.

b. Discarded catch of any living marine resource plus retained incidental catch and unobserved mortality due to a direct encounter with fishing gear. From NOAA Fisheries Service (used for its National Bycatch Strategy and bycatch reduction efforts).

D. *Social and Economic* – Another important priority in FY2027 is the collection of social and economic data. If a proposal description states that it will primarily collect social and economic data, the proposal may score a maximum of 6 points.

How does a proposal receive the maximum 6 points? Priorities for commercial social and economic data collection were compiled by the Committee on Economic and Social Science. Additionally, there is a list of data elements found in the Atlantic Coast Fisheries Data Collection Standards you may want to consider as a proposal ranker. The ACCSP has established standards for social and economic data collection in recreational and for-hire finfish fisheries. Our standard is voluntary surveys of finfish fisheries conducted at least every three years.

E. *Data Delivery Plan* – All proposals are expected to submit data collected through a proposal to the ACCSP. A proposal may therefore receive up to an additional 2 points if the proposal clearly identifies a plan for submitting collected data to ACCSP. When considering how many points a proposal should receive, consider the method of data transmission and frequency of submission to ACCSP.

PROJECT QUALITY FACTORS (Partners, Funding and Data):

A. *Multi-Partner Regional impact including broad applications* (PARTNERS*)* - To determine scoring for this factor (a score of 0-5) consider the following:
1) Does this project involve one or multiple partners?
2) Does this project collect data from one or multiple partners?
3) What is the timeline for benefiting from the data?
4) Does this project have a narrow or broad scope of work?
The highest possible score for the above section (PARTNERS) is a 5. The score of this category is 8% of the total score of the project.

B. *Contains funding transition plan/Defined end point* (FUNDING) - To determine scoring for this factor (a score of 0-4) consider the following:
1) How long has the project been receiving funds from ACCSP or other sources?
2) Does the project have an end point or continue year after year?
3) If the project continues does this project explain how new funds will be applied in coming years?
4) Is there a transition plan?

C. *In-kind contribution* (FUNDING) – To determine scoring for this factor (a score of 0-4) consider the following:
1) Is the partner adding funds as well as ACCSP?
2) At what level is the partner applying additional funds?
3) Is it at a level that is acceptable for the ACCSP standards?
The highest possible score for the above section (FUNDING) is a 8. The score of this category is 13% of the total score of the project.

D. *Improvement in data quality/quantity/timeliness* (DATA) - To determine scoring for this factor (a score of 0-4) consider the following:
1) At what rate can this project provide data to the ACCSP Data Warehouse?
2) Are the data collected from this project a higher pedigree than in previous years?
3) Does this project include innovative ways to collect data?
4) Does this project outline a clear and timely mechanism for sharing data to ACCSP?

E. *Potential secondary module as a by-product (In program priority order)* (DATA) – In determining what (if any) score to give for a proposal that addresses a secondary module as a byproduct consider the following, if the secondary module is:
1) Biological data receives a score of 0-5;
2) Catch and effort data receives a score of 0-4;
3) Bycatch data receives a score of 0-3; and
4) Social and economic data receives a score of 0-3.
Note that only one secondary module should be considered for scoring.

F. *Impact on stock assessment* (DATA) – To determine scoring for this factor (a score of 0-3) consider the following:
1) Does this project collect data from a species that has a stock assessment in the next few years?
2) Does this project collect data that can be organized in a fashion suitable for the ACCSP Data Warehouse that can be used for a stock assessment when needed?

G. *Impact on management* (DATA) – To determine scoring for this factor (a score of 0-3) consider the following:
1) Does this project collect data from a species that has pending management actions in the next few years?
2) Does this project collect data that can be organized in a fashion suitable for the ACCSP Data Warehouse that can be used for management when needed?

The highest possible score for the above section (DATA) is 15. The score of this category is 23% of the total score of the project.

OTHER FACTORS
A. *Innovative* (New projects only) – To determine scoring for this factor (a score of 0-3) consider whether the project proposes use of new technologies or methodologies or will result in new financial savings.

B. *Properly Prepared* – To determine scoring for this factor (a score of -1-1) consider the following:
1) Does the proposal follow the guidelines of the Funding Decision Document?
2) Does this proposal follow the directions of the guidelines set forth by the request for proposals?

C. *Merit* – To determine the scoring for this factor (a score of 0-3) consider the subjective worthiness of the proposal to receive funding.
The highest possible score for the above section (OTHER FACTORS) is a 4. The score of this category is 6% of the total score of the project.

If you have any questions, please reach out to ACCSP Deputy Director, Julie DeFilippi Simpson (julie.simpson@accsp.org).

Thank you for your hard work and dedication in reviewing the proposals!

GLOSSARY OF TERMS COMMONLY FOUND IN PROPOSALS

Access sites: Areas where fishermen fish from shore. Or access sites can be defined as the place fishermen board or leave a boat to go fishing.

Bank: A stretch of rising land at the edge of a body of water not washed by high water, which could be rocks or an overhanging cliff.

Beach: A level stretch of pebbles, bedrock shore, or sand beside a body of water (often washed by high water).

Breachway: Shore along a connecting channel.

Breakwaters: An offshore structure used to protect a harbor or beach from the forces of waves.

Bridge: A structure carrying a pathway or roadway over a body of water.

Bulkhead (as known as seawall): A retaining wall along a waterfront.

Bycatch (2 accepted definitions):
a. Fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program. *From Magnuson-Stevens Fishery Conservation and Management Act*

b. Discarded catch of any living marine resource plus retained incidental catch and unobserved mortality due to a direct encounter with fishing gear. *From NOAA Fisheries Service (used for its National Bycatch Strategy and bycatch reduction efforts)*

Catch: The total number, weight, or other measure of marine resources (fish, invertebrates, or others) which are captured and retained, released, or discarded.
Advisory Committee: Finfish, shellfish, and protected species that are captured, whether retained, released, or discarded.

Discarded or released catch: The portions of the catch that is not retained (i.e., discarded or released at sea dead or alive) and includes incidental take of protected species.

Advisory Committee: Recommends deleting the definition above and replacing it with:
Economic, social, and cultural discard: Finfish and shellfish that are the target of a fishery, but which are not retained because they are undesirable size, sex, or quality, or for other economic, social, or cultural reasons.
Regulatory discard: Finfish, shellfish, and protected species harvested in a fishery which fishermen are required by regulation to discard.

Immediate use catch: Use of the retained catch for food or bait before the end of the trip.

Landed catch: The total number, weight, or other measure of all marine resources (fish, invertebrates, others) captured, brought to shore and retained at the end of a trip. This includes catch that is discarded or not sold after being landed. This type of catch is indicated by disposition codes.
Advisory Committee:
Landed Catch: Finfish, shellfish, and protected that are captured, brought to shore and retained at the end of a trip.

Causeway: An elevated or raised way across wet ground or water.

Charterboat: *Trip Definition* - Any trip of a vessel-for hire engaged in recreational fishing (VHERF) that is hired on a per trip basis. For survey purposes, and possible alternative definitions, information should be gathered on: a) number of anglers (refers to all marine recreational resource users); b) size of boat; and c) where fishing occurred. *Boat Definition* - A charterboat is any VHERF that typically is hired on a per trip basis.

Commercial and recreational fisherman: For statistical purposes only, anyone who sells or barters any portion of the catch from a trip is a commercial fisherman for that trip, and any marine resources that are sold or bartered are considered a commercial product. All other fishermen and catches are considered recreational. Commercial trips with effort but no catch are still commercial trips and should be reported.

Commercial dealer: A seafood dealer is defined as any person or entity other than the final consumer, who purchases, ships, consigns, transfers, transports, barters, accepts (maintains) or packs any marine fishery

products received from marine resource harvesters or marine aquaculturists. Any marine fishery products landed in any state must be reported by a dealer or a marine resource harvester acting as dealer in that state. Any marine resource harvester or aquaculturist who sells, consigns, transfers, or barters marine fishery products to anyone other than a dealer would himself be acting as a dealer and would therefore be responsible for reporting as a dealer. This definition is provided for purposes of statistical gathering only.

Docks: Structure built out over water and supported by pillars/anchors with long-term docking facilities for boats.

Exclusive Economic Zone (EEZ): Offshore waters 3-200 miles on Atlantic coast. For the Gulf coast it is 9-200 miles from the shoreline.

Effort: Estimated number of fishing trips taken by an individual (recreationally).

Entanglements: A condition in which any part of a protected species is tangled, wrapped and snared, hooked, or otherwise attached to fishing gear.

Fisheries-dependent: Information collected directly from the commercial, for-hire, and recreational fisheries.

Fisheries-independent: Information gathered independent of the fisheries through direct or indirect sampling of the stocks.

Fishing guide: A person hired by a recreational fisherman to aid in fishing activities.

Fishing trip: A period of time over which fishing occurs. The time spent fishing includes configuring, deploying, and retrieving gear, clearing animals from the gear, and storing, releasing or discarding catch. When watercraft are used, a fishing trip also includes the time spent traveling to and from fishing areas or locales and ends when the vessel offloads product at sea or returns to the shore. When fishing from shore or man-made structures, a fishing trip may include travel between different fishing sites within a 24-hour period.
Commercial Trip: Any trip where the retained catch is or would be sold or bartered. This includes trips with effort but no catch.

For-hire Trip: Any shore or vessel trip whose participants are engaged in a marine resources recreational activity that is contracted for a fee.

Recreational Trip: Any trip for the purpose of recreation from which none of the catch is sold or bartered**.** This includes trips with effort but no catch.

Split Trip: A split trip is any angler trip in which a portion of the landings are sold commercially and a portion of the landings are retained for personal use.

Gear: Anything used to catch marine resources.

Gear configuration: Materials, construction, measure (e.g., mesh size, length of gear), and deployment of gear.

Guided beach trip: Any shore-based trip where a guide is hired or provided.

Guided fishing trip: A fishing trip on which a fishing guide is hired to provide services directly related to fishing activities.

Headboat: *Trip* - Any trip of a VHERF that is hired on a per person basis. For survey purposes, and possible alternative definitions information should be gathered on: a) number of anglers (refers to all marine recreational

resource users); b) size of boat; and c) where fishing occurred. *Boat* - A headboat is any VHERF that typically is hired on a per person basis.

Inland: Waterbodies less than zero miles from the shoreline. Also, includes waterbodies found inside the boundaries for territorial waters.

Intercept survey: On-site interviews which gather data from fishermen during or upon completion of their fishing trip at access sites.

International: Offshore waters greater than 200 miles from the shore line

Integrated Taxonomic Information System (ITIS): A taxonomic database for terrestrial and aquatic plants and animals. The product of a partnership of federal agencies collaborating with systemists in the federal, state and private sectors to provide scientifically credible taxonomic information.

Jetties: A kind of wall, usually made of rocks, built into the water to restrain currents or protect a harbor.

Metadata: Metadata are corollary or descriptive information, both numeric and non-numeric, which may qualify or explain primary data.

Mode of fishing: The method by which a recreational fishing trip is taken, e.g. private/rental boat, shore, or for-hire.

Multi-trip fisheries: Multiple trip fisheries are characterized by a large number of relatively short duration trips employing the same type of gear, (e.g. lobster pots), and resulting in catch of the same species (e.g. lobster), or relatively few species

Non-consumptive use: Any activity related to marine resources where no take of marine resources is attempted. Examples include photographing wildlife in natural or managed areas, SCUBA diving to view jewfish, whale watching, etc.

Observer: A trained agent (employee, contractor, grantee, etc.) of any ACCSP partner acting as an unbiased data collector observing fishing operations on fishing vessels at sea.

Other fishing modes: Any other non-boat fishing.

Piers: Structure built out over water and supported by pillars without long-term docking facilities for boats.

Person: Any individual, corporation, partnership, association or other entity, or any federal, state, local, or foreign government or any entity of such governments, including regional fishery management councils.

Port agent/sampler: A trained agent (e.g., employee, contractor, grantee, etc.) of any partner acting as an unbiased data collector, collecting data after the completion of a fishing trip.

Post stratification: Summarization of data into strata different from strata design used during data collection.

Price: The dollar amount per landed unit (e.g. pounds, bushels) of a given species (or species landing condition and market category).

Private access sites: Privately owned riparian land with dock/shoreline, waterfront residential developments, or marinas inaccessible to intercept sampling.

Private boat: *Trip* - Any boat trip for which no fee is paid for use of the boat. *Boat* - Any boat for which no fee is paid for use of the boat.

Protected species: Any organism listed under the MMPA, ESA, or the Migratory Bird Treaty or any state protected species legislation. The term protected species can include protected finfish species (e.g., Atlantic salmon, shortnose sturgeon), invertebrates (e.g., Queen conch), sea birds, and plants (e.g., sea oats).

Protected species interactions: Any interaction with a fishery, which results in the harassment, harm, or death of individuals of a species.

Public: Any user of non-confidential information.

Rental boat: *Trip* - A trip on a boat that is rented or leased. No captain or crew is hired. *Boat* - A boat that is rented or leased. No captain or crew is hired.

Retained catch: The number or weight of marine resources caught and kept for immediate use (e.g., bait, food) or for landing.

State territorial seas: Inshore 0-3 miles on Atlantic coast. Gulf coast is 0-9 miles from the shoreline.

Strandings: A marine mammal or sea turtle where: 1) the specimen is dead and/or moribund on the beach or shore or in a coastal waterway or EEZ, or 2) the specimen is alive and is on the beach or shore and is unable to return to the water under its own power, or 3) the specimen is in the EEZ or a coastal waterway where the water is so shallow and/or inhospitable that the specimen is unable to return to its natural habitat under its own power.

Stratification: The process of dividing a population into two or more non-overlapping comprehensive subpopulations, called strata, for the purpose of conducting independent surveys of these subpopulations.

Stratum: An identifiable sub-population of a population that is being sampled.

Team Fish: The cooperative harvesting of the resource by a group of fishermen. These fishermen may be formally organized in a sector or coop. Cooperation may take many forms (information-sharing on the location of the stocks, rationalization of the group's fleet, coordinate access to fishing grounds to avoid congestion and gear conflicts, search for lost gear, etc.), but in most cases the main objective is to increase the profits of the whole group.

Trip (see **fishing trip**): A trip is shore to shore by gear/area combination, or in the case of transfers at sea, an offloading at sea is a trip.

Trip duration: *Recreational Trip Duration:* A day of fishing measured in hours fished for the shore mode and dock-to-dock duration for the private/rental boat mode. *For-hire Trip Duration:* Dock-to-dock duration measured in hours fished

Unique Identifier for commercial fisheries: The unique identifier for commercial fisheries trip data is the trip start, the vessel identifier, and trip number when a vessel is involved; the trip start, the individual identifier, and the tip number when a vessel is not involved. Reporting of the unique identifier is required of both commercial fishermen and dealer on all submitted reports.

Unique identifier for recreational fisheries: The unique identifier for recreational trip data is the date of return, the sampler number, the record number, and the individual.

Value: The total landed dollar amount of a given species (or species landing condition and market category). Example: 100 pounds of lobster at a price of $3.50 per pound will have a value of $350.

Vessel directory frame: A list of known vessels operating in a particular fishery, which can be used to sample that fishery.

Waterbodies: Bodies of waters used for defining areas fished and identified by standard codes.

Recreational Technical Committee

Recommendation on updates to MRIP APAIS questions for 2027

The ACCSP Recreational Technical Committee (RTC) discussed and considered two topics for additional questions to be modified in the tablet-based APAIS Dockside Intercept Application (DIA). These are related to capturing more detail on depredation, and area fished by 10 minute grids. Responses to both recommendations would be available in the downloadable MRIP micro-data, and do not impact standard MRIP catch estimation calculations.

The materials for these items have been updated since the May Coordinating Council meeting, and are being reviewed for action by the ACCSP Operations and Advisory Committees. The recommendation from Operations and Advisors will be included in the supplemental materials for the ACCSP Coordinating Council Meeting.

Atlantic States Marine Fisheries Commission

Horseshoe Crab Management Board

November 10, 2026
10:45 a.m. - 12:15 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order *(E. Reid)*	10:45 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from May 2026	10:45 a.m.
3.	Public Comment	10:50 a.m.
4.	Review Delaware Bay Bait Harvest Specifications **Possible Final Action** • Review Horseshoe Crab and Red Knot Survey Data *(J. Sweka)* • Consider Changes to Specifications for the 2027 Fishing Year *(C. Starks)*	11:00 a.m.
5.	Consider Updates to Adaptive Resource Management (ARM) Framework Model Reward, Utility, and Harvest Policy Functions **Action** • Overview of Model Revisions Based on Stakeholder Input *(J. Sweka)* • Delaware Bay Ecosystem Technical Committee Report *(J. Sweka)* • Advisory Panel Report *(B. Hoffmeister)* • Consider Initiating an Addendum to Implement Changes to the ARM Framework	11:15 a.m.
6.	Consider Approval of Fishery Management Plan Review and State Compliance for the 2025 Fishing Year *(C. Starks)* **Action**	12:05 p.m.
7.	Other Business/Adjourn	12:15 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, Rhode Island; 401.847.3300) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Horseshoe Crab Management Board
November 10, 2026
10:45 a.m. – 12:15 p.m.

Chair: Eric Reid (RI) Assumed Chairmanship: 2/25	Technical Committee Chair: Ethan Simpson (VA) Delaware Bay Ecosystem TC Chair: Wendy Walsh (USFWS)	Law Enforcement Committee Rep: Nick Couch (DE)
Vice Chair: Carrie Kennedy (MD)	Advisory Panel Chair: Brett Hoffmeister (MA)	Previous Board Meeting: May 5, 2026
Voting Members: MA, RI, CT, NY, NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (15 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 2026

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Review Delaware Bay Bait Harvest Specifications (11:00-11:15 a.m.) Possible Final Action

Background

- In October 2026, the Delaware Bay Ecosystem TC (DBETC) and Adaptive Resource Management (ARM) Subcommittee met to review results of the horseshoe crab and red knot population abundance surveys in the Delaware Bay region **(Briefing Materials).**
- Addendum IX allows for male-only harvest specifications to be set for up to three years based on the ARM Framework. In October 2025, the Board set male-only harvest specifications for 2026 and 2027.
- Under Addendum IX, the ARM Framework is not used to inform Delaware Bay region bait harvest limits in interim years of multi-year male-only harvest specifications and the male-only harvest limit is based on the male:female sex ratio of spawning horseshoe crabs on beaches observed in the bay-wide spawning survey. If the sex ratio is greater than or equal to 3:1, the maximum harvest of 500,000 Delaware Bay origin males is permitted **(Briefing Materials).**

Presentations

- Horseshoe Crab and Red Knot Survey Results by J. Sweka
- Review of Specifications for the 2027 Fishing Year by C. Starks

Board actions for consideration at this meeting

- Review 2027 Delaware Bay bait harvest specifications

4. Consider Updates to Adaptive Resource Management Framework Reward/Utility/Harvest Policy Functions (11:15 a.m.-12:05 p.m.) Action

Background

- The Commission initiated a stakeholder engagement process in 2025 to get input on changes to the reward, utility, and harvest policy functions of the ARM Framework to better reflect current stakeholder values. The Board reviewed the final report in May 2026, which included recommendations to consider several changes to the reward, utility, and harvest policy functions of the ARM Framework.
- In May 2026 the Board tasked the ARM Subcommittee with developing the recommended changes to the ARM model **(Briefing Materials).**
- The DBETC met to review these changes in October 2026, in addition to a model code error correction **(Briefing Materials).**
- The Advisory Panel met in October to review the proposed model changes and provide input **(Supplemental Materials).**

Presentations

- Overview of Model Revisions Based on Stakeholder Input by J. Sweka
- Delaware Bay Ecosystem Technical Committee Report by J. Sweka
- Advisory Panel Report by B. Hoffmeister

Board actions for consideration at this meeting

- Initiate an addendum to consider adopting changes to the reward, utility, and harvest policy functions of the ARM Framework based on 2026 stakeholder input

6. Consider Approval of Fishery Management Plan Review and State Compliance for the 2025 Fishing Year (12:05-12:15 p.m.) Action

Background

- State Compliance Reports were due July 1, 2025.
- The Plan Review Team reviewed each state report and compiled the annual FMP Review **(Briefing Materials).**
- South Carolina, Georgia, and Florida have requested and meet the requirements of *de minimis* status.

Presentations

- FMP Review of the 2025 Fishing Year by C. Starks

Board actions for consideration at this meeting

- Approve FMP Review and State Compliance Reports
- Approve *de minimis* requests

7. Other Business/Adjourn (12:15 p.m.)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

HORSESHOES CRAB MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

May 5, 2026

These minutes are draft and subject to approval by the Horseshoe Crab Management Board.
The Board will review the minutes during its next meeting.

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1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of October 2025** by consent (Page 1).

3. **Move to adjourn** by consent (Page 13).

ATTENDANCE

Board Members

Dan McKiernan, MA (AA)
Raymond Kane, MA (GA)
Rep. Sarah Peake, MA, proxy for Rep. Armini (LA)
Nicole Lengyel Costa, RI, proxy for J. McNamee (AA)
David Borden, RI (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, MD (AA)
Bill Hyatt, CT (GA)
Robert LaFrance, CT, proxy for Rep. Gresko (LA)
Jesse Hornstein, NY, proxy for M. Gary (AA)
Emerson Hasbrouck, NY (GA)
Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
John Clark, DE (AA)
Roy Miller, DE (GA)
Craig Pugh, DE, proxy for Rep. Carson (LA)
Carrie Kennedy, MD, proxy for K. Charbonneau (AA)
Russel Dize, MD (GA)
Ethan Simpson, VA, proxy for J. Grist (Acting AA)
Chris Batsavage, NC, proxy for K. Rawls (AA)
Ben Dyar, SC, proxy for B. Keppler (AA)
Malcolm Rhodes, SC (GA)
Chris McDonough, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Gary Jennings, FL (GA)
Ron Owens, PRFC
Chris Wright, NMFS
Lowell Whitney, US FWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

John Sweka, ARM Subcommittee Chair

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Caitlin Starks
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Horseshoe Crab Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Tuesday, May 5, 2026, and was called to order at 1:15 p.m. by Chair Eric Reid.

CALL TO ORDER

CHAIR ERIC REID: Good afternoon, everybody, welcome to the Horseshoe Crab Board. My name is Eric Reid; I am a Legislative Proxy for Senator Susan Sosnowski from Rhode Island. I have the honor of chairing this Board. To my right is Ms. Starks and Ms. Nehemiah, and we have online Mr. Sweka if we need him. He's in the on-deck circle that if we need him, we'll be happy to connect you with him.

We also have with us today Mr. Crawford and Ms. O'Donnell, they are from Compass Resource Management, they did some work for us, and we're going to get a presentation from them and from Ms. Starks. Then we have a path forward we would like to present to you, and we'll see if we can do that without too much fanfare.

APPROVAL OF AGENDA

CHAIR REID: Let's get started. Approval of the Agenda, is there any changes to the agenda? Seeing none; agenda stands approved.

APPROVAL OF PROCEEDINGS

CHAIR REID: Approval of our proceedings from October 2025 meeting, is there any problem with those minutes? Seeing none; those proceedings stand approved.

PUBLIC COMMENT

CHAIR REID: Is there anybody in the audience that would like to make a public comment that is not on this agenda? Is there anybody online? Seeing none; very good.

CONSIDER REPORT ON STAKEHOLDER ENGAGEMENT PROCESS ON ADAPTIVE RESOURCE MANAGEMENT FRAMEWORK REWARD/UTILITY/HARVEST POLICY FUNCTIONS

CHAIR REID: We're going to have a presentation. We're going to consider the stakeholder engagement process report on the Adaptive Resource Management Framework, Reward/Utility/Harvest Policy Functions and that will be from Mr. Crawford and Ms. O'Donnell. Then Ms. Starks is going to give a presentation at the end and we will take questions at that time. We're going to go through all the reports first.

MS. TONI KERNS: Really quick, Eric. I just want to note that Adam Nowalsky from New Jersey is participating online, as well as Monica Martinez from New York.

CHAIR REID: Thank you, Ms. Kerns. With that, Mr. Crawford, Ms. O'Donnell, take it away.

MR. BRIAN CRAWFORD: Hello, Board members. Thanks for the opportunity to present today, where we've been looking forward to it for some time. My name is Brian Crawford, as was stated, my colleague Katie O'Donnell and I are facilitators and decision scientists with Compass Resource Management. Over the past eight months-ish, we've supported ASMFC in running a structured stakeholder engagement process to inform those updates of the value-based requirements of the Horseshoe Crab Adaptive Management Framework.

Today we want to briefly summarize the process, and focus on the stakeholder recommendations and rationales that emerge from it. Right up front, before we really launch into those recommendations, we want to acknowledge the people who invested in this process, specifically those 14 stakeholder representatives you see on the right side.

We gathered them from 6 broad interest groups engaged throughout the process, these were bait fishers, dealers, the biomedical industry and ecosystem horseshoe crab and shorebird

conservation groups. We also had key participation and input from technical staff, especially the DBETC and ARM Subcommittee, and also had additional folks observe the process along the way.

Again, wanted to say thanks to that stakeholder group and others for the commitment to the ARM process of the whole and this process specifically, and really thanks for them for being open and genuinely listening to each other, and for working together to reach the recommendations we'll present today.

We also wanted to acknowledge and thank the Core Planning and Technical Committee that Compass worked with through this effort to design and implement the process. Most of them are on the call today, and maybe will be available to help answer any questions. Diving into what we did. Overall, this engagement process focused on these three objectives.

First, we wanted to continue to build stakeholders' understanding of these value-based functions in the ARM called the Utility, Reward and Harvest functions. Sometimes you might see them as U/R/H functions in this presentation. Second, we wanted to discuss and identify broadly supported recommendations for revising those functions that better represented stakeholder values.

Lastly, we, oh and along the way, in reaching those recommendations it is very important we also wanted to clearly document when different perspectives remained. Lastly, along the way, we really identified next steps and opportunities for improving the ARM Framework and the process around it as a whole. We'll kind of end the conversation today with some of those.

How did we get heretoday? Well, the stakeholder process began back in October with a short on-boarding period where we established the stakeholder group, had some initial interviews. After that we held educational sessions that really focused on that first objective of building the group's understanding of the ARM, especially the U/R/H functions.

This also allowed for a good dialogue between the stakeholders and modelers. Next, we held an in-person workshop in January in Ocean City, Maryland, to discuss and elicit values and initial recommendations for updating the ARM. Last, we conducted post-workshop activities of discussing the stakeholder input with the Delaware Bay Ecosystem Technical Committee and ARM Subcommittee, which we will be referring to throughout this presentation as the Tech Committees occasionally. We also finalized those recommendations, documented remaining disagreements within the stakeholder group, and that was done with a meeting with them just a few weeks ago. We also established; we produced a report for this process that you should have received.

To make the process tractable, we were really explicit with the stakeholders about the scope, what was in and out of the scope of this particular process. The focal question we wanted stakeholders to really engage with is how their priorities and values should be better represented in the ARM model through the U/R/H functions.

We specified that kind of the underlying population assessment science, the fundamental structure of the ARM framework and past management decisions were all out of scope of this particular process. However, we really kind of acknowledged and were reminded by the stakeholders throughout this process that there is a connection, of course, between the science and values in the ARM.

We collected some of those concerns during the process and will return to them and insights for improving the ARM at the end of the presentation. Speaking of those connections, this was a diagram we developed to use throughout the process for stakeholders to represent kind of a more technical based and more values-based components of the ARM Framework.

On the left we have the technical components that used best available science to predict kind of a current and future status and trajectory of horseshoe crabs and red knots in the Delaware Bay. These science-based outcomes are kind of what we expect the system to look like, feed into the values-based utility reward and harvest functions.

These functions encode the values of how satisfied we are with different levels of horseshoe crab harvest and red knot abundance, how to trade off those two competing interests, and ultimately how many horseshoe crabs should be harvested. This right side of the figure is really where the process focused.

What were the key outcomes of the process? We wanted to kind of give you a snapshot of these right up front, and then go into more detail then. Here we present kind of in broad strokes the 5 recommendations that emerged with broad agreement among stakeholder and technical committees in this process.

We'll walk through each of these in detail in the next slides. Overall, the group recommends changing the value of females to male horseshoe crabs in the harvest utility function. They recommend maintaining the current maximum harvest limits for male and female horseshoe crabs, updating the harvest policy function to trigger 0 harvest if the female horseshoe crab population falls below threshold.

Updating the red knot utility curve using values that we listed from stakeholders, and finally maintaining the current reward function structure that includes components of horseshoe crab harvest and red knot abundance. I used a term in that last slide called broad agreement that we want to define what that means and how we documented it.

At the final stakeholder meeting we asked participants to communicate the level of support for each recommendation using these three defined levels. Endorse means I fully support this. Accept means I can live with this, it may not be my first choice, but I'll support it here and outside this group. Oppose means I cannot support it.

For the purposes of this presentation and the Final Report, broad agreement describes the recommendations where all or most of the stakeholders endorsed or accepted a recommendation, and where the rationales of any opposing views are documented.

It's also worth noting that for this accept option, some participants really emphasized to each other during the meeting the importance that the group adheres to this overall principal of kind of communicating openly within the group, and maintaining that honesty when communicating about the process and their views for any recommendations more broadly. With that, I am going to turn it over to Katie, and she can walk through the 5 recommendations in more detail.

MS. KATE O'DONNELL: I'll be diving into each of the 5 recommendations. In each of those we'll generally describe what is currently in the ARM Framework, the approach that we used, and then the emerging recommendations and rationale. The first topic that we discussed was around the horseshoe crab harvest utility function.

The current ARM treats one female as equivalent to two males, in terms of harvest value. The group have agreed to an elicitation where we asked 8 fishers, dealers and biomedical participants, what is the expected value of catching one female equivalent to versus how many males over the next 5 years.

For biomedical participants, males and females are equal in value for their industry. For the fishers and dealers, the median response was a value of 2.65 males per 1 female for the bait market, given that female crabs are larger and can bait more traps relative to males. The full group recognized that this utility function specifically addresses the bait context and, on that basis, all participants, including

the biomedical representatives agreed to adopt 2.65 to 1 as the updated ratio. The technical committees also supported this change.

The second recommendation concerns the sex-specific maximum bait harvest limits. These are the hard caps on what the ARM can recommend in any given year, and they are currently set to 500,000 males and 210,000 females. During discussion, fishers and dealers voiced that they do not want to see a decrease in these limits, but they should at least be maintained.

Noting that actual harvest has been well below these limits since about 2020, due to a market downturn. Also, that keeping the current caps in place provides an opportunity for the market to recover. The fishers and dealers also suggested that the caps could be increased in the future, but some other participants did not support increasing either of these harvest limits.

Given these diverging views, the full stakeholder group agreed to retain the current harvest limits, where public acceptance for female harvest at these current levels should be established first, before considering any increase. Again, the technical committees supported this approach as well. The third recommendation responds to a concern that was raised in the 2021 ARM Framework revision. The current new harvest policy functions do not technically pass to 0, which means that the model cannot recommend 0 harvest, even if populations were to reach critically low levels.

The technical reason is that the model is fit to historical data, and it never predicts near 0 population sizes, as shown in the light green blob of future population sizes predicted by the ARM, because the model is optimizing towards sustainable populations. Still, participants wanted an explicit precautionary mechanism, a clear threshold below which 0 harvest would be triggered.

The group discussed several options for this, and favored setting a user-defined threshold for female horseshoe crab abundance inside the ARM Framework model to preserve the framework's adaptive learning. But where should this value be? Ultimately, the stakeholders deferred to the technical committees to identify an evidence-based threshold.

The Delaware Bay Ecosystem Technical Committee and the ARM Subcommittee reviewed a range of historical abundance benchmarks, ranging from 0 all the way up to 20 million females, and did an elicitation of where that minimum female abundance threshold should be for triggering 0 harvest.

The recommendation then coming from this process is to add a threshold that would trigger 0 harvest when the female horseshoe crab population is estimated to be less than 7 million. That is based on the median response from the Technical Committee elicitation exercise. For context, that 7 million is a little higher than some of the low annual abundances in the 2000s.

This number was viewed as an evidence-based safety net, but it still allows for learning within the model. However, there were two participants who only accepted this level as a near-term measure, and requested an additional process to explore higher abundance thresholds that would be more precautionary.

They noted that 7 million females would be roughly a 63% decline from the current estimated population, which is approximately 19 million females. The fourth of the five recommendations, we considered changes to the red knot utility function. This is the function that translates predicted red knot stopover abundance to a utility or a satisfaction level.

The current function, which is shown here, rises sharply from 0 to 1, which is full utility, at around 81,900 birds. This count was designed without specific stakeholder input in the last ARM revision,

which occurred during COVID. We used this process to conduct elicitation exercises with participants from the shorebird, horseshoe crab and ecosystem conservation groups to better represent their values.

Those groups reviewed a list of benchmark stopover abundances, and completed a final exercise, which asked their level of satisfaction at different levels of red knot stopover abundance in 2050. Participants confirmed that this question framed the future conditions relative to the current population size, and it captured their values and their risk attitudes to population losses or gains. Using responses from the individual participants, which are shown in the thinner colored lines here. The group and technical committees recommended updating the red knot utility curve using the median responses from those stakeholders as represented by the thicker black line in this figure.

Participants supported this curve as a reflection of their values, especially for avoiding low abundance, and increasing utility more gradually as abundance increases from current estimates. The fifth and final component that the group examined was the reward function, which currently combines horseshoe crab harvest utility, red knot abundance utility, and the product into a single annual reward.

This structure gives additional credit to management actions that achieve both objectives for horseshoe crabs and red knots. In this process, participants discussed whether and how to change the reward function. Some participants were satisfied with the current structure, others suggested adding terms that reflect broader ecosystem values, such as habitat quality, horseshoe crab abundance, other shorebirds or other indicators of ecosystem integrity.

Also, some suggested changing the relative weights of these terms. Currently, they are given equal weight. To values that give more weight, to red knots or to other ecological terms. The group worked through the technical and philosophical challenges of each option, in particular the requirements that any new term that would be added to this reward function be measurable, predictable, and within the scope of the ARM.

Through final discussions with stakeholders and with the technical committees, we achieved a near consensus recommendation to maintain the current reward function. Most members of both groups supported this because for one, red knots were already selected as an indicator of broader ecosystem health. Secondly, many ecosystem values are not measurable, or predictable with current data, and third that additional ecological terms proposed by the group are partially correlated with current ones that are included in the function.

The one stakeholder, and one committee member who opposed the current reward structure suggested either adding a term for horseshoe crab abundance or placing greater weight on ecological terms, stating that this would better capture broader ecosystem values that are not represented in the ARM.

In summary, here are the 5 recommendations that I just went through that emerged with broad agreement among stakeholders and technical committees. Just noting that two of the five with the asterisk had a few participants with reservations.

MR. CRAWFORD: Lastly, we just wanted to kind of zoom back out and talk about next steps that were recommended and how we can continue kind of improving the ARM and buy-in alongside or in addition to those 5recommendations. Taken together first, we want to acknowledge that it seems implementing those 5 recommendations in the ARM can make it more transparent and reflective of stakeholder values, and improve buy-in among stakeholders. However, we want to be honest. This 8-month process did not resolve everyone's concerns and solve all the problems,

which is okay. At the last meeting we asked participants about the level of support in the ARM, even if it recommended female harvest, knowing that that is a really key issue for many. In discussion, we heard that most participant trusted the ARM and its harvest recommendations. They viewed it as an evidence-based peer reviewed framework, and noted that management under the ARM has resulted in a strong increase to horseshoe crabs and a sustainable red knot population.

However, 3 participants opposed using the ARM recommendations, and although these individuals did not explicitly say why in that meeting, participants in previous discussions had expressed the need to take more of a precautionary approach, and to see a thriving ecosystem before female harvest would be acceptable, while others were more concerned about the ARMs underlying science.

Lastly, we think it's also worth noting, another frustration that we heard from multiple participants, actually on the support side of that graph, who mentioned that we collectively have invested a lot of effort into building the ARM, but aren't using the harvest recommendations. They questioned the value of continuing to commit time and resources to the ARM.

Finally, how do we keep improving collaboration and buy-in on top of these 5 recommendations? Well, a few other recommendations were suggested during the process that we wanted to end with. First, on the science side.

The science disagreement keeps coming up, and the group identifies value in dedicating work in sessions on horseshoe crab egg density data and the mechanisms linking the horseshoe crab abundance to red knot outcomes, as well as exploring habitat dynamics, which can better be incorporated in the model.

On education, the group really appreciated the educational sessions that we ran in this process, and suggested continuing to engage for other stakeholder groups through additional sessions, especially one around uncertainty and predictions in the ARM. On communication the groups wanted more help finding existing documents and opportunities for input into this process.

ASMFC could consider improving advertising these opportunities and documents, as well as new concise plain language products that describe the ARM science, process and rationale for management decisions. This could help groups communicate with constituents, increase everyone's understanding, and also prevent the spread of misinformation, which was cited by some of the participants.

ASMFC could also work with the stakeholders to develop these products collaboratively, since building the public trust is a shared responsibility. With that, we've given you 5 key recommendations for updating the values-based functions in the ARM, as well as some bonus recommendations that came from this process for improving the science, process and communication of the ARM. We just wanted to say thanks again to the stakeholder group for working together towards these recommendations, and thank you all for listening.

The Team and I would be happy to answer any questions, and I think I'm going to turn it over to Caitlin now.

CHAIR REID: Great, thank you very much, you and the team, and all our stakeholders.

CONSIDER INITIATING AN ADDENDUM ON PROPOSED CHANGES

CHAIR REID: I will turn it over to Ms. Starks, she's going to talk us through next steps to it.

MS. CAITLIN STARKS: Considering the outcomes of this process, we being the staff and the planning team that worked on developing this stakeholder process have kind of outlined these next steps for what we see as a logical path forward. Obviously, it

is the Board's prerogative to decide how to proceed today.

But our recommendation would be to start with charging the ARM Subcommittee to make these recommended changes to the ARM model, and with running that model with the revisions, as well as the model without the revisions to do a side-by-side comparison and make sure everything is working properly. The Delaware Bay Ecosystem Technical Committee could also meet to review those results before bringing that work back to the Board.

Then at that point the Board can initiate an addendum and go through that process to implement the changes in the management program. If the Board were to follow these outlined steps, I think you could expect that addendum to be completed in early 2027, with plenty of time before fall 2027, which is when we would next need to set Delaware Bay specifications for the 2028 fishing year. Because if you recall, we set two years of male only harvest specifications that would go through 2027. That's all I have.

CHAIR REID: Okay, thank you very much, any questions from the people in the room or at the table. Mr. Clark, welcome back.

MR. JOHN CLARK: Thank you for the presentations. I was at the workshop, very interesting. My question I think is mostly for John Sweka, who you said was on the call. I'm just curious, John, if changing these Reward, Utility and Harvest functions, given that minimal level we've been recommending for harvest now, do you see it making much difference to what the recommendations would be?

MR. JOHN SWEKA: To answer your question, John, I think it's a little premature to really say. First, as Caitlin said, we want to make sure that everything is going to run right. I don't foresee any technical issues in making these changes within the modeling framework. But my gut tells me that it probably won't change the ultimate harvest recommendations very much.

CHAIR REID: Mr. Clark.

MR. CLARK: Yes, if I could just follow up. I guess this one would be to Brian and Katie. Do you think, based on the whole workshop process, that if the recommended harvest came back and was pretty much the same as it is now, that the buy-in for the ARM for stakeholders would still be better, or would they think that, you know I participated in this process and nothing has changed?

MR. CRAWFORD: I think our best guess at that is that second to last slide we showed, where a couple people will be opposed to ARM recommendations, we're assuming that after the updates it would recommend some level of female harvest. Those issues are kind of they seem to go beyond the extent of updating these values-based function.

It's hard to speak for them of how satisfied they would be with the involvement of this process, but I think based on how everyone participated together, I would hope that they would see value in the process we went through, you know kind of the incremental improvement of the ARM representing their values more.

But there is work to be done in digging into the underlying science, and also sort of working with those groups around the scope of the ARM, and what is kind of in and out of scope, and how that relates to how satisfactory they might see some of these options, or some of the recommendations that maybe they wanted but were not implemented, like an additional term for the reward function, for example.

CHAIR REID: All set, John? Mr. Borden, and anybody else.

MR. DAVID V.D. BORDEN: My question is on the slide that is up here, very convenient it went back to it in time. For those that are opposed to the idea, were they opposed for the same reason or different

reasons? That is one question, then I have a follow up question for Bob Beal.

MR. CRAWFORD: I would say there are multiple reasons. Again, when we did this particular poll at the last meeting we asked but didn't hear their rationale in the moment. But drawing from past conversations during this process, the two reasons are on the slide. Some people just kind of don't trust the recommendations before the underlying science is investigated more, specifically egg density data and its incorporation into the model was brought up by a couple people.

Others, really, it's about, if I can speak for them, it seems to be about their risk tolerance, and they really want to see a thriving ecosystem and high populations of horseshoe crabs and red knots before they would be comfortable with female harvest. At least two reasons, I would say.

MR. BORDEN: My question to Bob is, what was the total cost of the workshop, Bob?

EXECUTIVE DIRECOT ROBERT E. BEAL: Toni and I were just having that conversation offline. With travel and everything else, it was 70 thousand dollars, maybe, with facilitators and travel and sort of soup to nuts the whole thing. There was a lot of pre-game conversations. There were facilitators and other things to set it up. It was fairly expensive.

MR. BORDEN: My assumption is that doesn't include staff time.

EXECUTIVE DIRECTOR BEAL: Correct.

CHAIR REID: Mr. LaFrance. Anybody else?

MR. ROB LaFRANCE: I guess I had a question about the biomedical preference. It indicated, from what I saw on the screen that there was no preference one way or the other. I guess my question is, could that harvest only be male or only female, or did the calculations come out? I guess I'm trying to understand how that came out in the final analysis to 2.65 to 1. Did that make it lower or did it make it higher?

MR. CRAWFORD: Katie, do you want to take this one?

MS. O'DONNELL: Yes, I think if I understand the question. The biomedical participants, like we asked this question of all three of those groups, the biomedical stakeholders, the bait fishers and dealers for the purposes of having the discussion. When we kind of separated out the responses by group, it became clear that the biomedical representatives said, in their industry for them they need both males and females. But the value is equal, essentially.

A female is not more valuable than a male, in their context. We then, the 2.65 represents the median value just from the bait fishers and the dealers. Overall, the whole group, the full group agreed to just use their responses, because they have the best understanding of the market, the bait market, which is what this utility function is intended to represent in the ARM Framework. The biomedical values were not actually included in this 2.65.

MR. LaFRANCE: I guess my other point of understanding and I can clarify this is, from their perspective they need both, and that was what was unclear to me.

MS. O'DONNELL: Yes, correct.

CHAIR REID: Anybody else on the Board, anybody but John? Adam, anybody else on line for us. I'll get her in a minute, Ms. Berger, I will get to you but not right now. Go ahead, Mr. Clark.

MR. CLARK: I just had a question about the red knot function. I was just curious as to what the actual red knot population should be now, based on that curve for the full harvest of females. It looked like it was over 100,000. I mean can you get that graph up there that showed the red knot utility function? Yes, that one there. To get to the full female harvest, the population would have to be at a level.

I'm just curious if it has been at that level any time since we've been doing population estimates of the red knots.

MR. CRAWFORD: I think our current estimates, they are between 40 and 50 thousand, so kind of on the lower end of that figure. There is a bit of kind of an inflection point, and the way we asked this question was intentional, it was kind of in reference to the current population size. We saw people really become unhappy if we go below where we are right now, and then gain utility, gain satisfaction if we increase from where we are right now around that 50 thousand.

I think it's worth noting also, yes, the 40 to 50 thousand, that is kind of the minimal estimate of minimum recovery targets for the Fish and Wildlife Service and that was one of the benchmark abundances that we gave to folks when they filled out the exercise. I think the range encompasses the maximum population that has ever been estimated for any given year, but I would have to look back at what that was. Maybe John knows better.

CHAIR REID: Mr. Sweka.

MR. SWEKA: Yes, John, just to your question. I think everybody needs to keep in mind that this utility function is not a harvest control rule. If red knot were at 150,000 that doesn't mean you can harvest 100% of your allowable horseshoe crab. There is the possibility that even at lower red know abundances, I mean what this utility function does is it quantifies the happiness of the stakeholders, with respect to the abundance of red knots.

It could very well be the case that we could be at 50 to 75 thousand red knots. But if horseshoe crabs are very, very abundant, you could go into a situation where the ARM Framework would recommend something very close to the maximum female harvest. I think that is something we all need to keep in mind is, utility functions are not a harvest control rule, that tells you how much you can harvest, given a population size.

CHAIR REID: All set, John.

MR. CLARK: Yes, I understood that. Yes, I just think it would be very difficult to have a full harvest without some of these people seeing the red knots at a very high number.

CHAIR REID: Any other questions from the Board. Anybody in the audience? I'm going to go online to Mr. Hoffmeister, he's our AP Chair. Brett, go ahead.

MR. ALAN BERGENSON: This is Allen Bergenson, I couldn't find my link to get in, so Brett graciously shared the link and I'm in here as Brett 2. Anyway, I just wanted to reflect what Katie said before. The biomedical industry, we don't have any set number, no utility of so many males to so many females, they are all the same to us. That's why we didn't participate in that part, because we felt there was no value into our saying that. It's not 1 to 1; it's just not defined because we don't need that.

CHAIR REID: Okay, thank you, Brett 2. Joanna Berger.

MS. JOANNA BURGER: This is Joanna Burger, and I was on the stakeholder committee, and I think they did a super job reporting on what happened at the meeting. I just want to emphasize the fact that the stakeholder's session as a whole didn't have the same view. We reached consensus, because we were given different alternatives.

We selected sort of the best one. But I think many stakeholders might not believe that we reached a consensus on what would be an acceptable female harvest. Someone asked where the large number of red knots came from, the 150. That partially comes from fact in the 1980s when we first started doing surveys, and I'm old enough to have actually done those first surveys, there was in the order of 100 thousand to 120 thousand.

That is sort of the genesis of where that number came from, and to back up above that. When we're

thinking about female horseshoe crab harvest, and increasing the population of horseshoe crab, we want to be able to increase the horseshoe crabs, not only to support the current population, but to support what might have been a traditional population. I think the report accurately reflects the difference, and it reflects the fact that some people didn't want to add additional things such as the egg density. We were hoping that this would lead onto more discussions of being able to add those other functions. The report as presented was an excellent representation.

CHAIR REID: Thank you, Ms. Burger. Seeing no other hands; do we have anybody else online? Seeing none; back to the Board. Mr. McKiernan.

MR. DANIEL McKIERNAN: Just a point of clarification. There was a reference to the current population of females in Delaware Bay at 19 million. I was just hoping to clarify if that is 19 million adults, or is it 19 million females of all ages.

CHAIR REID: Hang on, Mr. Chair, sorry, Dan. I should have called you Mr. Chair in the beginning. John Sweka.

MR. SWEKA: Yes, I can answer that question. It was approximately 19 million adult females, which was comprised of both the primiparous and multiparous crabs. That was our latest population estimates coming from 2024.

MR. McKIERNAN: Thank you for that. For me, an in-depth discussion about 200,000 extractions seems pretty small and pretty reasonable.

CHAIR REID: Anybody else? Okay, so what is the pleasure of the Board? We've got the slide on the board just to jog your memory and we'll see if anybody has any comments. If not, I am assuming that will be the consent to staff to move in their direction that they are proposing. Just give us a second. Okay, from the Board. Seeing none; Ms. Starks, are you good?

DISCUSS STATE LEGISLATION ON HORSESHOE CRAB FISHERIES

CHAIR REID: Okay, with that we'll move on to our next item, Ms. Starks.

MS. STARKS: Just to remind everyone why this topic is on the agenda. There was a request from a Board member, and what they wanted to see was a summary of state legislative actions in Connecticut, New York and New Jersey to implement restrictions that horseshoe crab fisheries outside the scope of what is in the Commission's fishery management plan.

I think as most people know, there has been more attention on horseshoe crab management at the state legislative level recently, and there have been some laws passed in those states. I gathered information from each of the states to describe their statutes and regulations, including legal language that has been enacted, regulations the state agency has in addition to the statutes, rules about possession and use of horseshoe crab as bait, and biomedical use, and this information was all compiled into a memo as well in your briefing materials.

I'll just go over the laws and rules related to bait harvest for each state. The recent Connecticut law prohibits hand harvest of horseshoe crab, effective October 1, 2023. But hand harvest may be authorized for scientific or educational purposes, and horseshoe crab may be taken by otter trawl, with a limit of 25 horseshoe crabs a day. In Connecticut, a person may also possess legally acquired dead horseshoe crabs being used for bait.

The recent New York Horseshoe Crab Protection Act phases out the commercial and biomedical harvest of horseshoe crab, reducing the state quota from the current level to 75% this year, 50% in 2027 and 25% in 2028, and then a complete ban taking effect January 1, 2029. Until 2029 the current regulations

will remain in place. Then in New Jersey the commercial harvest moratorium of horseshoe crab for bait was enacted in 2008. That does allow New Jersey DEP to issue a permit for to take a horseshoe crab or eggs for scientific and educational purposes.

Then with regard to possession and use of horseshoe crab as bait. In Connecticut, it is still legal to possess and use horseshoe crab as bait, but it requires a trawl license, landing license, which allows possession of horseshoe crabs that were legally caught in another state or federal waters, or a shellfish harvesting license.

In New York the recent Act only addresses the take of horseshoe crab, not possession. Those holding a horseshoe crab commercial bait harvesters permit will be still allowed to possess and use horseshoe crab as bait after January 1, 2029. In New Jersey, the state statute allows commercial fishermen to possess and use horseshoe crab as bait.

But they have to provide documentation that the crabs were not harvested in New Jersey, including a receipt or bill of landing with the contact information for the person or company that provided the horseshoe crab, the permit or license number of that person or company and the state and harvest location if possible.

We also asked about if these states had any laws about importing horseshoe crabs that were harvested in other states, and for Connecticut, import of horseshoe crabs from other states is allowed. For New York, those holding the horseshoe crab commercial bait harvesters permit are allowed to possess horseshoe crabs sourced from inside or outside of the state.

Then in New Jersey the statute again only allows possession and use of horseshoe crabs in state if those horseshoe crabs were harvested outside of New Jersey. Then our last slide here is about the rules and laws pertaining to biomedical use of horseshoe crabs. In Connecticut there is no biomedical horseshoe crab collections occurring at this time, and there haven't been any previously on record in Connecticut. But from what I was able to gather the law is not very clear on whether it is prohibited or not. Then under the recent protection act in New York, biomedical take of horseshoe crabs will also be banned effective January 1, 2029, and until then a biomedical harvest and/or users permit that is issued by New York DEC is required for the take, possession, and sale or purchase of biomedical horseshoe crab.

Then for New Jersey the state actually does allow NJ DEP to issue a permit for the collection of blood from horseshoe crabs for biomedical purposes, provided that those horseshoe crabs are released otherwise unharmed to the same waters where they were collected. That is again an FMP requirement. That is my summary and I can take any questions, or perhaps the states can also help.

CHAIR REID: Any questions? Mr. McKiernan.

MR. McKIERNAN: More of a comment. I would be happy to take the blame for this, or the credit, because there has been legislation filed in my state to do something similar to what is happening in New York. When I read the documentation from the advocates, there is a serious amount of misinformation or incomplete information.

That is why I asked for this to be presented, because for example, New Jersey is portrayed by some of the advocates in Massachusetts as having a prohibition on harvest, when in fact, there is a very viable biomedical fishery. In any state, whether it be New York or if Massachusetts were to go forward and ban biomedical harvest, that would be a huge blow, and result in some unintended consequences with pressure put on other states.

I also want to just tell the Board that we are preparing for a field study this summer to look at the survival of post bled crabs, and we're going to use acoustic tags and an acoustic array to work in both Pleasant Bay and Nantucket Sound. We hope to be able to bring back to this Board some new

updated information on survival of crabs in that realm.

CHAIR REID: Thank you, Mr. Chair. Mr. Clark.

MR. CLARK: Just curious, I assume New Jersey does not have any sunset provision in their law, but just wondering if Connecticut or New York, if there is anything in the law that would cause them to reevaluate the law in a set period of time.

CHAIR REID: Connecticut, New York.

MS. SHANNA MADSEN: There is no sunset provision in ours, John.

CHAIR REID: Mr. Hornstein.

MR. JESSE HORNSTEIN: Same as Connecticut, there is no sunset as far as I'm aware. Also, I don't believe there has ever been biomedical harvest in New York, just to be clear.

CHAIR REID: Mr. Cimino.

MR. JOE CIMINO: In legislation for New Jersey there is actually biological triggers as well as there is an endangered and nongame species advisory council for the state that also would have to weigh in on approval of allowing harvest again.

CHAIR REID: Anybody else? Mr. McKiernan.

MR. McKIERNAN: Point of clarification to New Jersey. Do you mean bait harvest or any harvest, because I consider biomedical harvest, harvest, even if it's catch and release.

MR. CIMINO: To bring back the bait fishery.

MR. McKIERNAN: It is bait fish you are referring to.

CHAIR REID: Mr. Clark.

MR. CLARK: Yes, me again, Mr. Chair. Yes, I was just curious. I mean as Dan brought up, in these states was there any discussion about the fact that closing the fisheries in their state put more pressure on other states, especially when it is pretty hypocritical to ban harvest of horseshoe crabs in your state, and yet allow your fishermen to use horseshoe crabs as bait, which means they have to be coming from some of the other states that do still have harvest, which puts more pressure there.

CHAIR REID: Mr. Cimino and then Mr. Hyatt.

MR. CIMINO: I'm not going to disagree with John there, but I actually also had a question on, some of the other states like Massachusetts. I know there were issues in South Carolina with the biomedical industry. I'm curious for the pressure that is coming in. Is there any shown tie in to the dependents of a red knot stopover in your state? Has it ever been shown that it is the same kind of situation that the Delaware Bay has for the importance of a red knot stop over. I guess, Dan, to you in particular. Has that case been made to Massachusetts?

MR. McKIERNAN: To that question, Joe. I think there have been observations of red knots in Massachusetts. I think they are more likely to be seen on their southern migration. I don't know of any aggregations of red knots during the spawning period, during the period of late April through early June. It doesn't mean there wasn't a red knot on a beach, but we don't have the kind of numbers that you all have.

CHAIR REID: Mr. Hyatt.

MR. WILLIAM HYATT: John, in answer to your question. Yes, the legislatures who put forth this legislation did have conversations relative to the fact that we would be disallowing harvest in Connecticut, but that they could still reach out of state for crabs. The decision and the justification were based on the fact that stock condition, crab stock condition in Long Island Sound was poor and on a long-term declining trend.

They felt that it was reasonable that in those areas where the stock is deemed healthy and productive, to allow for fishermen to import crabs from those areas. It was given, I would say, full discussion and consideration. Fair or not that is the conclusion that they arrived at.

ADJOURNMENT

CHAIR REID: Are you all set, curious George? Anybody else? Is there any other business? Seeing none is there any opposition to adjourning? Seeing none; thank you very much.

(Whereupon the meeting adjourned at 2:06 p.m. on Tuesday, May 5, 2026)

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Horseshoe Crab Management Board**

FROM: **Delaware Bay Ecosystem Technical Committee and Adaptive Resource Management Subcommittee**

DATE: **October 26, 2026**

RE: **2025 Survey Results, Recommendations for ARM Revisions, and 2027 Delaware Bay Horseshoe Crab Harvest**

The Delaware Bay Ecosystem Technical Committee (DBETC) and Adaptive Resource Management (ARM) Subcommittee (henceforth, the Committees) met jointly on October 5, 2026 to 1) review recent survey data for horseshoe crabs and red knots, 2) review bait harvest specifications for 2027 and make recommendations as necessary, 3) discuss a correction to an error found in the ARM model code, and 4) review modeling updates to the Utility, Reward, and Harvest Policy (URH) functions of the ARM Framework based on the input provided through the stakeholder engagement process conducted earlier this year. The discussions and recommendations of the Committees are summarized in that order below.

1. Review of Annual Survey Data for Horseshoe Crab and Red Knot

Andre Lai (Virginia Tech) presented the results of the 2025 horseshoe crab trawl survey (Lai et al. 2026). The Virginia Tech Trawl survey is designed specifically to characterize the horseshoe crab population in the coastal Delaware Bay Area (DBA) and Lower Delaware Bay (LDB) and has been conducted since 2002. It provides one of the main indices of horseshoe crab abundance used in the ARM Framework. The DBA was previously sampled from 2002 to 2011, and again from 2016 onwards. The LDB was previously sampled from 2010 to 2012, 2016 to 2021, and sampling resumed in 2025.

In the 2025 survey of the DBA, mean catches-per-tow of mature males and females declined from their 2024 levels and are consistent with the mean CPUE recorded in earlier years. Mean catches-per-tow of immature males and females have remained relatively stable since 2016. Mean catch-per-tow of newly mature males decreased from 2024, continuing to decline from their high values in 2021 and 2022 but remaining relatively consistent with CPUE values recorded prior to 2016. Following the revision of the sampling protocol to probe more ambiguous females for eggs, mean catch-per-tow of newly mature females continued to rebound from extremely low values since 2019, reaching their highest recorded value in 2025. There is a decreasing trend in mean prosomal width for mature and newly mature males and females. Based on the 2025 survey, population estimates for the DBA increased significantly for

both immature females and males compared to 2024. The estimated populations decreased from their 2024 values for mature crabs of both sexes, and newly mature males. The estimated population total for newly mature females increased from 2024 values.

In the LDB in 2025, there was an observed increase in stratified mean catch-per-tow for all demographic groups when compared to 2021. Similarly, the population estimates across demographic groups increased compared to 2021.

Jordan Zimmerman (DNREC) presented the results of the 2025 Delaware 30-foot Trawl Survey and Delaware Bay Spawning Survey. In 2025 for the index months of April-July, the geometric mean catch per nautical mile in the trawl survey decreased from 2024 and was slightly below the time series mean (Figure 1). When considering all months (March-December) the index is similar to 2023 and 2024 levels (Figure 2).

In the 2025 Delaware Bay Spawning Survey, sampling was conducted between May 10 and June 27 during 12 nighttime high tides, at 12 beaches in Delaware and 10 in New Jersey. Peak spawning in Delaware occurred May 10-14, and peak spawning in New Jersey occurred June 9-13. The bay-wide index of female spawning activity shows a slightly positive but not significant trend over the time series (1999-2025), while the index of male spawning activity shows a significant increasing trend (Figure 3). The male:female spawning ratio in 2025 was 5:1.

Dani Dyson (NJDEP) shared an update on the NJ Ocean Trawl Survey and noted that there is no data for 2025 due to vessel issues.

Jim Lyons (USGS) presented the results of the 2026 red knot surveys and stopover population estimate (Lyons 2026). The 2026 passage population of red knots in the Delaware Bay was estimated using a Bayesian analysis of a mark–resight model which accounts for population turnover and imperfect detection. The 2026 passage population estimate was 39,534 individuals (95% credible interval: 36,740–42,922). This represents a change of approximately -27% compared to 2025 but is similar to 2022 and 2023 levels. Kat Christie (DNREC) presented additional information on the 2025 Delaware and New Jersey shorebird surveys, noting a recurring trend of the ground counts exceeding aerial counts.

2. Review 2027 Bait Harvest Specifications

Under Addendum VIII (ASMFC 2022b), the 2022 ARM Revision is used to annually produce bait harvest recommendations for male and female horseshoe crabs of Delaware Bay-origin based on the abundance of horseshoe crabs and red knots. In October 2025, the Horseshoe Crab Management Board chose to set male-only harvest specifications of 500,000 males for two years (2026 and 2027) as allowed by Addendum IX (ASMFC 2025). Under Addendum IX, in interim years of multi-year specifications the male-only harvest limit is based on the male:female sex ratio of spawning horseshoe crabs on beaches observed in the bay-wide spawning survey. If the sex ratio is greater than or equal to 3:1, the maximum harvest of 500,000 Delaware Bay origin males is permitted. If the sex ratio is between 3:1 and 2:1, the

maximum allowable male harvest is reduced as the ratio decreases and would be zero if the sex ratio were to decrease to 2:1 or less.

The observed sex ratio in the 2025 bay-wide spawning survey was 5 males to 1 female, so the maximum harvest of 500,000 Delaware Bay origin males is permitted. Thus, the Committees recommend maintaining the 2027 harvest specifications. The allocations implemented for 2026 and 2027 are shown in Table 1.

Table 1. Delaware Bay-origin and total horseshoe crab quota for 2026 and 2027 by state with no female harvest and the 2-to-1 offset. Virginia total quota only refers to the amount that can be harvested east of the COLREGS line

State	Delaware Bay-Origin Quota		Total Quota	
	Male	Female	Male	Female
Delaware	173,014	-	173,014	-
New Jersey	173,014	-	173,014	-
Maryland	132,865	-	255,980	-
Virginia	21,107	-	81,331	-
TOTAL	500,000	0	683,339	0

3. Discuss Correction to ARM Model Code Error

Bryan Nuse (Bird Conservancy of the Rockies) was contracted to develop revisions to the URH functions in the ARM Framework model based on the 2026 stakeholder process input. In the process of this work, an error was identified in the 2021 ARM model code: rather than using annual bait harvest values alone to calculate annual reward when solving for optimal harvest policy parameters, total anthropogenic horseshoe crab mortality (bait harvest, bycatch, and estimated biomedical mortality combined) was used to calculate annual reward. This error ultimately resulted in a reward function different than what was intended by both the modelers and stakeholder groups.

Bryan presented a comparison of simulation results from each of the changes made to the 2021 ARM model, including the error correction. When comparing the results of the corrected 2021 model to the uncorrected 2021 model, the following differences are observed:

- The harvest policy function for male horseshoe crabs is very similar between corrected and uncorrected versions, with a slightly steeper slope in the corrected version. No change is predicted in male harvest levels over the long-term (100-year simulation).
- The harvest policy function for female horseshoe crabs in the corrected version is more likely to recommend female harvest levels closer to the cap, resulting in more predicted female harvest in the long-term.
- The harvest policy for females in the corrected version is more responsive to extremely low abundances of female crabs and comes closer to intersecting 0 at extreme low abundances, but it does increase rapidly as abundance increases.

- The corrected version has a very small effect on the long-term trajectories of red knot and female horseshoe crab abundance, with minor decreases in each (changes of -0.5% and -1.3%, respectively, over a 100-year time horizon).

The Committees acknowledged the need to correct the model code to the intended peer-reviewed methods so that reward is calculated based on bait harvest values only.

4. Review Updates to RUH Functions in the ARM Model

Bryan Nuse presented the revisions to the URH functions in the ARM Framework model. The revisions included the incorporation of three recommendations from the 2026 stakeholder engagement process (Compass 2026):

1. update HSC utility using a female-to male value ratio of 2.65:1.
2. update REKN utility to replace the current curve with the median curve from stakeholder-elicited values from the 2026 workshop.
3. implement a 7,000,000 threshold in female HSC harvest policy function, below which female harvest is 0.

Bryan Nuse implemented these recommendations through revisions to the 2021 ARM Framework model code and reran the model to produce solutions that were compared to the 2021 model solutions. When comparing the results of all three 2026 recommended revisions to the results of the corrected 2021 model, the following differences are observed:

- The predicted long-term trajectory of red knot abundance increases slightly, by 1.3%.
- The long-term trajectory of female horseshoe crab abundance increases by 4.2%.
- There is a 44.3% decrease in predicted female harvest over the long-term, which is influenced by the 7 million abundance threshold for when female harvest would be permitted.

The Committees recommend that the Board consider these model updates for future management. They noted some concern about the threshold creating instability in the female harvest recommendations because the results predict fairly frequent changes between a female harvest recommendation of zero and near the maximum of 210,000 females. However, it was noted that these simulations use data through 2021 only, and the female population estimate has increased since then. Therefore, it is likely that once more recent years of data are incorporated in the next update of the model parameters in 2027, the model will predict fewer switches between zero and a higher female harvest recommendation. The Committees also recommended that the stakeholder group be provided an opportunity to review the results of the model updates.

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Lyons, J. E. 2026. Stopover Population Estimate and Migration Ecology of Red Knots *C. c. rufa* at Delaware Bay, USA, 2026. Memorandum to the Delaware Bay ARM Working Group, Laurel, Maryland.

Figures

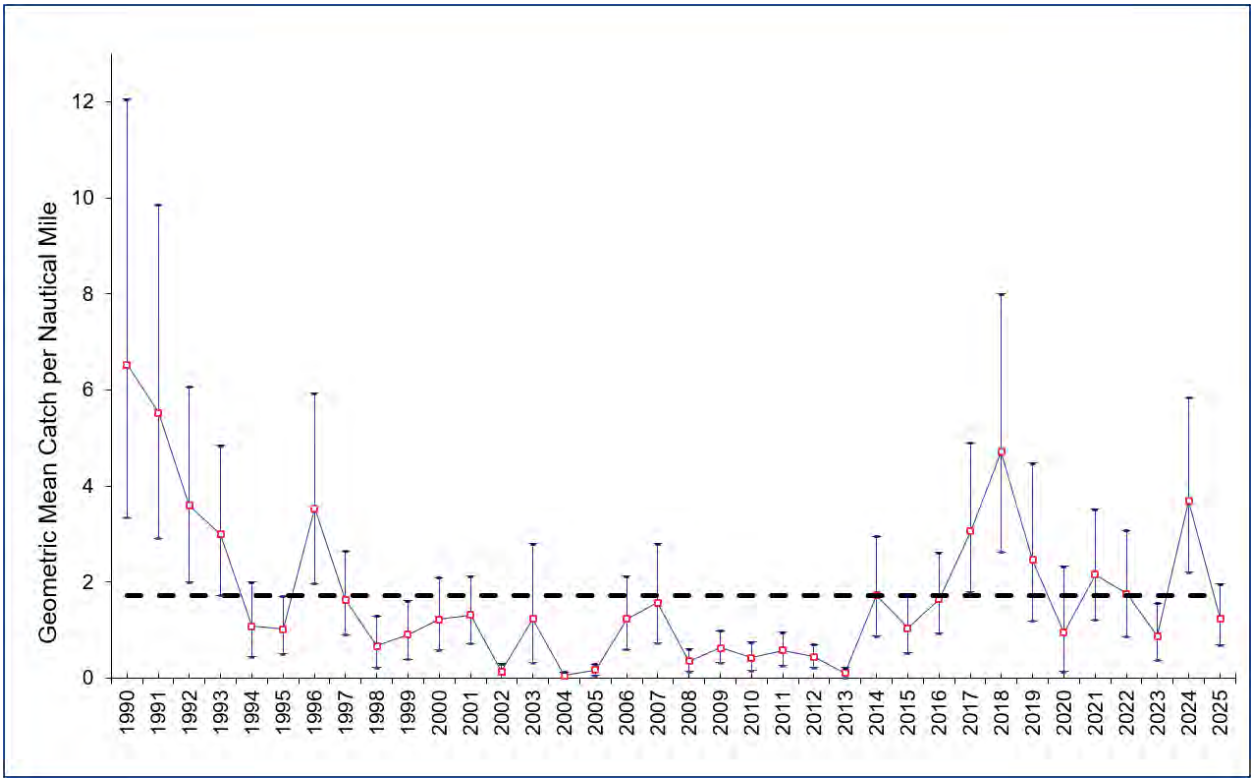


Figure 1. Adult horseshoe crab index from the Delaware 30-foot trawl survey for the months of April-July, 1990-2025.

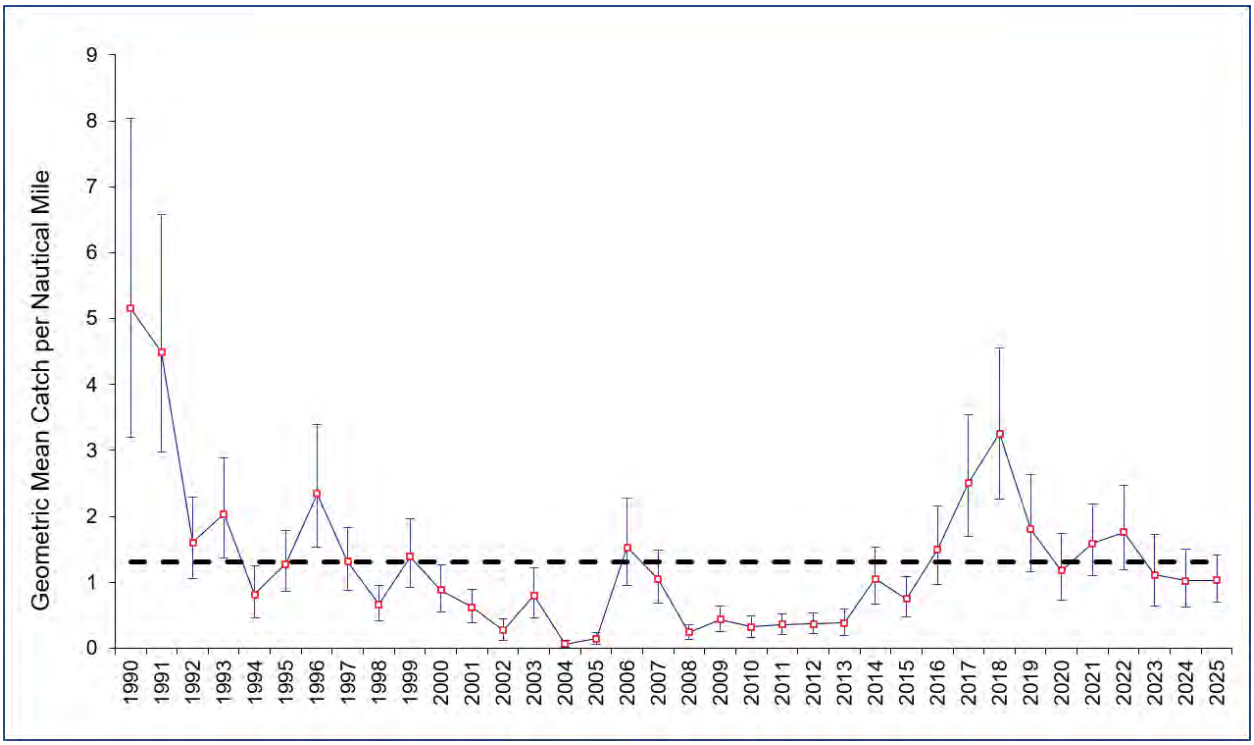


Figure 2. Adult horseshoe crab mean catch per nautical mile in the Delaware 30-foot trawl survey index for all months of (March-December), 1990-2025.

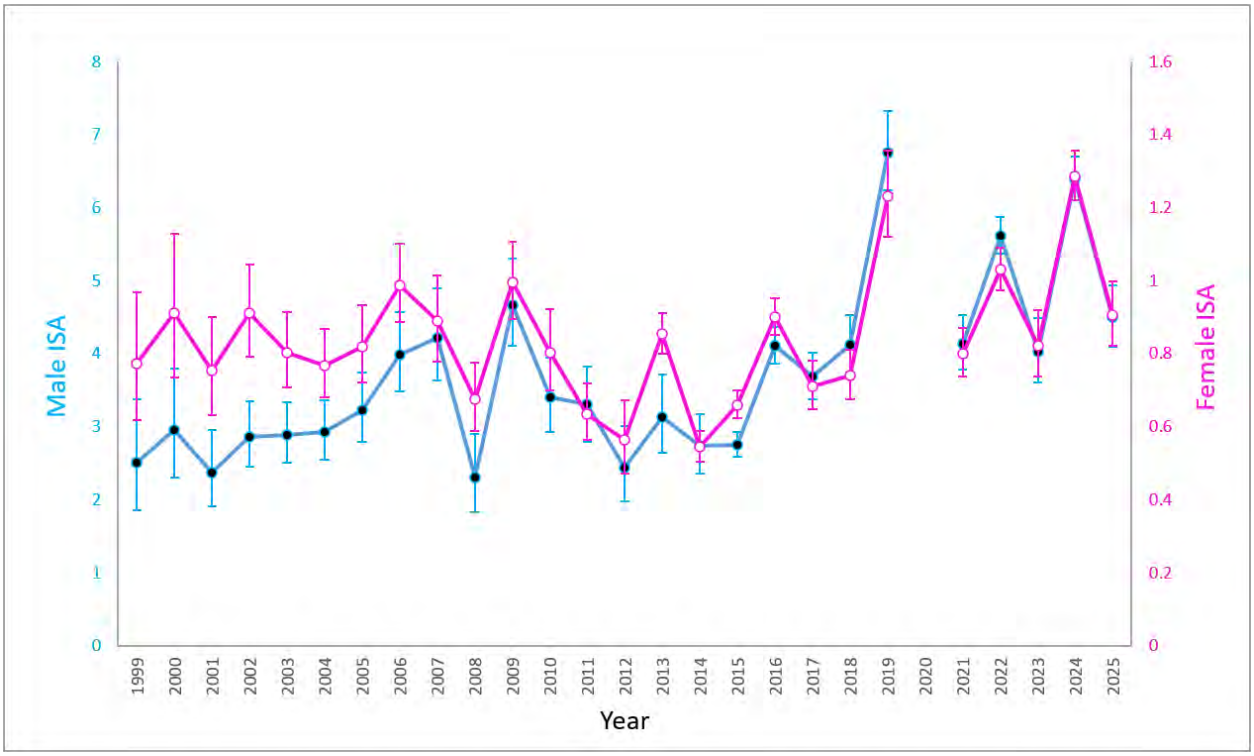


Figure 3. Index of horseshoe crab spawning activity for males and females from the Delaware Bay horseshoe crab spawning survey (baywide), 1999-2025.

Results of the 2025 Horseshoe Crab Trawl Survey:
Report to the Atlantic States Marine Fisheries Commission Horseshoe Crab and Delaware Bay Ecology Technical Committees

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INTRODUCTION

The Atlantic horseshoe crab (*Limulus polyphemus*) fishery along the US East Coast dates back as early as the mid-1800s, where they were used as fertilizer and livestock feed (Kreamer & Michels, 2009; Millard et al., 2015). Today, horseshoe crab flesh is used to bait pots in the conch (*Busycon* spp.), whelk (*Sinistrofulgur* sp.), and American eel (*Anguilla rostrata*) fisheries, while their hemolymph is harvested to produce *Limulus* amebocyte lysate (LAL) for pharmaceutical assays of bacterial endotoxins (ASMFC, 2020; Ding et al., 1997; Hurton et al., 2009; Novitsky, 2009). Delaware Bay hosts the largest spawning population of horseshoe crabs and is internationally recognized as a critical stopover site for various migratory shorebirds of conservation concern like the rufa red knot (*Calidris canutus rufa*) (Mizrahi & Peters, 2009). These birds refuel on horseshoe crab eggs during their northward spring migrations to their Arctic breeding grounds (McGowan et al., 2011; Morrison, 1984; Myers, 1983). To balance commercial harvest with shorebird energy needs, the Atlantic States Marine Fisheries Commission (ASMFC) implemented the Adaptive Resource Management (ARM) framework in 2013, which calculates annual sex-specific harvest limits per state using fishery-independent indices of horseshoe crab and red knot abundances fed into stock assessment models (Anstead et al., 2023; ASMFC, 2009, 2020; McGowan et al., 2015; Sweka et al., 2007).

Since 2003, Virginia Polytechnic State University (hereafter "Virginia Tech") has conducted an annual trawl survey designed specifically to characterize the horseshoe crab population in the coastal Delaware Bay Area (DBA) and Lower Delaware Bay (LDB). This survey remains one of the main indices of horseshoe crab abundance used in the ARM framework (Anstead et al., 2023; ASMFC, 2009, 2020; Hata & Berkson, 2004; Sweka et al., 2007).

The objectives of the Virginia Tech trawl survey are to (1) determine horseshoe crab relative abundance, (2) describe horseshoe crab population demographics, and (3) track interannual changes in the two aforementioned parameters. Here, we report the results of our Fall 2025 trawl survey. Gear catchability has not been evaluated for these estimates of horseshoe crab abundance, so they should be considered conservative.

METHODS

The Virginia Tech trawl survey is traditionally conducted in two areas (Figure 1). The DBA sampling area extends latitudinally from the northern limit of Atlantic City, NJ (39° 20' N) south to Wachapreague, VA (37° 40' N), and longitudinally from the coastline to 12 nautical miles from shore (Figure 1). The LDB sampling area extends from the bay's mouth to the boundary between Egg Island Point, NJ and Kitts Hummock, DE. The sampling area was stratified based on bottom topography (trough/non-trough) and distance from shore (0-3 nm, inshore; 3-12 nm, offshore), emulating the methodology of the 2001 pilot HSC survey conducted in the DBA (Hata & Berkson, 2004). Troughs are classified as areas of seabed that are >2.4 m deep, <1.8 km wide, and >1.8 km long, as determined from NOAA nautical charts. These charts were georeferenced as a digital map in ArcGIS Pro to design the sampling scheme. The World Geodetic System 1984 coordinate system was used to divide the survey region into 1' latitude-by-1' longitude cells, with the LDB consisting of 196 cells (~528 km^2) and the DBA consisting of 1890 cells (~5127 km^2).

The DBA was previously sampled from 2002 to 2011, and again from 2016 onwards. The LDB was previously sampled from 2010 to 2012 and 2016 to 2021. We resumed sampling of the LDB in 2025. The surveys were conducted between August 28th and November 20th, 2025. Sampling was conducted aboard a 16.8-m chartered commercial fishing vessel operating out of Ocean City, MD. Trawls were performed using a two-seam flounder trawl with an 18.3-m headrope and 24.4-m footrope, rigged with a Texas Sweep consisting of a 13-mm link chain and a tickler chain. The net body consists of 15.2-cm (6-in) stretched mesh while the codend consists of 14.3-cm (5 5/8-in) stretched mesh. The net was mostly towed along the bottom for 15-minute periods but would occasionally be hauled back early to avoid entanglement with fishing gear (e.g., gill nets and pots), vessel traffic, or if the crew suspected that the net had snagged on something along the bottom. The start and end positions of each tow were recorded when the winches were stopped and when retrieval began, respectively. The bottom water temperature was recorded for each tow, in addition to the beginning and ending trawl depth, bottom salinity, air and surface temperatures, time of day, and general weather conditions. Forty-one tows were conducted in the 2025 DBA survey, while seven tows were conducted in the LDB (Figure 2).

The Virginia Tech trawl survey stratifies the horseshoe crab population into six demographic groups based on sex and maturity. Maturity classifications are immature, newly mature (those that are capable of spawning but have not yet spawned), and mature (those that have previously spawned). Newly mature and mature males are morphologically distinct and are believed to be classifiable without error given the presence and absence, respectively, of the "thumb" on the pedipalps (grasping appendages). However, some error is associated with distinguishing newly mature from immature females. Females over 180 mm in prosomal width that were not obviously mature (females lacking discolored patches and mating scars on their carapaces) or immature (too small or soft-shelled) were probed with an awl to determine the presence or absence of eggs. Females with eggs but without rub marks were considered newly mature while females with both eggs and rub marks were considered mature.

Once the net was retrieved and its contents were dumped on deck, the vessel crew sorted out the horseshoe crabs from any bycatch. Either all individuals or a subsample had their prosomal widths measured and were classified by sex and maturity. Initial sorting classifications were presumed adult males (newly mature and mature), presumed adult females, and all immatures. In the event where a subsample was necessary due to an excessive number of crabs, we retained up to 25 adult males, 25 adult females, and 50 immatures for examination. The remainder were counted separately by their initial sorting classification and released. Characteristics of the examined subsamples were then extrapolated to the counted portions of the catch.

In 2025, we began the additional collection of elasmobranch (skate, ray, and shark) sex, count, and size data. This was done to address the historical lack of documentation for these bycatch species and generate information on their distribution along the Atlantic coast. Around 25 clearnose skates (*Rostroraja*

eglanteria) were randomly selected from the contents of each tow, sexed, and had their disc widths and total lengths measured. Other elasmobranch species were only sexed and counted. We continued to document whelk and summer flounder bycatch in the tows, as in previous years.

In each sex-maturity stratum, the mean catch per 15-minute tow and associated variance were calculated by either assuming a normal-distribution model or a delta-lognormal distribution model (Pennington, 1983). Stratum mean and variance estimates were combined using formulas for a stratified random sampling design (Cochran, 1977). The approximate 95% confidence intervals were calculated using the effective degrees of freedom (Cochran, 1977). Annual means were considered significantly different if 95% confidence intervals did not overlap. Stratified means calculated using the delta-lognormal distribution model are not additive – i.e., means calculated for each demographic group do not sum to the mean calculated using all crabs. Means calculated using the normal distribution model are additive, within rounding errors.

Annual size frequency distributions, in intervals of 5-mm PW, were calculated for each demographic group. Size distributions from all stations within a stratum were pooled (adjusted for tow duration if necessary) for each year to determine relative proportions in each size interval. These proportions were then multiplied by the relative annual stratum mean catch-per-tow to produce a stratum size-frequency distribution. Stratum distributions were then multiplied by the stratum weights and added in the same manner as calculating the stratified mean catch per tow. Areas under the distribution curves represent the stratified mean catch per tow at each size interval.

Within the DBA, the average tow distance for a 15-minute tow was 1.12 kilometers at an average speed of 4.71 kph. No net spread (wing opening) measurement device was used during sampling this year. However, this would be useful to integrate in future surveys. Instead, the net spread was calculated using the net spread regression relationship developed from previous trawl surveys:

$$S = 13.84 - 0.858 \times C$$ where S is net spread in meters and C is tow speed in kph

From the 48 tows conducted in 2025, the average net spread was 9.80 meters.

For each tow, catch density (catch/km^2) was calculated from the product of tow distance (in km) and estimated net spread (converted from meters to km), assuming that all fishing was done only by the net, and that there was no herding effect from the ground gear (effect of the sweeps in the footrope).

$$catch/km^2 = catch / [tow\ distance\ (km) \times net\text{-}spread\ (km)]$$

Within each stratum, the mean catch per square kilometer and associated variance were calculated assuming a normal-distribution model and a lognormal delta-distribution model. Stratum mean densities and variance estimates were combined to produce a stratified mean density ($\underline{X}_{st}$) using formulas for a stratified random sampling design as with the catch-per-tow estimates described above (Cochran, 1977). Population totals were estimated by multiplying $\underline{X}_{st}$ by survey area (DBA = 5127.1 km^2; LDB = 528.4 km^2).

$$Population\ total = \underline{X}_{st} \times survey\ area\ (5127.1 \text{ or } 528.4\ km^2)$$

RESULTS

Delaware Bay Area

Mean stratified catch-per-tow of immature females and males increased significantly in 2025 from 2024 but remained consistent with patterns observed since 2016 (Tables 1 and 2; Figure 3). Catch-per-tow of newly mature females continued to show a substantial rebound from pre-2024 levels and reached their highest recorded value following a revision in our sampling protocol that demanded more stringent probing for eggs in ambiguous females. Newly mature males showed a decrease in catch-per-tow, continuing to decline from their higher values in 2021 and 2022 but remaining relatively consistent with catch-per-tow values recorded prior to 2016. Catch-per-tow of mature females and males declined from their 2024 values, becoming more similar to abundance levels seen in earlier years (Tables 1 and 2; Figure 3). Variation increased substantially from 2024 for immature females and immature males, as well as mature males. It increased slightly for newly mature females and mature males. Conversely, variation decreased for mature females.

There continues to be a significant correlation between stratified mean catches of mature males and mature females ($r = 0.94$; $p < 0.001$; $T = 12.14$; $n = 20$) when considering all data since 2002. This is also true for immature males and females ($r = 0.96$; $p < 0.001$; $T = 14.59$; $n = 20$), but not for newly mature individuals ($r = -0.37$; $p = 0.11$; $T = -1.69$; $n = 20$). Previously, there was a significant positive correlation between newly mature individuals from 2002 to 2018. However, this correlation was lost with the addition of data from 2019 and 2022, likely due to the low number of newly mature females trawled in recent years compared to newly mature males. The inclusion of data from years since 2022 did not recover this correlation.

Lower Delaware Bay

2025 marks the first time the Lower Delaware Bay was sampled since 2021, and the data suggests an increase in catch-per-tow across all demographic groups between these two years (Tables 3 and 4; Figure 4). Mean stratified catch-per-tow values for immature females and immature males more than doubled from 2021. Catch-per-tow of newly mature females has been recorded as 0 since 2019, rising to 1.8 in 2025. A similar pattern was observed in newly mature males, having been recorded at 0.1 in 2020 before increasing to 2.2 in 2025. Mature females more than doubled in mean catch-per-tow between 2021 and 2025, while mature males saw a substantial increase. Variation increased slightly from 2021 for immature males and females. It increased for newly mature males from 2020 while increasing slightly for newly mature females from 2018. Conversely, variation decreased for mature females and males between 2021 and 2025, with a much larger decrease observed in the latter.

There is a significant correlation between stratified mean catches of mature males and mature females in the LDB ($r = 0.95$; $p < 0.001$; $T = 13.39$; $n = 10$) when considering all data since 2010. This is also true for immature males and females ($r = 0.99$; $p < 0.001$; $T = 31.09$; $n = 10$), but not for newly mature crabs ($r = 0.38$; $p = 0.10$; $T = 1.73$; $n = 10$).

Size Distributions

Size-frequency distributions remain highly variable (Figures 5 and 6). The substantially higher catch of newly mature females in 2025 led to this demographic group being more prominent within the overall size-frequency distribution than in earlier years. The overall shape and demographic composition of the DBA size-frequency distribution from 2025 is similar to that of 2024.

We had previously reported that mean prosomal widths of crabs in the DBA survey displayed slight but detectable decreases over time (Table 5; Figure 7) (Hallerman & Jiao, 2020; Hata & Hallerman, 2017, 2019). This trend appears to have continued this year within the DBA. The rate of decrease is greatest for newly mature females, followed by mature females, mature males, and finally newly mature males. The decreasing trend is statistically significant for mature and newly mature individuals of both sexes within the DBA (Table 6). The negative correlation between years and mean prosomal width of newly mature and mature individuals remained statistically significant. In the LDB, statistically significant trends in mean prosomal width over time were only observed for mature females and newly mature females (Table 5; Figure 7). The rate of decrease is greater for newly mature females than for mature females (Table 6).

Sex Ratios

Overall, mature males have become increasingly more common than mature females throughout the DBA sampling period, with the mean-catch-per-tow sex ratio (M:F) for mature individuals increasing from 1.61 in 2002 to 5.70 in 2025 with a median of 2.05 across the time series. M:F sex ratios in newly mature crabs have been comparatively more stable over time but still highly variable, ranging from 0.09 in 2003 to 157.89 in 2023, with a median of 1.09 across the time series. This variability is likely caused by low catches of newly mature females in previous years. M:F sex ratios in immature individuals range from 0.44 in 2019 to 1.08 in 2025, with a median of 0.70 across the time series.

M:F sex ratios within the LDB were higher across all maturity groups relative to the DBA. The M:F sex ratio for mature individuals ranges from 2.14 in 2010 to 19.8 in 2020, with a median of 4.53 over the time series – over twice that of the coastal DBA. For newly mature individuals, the M:F sex ratio ranges from 0.38 in 2010 to 5.23 in 2017, with a median of 1.33 across the time series. M:F sex ratios in immature individuals range from 0.63 in 2017 to 1.27 in 2025, with a median of 0.88 across the time series.

Population Estimates

Annual population estimates of immature crabs in the DBA survey mirror trends observed in the catch-per-tow estimates and have been variable over time, with a large peak in 2009 (Tables 7 and 8). Compared to 2024, the estimated mean population total increased significantly for both immature females and males, rising from 6.72 million to 11.37 million and from 5.43 million to 12.39 million individuals respectively. The estimated mean population total decreased from their 2024 values for mature crabs, with mature females dropping from 9.53 million to 7.11 million individuals while mature males fell from 47.72 million to 40.93 million individuals. The estimated mean population totals for newly mature females increased from their 2024 values, rising from 2.89 million to 3.43 million individuals. Conversely, newly mature males decreased in their 2025 population size, falling from 1.72 million to 904 thousand individuals.

The 2025 population estimates for immature crabs in the LDB almost tripled from their 2021 values, with immature females rising from 130 thousand to 315 thousand while immature males increased from 140 thousand to 407 thousand (Tables 9 and 10). Increases were observed in mature crabs as well, with mature females rising from 65 thousand in 2021 to 213 thousand in 2025, while mature males increased from 365 thousand to 588 thousand in the same time period. The populations of newly mature individuals rebounded dramatically from their extremely low values in previous years. Newly mature females were estimated to have a population size of less than a thousand since 2019 before rising to 79 thousand in 2025, while newly mature males rose from 4 thousand in 2020 to 96 thousand in 2025.

On average, 23.1% of the total number of immature females and 25.1% of immature males occurred within Delaware Bay, although the LDB sampling area comprises only 9.3% of the total combined area. Over the whole time series, about 7.4% of the combined population of newly mature females occurred within the

Bay, while 12.2% of newly mature males were in the Bay. About 16.3% of mature females and 21.3% of mature males occurred within the Bay on average.

Effects of the Sampling Period

Sampling occurred from August 28th to November 20th, with most of the trawls being performed in November (20 tows) and August (17 tows), while 11 trawls were performed in September and none in October. This timeframe is similar to those in sampling years prior to 2019, as trawls between 2019 and 2021 were performed earlier in August and September.

The average monthly DBA water temperature in 2025 (20.24 °C) was slightly lower than that in 2024 (21.47 °C), but remained similar to the average water temperatures recorded since 2016 (Table 11; Figure 8). The average LDB water temperature in 2025 (9.71 °C) was much lower than that recorded in previous years (20.50 °C in 2021), although this is likely due to the LDB tows being conducted much later in the year (mean ordinal date of 324 in 2025 compared to 268 in 2021).

In 2024, there was a correlation within the coastal DBA of mean catches-per-tow of immature males and females with both water temperature and ordinal date. With the addition of data from 2025, the correlation between immature female catch-per-tow and water temperature is no longer statistically significant (p = 0.065), but the correlation with ordinal date remains significant (p = 0.035). Immature male catch-per-tow remains significantly correlated with both water temperature (p = 0.049) and ordinal date (p = 0.030) (Table 12). Mature female catch-per-tow is significantly correlated with water temperature (p = 0.045) but not with ordinal date (p = 0.118). Mean catch-per-tow of mature males and newly mature females is not significantly correlated with water temperature or ordinal date. Newly mature male catch-per-tow is not significantly correlated with water temperature (p = 0.126) but is significantly correlated with ordinal date (p = 0.036).

In the LDB, there is no statistically significant correlation observed between the mean catch-per-tow of any demographic group and water temperature or ordinal date (Table 12).

Bycatch

In addition to horseshoe crabs, these surveys also capture a variety of bycatch species. Detailed documentation on the number of each bycatch species caught and associated size measurements have been historically lacking. The exceptions to this are summer flounder (*Paralichthys dentatus*), knobbed whelk (*Busycon carica*), and channeled whelk (*Busycotypus canaliculatus*). In 2024, we started recording the abundance of elasmobranch bycatch and basic size measurements for the most abundant species, and formally implemented this procedure into the 2025 sampling protocol.

Thirteen different elasmobranch species (5 shark, 3 skate, and 5 ray species) were identified as bycatch during the 2025 horseshoe crab trawl survey (Table 13; Figure 9). Clearnose skates (*Rostroraja eglanteria*) were by far the most encountered bycatch species (frequency of occurrence = 0.91), with 1,121 individuals counted across all tows. The next most frequent elasmobranch species was the bullnose ray (*Myliobatis freminvillei*), with 113 individuals counted across over half the tows (frequency of occurrence = 0.53), followed by the southern stingray (*Hypanus americanus*), with 72 individuals counted across around half the tows (frequency of occurrence = 0.51).

KEY FINDINGS - DBA

1. Mean catches-per-tow of mature males and females declined from their 2024 levels and are consistent with mean CPUE recorded in earlier years. The variances of the mean CPUE for mature males increased substantially for mature males but decreased for mature females.
2. Mean catches-per-tow of immature males and females have remained relatively stable since 2016, and this pattern continued into 2025. Variation increased from 2024 for both immature demographic groups.
3. Mean catch-per-tow of newly mature males decreased from 2024, continuing to decline from their high values in 2021 and 2022 but remaining relatively consistent with CPUE values recorded prior to 2016. Mean catch-per-tow of newly mature females continued to rebound from extremely low values since 2019, reaching their highest recorded value in 2025. This followed a revision in our sampling protocol that demanded more stringent probing for eggs in ambiguous females. Variation increased slightly for newly mature females and males.
4. Mean catches-per-tow of immature males are significantly correlated with both ordinal date and water temperature. Immature female catch-per-tow is now only significantly correlated with ordinal date. Mature female catch-per-tow is significantly correlated with water temperature but not ordinal date. The mean catch-per-tow of mature males and newly mature females are not significantly correlated with either water temperature or ordinal date. Mean catch-per-tow of newly mature males is significantly correlated with ordinal date only.
5. Annual mean prosomal width appears to still be decreasing in mature and newly mature males and females. The rate of decrease is greatest for newly mature females, followed by mature females, mature males, and finally newly mature males.

KEY FINDINGS - LDB

1. Sampling in the LDB resumed in 2025. An increase in stratified mean catch-per-tow was observed across all demographic groups when compared to 2021.
2. Mean catches-per-tow of immature females and males more than doubled from 2021. Variation increased slightly from 2021 for both immature demographic groups.
3. Mean catch-per-tow of newly mature females rose to 1.8 in 2025 from 0 since 2019. Mean catch-per-tow of newly mature males increased to 2.2 in 2025 from 0.1 in 2020. Variation increased for newly mature males from 2020 while increasing slightly for newly mature females from 2018.
4. Mean-catch-per-tow of mature females more than doubled between 2021 and 2025, while mature males saw a substantial increase. Variation decreased for mature females and males between 2021 and 2025, with a much larger decrease observed in the latter.
5. In the LDB, there is no statistically significant correlation observed between the mean catch-per-tow of any demographic group and water temperature or ordinal date.
6. In the LDB, statistically significant decreases in mean prosomal width over time were only observed for mature females and newly mature females.

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FIGURES AND TABLES

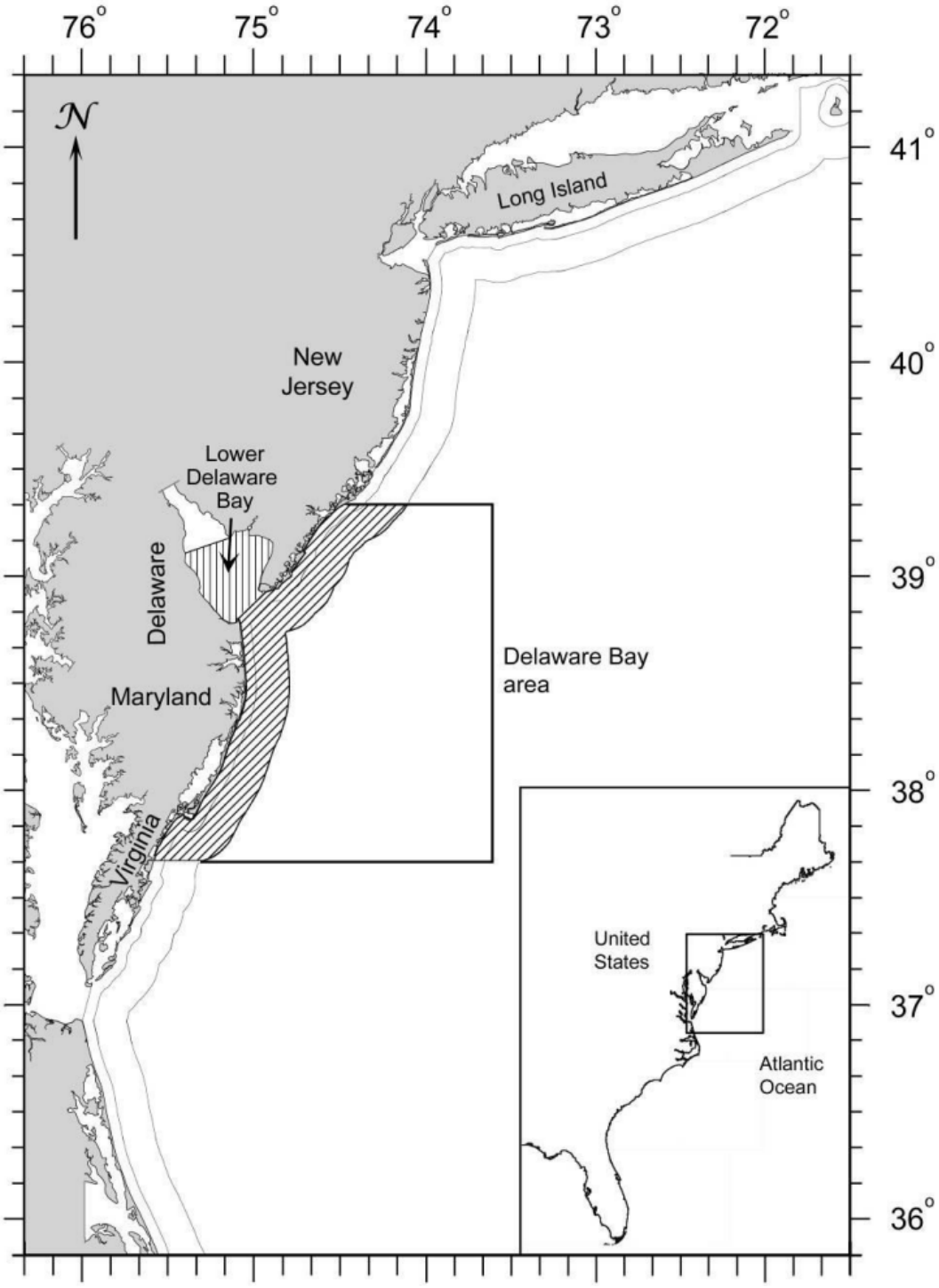


Figure 1. 2025 HSC trawl survey sampling area. The coastal Delaware Bay Area (DBA) and Lower Delaware Bay (LDB) survey areas are indicated. Mean catches between years were compared using stations within the shaded portions of the survey areas.

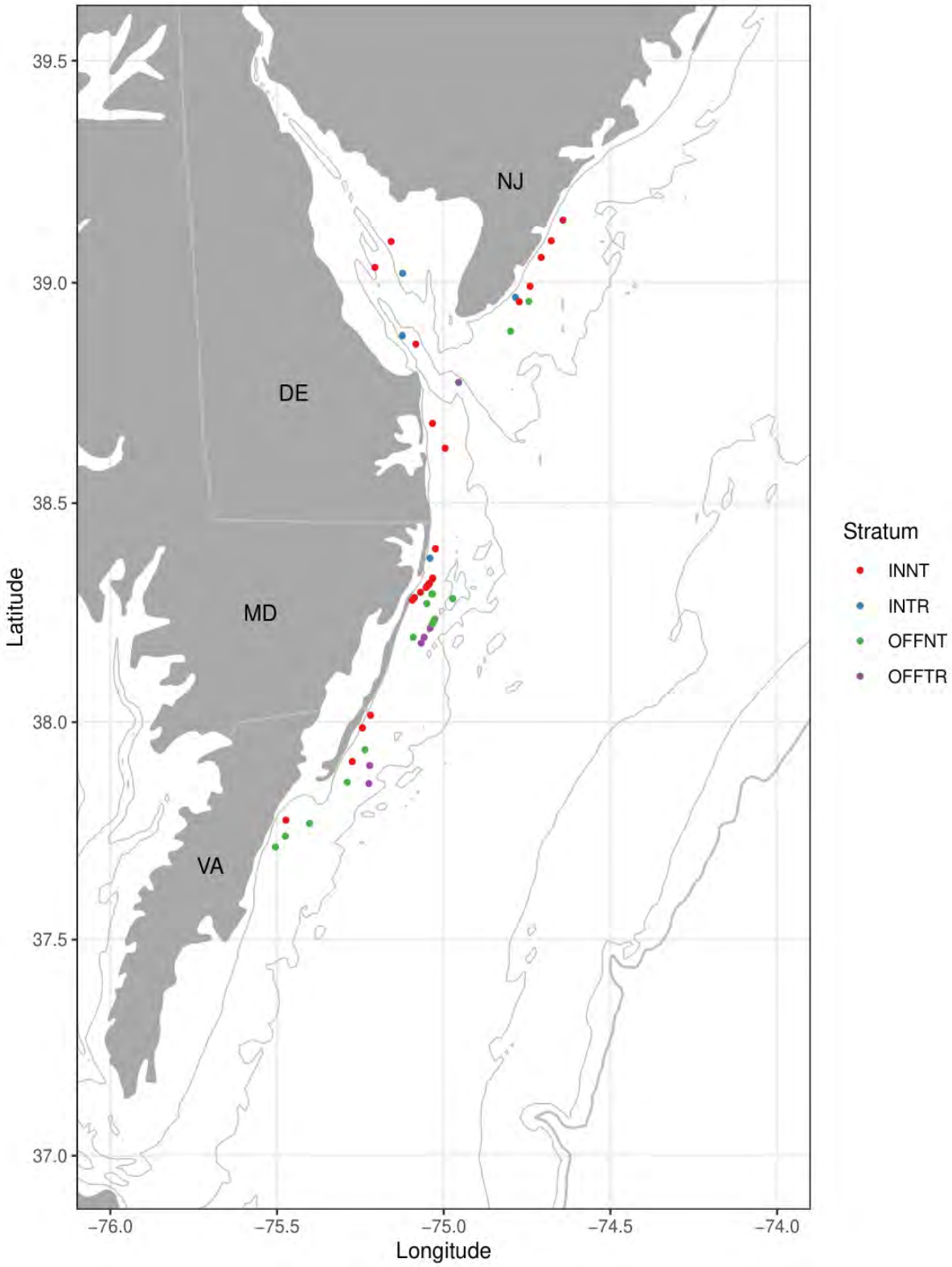


Figure 2. Map of all stations sampled during the 2025 field season. INNT denotes inshore non-trough sites, INTR denotes inshore trough sites, OFFNT denotes offshore non-trough sites, and OFFTR denotes offshore trough sites.

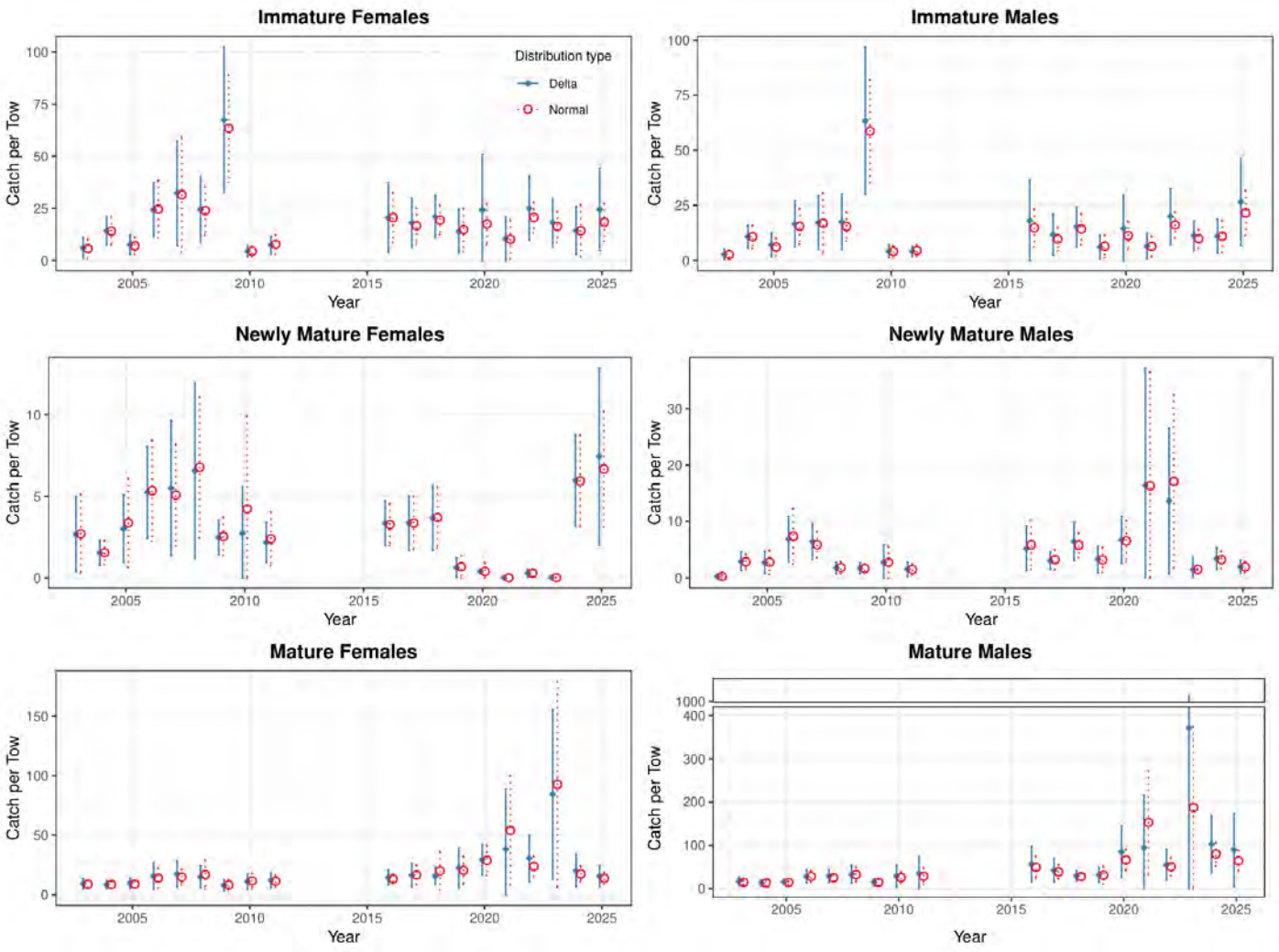


Figure 3. Plots of stratified mean catches per 15-minute tow of horseshoe crabs in the coastal Delaware Bay Area survey by demographic group. Vertical lines indicate 95% confidence intervals. Solid blue symbols and lines indicate the delta distribution model. Open red symbols and dashed lines indicate the normal distribution model. Data are from Tables 1 and 2. Note the differences in the *y*-axis scales.

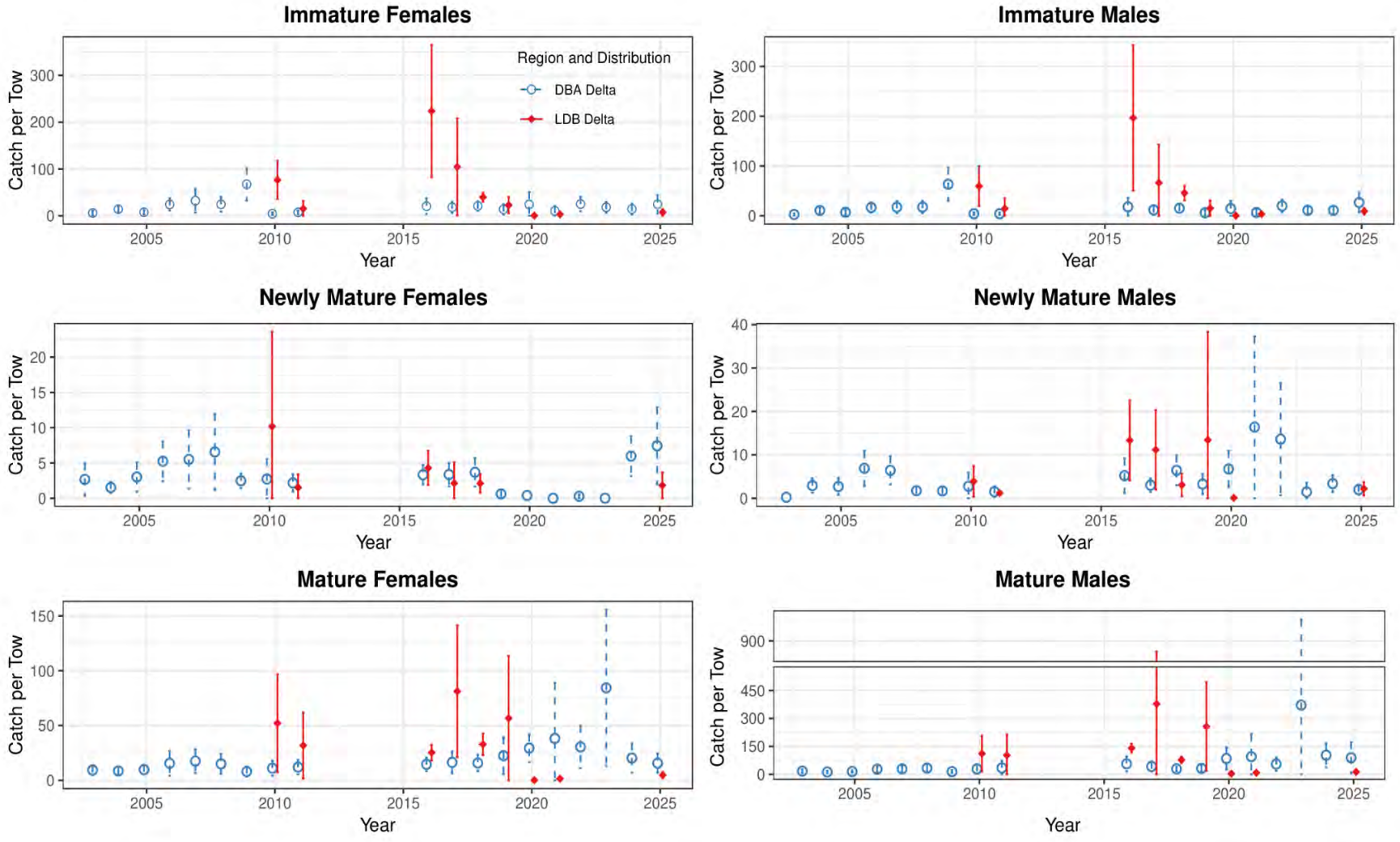


Figure 4. Plots of stratified mean catch per 15-minute tow of horseshoe crabs in the Lower Delaware Bay survey by demographic group, with coastal Delaware Bay Area survey means for comparison. Vertical lines indicate 95% confidence limits. Only the delta distribution model means are presented for comparison. Solid red symbols and lines indicate the Lower Delaware Bay survey. Open blue symbols and dashed lines indicate the coastal Delaware Bay Area survey. Note differences in *y*-axis scales.

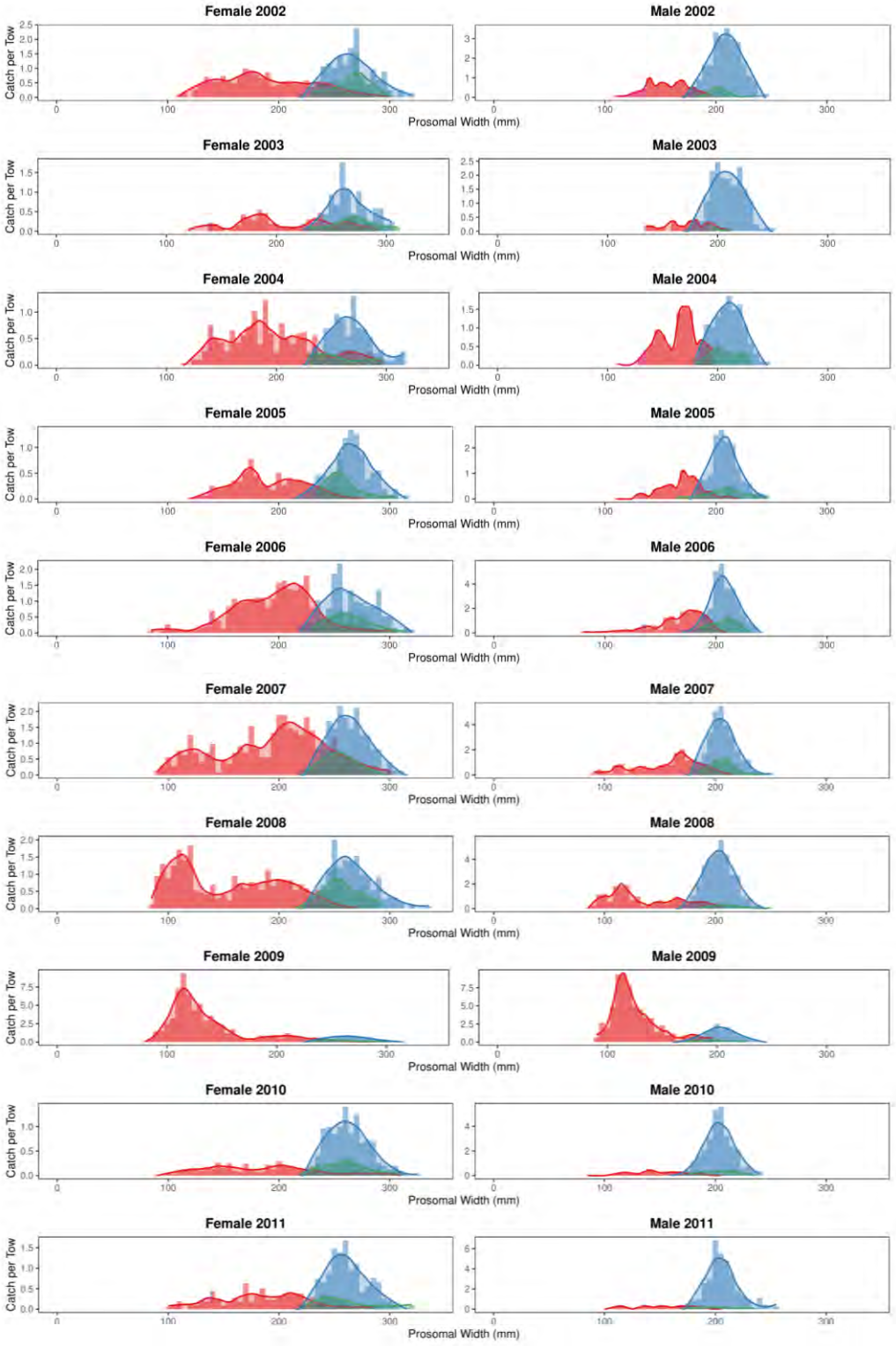


Figure 5. Size frequency distributions of horseshoe crabs by demographic group and year in the coastal Delaware Bay Area trawl survey. Relative frequencies are scaled to equal stratified mean catch-per-tow in Table 1 when summed. Red represents immatures, green represents newly matures, and blue represents matures.

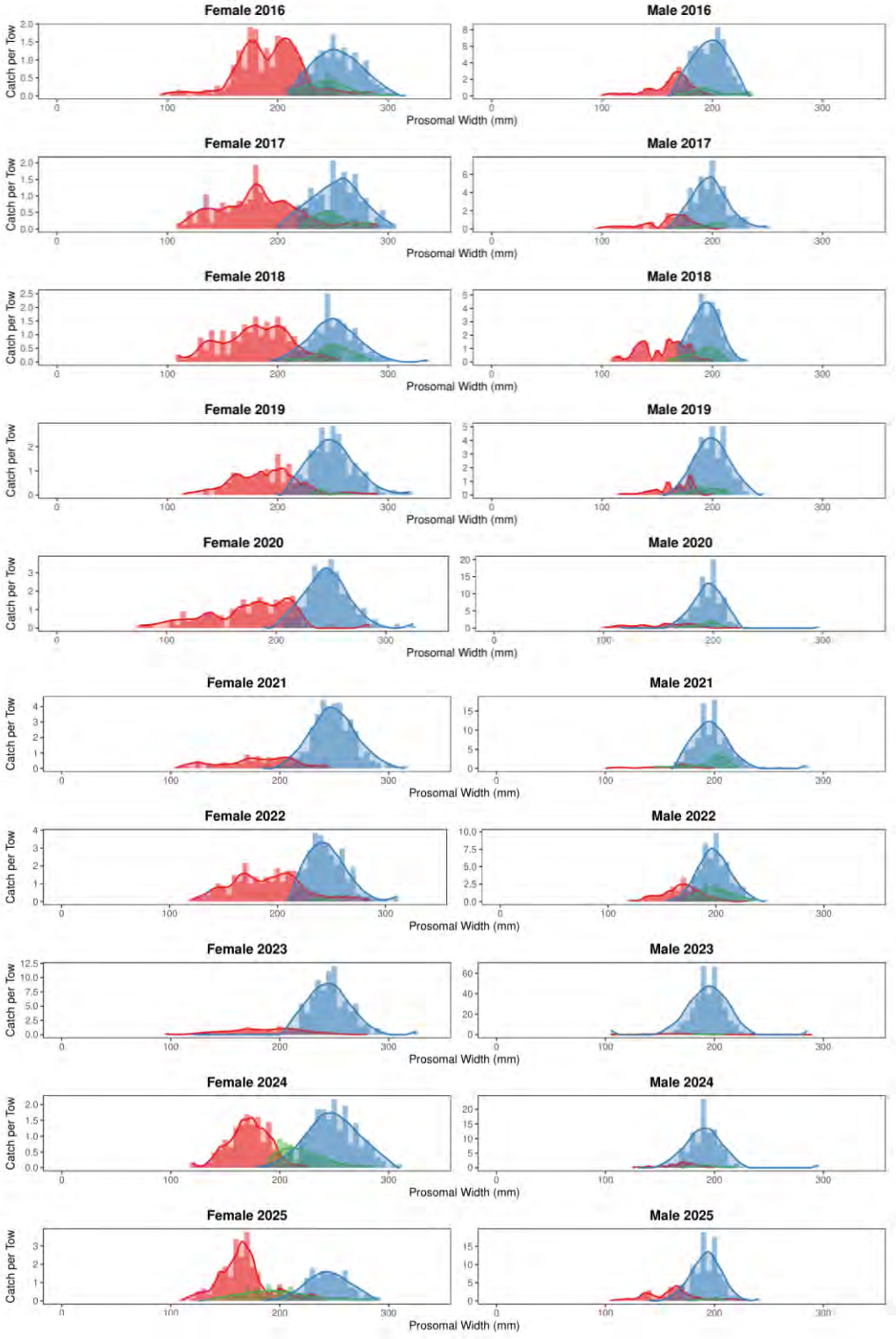


Figure 5. continued.

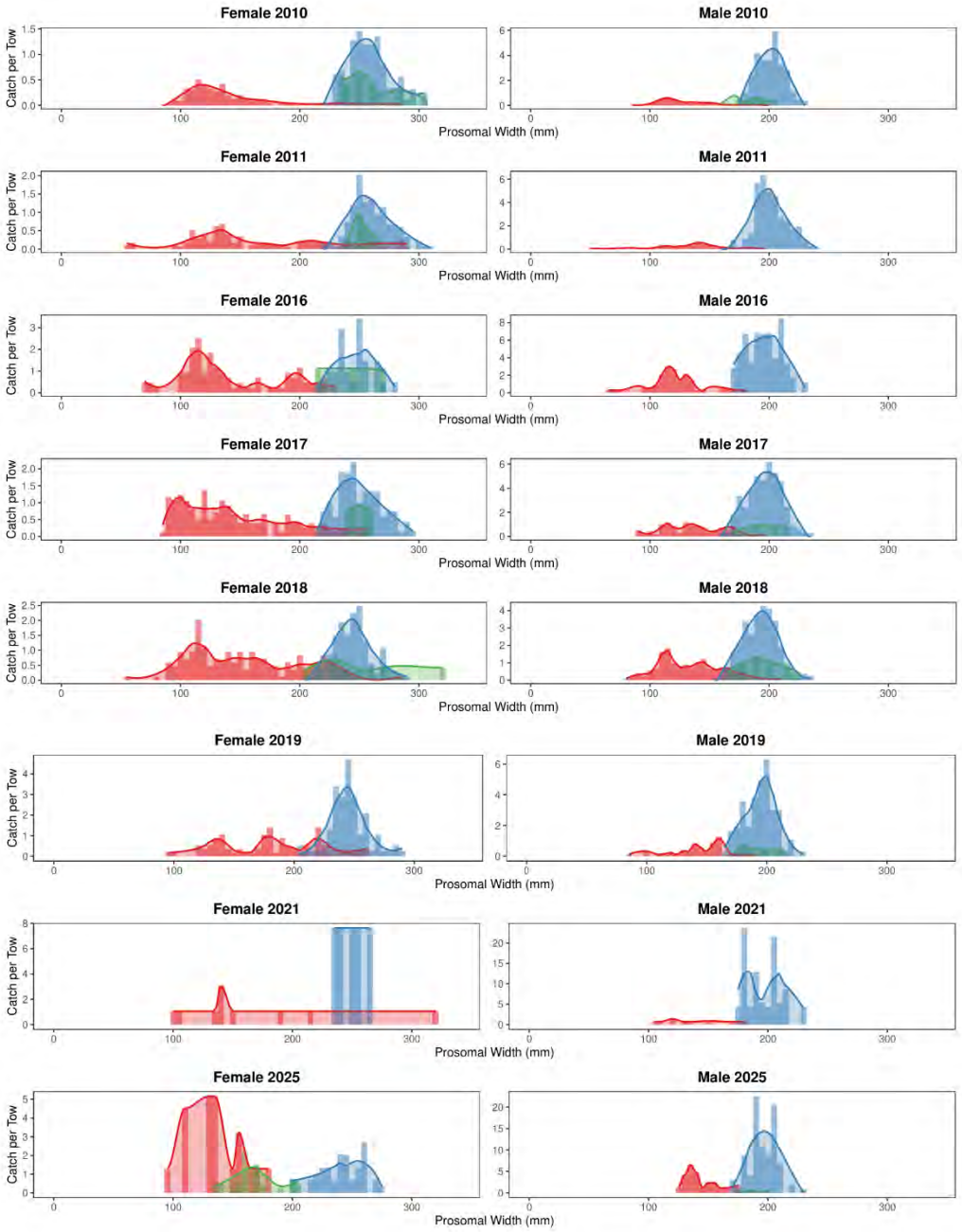


Figure 6. Relative size frequency distributions of horseshoe crabs by demographic group and year in the Lower Delaware Bay trawl survey. Relative frequencies are scaled to equal stratified mean catch-per-tow in Table 3 when summed.

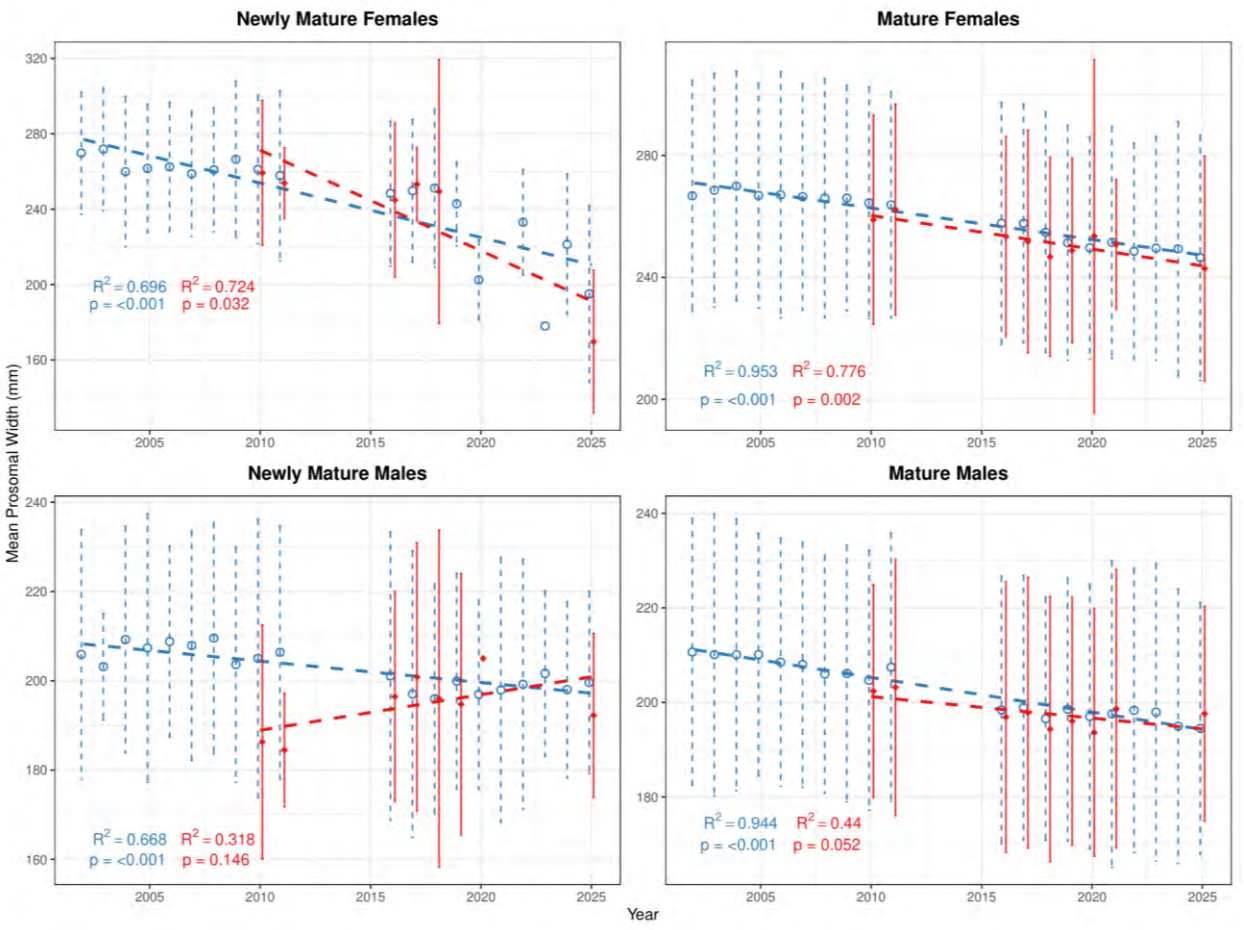


Figure 7. Mean prosomal widths (mm) (± 2 standard deviations) of mature and newly mature female and male horseshoe crabs in the Delaware Bay Area (blue symbols and lines) and Lower Delaware Bay (red symbols and lines) surveys.

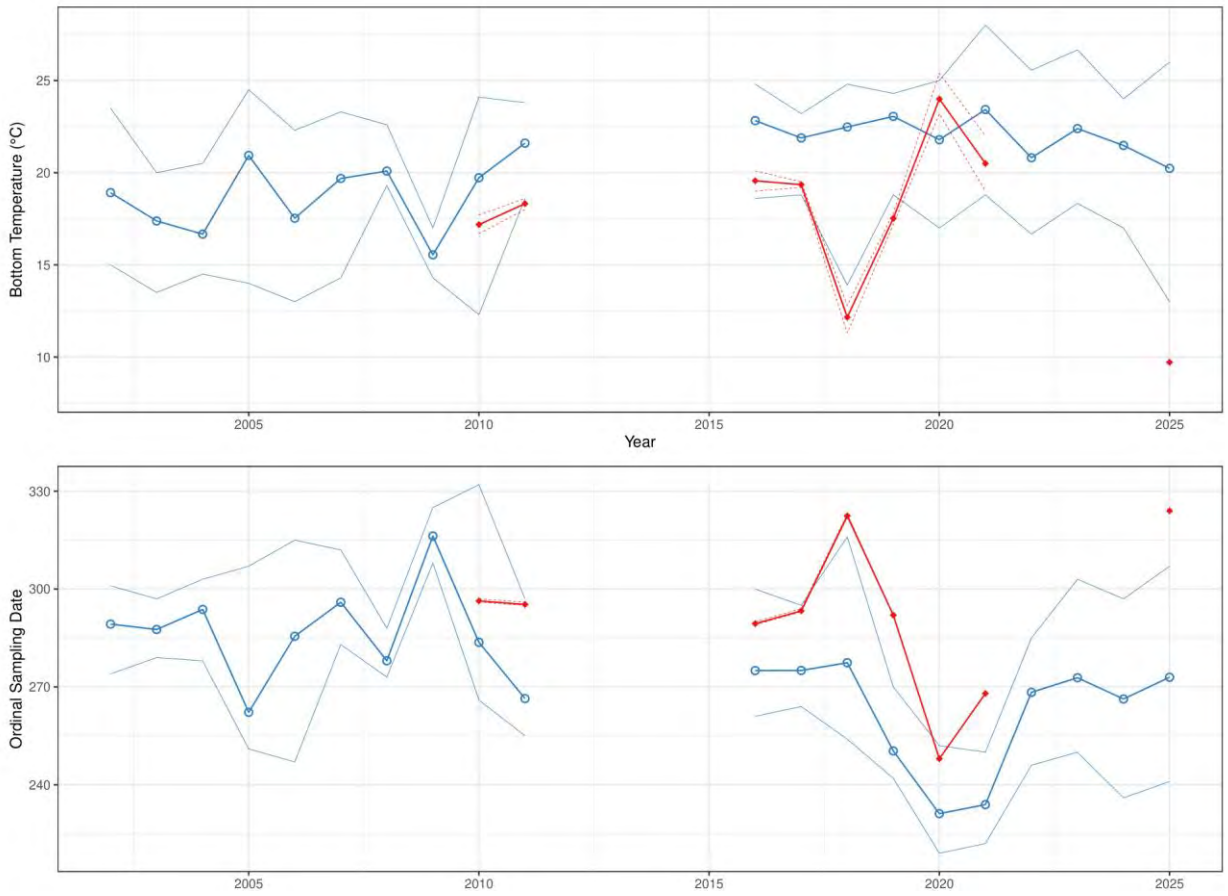


Figure 8. Plots of bottom water temperatures and ordinal sampling dates (days since January 1st) in the coastal Delaware Bay Area and Lower Delaware Bay trawl surveys. Open symbols and blue lines indicate coastal Delaware Bay Area. Solid symbols and red lines indicate Lower Delaware Bay. Points indicate mean values. Thinner lines indicate maximum and minimum values.

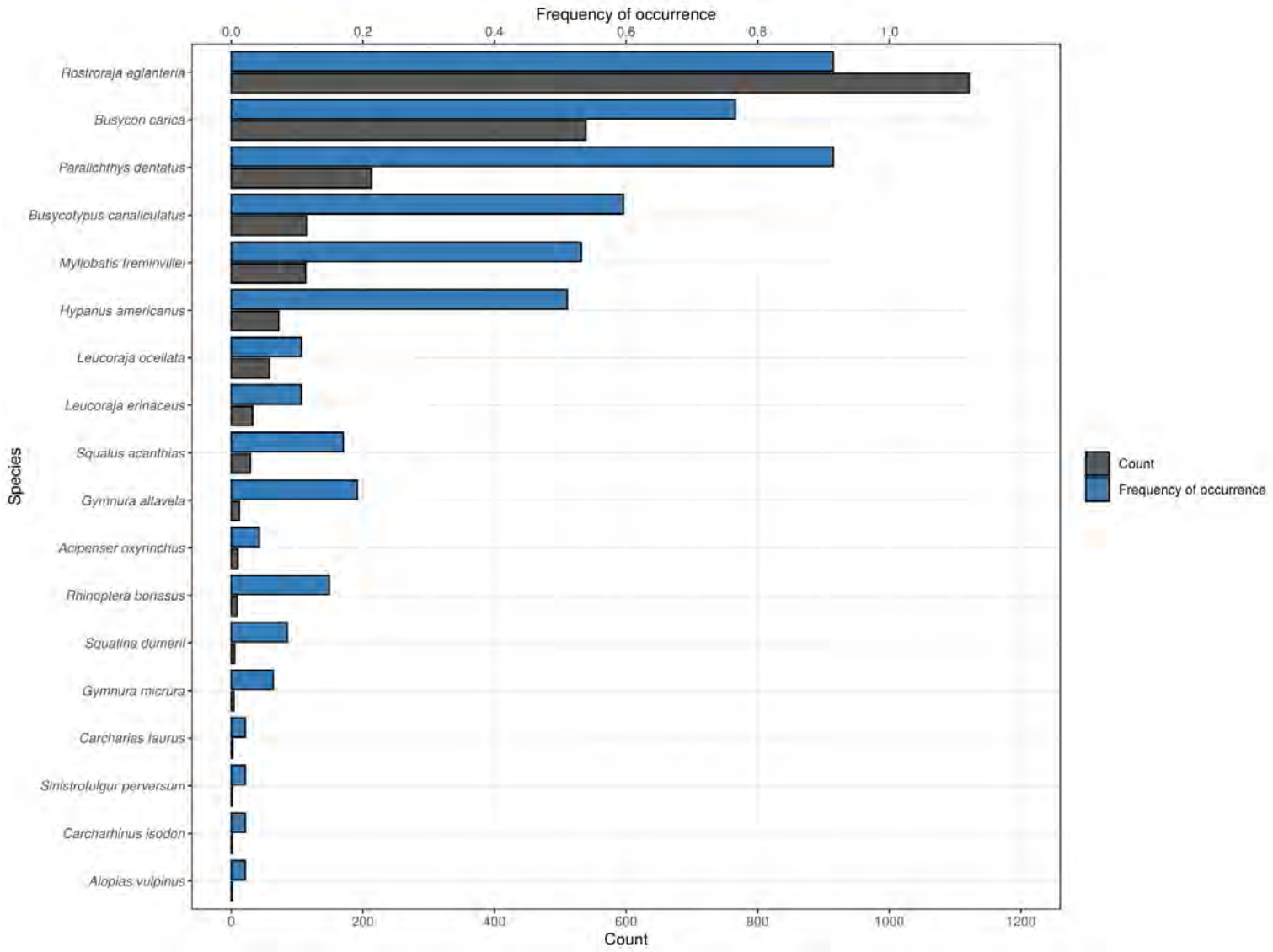


Figure 9. Frequency of occurrence and count of all bycatch species caught during the 2025 field season. Frequency of occurrence (number of tows with species/total number of tows performed) is indicated with blue bars while count is indicated with dark grey bars. Note differences in *x*-axis scales.

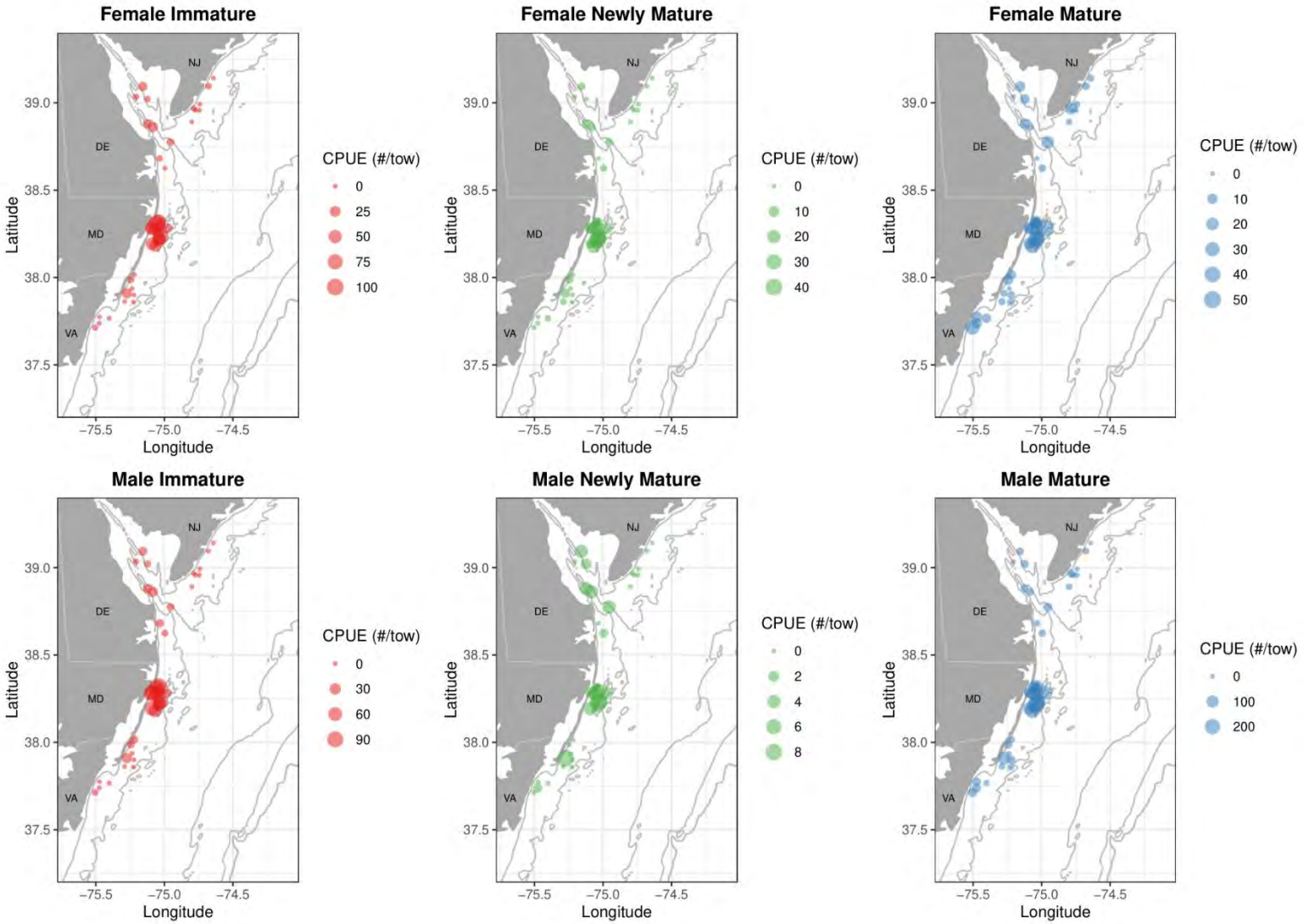


Figure 10. Geographical distribution of stratified mean catch-per-tow by demographic group in 2025. Larger circles indicate higher catch-per-tow values.

Table 1. Stratified mean catch-per-tow of horseshoe crabs in the coastal Delaware Bay Area survey, 2002-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the delta distribution model by demographic group. Also included are the upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2002	21.9	36.1	7.6	0.31	6.8	2002	12.6	21.4	3.9	0.33	4.2
2003	10.5	20.4	0.7	0.43	4.6	2003	5.4	9.9	0.9	0.39	2.1
2004	17.9	27.2	8.6	0.25	4.5	2004	15.7	25.0	6.4	0.29	4.5
2005	12.7	19.9	5.5	0.28	3.5	2005	11.9	20.0	3.8	0.33	3.9
2006	29.5	42.8	16.3	0.21	6.3	2006	21.6	33.9	9.2	0.25	5.4
2007	29.6	59.4	0.0	0.41	12.2	2007	19.5	39.6	0.0	0.42	8.2
2008	25.3	43.7	6.9	0.33	8.3	2008	18.0	32.4	3.6	0.35	6.3
2009	90.2	167.4	12.9	0.39	35.5	2009	69.0	109.7	28.3	0.29	19.8
2010	9.0	11.9	6.1	0.16	1.4	2010	6.1	9.5	2.8	0.27	1.6
2011	11.4	15.9	6.9	0.19	2.2	2011	6.9	10.1	3.7	0.23	1.6
2016	25.8	45.1	6.5	0.36	9.2	2016	20.0	36.6	3.5	0.39	7.9
2017	17.9	25.4	10.4	0.19	3.4	2017	12.3	20.5	4.2	0.27	3.3
2018	22.5	31.2	13.9	0.18	4.1	2018	16.5	24.4	8.7	0.22	3.7
2019	8.0	12.7	3.2	0.3	2.4	2019	3.5	6.0	1.0	0.35	1.2
2020	25.3	51.9	0.1	0.6	15.2	2020	16.0	31.3	0.8	0.56	9.1
2021	10.4	19.8	1.1	0.52	5.5	2021	6.4	11.5	1.3	0.46	3.0
2022	24.6	38.5	10.8	0.33	8.1	2022	19.3	30.8	7.7	0.36	6.9
2023	14.4	22.6	6.1	0.31	4.5	2023	9.7	15.3	4.0	0.32	3.1
2024	14.8	26.5	3.1	0.44	6.5	2024	11.9	20.2	3.7	0.38	4.56
2025	24.5	44.2	4.8	0.46	11.2	2025	26.6	46.4	6.8	0.42	11.3
Mature Females						Mature Males					
2002	11.4	18.5	4.2	0.3	3.4	2002	26.6	39.7	13.4	0.24	6.3
2003	7.7	11.7	3.7	0.25	1.9	2003	18.4	29.6	7.3	0.28	5.2
2004	5.9	8.6	3.3	0.21	1.3	2004	11.4	17.1	5.7	0.24	2.8
2005	7.2	11.4	3.0	0.27	2.0	2005	13.2	19.1	7.3	0.21	2.8
2006	15.3	33.8	0.0	0.44	6.7	2006	36.2	60.9	11.4	0.28	10.1
2007	16.9	27.5	6.2	0.3	5.1	2007	34.3	54.4	14.3	0.28	9.7
2008	14.4	23.3	5.4	0.29	4.2	2008	33.5	57.2	9.8	0.33	11.2
2009	6.7	11.2	2.3	0.32	2.1	2009	14.1	22.8	5.3	0.30	4.2
2010	11.8	17.3	6.3	0.22	2.6	2010	31.5	49.2	13.8	0.27	8.6
2011	12.3	17.1	7.6	0.18	2.2	2011	36.0	69.8	2.2	0.41	14.7
2016	13.5	19.5	7.6	0.21	2.9	2016	49.2	83.1	15.2	0.29	14.3
2017	16.9	24.8	9.0	0.23	3.9	2017	48.9	74.0	23.9	0.25	12.2
2018	16.8	23.7	9.9	0.2	3.3	2018	35.7	48.9	22.5	0.17	6.2
2019	11.6	18.7	4.5	0.3	3.5	2019	20.0	33.3	6.8	0.33	6.6
2020	29.6	41.2	18.1	0.23	6.9	2020	87.0	139.4	34.5	0.36	31.1
2021	38.2	86.5	0.0	0.72	27.4	2021	95.0	207.8	0.0	0.67	64.1
2022	28.2	42.3	14.1	0.29	8.3	2022	50.0	79.1	20.9	0.34	17.2
2023	73.4	149.0	0.0	0.56	41.3	2023	320.0	881.0	0.0	0.95	302.0
2024	21.0	34.5	7.6	0.35	7.4	2024	105.5	170.9	40.0	0.34	36.1
2025	15.7	24.5	6.9	0.32	5.0	2025	89.4	173.4	5.6	0.53	47.6
Newly Mature Females						Newly Mature Males					
2002	3.6	5.6	1.6	0.26	0.9	2002	1.3	2	0.5	0.28	0.4
2003	1.8	3.8	0.0	0.49	0.9	2003	0.2	0.5	0.0	0.84	0.2
2004	0.8	1.3	0.3	0.3	0.2	2004	1.8	2.6	1	0.21	0.4
2005	1.1	1.7	0.5	0.28	0.3	2005	1.3	2.3	0.4	0.33	0.4
2006	4.6	7.8	1.5	0.3	1.4	2006	7.1	11.6	2.6	0.36	2.7
2007	5.1	9.3	0.9	0.39	2.0	2007	6.7	10.6	2.8	0.28	1.9
2008	6.0	11.8	0.2	0.44	2.7	2008	1.8	2.9	0.6	0.32	0.6
2009	2.0	3.1	0.9	0.26	0.5	2009	1.7	2.8	0.5	0.34	0.6
2010	3.0	6.8	0.0	0.59	1.8	2010	3.2	7.0	0.0	0.55	1.8
2011	2.0	3.3	0.7	0.31	0.6	2011	1.9	3.4	0.4	0.37	0.7
2016	3.5	5.2	1.9	0.23	0.8	2016	5.9	11	0.7	0.42	2.5
2017	3.5	5.5	1.6	0.27	0.9	2017	3.6	5.8	1.5	0.29	1.0
2018	3.9	6.3	1.4	0.3	1.2	2018	7.5	11.9	3.1	0.27	2.1

Table 1. continued.

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Newly Mature Females						Newly Mature Males					
2019	0.5	1.0	0.0	0.46	0.2	2019	2.8	4.6	1.0	0.32	0.9
2020	0.3	0.8	0.0	0.85	0.3	2020	7.0	11.0	2.9	0.35	2.4
2021	0.0	NA	NA	NA	NA	2021	16.4	37.3	0.0	0.69	11.3
2022	0.3	0.5	0.1	0.5	0.1	2022	13.8	26.0	1.7	0.52	7.2
2023	0.0	NA	NA	NA	NA	2023	0.1	0.3	0.0	0.76	0.1
2024	6.4	9.3	3.5	0.25	1.6	2024	3.8	5.8	1.7	0.31	1.2
2025	7.4	12.9	2.0	0.41	3.1	2025	2.0	3.1	0.8	0.33	0.7

Table 2. Stratified mean catch-per-tow of horseshoe crabs in the coastal Delaware Bay Area survey, 2002-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the normal distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2002	19.1	27.6	10.5	0.22	4.1	2002	11.7	18.3	5.0	0.27	3.2
2003	9.5	15.9	3.0	0.32	3.1	2003	4.9	8.1	1.8	0.30	1.5
2004	17.0	24.5	9.5	0.21	3.6	2004	14.0	20.3	7.6	0.22	3.1
2005	11.5	17.0	6.1	0.23	2.6	2005	10.6	16.7	4.4	0.28	2.9
2006	31.1	46.9	15.3	0.24	7.5	2006	21.5	32.0	11.1	0.23	5.0
2007	29.8	59.6	0.0	0.41	12.2	2007	20.5	43.2	0.0	0.45	9.3
2008	24.6	38.9	10.3	0.27	6.6	2008	15.9	24.2	7.6	0.24	3.8
2009	63.1	93.8	32.4	0.24	14.9	2009	61.0	89.8	32.1	0.23	14.0
2010	9.4	13.0	5.7	0.19	1.8	2010	6.4	10.1	2.6	0.29	1.8
2011	12.2	18.5	6.0	0.25	3.0	2011	7.3	11.2	3.3	0.26	1.9
2016	25.1	41.1	9.0	0.31	7.7	2016	18.1	29.9	6.3	0.31	5.7
2017	19.1	28.7	9.6	0.24	4.6	2017	12.4	19.3	5.5	0.26	3.3
2018	22.5	30.6	14.5	0.17	3.8	2018	17.2	25.9	8.6	0.24	4.1
2019	13.7	21.9	5.5	0.3	4.1	2019	6.6	11.1	2.0	0.34	2.2
2020	18.8	35.4	8.7	0.32	6.0	2020	12.7	24.0	4.7	0.37	4.8
2021	10.1	19.2	1.5	0.50	5.1	2021	6.4	11.0	1.8	0.42	2.7
2022	20.7	27.2	14.2	0.18	3.8	2022	16.0	21.4	10.7	0.20	3.2
2023	13.2	18.9	7.5	0.24	3.2	2023	8.4	12.1	4.8	0.25	2.1
2024	14.9	27.4	2.4	0.45	6.9	2024	11.8	19.3	4.3	0.35	4.2
2025	18.4	27.4	9.3	0.28	5.2	2025	21.6	31.8	11.4	0.27	5.9
Mature Females						Mature Males					
2002	11.0	17.0	4.9	0.26	2.8	2002	24.6	34.4	14.8	0.19	4.7
2003	7.5	10.9	4.1	0.22	1.6	2003	17.0	24.7	9.4	0.21	3.6
2004	6.0	8.3	3.7	0.19	1.1	2004	12.6	20.2	5.1	0.29	3.6
2005	6.8	10.0	3.5	0.22	1.5	2005	12.3	16.7	7.8	0.17	2.1
2006	13.5	24.2	2.7	0.31	4.2	2006	32.8	49.5	16.1	0.22	7.4
2007	14.2	21.3	7.1	0.24	3.4	2007	28.4	39.9	16.8	0.20	5.6
2008	16.5	31.0	2.0	0.41	6.8	2008	32.7	53.7	11.7	0.31	10.0
2009	7.3	12.3	2.2	0.33	2.4	2009	14.2	22.9	5.5	0.29	4.1
2010	12.7	19.7	5.7	0.26	3.3	2010	32.5	50.9	14.1	0.27	8.8
2011	12.6	18.1	7.2	0.2	2.6	2011	35.4	61.4	9.5	0.32	11.5
2016	12.8	17.4	8.2	0.17	2.2	2016	53.9	90.0	17.8	0.30	16.2
2017	18.2	28.0	8.4	0.26	4.8	2017	47.2	69.3	25.1	0.23	10.8
2018	21.1	39.6	2.5	0.41	8.7	2018	34.9	44.9	24.9	0.14	4.8
2019	18.7	28.4	9.0	0.26	4.8	2019	19.7	31.0	8.4	0.28	5.6
2020	29.4	41.8	17.3	0.25	7.2	2020	68.8	111.7	44.1	0.21	14.7
2021	54.0	85.3	6.8	0.50	26.8	2021	152.6	215.5	30.0	0.46	69.7
2022	24.3	31.5	17.1	0.18	4.3	2022	47.8	64.7	31.0	0.21	9.9
2023	79.8	167.0	0.0	0.59	47.2	2023	170.0	360.0	0.0	0.60	102.0
2024	18.2	24.7	11.7	0.20	3.6	2024	82.7	110.0	55.4	0.18	15.1
2025	13.8	18.8	8.8	0.21	2.8	2025	64.1	88.8	39.5	0.22	14.1
Newly Mature Females						Newly Mature Males					
2002	3.5	5.3	1.7	0.24	0.9	2002	1.3	2.2	0.4	0.31	0.4
2003	1.8	3.6	0.1	0.45	0.8	2003	0.2	0.5	0.0	0.84	0.2
2004	0.8	1.4	0.3	0.33	0.3	2004	1.8	2.6	1.0	0.21	0.4
2005	1.2	2.1	0.3	0.35	0.4	2005	1.3	2.1	0.5	0.29	0.4
2006	4.8	8.2	1.4	0.33	1.6	2006	7.5	13.2	1.8	0.36	2.7
2007	4.6	7.7	1.5	0.32	1.5	2007	6.1	9.1	3.2	0.23	1.4
2008	6.3	11.3	1.3	0.37	2.3	2008	1.8	3.1	0.5	0.34	0.6
2009	2.0	3.1	0.9	0.26	0.5	2009	1.6	2.6	0.6	0.30	0.5
2010	4.0	10.3	0.0	0.74	3.0	2010	3.3	7.2	0.0	0.56	1.9
2011	2.2	3.9	0.5	0.38	0.8	2011	1.9	3.5	0.4	0.38	0.7
2016	3.5	5.1	1.9	0.22	0.8	2016	6.6	12.6	0.6	0.43	2.9
2017	3.6	5.5	1.6	0.27	1.0	2017	3.8	6.4	1.3	0.32	1.2
2018	3.9	6.2	1.6	0.28	1.1	2018	6.9	10.0	3.9	0.21	1.5

Table 2. continued.

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Newly Mature Females						Newly Mature Males					
2019	0.6	1.2	0.0	0.48	0.3	2019	3.5	5.5	1.5	0.29	1.0
2020	0.3	0.8	0.0	0.84	0.3	2020	6.9	10.6	3.3	0.31	2.1
2021	0.0	NA	NA	NA	0.0	2021	16.3	37.4	0.0	0.69	11.3
2022	0.3	0.5	0.04	0.46	0.1	2022	16.2	28.6	3.8	0.45	7.2
2023	0.0	NA	NA	NA	NA	2023	0.1	0.3	0.0	0.76	0.1
2024	6.4	9.3	3.5	0.25	1.6	2024	3.8	5.5	2.0	0.27	1.0
2025	6.7	10.2	3.1	0.30	2.0	2025	1.9	2.9	0.9	0.29	0.6

Table 3. Stratified mean catch-per-tow of horseshoe crabs in the Lower Delaware Bay survey area in 2010-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the delta distribution model, by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2010	79.7	122.2	37.3	0.21	16.5	2010	61.2	105.5	16.9	0.30	18.1
2011	19.7	45.2	0.0	0.47	9.2	2011	20.2	50.7	0.0	0.55	11.0
2012	164.3	311.8	16.9	0.32	53.1	2012	192.6	548.4	0.0	0.43	82.7
2016	196	335.5	56.6	0.29	57.0	2016	184.2	322.9	45.5	0.32	58.7
2017	96.7	210.0	0.0	0.46	44.1	2017	62.9	137.6	0.0	0.46	29.0
2018	47.2	56.2	38.1	0.08	3.8	2018	55.1	71.8	38.4	0.12	6.8
2019	9.5	24.3	0.0	0.60	5.7	2019	5.7	15.8	0.0	0.70	4.0
2020	0.3	0.8	0.0	0.97	0.3	2020	0.2	0.6	0.0	0.97	0.2
2021	3.1	NA	NA	0.99	3.1	2021	3.3	NA	NA	0.78	2.6
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	7.3	14.6	0.0	0.49	3.6	2025	9.3	15.9	2.7	0.4	3.3
Mature Females						Mature Males					
2010	48.8	98.9	0.0	0.4	19.5	2010	130.3	242.6	18.1	0.34	43.7
2011	30.3	60.4	0.2	0.36	10.8	2011	110.2	249	0.0	0.45	50.0
2012	19.1	51.6	0.0	0.4	7.6	2012	66.8	141.1	0.0	0.35	23.3
2016	26.3	33.9	18.7	0.12	3.2	2016	161.7	192.5	131.0	0.08	13.3
2017	80.6	167.1	0.0	0.39	31.1	2017	362.7	868.5	0.0	0.50	182.2
2018	36.2	46.6	25.8	0.12	4.3	2018	94.3	117.9	70.7	0.11	10.0
2019	20.8	54.7	0.0	0.63	13.2	2019	100.4	254	0.0	0.59	59.7
2020	0.2	0.5	0.0	0.97	0.2	2020	4.1	8.8	0.0	0.67	2.7
2021	1.6	NA	NA	0.99	1.5	2021	8.7	NA	NA	0.72	6.3
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	4.8	7.5	2.2	0.3	1.2	2025	13.3	18.3	8.4	0.17	2.3
Newly Mature Females						Newly Mature Males					
2010	9.7	25.8	0.0	0.64	6.2	2010	4.4	9.5	0.0	0.46	2.0
2011	1.4	3.8	0.0	0.58	0.8	2011	1.4	4.9	0.0	0.94	1.3
2012	1.0	4.4	0.0	0.76	0.8	2012	6.1	14.2	0.0	0.48	2.9
2016	4.6	8.0	1.1	0.31	1.4	2016	16.2	29.0	3.5	0.3	5.0
2017	2.1	5.9	0.0	0.65	1.4	2017	12.4	27.6	0.0	0.44	5.4
2018	2.3	4.4	0.2	0.35	0.8	2018	3.6	7.6	0.0	0.44	1.6
2019	0.0	0.0	0.0	NA	0.0	2019	8.0	22.3	0.0	0.7	5.6
2020	0.0	0.0	0.0	NA	0.0	2020	0.1	0.3	0.0	0.97	0.1
2021	0.0	NA	NA	NA	0.0	2021	0.0	NA	NA	NA	0.0
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	1.8	3.7	0.0	0.5	0.9	2025	2.2	3.8	0.7	0.3	0.8

Table 4. Stratified mean catch-per-tow of horseshoe crabs in the Lower Delaware Bay survey area in 2010-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the normal distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2010	79.5	116.5	42.6	0.19	15.1	2010	60.4	95.7	25.1	0.25	15.3
2011	21.3	54.2	0.0	0.55	11.8	2011	21.5	57.2	0.0	0.60	12.9
2012	165.5	287.6	43.4	0.30	49.9	2012	183.9	360.1	7.8	0.34	63.4
2016	186.5	284.7	88.3	0.22	40.1	2016	167.9	249.7	86.0	0.21	34.6
2017	90.8	176.0	5.6	0.37	33.2	2017	58.2	109	7.5	0.36	20.7
2018	47.1	55.6	38.6	0.08	3.6	2018	54.9	69.6	40.2	0.11	6.2
2019	16.0	30.4	1.5	0.35	5.6	2019	10.7	21.7	0.0	0.40	4.3
2020	0.3	0.8	0.0	0.97	0.3	2020	0.2	0.6	0.0	0.97	0.2
2021	3.1	NA	NA	NA	NA	2021	3.3	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	7.1	13.3	1.0	0.4	3.0	2025	9.0	14.4	3.5	0.3	2.7
Mature Females						Mature Males					
2010	49.1	99.8	0.0	0.40	19.7	2010	128.0	227.9	28.2	0.3	38.9
2011	28.6	49.9	7.4	0.27	7.7	2011	100.3	187.7	13.0	0.31	31.5
2012	18.7	46.2	0.0	0.34	6.4	2012	65.3	111.7	18.8	0.28	18.1
2016	26.2	33.4	19.0	0.11	3.0	2016	161.8	192.4	131.1	0.08	13.3
2017	80.5	165	0.0	0.38	30.4	2017	303.4	531.7	75.2	0.27	82.2
2018	36.2	47.2	25.1	0.12	4.3	2018	94.7	120.3	69.0	0.11	10.8
2019	29.3	54.8	3.8	0.34	9.9	2019	49.9	90	9.9	0.31	15.6
2020	0.2	0.5	0.0	0.97	0.2	2020	4.1	8.8	0.0	0.67	2.7
2021	1.6	NA	NA	NA	NA	2021	8.7	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	4.9	7.8	2.0	0.3	1.4	2025	13.2	17.8	8.7	0.2	2.1
Newly Mature Females						Newly Mature Males					
2010	9.6	24.9	0.0	0.62	5.9	2010	4.3	9.1	0.0	0.43	1.9
2011	1.4	3.8	0.0	0.58	0.8	2011	1.4	4.9	0.0	0.94	1.3
2012	1.0	4.4	0.0	0.76	0.8	2012	6.1	14.1	0.0	0.47	2.9
2016	4.5	8.0	1.1	0.3	1.3	2016	16	27.2	4.9	0.27	4.3
2017	2.1	5.9	0.0	0.65	1.4	2017	12.4	25.7	0.0	0.42	5.2
2018	2.3	4.3	0.3	0.34	0.8	2018	3.6	7.6	0.0	0.44	1.6
2019	0.0	0.0	0.0	NA	0.0	2019	8.5	22.9	0.0	0.66	5.6
2020	0.0	0.0	0.0	NA	0.0	2020	0.1	0.3	0.0	0.97	0.1
2021	0.0	NA	NA	NA	0.0	2021	0.0	NA	NA	NA	0.0
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	1.8	3.9	0.0	0.5	0.8	2025	2.2	3.6	0.8	0.3	0.7

Table 5. Results of correlation analyses of mean prosomal width (mm) and survey year for mature and newly mature males and females from the Delaware Bay Area and Lower Delaware Bay surveys. Statistics presented are the number of years included: *n*; *T-score*; probability, *p*; and correlation coefficient, *r*. A negative correlation coefficient indicates a decreasing regression slope.

Maturity Group	n	T	p	r
Delaware Bay Area 2002 - 2025				
Mature females	20	-19.20	<0.001	-0.976
Newly mature females	20	-6.24	<0.001	-0.834
Mature males	20	-17.38	<0.001	-0.971
Newly mature males	20	-6.02	<0.001	-0.818
Lower Delaware Bay 2010 - 2025				
Mature females	10	-4.92	0.002	-0.881
Newly mature females	10	-3.24	0.032	-0.851
Mature males	10	-2.34	0.052	-0.663
Newly mature males	10	1.67	0.146	0.564

Table 6. Results of linear regression analyses of mean prosomal width (mm) and survey year for mature and newly mature males and females from the Delaware Bay Area and Lower Delaware Bay surveys. Statistics presented are regression slope, *m*, and probability, *p*.

Maturity Group	m	p
Delaware Bay Area 2002 - 2025		
Mature females	-1.03	<0.001
Newly mature females	-2.89	<0.001
Mature males	-0.73	<0.001
Newly mature males	-0.48	<0.001
Lower Delaware Bay 2010 - 2025		
Mature females	-1.10	0.002
Newly mature females	-5.34	0.032
Mature males	-0.46	0.052
Newly mature males	0.80	0.146

Table 7. Estimated population (in thousands) of horseshoe crabs in the coastal Delaware Bay Area survey, 2002-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the delta distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2002	9470	15665	3275	0.31	2936	2002	5483	9284	1683	0.33	1809
2003	4585	8848	321	0.43	1972	2003	2303	4217	390	0.39	898
2004	7774	11770	3778	0.25	1944	2004	6810	10895	2725	0.29	1975
2005	5630	8856	2404	0.28	1576	2005	5260	8839	1681	0.33	1736
2006	12928	18691	7164	0.21	2715	2006	9327	14554	4100	0.24	2238
2007	13684	27486	0	0.41	5610	2007	8966	18246	0	0.42	3766
2008	10933	18650	3216	0.32	3499	2008	7841	13917	1766	0.35	2744
2009	39032	72868	5197	0.39	15222	2009	29864	47269	12460	0.28	8362
2010	3954	5220	2688	0.16	633	2010	2686	4144	1229	0.26	698
2011	4965	6945	2985	0.2	993	2011	3092	4547	1637	0.23	711
2016	11699	20462	2935	0.36	4212	2016	9102	16649	1555	0.39	3550
2017	7505	10708	4302	0.19	1426	2017	5091	8465	1717	0.27	1375
2018	10173	14285	6061	0.19	1933	2018	7507	11173	3842	0.23	1727
2019	3397	5516	1279	0.31	1053	2019	1487	2614	360	0.38	565
2020	9475	19779	0	0.65	6159	2020	5925	11967	0	0.61	3614
2021	4174	7947	400	0.53	2218	2021	2574	4634	513	0.47	1199
2022	9930	15493	4366	0.33	3282	2022	7652	12192	3112	0.35	2686
2023	8228	14206	2250	0.39	3238	2023	5313	8835	1792	0.36	1910
2024	6724	12105	1343	0.44	2966	2024	5432	9227	1638	0.39	2094
2025	11369	20552	2186	0.46	5237	2025	12387	21753	3022	0.43	5334
Mature Females						Mature Males					
2002	4959	8084	1834	0.3	1488	2002	11584	17335	5834	0.24	2780
2003	3379	5160	1599	0.25	845	2003	8069	13029	3110	0.29	2340
2004	2735	4043	1426	0.23	629	2004	5150	7788	2511	0.25	1288
2005	3138	4942	1333	0.27	847	2005	5844	8461	3228	0.22	1286
2006	6611	14330	0	0.42	2777	2006	15825	26060	5589	0.27	4273
2007	7746	12704	2789	0.31	2401	2007	15795	25104	6487	0.28	4423
2008	6311	10202	2419	0.29	1830	2008	14647	24995	4299	0.33	4834
2009	2975	4971	979	0.32	952	2009	6240	10197	2283	0.3	1872
2010	5178	7616	2740	0.23	1191	2010	13963	21910	6015	0.28	3910
2011	5290	7282	3297	0.18	952	2011	15060	29000	1120	0.4	6024
2016	6024	8635	3413	0.21	1265	2016	21941	37216	6665	0.29	6363
2017	7185	10525	3844	0.23	1653	2017	20664	31208	10119	0.25	5166
2018	7326	10520	4131	0.21	1538	2018	15749	21880	9619	0.18	2835
2019	5110	8454	1767	0.32	1635	2019	8924	15202	2646	0.35	3108
2020	10803	15359	6247	0.25	2706	2020	31546	51050	12042	0.36	11583
2021	15498	35873	0	0.75	11,568	2021	38538	85949	0	0.7	26925
2022	11421	17179	5662	0.30	3380	2022	19921	31447	8395	0.34	6806
2023	59866	138341	0	0.71	42480	2023	245346	716731	0	1.03	253925
2024	9534	15559	3509	0.35	3316	2024	47719	76968	18470	0.34	16153
2025	7112	11078	3146	0.32	2262	2025	40933	79370	2495	0.53	21803
Newly Mature Females						Newly Mature Males					
2002	1537	2400	675	0.26	400	2002	548	869	227	0.28	153
2003	794	1633	0	0.49	389	2003	78	221	0	0.84	66
2004	358	575	141	0.29	104	2004	789	1127	451	0.21	166
2005	479	753	206	0.27	129	2005	597	1002	191	0.33	197
2006	2051	3509	594	0.31	636	2006	3113	5113	1113	0.31	965
2007	2373	4339	408	0.4	949	2007	3129	4972	1287	0.28	876
2008	2571	4984	158	0.43	1106	2008	757	1254	261	0.31	235
2009	885	1361	410	0.26	230	2009	725	1240	210	0.34	247
2010	1338	2990	0	0.59	789	2010	1422	3070	0	0.55	782
2011	845	1360	331	0.3	254	2011	749	1335	164	0.36	270
2016	1608	2357	860	0.23	370	2016	2608	4884	331	0.42	1095
2017	1480	2274	687	0.26	385	2017	1523	2392	654	0.28	426
2018	1773	2923	622	0.31	550	2018	3341	5367	1316	0.29	969

Table 7. continued.

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Newly Mature Females						Newly Mature Males					
2019	0.6	1.2	0.0	0.48	0.3	2019	3.5	5.5	1.5	0.29	1.0
2020	0.3	0.8	0.0	0.84	0.3	2020	6.9	10.6	3.3	0.31	2.1
2021	0	NA	NA	NA	NA	2021	6333	14328	0	0.68	4309
2022	115	207	23	0.46	53	2022	5487	10293	681	0.52	2,835
2023	0	NA	NA	NA	NA	2023	55	131	0	0.77	42
2024	2893	4193	1593	0.25	723	2024	1716	2658	775	0.31	527
2025	3433	5957	909	0.42	1428	2025	904	1439	369	0.34	306

Table 8. Estimated population (in thousands) of horseshoe crabs in the coastal Delaware Bay Area survey, 2002-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the normal distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2002	8222	11875	4568	0.21	1727	2002	5076	7998	2155	0.28	1421
2003	4089	6860	1317	0.32	1308	2003	2114	3462	766	0.3	634
2004	7376	10616	4135	0.21	1549	2004	6033	8786	3281	0.22	1327
2005	5104	7521	2687	0.23	1174	2005	4673	7414	1932	0.28	1308
2006	13714	20988	6439	0.25	3429	2006	9378	13971	4786	0.23	2157
2007	13692	27335	48	0.41	5614	2007	9350	19735	0	0.45	4208
2008	10595	16578	4612	0.26	2755	2008	6897	10443	3350	0.23	1586
2009	27375	40519	14232	0.23	6296	2009	26435	38730	14140	0.23	6080
2010	4102	5706	2497	0.19	779	2010	2781	4423	1139	0.29	806
2011	5426	8433	2420	0.27	1465	2011	3301	5219	1382	0.28	924
2016	11292	18441	4144	0.3	3388	2016	8185	13512	2858	0.31	2537
2017	7948	11818	4077	0.23	1828	2017	5082	7829	2335	0.26	1321
2018	10115	13839	6391	0.18	1821	2018	7768	11653	3882	0.24	1864
2019	14855	15027	14682	0.33	4902	2019	66	236	0	1.27	84
2020	6832	10559	3106	0.32	2213	2020	4610	7540	1679	0.38	1740
2021	4053	7670	436	0.51	2064	2021	2548	4389	707	0.42	1074
2022	8328	11016	5639	0.19	1580	2022	6359	8461	4257	0.20	1243
2023	7702	12775	2629	0.36	2770	2023	4510	6819	2202	0.29	1296
2024	6838	12683	993	0.47	3207	2024	5429	8926	1932	0.36	1941
2025	8538	12837	4239	0.29	2462	2025	10060	14880	5239	0.27	2765
Mature Females						Mature Males					
2002	4779	7431	2128	0.26	1243	2002	10711	14972	6450	0.19	2035
2003	3308	4851	1764	0.22	728	2003	7454	10827	4082	0.21	1565
2004	2767	3919	1615	0.20	553	2004	5586	8875	2297	0.28	1564
2005	2957	4323	1592	0.22	651	2005	5408	7322	3494	0.17	919
2006	5867	10517	1218	0.31	1819	2006	14461	21734	7188	0.23	3326
2007	6553	9864	3243	0.25	1638	2007	13100	18506	7694	0.20	2620
2008	7172	13336	1008	0.4	2869	2008	14244	23240	5247	0.30	4273
2009	3230	5523	936	0.33	1066	2009	6319	10255	2383	0.29	1833
2010	5588	8698	2478	0.26	1453	2010	14396	22600	6192	0.27	3887
2011	5388	7629	3147	0.20	1078	2011	14858	25890	3825	0.33	4903
2016	5735	7770	3700	0.17	975	2016	24017	40197	7837	0.30	7205
2017	7785	12033	3537	0.27	2102	2017	19985	29245	10724	0.23	4597
2018	9463	18463	464	0.44	4164	2018	15264	19849	10680	0.15	2290
2019	6420	6506	6334	0.32	2054	2019	11660	11824	11497	0.37	4314
2020	10927	16014	5840	0.28	3021	2020	25200	34983	15416	0.23	5810
2021	21766	40665	2867	0.49	10750	2021	61879	109880	13877	0.45	27576
2022	9839	12836	6842	0.18	1770	2022	19032	25588	12475	0.20	3859
2023	69076	167547	29396	0.77	52990	2023	148824	362850	0	0.77	115167
2024	8308	11332	5283	0.20	1666	2024	37699	50225	25173	0.18	6942
2025	6222	8381	4064	0.20	1227	2025	29315	40715	17916	0.22	6514
Newly Mature Females						Newly Mature Males					
2002	1509	2278	741	0.24	362	2002	561	925	196	0.31	174
2003	787	1547	26	0.45	354	2003	78	222	0	0.84	66
2004	367	613	120	0.32	117	2004	786	1120	452	0.20	157
2005	531	908	154	0.34	181	2005	580	927	233	0.29	168
2006	2122	3705	540	0.33	700	2006	3377	6076	678	0.38	1283
2007	2129	3584	674	0.33	703	2007	2841	4214	1468	0.23	653
2008	2697	4780	613	0.36	971	2008	776	1315	237	0.33	256
2009	883	1366	399	0.26	230	2009	708	1157	259	0.31	219
2010	1770	4532	0	0.74	1310	2010	1464	3180	0	0.56	820
2011	882	1495	269	0.34	300	2011	766	1343	190	0.36	276
2016	1583	2304	863	0.22	348	2016	2939	5588	290	0.43	1264
2017	0.00	NA	NA	NA	NA	2017	1590	2623	557	0.32	509
2018	1780	2866	695	0.29	516	2018	3064	4466	1663	0.22	674

Table 8. continued.

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Newly Mature Females						Newly Mature Males					
2019	77	225	0	0.94	73	2019	112	267	0	0.68	77
2020	134	330	0	0.87	117	2020	2430	3676	1184	0.30	740
2021	0	NA	NA	NA	NA	2021	6308	14299	0	0.68	4307
2022	115	212	18	0.46	53	2022	6370	11143	1597	0.44	2795
2023	0	NA	NA	NA	NA	2023	55	131	0	0.77	42
2024	2924	4262	1587	0.26	751	2024	1725	2529	921	0.27	469
2025	3085	4758	1413	0.31	954	2025	874	1340	408	0.30	263

Table 9. Estimated population (in thousands) of horseshoe crabs in the Lower Delaware Bay survey area in 2010-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the delta distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2010	3510	5199	1822	0.2	702	2010	2632	4476	788	0.29	763
2011	870	1931	0	0.44	383	2011	881	2160	0	0.52	458
2012	8021	15084	958	0.32	2567	2012	9381	21965	0	0.42	3940
2016	9046	15558	2534	0.29	2623	2016	8429	14813	2044	0.32	2697
2017	4536	10029	0	0.47	2132	2017	2920	6458	0	0.47	1372
2018	2211	2803	1619	0.1	221	2018	2597	3516	1678	0.15	390
2019	525	1278	0	0.56	294	2019	308	816	0	0.64	197
2020	12	33	0	0.97	12	2020	8	22	0	0.97	8
2021	130	NA	NA	0.99	129	2021	140	NA	NA	0.78	109
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	315	622	8	0.48	151	2025	407	691	124	0.35	140
Mature Females						Mature Males					
2010	2117	4260	0	0.39	826	2010	5657	10247	1067	0.32	1810
2011	1348	2599	96	0.33	445	2011	4829	10570	0	0.43	2076
2012	938	2522	0	0.39	366	2012	3263	6864	0	0.35	1142
2016	1274	1710	837	0.15	191	2016	7735	9709	5761	0.1	774
2017	3674	7501	0	0.38	1396	2017	16794	40517	0	0.51	8565
2018	1771	2588	953	0.18	319	2018	4616	6600	2631	0.18	831
2019	1148	3011	0	0.63	723	2019	5746	14583	0	0.6	3448
2020	7	19	0	0.97	7	2020	152	332	0	0.68	103
2021	65	NA	NA	0.99	64	2021	365	NA	NA	0.72	262
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	213	332	94	0.26	56	2025	588	802	373	0.17	101
Newly Mature Females						Newly Mature Males					
2010	414	1087	0	0.63	261	2010	187	409	0	0.46	86
2011	65	170	0	0.58	38	2011	58	208	0	0.94	55
2012	50	214	0	0.76	38	2012	301	710	0	0.49	147
2016	206	357	55	0.3	62	2016	727	1268	186	0.29	211
2017	88	249	0	0.66	58	2017	542	1100	0	0.40	217
2018	115	220	9	0.36	41	2018	148	290	7	0.40	59
2019	0	0	0	NA	0	2019	361	1022	0	0.71	257
2020	0	0	0	NA	0	2020	4	11	0	0.97	4
2021	0	NA	NA	NA	NA	2021	0	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	79	156	1	0.46	36	2025	96	161	30	0.34	32

Table 10. Estimated population (in thousands) of horseshoe crabs in the Lower Delaware Bay survey area in 2010-2025, with the mean, standard deviation (sd), and coefficient of variation (CV), calculated using the normal distribution model by demographic group. Also included are the estimated upper and lower 95% confidence limits (UCL, LCL).

YEAR	MEAN	UCL	LCL	CV	SD	YEAR	MEAN	UCL	LCL	CV	SD
Immature Females						Immature Males					
2010	3503	5155	1851	0.18	631	2010	2588	4056	1120	0.24	621
2011	938	2311	0	0.53	497	2011	935	2437	0	0.58	542
2012	8125	14222	2027	0.31	2519	2012	9023	17690	356	0.35	3158
2016	8618	13190	4046	0.22	1896	2016	7725	11638	3812	0.21	1622
2017	4325	8829	0	0.41	1773	2017	2731	5408	53	0.38	1038
2018	2209	2780	1638	0.10	221	2018	2595	3529	1661	0.15	389
2019	852	868	836	0.01	9	2019	566	566	566	0.00	0
2020	12	33	0	0.97	12	2020	8	22	0	0.97	8
2021	130	NA	NA	0	0	2021	140	NA	NA	0.00	0
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	307	565	50	0.42	128	2025	392	615	169	0.28	110
Mature Females						Mature Males					
2010	2124	4340	0	0.41	871	2010	5600	9916	1285	0.30	1680
2011	1290	2239	340	0.27	348	2011	4479	8332	625	0.31	1388
2012	915	2242	0	0.34	311	2012	3188	5456	921	0.28	893
2016	1264	1647	880	0.13	164	2016	7727	9570	5883	0.10	773
2017	3654	7307	2	0.36	1315	2017	13805	23702	3908	0.26	3589
2018	1782	2666	898	0.19	339	2018	4647	6901	2393	0.19	883
2019	1932	1948	1916	0	0	2019	8356	8356	8356	0.00	0
2020	7	19	0	0.97	7	2020	152	332	0	0.68	103
2021	65	NA	NA	0	0	2021	365	NA	NA	0.00	0
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	216	166	85	0.29	62	2025	585	782	388	0.16	93
Newly Mature Females						Newly Mature Males					
2010	418	1097	0	0.63	263	2010	185	391	0	0.43	80
2011	65	170	0	0.58	38	2011	58	208	0	0.94	55
2012	50	214	0	0.76	38	2012	302	719	0	0.50	151
2016	205	355	55	0.28	57	2016	716	1176	256	0.25	179
2017	88	249	0	0.66	58	2017	541	1090	0	0.40	216
2018	114	226	3	0.35	40	2018	149	296	1	0.41	61
2019	0	0	0	NA	0	2019	401	408	394	0.00	3
2020	0	0	0	NA	0	2020	4	11	0	0.97	4
2021	0	NA	NA	NA	NA	2021	0	NA	NA	NA	NA
2022	NA	NA	NA	NA	NA	2022	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	2023	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	2024	NA	NA	NA	NA	NA
2025	78	347	0	0.46	36	2025	94	153	35	0.31	29

Table 11. Mean, minimum (min), and maximum (max) bottom water temperature (°C) and ordinal sampling date (numerical calendar date from January 1st) for survey collections in the Delaware Bay Area and Lower Delaware Bay. For reference, September 1st is ordinal date 243 in non-leap years.

	Water Temperature			Ordinal Date		
	mean	min	max	mean	min	max
Delaware Bay Area						
2002	19.33	15	23.5	277.41	273	300
2003	17.41	13.5	20	286.60	278	296
2004	16.67	14.5	20.5	292.74	277	302
2005	20.94	14	24.5	261.23	250	306
2006	17.53	13	22.3	284.53	246	314
2007	19.69	14.3	23.3	294.96	282	311
2008	20.09	19.3	22.6	277.02	272	287
2009	15.54	14.3	17	315.24	307	324
2010	19.72	12.3	24.1	282.68	265	331
2011	21.60	18.6	23.8	265.44	254	296
2012	18.47	18.1	18.8	292.92	289	298
2016	22.82	18.6	24.8	274.02	260	299
2017	21.89	18.8	23.2	274.05	263	294
2018	22.48	13.9	24.8	276.41	253	315
2019	23.05	18.8	24.3	250.38	242	270
2020	21.79	17	25	231.15	219	252
2021	23.25	18.8	28	233.44	222	250
2022	21.18	16.7	25.6	265.42	245	285
2023	22.54	18.3	26.7	270.02	248	302
2024	21.47	17	24	262.17	235	297
2025	20.24	13	26	272.97	241	307
Lower Delaware Bay						
2010	17.18	16.7	17.7	295.36	295	296
2011	18.32	18	18.6	294.27	294	295
2012	17.96	17.9	18	299.00	299	299
2016	19.56	19	20.1	288.40	288	289
2017	19.35	19.2	19.5	292.30	292	293
2018	12.16	11.3	12.8	321.44	321	322
2019	17.50	17.2	17.8	292.00	292	292
2020	24.00	23.2	25.4	248.00	248	248
2021	20.50	19	22	268.00	268	268
2022	NA	NA	NA	NA	NA	NA
2023	NA	NA	NA	NA	NA	NA
2024	NA	NA	NA	NA	NA	NA

Table 11. continued.

	Water Temperature			Ordinal Date		
	mean	min	max	mean	min	max
Lower Delaware Bay						
2025	9.71	8	11	324.00	324	324

Table 12. Correlations between annual mean catches-per-tow of horseshoe crabs with mean bottom water temperature and ordinal sampling date in the Delaware Bay Area survey and the Lower Delaware Bay survey, by demographic group. The Delaware Bay Area surveys included 20 years, and the Lower Delaware Bay surveys included 10 years. Statistics presented include correlation coefficient, *r*; *T-score*; and probability, *p*. Data are from Tables 1, 3, and 10.

	Water Temperature			**Ordinal Date**		
Delaware Bay Area 2002 - 2025	***r***	***T***	***p***	***r***	***T***	***P***
Immature females	-0.421	-1.97	0.065	0.473	2.28	0.035
Immature males	-0.445	-2.11	0.049	0.485	2.35	0.030
Mature females	0.454	2.16	0.045	-0.361	-1.64	0.118
Mature males	0.386	1.77	0.093	-0.245	-1.07	0.298
Newly mature females	-0.263	-1.16	0.263	0.416	1.94	0.068
Newly mature males	0.354	1.61	0.126	-0.472	-2.27	0.036
Lower Delaware Bay 2010 - 2025						
Immature females	0.136	0.36	0.727	0.091	0.24	0.816
Immature males	0.084	0.22	0.830	0.124	0.33	0.751
Mature females	-0.021	-0.05	0.958	0.277	0.76	0.471
Mature males	0.111	0.29	0.777	0.138	0.37	0.724
Newly mature females	0.253	0.52	0.629	-0.345	-0.74	0.503
Newly mature males	0.163	0.40	0.700	0.011	0.03	0.979

Table 13. Count and frequency of occurrence (number of tows with species/total number of tows performed) of all bycatch species caught during the 2025 field season.

SCIENTIFIC NAME	COMMON NAME	COUNT	FREQ. OF OCCURRENCE
Rostroraja eglanteria	Clearnose Skate	1121	0.91
Busycon carica	Knobbed Whelk	539	0.77
Paralichthys dentatus	Summer Flounder	213	0.91
Busycotypus canaliculatus	Channeled Whelk	114	0.60
Myliobatis freminvillei	Bullnose Ray	113	0.53
Hypanus americanus	Southern Stingray	72	0.51
Leucoraja ocellata	Winter skate	58	0.11
Leucoraja erinaceus	Little skate	33	0.11
Squalus acanthias	Spiny dogfish	29	0.17
Gymnura altavela	Spiny Butterfly Ray	12	0.19
Acipenser oxyrinchus	Atlantic Sturgeon	10	0.04
Rhinoptera bonasus	Cownose Ray	9	0.15
Squatina dumeril	Atlantic Angel Shark	5	0.09
Gymnura micrura	Smooth Butterfly Ray	4	0.06
Carcharias taurus	Sand Tiger Shark	2	0.02
Sinistrofulgur perversum	Lightning Whelk	1	0.02
Alopias vulpinus	Common Thresher Shark	1	0.02
Carcharhinus isodon	Finetooth Shark	1	0.02

This information is preliminary or provisional and is subject to revision. It is being provided to meet the need for timely best science. The information has not received final approval by the U.S. Geological Survey (USGS) and is provided on the condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the information.

Stopover Population Estimate and Migration Ecology of Red Knots *C. c. rufa* at Delaware Bay, USA, 2026

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Abstract

Red Knots (*Calidris canutus rufa*) rely on Atlantic horseshoe crab (*Limulus polyphemus*) eggs to refuel during migratory stopover at Delaware Bay. Intensive harvest of horseshoe crabs in the 1990s contributed to declines in Red Knot numbers. In 2013, the Atlantic States Marine Fisheries Commission adopted an Adaptive Resource Management (ARM) framework to balance sustainable horseshoe crab harvest with ecosystem integrity and Red Knot recovery, requiring annual stopover population estimates. We estimated the 2026 passage population of Red Knots at Delaware Bay using a Bayesian analysis of a Jolly–Seber mark–resight model which accounts for population turnover and imperfect detection. The 2026 passage population was 39,534 individuals (95% credible interval: 36,740–42,922), a change of approximately -27% compared to 2025 but similar to passage population estimates in 2022 and 2023. These findings provide meaningful input for the ARM framework, supporting sustainable harvest of horseshoe crabs while maintaining adequate foraging opportunities for Red Knots and other shorebirds.

Parts of the Introduction, Methods, and Appendices were originally published in Lyons (2024) and are summarized herein.

1 Introduction

The northward migration of Red Knots (*Calidris canutus rufa*) in the mid-Atlantic region coincides with the onset of spawning of horseshoe crabs (*Limulus polyphemus*). Red Knots stop at the Delaware Bay to feed on horseshoe crab eggs, which are an important food

resource for Red Knots and other shorebirds because they have a high energy content and are easily digestible (Karpanty et al., 2006, Haramis et al., 2007).

Horseshoe crabs have been harvested since at least 1990 for use as bait in American eel (*Anguilla rostrata*) and whelk (*Busycotypus canaliculatus* and *Busycon carica*) fisheries (Kreamer and Michels, 2009). The number of horseshoe crabs harvested increased throughout the 1990s, peaked in the late 1990s, and then declined in the early 2000s. In the 1990s and early 2000s the estimated number of Red Knots counted during aerial surveys of Delaware Bay declined from ∼50,000 to ∼13,000 (Niles et al., 2008). Avian conservation biologists hypothesized that unregulated harvest of horseshoe crabs in Delaware Bay during the 1990s reduced food availability for migratory shorebirds. This shortage limited their ability to refuel during stopover, thereby potentially compromising migration performance, breeding success, and annual survival (Baker et al., 2004, McGowan, Hines, et al., 2011).

The Atlantic States Marine Fisheries Commission (ASMFC) has managed the horseshoe crab harvest in the Delaware Bay region since 1998 and in 2012 adopted an Adaptive Resource Management (ARM) framework that was created to explicitly incorporate shorebird objectives in horseshoe crab harvest management (McGowan, Smith, et al., 2015). The ARM framework was designed to constrain the harvest so that the number of spawning horseshoe crabs would not limit the number of Red Knots stopping at Delaware Bay during migration. To achieve multiple objectives simultaneously, the ARM framework requires an estimate each year of both the horseshoe crab population and the Red Knot stopover population (McGowan, Lyons, and Smith, 2015).

The goal of this study was to estimate the stopover population size in 2026 using mark-resight data on individually marked birds and a Jolly-Seber model for open populations (Jolly, 1965, Seber, 1965), as we have each year since 2011 to support the ARM framework, and evaluate timing of arrivals, departures, and stopover duration at Delaware Bay in 2026.

2 Methods

2.1 Field methods

Red Knots have been individually marked at Delaware Bay and other regions across the Western Hemisphere (e.g., parts of Argentina, Brazil, Canada, Chile) since 2003 with field-readable leg flags engraved with unique three-character alphanumeric codes (Clark et al., 2005). Mark–resight data consisting of individual resightings of flagged birds and counts of marked and unmarked birds were collected during northward migration in 2026 on the

Table 1: Dates for mark-resight survey periods (3-day sampling occasions) for Red Knot (*C. c. rufa*) population analysis at Delaware Bay in 2026. The same sampling periods have been used at Delaware Bay since 2011.

Survey period	Dates	Survey period	Dates
1	8–10 May	6	23–25 May
2	11–13 May	7	26–28 May
3	14–16 May	8	29–31 May
4	17–19 May	9	1–3 June
5	20–22 May		

Delaware and New Jersey shores of Delaware Bay following established protocols (Lyons, 2016). These methods have been consistently applied at Delaware Bay since 2011.

Surveys were conducted on 20 beaches (Appendix A) during May and early June 2026 (Table 1). Each beach was surveyed at least once in every three-day sampling period (Lyons, 2016). During surveys, agency staff and volunteers searched for flagged birds, recording the engraved alphanumeric codes. During resighting surveys, observers also periodically employed scan sampling techniques to estimate the marked–unmarked ratio. In each scan, a random portion of a Red Knot flock was examined, and observers recorded (1) the number of individually flagged birds and (2) the total number of birds checked for flags (Lyons, 2016). Survey data are available from Delaware Division of Fish and Wildlife and New Jersey Department of Environmental Protection.

2.2 Statistical methods

For analysis with the Jolly-Seber (JS) model, the migration season at Delaware Bay was divided into 9 three-day sampling periods (Table 1). Three days was chosen as the time step for the mark-resight model given the time required to complete a circuit of all 20 beaches. Multiple observations of a flagged individual within any of these sampling periods were combined into one observation per period and formatted as encounter histories for mark-recapture modeling (Williams, Nichols, and Conroy, 2002). A summary of the 2026 mark–resight data is provided in Appendix B.

Stopover population size was estimated using methods outlined in Lyons et al. (2016). Specifically, we used the superpopulation framework of Crosbie and Manly (1985) and Schwarz and Arnason (1996) for the JS model (Jolly, 1965; Seber, 1965), which is an open population model accounting for turnover of individuals during migration and imperfect detection during surveys. The superpopulation is defined as all birds present in the study

area on at least one sampling occasion (Nichols and Kaiser, 1999).

The Jolly–Seber (JS) model includes parameters for recruitment (β), survival (ϕ), and capture probability (p). In the context of estimating populations of migratory birds at a stopover site, these parameters correspond to the probability of arrival at the study area (β), probability of remaining from time t to $t+1$ (ϕ), and resighting probability (p). Stopover departure is defined as $1–\phi$, the probability that a bird present at time t departs the study area before $t+1$. Resighting probability was modeled as a function of flag color because some colors are harder to read than others (Appendix C); specifically, we fit a separate detection probability for dark green flags because these can have lower detection probability than light green flags (Tucker, McGowan, Nuse, et al., 2023). Arrival, departure, and resighting parameters are biologically meaningful at Delaware Bay because they capture the dynamic nature of migration, where birds arrive and depart continuously, remain for varying durations, and are resighted with imperfect detection, allowing estimation of the total number of Red Knots using the stopover (superpopulation).

We used a Bayesian analysis of a state-space formulation of the JS model (Royle and Dorazio, 2008; Kéry and Schaub, 2012; Lyons et al., 2016) in which abundance estimates were derived in two steps. First, the number of birds with leg flags was estimated using encounter histories. Second, this abundance estimate was adjusted for unmarked birds using the proportion of flagged individuals (Lyons et al., 2016). The flagged proportion was estimated from the scan sample data using a binomial model, implemented as a generalized linear mixed model with a random effect for sampling period to account for temporal variation in arrival of flagged birds and additions of newly-flagged individuals during the migration season. Additional methodological details are provided in Lyons et al. (2016) and Appendix C.

The JS model has several key assumptions, including homogeneous probabilities of arrival, stopover departure, and resighting among individuals; that marks are not lost or misrecorded; that sampling is effectively instantaneous relative to the interval between occasions; that emigration from the study area is permanent; that individual fates are independent of one another; and that marked-to-unmarked ratio data are representative of the population (i.e., individuals in the scan samples are randomly selected from the population). To help meet the assumption that individual identities of flagged birds were recorded without error, resighting data were validated against physical capture and flag-deployment records in the http://www.bandedbirds.org/ repository. Resightings without a corresponding record of prior physical capture and flag deployment were excluded from analyses as false-positive (misread) errors. An exception was made for resightings of orange flags, which were retained without validation because capture records from Argentina and Uruguay—where orange flags are used

under the Pan American Shorebird Program (Howes, Béraud, and Drolet-Gratton, 2016)—are generally not available in the repository. Thus, validation against capture data was applied when such data were available but could not be applied uniformly across all countries. A second type of false positive error is also possible. Some of the resightings in our dataset may be flags that were deployed prior to 2026 but were not in fact present at Delaware Bay in 2026. It is not possible to identify this second type of false positive with banding data validation or other quality assurance/quality control methods (Tucker, McGowan, Robinson, et al., 2019). See Lyons (2016) for discussion of all model assumptions.

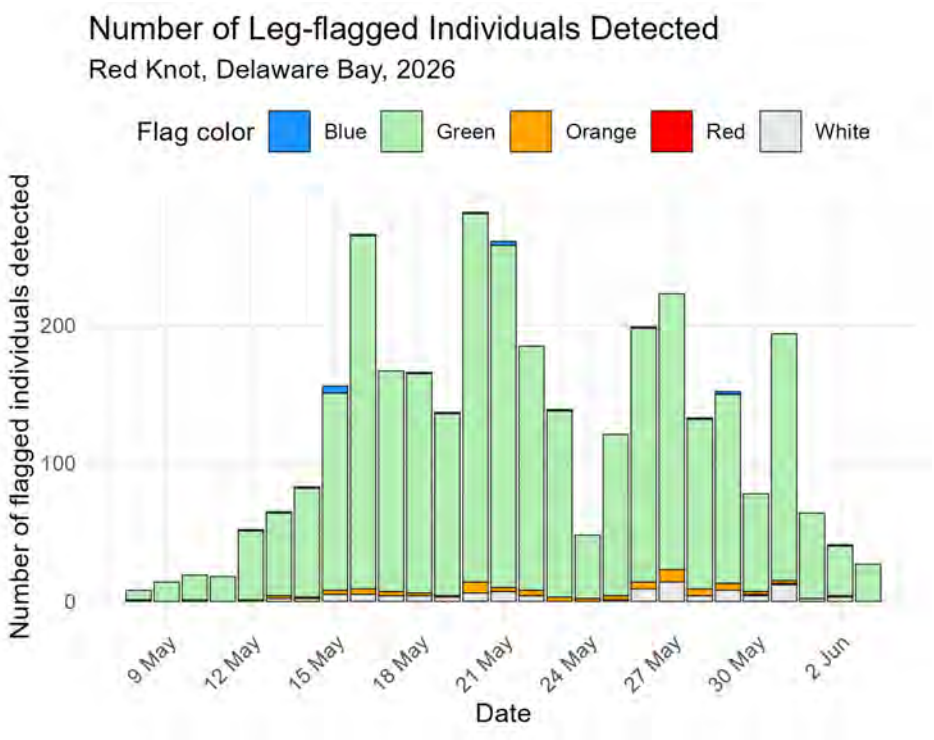


Figure 1: Number of unique leg-flags (individuals) detected each day in 2026. Colors correspond to countries in the Western Hemisphere according to the Pan American Shorebird Program (Howes, Béraud, and Drolet-Gratton, 2016): blue = Brazil and Paraguay; green = USA; orange = Argentina and Uruguay; red = Chile; white = Canada.

Stopover duration is an important reflection of turnover and key aspect of stopover dynamics. We estimated stopover duration in 2026 using the approach described by Lyons et al. (2016) and Lok et al. (2019), which takes advantage of the state-space formulation of the Jolly–Seber model. In the state-space formulation, a latent parameter indicates the number of time steps that each individual remains in the study area, i.e., stopover duration. Lyons et al. (2016) originally calculated duration based only on individuals that were resighted at least once. Lok et al. (2019) improved this approach by extending the calculation to all individuals,

including those never observed, estimated to be present for at least one sampling period.

3 Results

3.1 Mark-resight surveys

Field observers in 2026 collected a total of 3,525 flag resightings between 8 May and 3 June 2026. Among this total, 227 resightings lacked a corresponding banding record, for an overall misread error of 6.4%. After discarding resightings that could not be verified, there were 3,298 valid resightings representing a total of 1,641 individual birds that were recorded at least once between 8 May and 3 June 2026. These individuals had been captured and flagged in five to seven different countries (Fig. 1). The number of individuals detected in 2026 (n = 1,641) was 29% higher than the number detected in 2025 (n = 1,276) and the highest since 2019. On average, each flagged individual was resighted 2.0 times and the maximum number of times resighted was 14.

The mean flagged proportion across all 3-day periods was 6.1% (95% CI: 4.5%–8.2%) (Fig. D1). The flagged proportion flucutated between 4–6% for much of the season but was greater in the last two sampling intervals (8–12%; Fig. D1). The 2026 mean flagged proportion was slightly higher than 2024–2025, but remains substantially lower than during 2011–2020, when the flagged proportion was estimated to be closer to 10% (Fig. 3.

3.2 Superpopulation estimate and migration ecology in 2026

The passage population size estimate for 2026 was 39,534 (95% CI: 36,740–42,922; Table 2). The time-specific stopover population estimates peaked at 17,150 on 21 May.

Arrivals peaked on 15 May, then continued at a lower, fairly steady rate through 21 May; by 21 May 2026, 67% of the stopover population had arrived (Fig. 2a). A brief lull around 24 May was followed by a second, later wave of arrivals, with ∼20% of the stopover population arriving in the 3-day period centered on 27 May.

Departure probability remained relatively low (∼22%) through 21 May, then rose steadily from 18 May through the end of the month, reflecting increasing rates of departure from the stopover site in each successive sampling period (Fig. 2b).

Mean stopover duration in 2026 was 7.14 days (95% CI: 6.86–7.47). This is somewhat lower than recent years (8.6–12.1 days during 2019–2025).

The mean probability of resighting in 2026 was 54% (95% CI: 34–76%), the highest mean

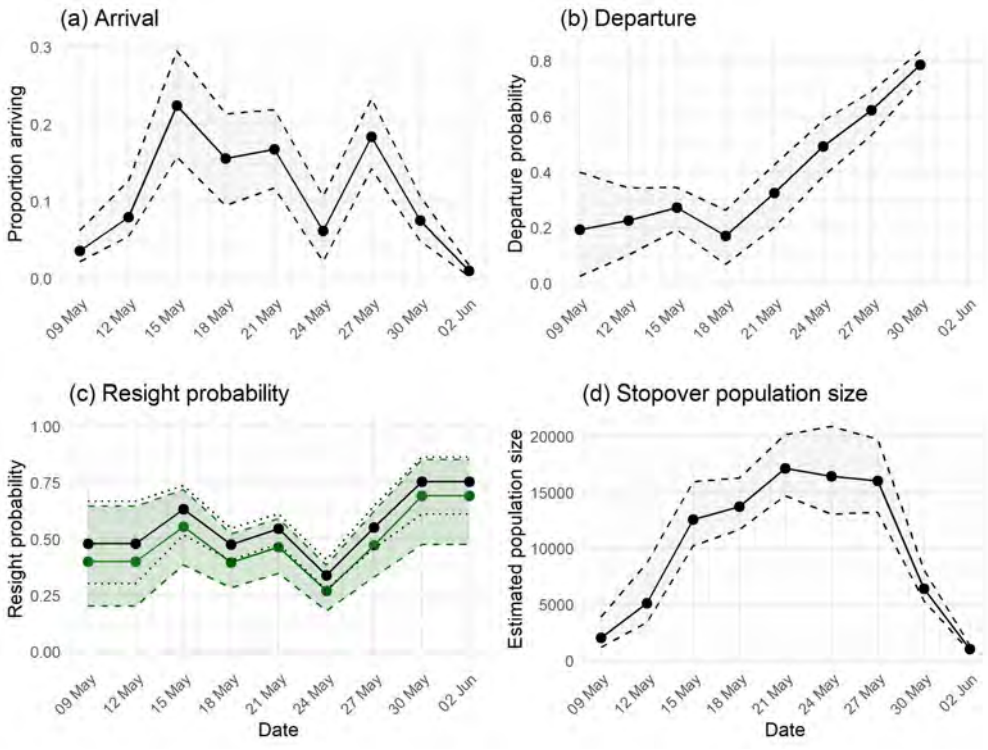


Figure 2: Jolly-Seber model parameter estimates from a mark-resight study of Red Knots (*C. c. rufa*) at Delaware Bay in 2026: (a) proportion of stopover population arriving at Delaware Bay, (b) stopover departure probability, (c) probability of resighting, and (d) time-specific population size estimates. Dates on the x-axis indicate the mid-point of three-day sampling occasions (Table 1). Dashed lines and shading indicate a 95% Bayesian credible interval. The model included two parameters for probability of resighting (c), one for dark green flags and one for other flag colors combined.

probability of resighting since 2014 (Fig. 4). Across the sampling occasions in 2026, resighting probability ranged from approximately 34% to 76% (Fig. 2c). The probability of rsighting for dark green flags in 2026 was significantly different from other flags (slope: -0.322, 95% CI: -0.543 to -0.098; Fig. 2c).

4 Discussion

In 2026, the passage population was estimated at 39,534 Red Knots, approximately 27% lower than 2025. Overlapping credible intervals with recent years indicate no clear directional trend, but rather interannual variability within the long-term range. Producing this annual estimate meets a core goal of the study—providing the ARM framework with up-to-date population inputs to evaluate whether current horseshoe crab harvest strategies maintain

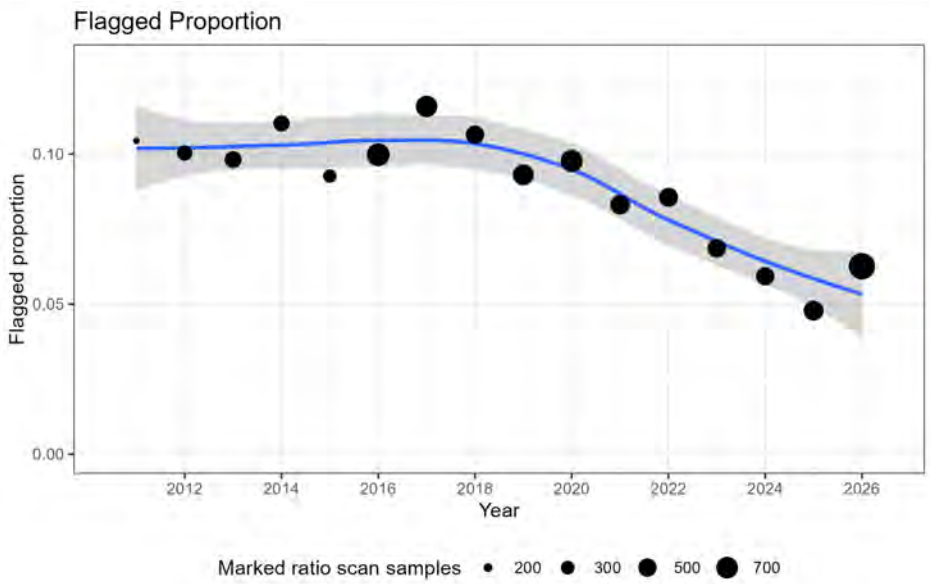


Figure 3: Flagged proportion of Red Knots observed during mark-resight studies at Delaware Bay, 2011–2026, defined as the proportion of birds in scan samples bearing field-readable flags. The blue line shows the LOESS-smoothed trend, and the shaded area represents the 95% confidence interval around the fitted trend.

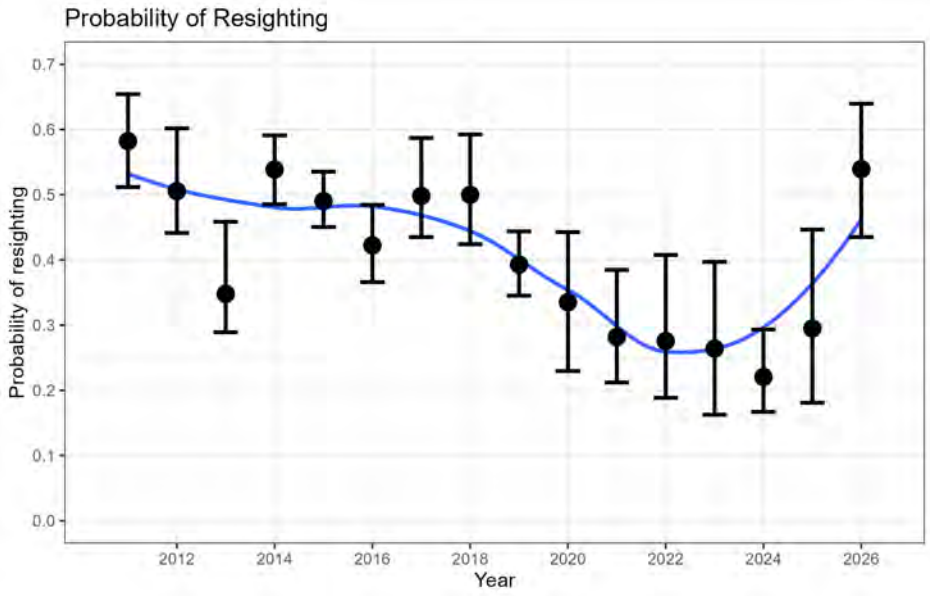


Figure 4: Probability of resighting in mark-resight studies of Red Knots at Delaware Bay, 2011–2026. The blue line shows the LOESS-smoothed trend, and the errow bars represents the 95% credible interval around each annual estimate.

Table 2: Red Knot (*C. c. rufa*) stopover (passage) population estimated using mark-resight methods during northward migration at Delaware Bay. The mark-resight estimate of stopover (passage) population, N^*, accounts for population turnover during migration. CI = Bayesian credible interval and CV = coefficient of variation.

Year	Stopover population (N^*)	95% CI N^*	CV
2011	43,570	(40,880–46,570)	0.03
2012	44,100	(41,860–46,790)	0.03
2013	48,955	(39,119–63,130)	0.12
2014	44,010	(41,900–46,310)	0.03
2015	60,727	(55,568–68,732)	0.06
2016	47,254	(44,873–50,574)	0.03
2017	49,405	(46,368–53,109)	0.03
2018	45,221	(42,568–49,508)	0.04
2019	45,133	(42,269–48,393)	0.03
2020	40,444	(33,627–49,966)	0.10
2021	42,271	(35,948–55,210)	0.11
2022	39,800	(35,013–51,355)	0.10
2023	39,361	(33,724–47,556)	0.09
2024	46,127	(39,286–57,799)	0.11
2025	54,044	(47,926–61,928)	0.07
2026	39,534	(36,740–42,922)	0.04

adequate foraging opportunities for knots at Delaware Bay.

By simultaneously estimating arrival and departure schedules, resight probability, and passage abundance, the Jolly–Seber framework delivers integrated, decision-relevant measures of Delaware Bay stopover dynamics. These outputs provide a rigorous basis for adjusting crab harvest within the ARM framework. Mark-resight-derived stopover metrics translate monitoring data into policy-relevant evidence needed to sustain the Delaware Bay stopover and the *rufa* Red Knot population.

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Appendix

A Study Area

Table A1: Locations around Delaware Bay, USA, where mark-resight surveys were conducted to estimate Red Knot (*C. c. rufa*) stopover population size during northward migration in 2026. DE = Delaware; NJ = New Jersey; NWR = National Wildlife Refuge. Beach names reflect locally used survey locations. Official geographic names were verified against the U.S. Geological Survey Geographic Names Information System (GNIS) where available. *Locations without GNIS-recognized beach names are identified using locally used names and precise latitude/longitude coordinates.

State	Beach	Longitude	Latitude
DE	Port Mahon	-75.4021	39.1831
DE	Pickering Beach	-75.4087	39.1377
DE	Kitts Hummock	-75.4048	39.1130
DE	Ted Harvey Wildlife Area	-75.4019	39.0864
DE	North Bowers*	-75.3973	39.0630
DE	Brockenbridge*	-75.3638	39.0359
DE	Mispillion Harbor	-75.3131	38.9519
DE	Slaughter Beach	-75.3146	38.9282
DE	Fowlers Beach*	-75.2633	38.8766
DE	Prime Hook NWR	-75.2467	38.8604
NJ	Gandys*/Money Island	-75.2417	39.2767
NJ	Fortescue	-75.1675	39.2233
NJ	North Reeds*	-74.8908	39.1228
NJ	South Reeds*	-74.8922	39.1138
NJ	Cooks*	-74.8941	39.1082
NJ	Kimbles*	-74.8948	39.1049
NJ	Bay Cove*	-74.8965	39.1008
NJ	Pierces Point	-74.9013	39.0897
NJ	Villas and Norburys*	-74.9298	39.0449

B Mark-resight Data Summary

Table B1: Summary (m-array) of Red Knot (*C. c. rufa*) mark-resight data from Delaware Bay, USA, 2026. Releases is the number of flags detected at each sample. NR = never resighted.

			Next resighted at sample								
Sample	Dates	Releases	2	3	4	5	6	7	8	9	NR
1	8-10 May	23	14	3	0	0	0	0	0	0	6
2	11-13 May	85		48	3	4	1	0	1	0	28
3	14-16 May	415			124	54	13	12	4	0	208
4	17-19 May	313				145	15	11	7	1	134
5	20-22 May	470					118	31	10	1	310
6	23-25 May	240						55	9	1	175
7	26-28 May	307							76	1	230
8	29-31 May	269								41	228

C Statistical Methods to Estimate Stopover Population Size Using Mark-Resight Data and Counts of Marked Birds

We converted the observations of marked Red Knots into encounter histories, one for each bird, and analyzed the encounter histories with a Jolly-Seber (JS) model (Jolly, 1965; Seber, 1965). The JS model includes parameters for recruitment (β), survival (ϕ), and capture (p) probabilities; in the context of a mark-resight study at a migration stopover site, these parameters are interpreted as probability of arrival to the study area, stopover persistence, and resighting, respectively. Stopover persistence is defined as the probability that a bird present at time t remains at the study area until time $t + 1$.

The Crosbie and Manly (1985) and Schwarz and Arnason (1996) formulation of the JS model also includes a parameter for superpopulation size, which in our approach to mark-resight inferences for stopover populations is an estimate of the marked (leg-flagged) population size.

We chose to use three-day periods, rather than days, as the sampling interval for the JS model given logistical constraints on complete sampling of the study area; multiple observations of the same individual in a given three-day period were combined for analysis. A summary

(m-array) of the mark-resight data is presented in Appendix B.

We made inference from a fully time-dependent model; arrival, persistence, and resight probabilities were allowed to vary with sampling period $[\beta_t, \phi_t, p_t]$. In this model, we set $p_1 = p_2$ and $p_{K-1} = p_K$ (where K is the number of samples) because not all parameters are estimable in the fully time-dependent model (Jolly, 1965).

We followed the methods of Royle and Dorazio (2008, Chapter 10) and Kéry and Schaub (2012, Chapter 10) to fit the JS model using the restricted occupancy formulation. Royle and Dorazio (2008) use a state-space formulation of the JS model with parameter-expanded data augmentation. For parameter-expanded data augmentation, we augmented the observed encounter histories with all-zero encounter histories ($n = 2,000$) representing potential recruits that were not detected (Royle and Dorazio, 2012).

According to the Pan American Shorebird Program (Howes, Béraud, and Drolet-Gratton, 2016), researchers in the U.S. deploy green engraved leg flags. In 2014, researchers switched from using light green flags to dark green flags, which many observers found more difficult to read in the field, as shown by Tucker, McGowan, Nuse, et al. (2023). Therefore we modeled two detection probabilities, one for dark green flags and one for all other flag colors:

$$\text{logit}(p_{it}) = \beta_0 + \beta_1 \times DG_i \tag{C1}$$

where β_0 is the logit of the average resighting probability of all non-dark-green flags, β_1 is the effect of dark green flag color on resighting probability, and DG = 1 for dark green flags and 0 otherwise.

We followed Lyons et al. (2016) to combine the JS model with a binomial model for the counts of marked and unmarked birds in an integrated Bayesian analysis. Briefly, the counts of marked birds (m_s) in the scan samples are modeled as a binomial random variable:

$$m_s \sim \text{Binomial}(C_s, \pi) \tag{C2}$$

where m_s is the number of marked birds in scan sample s, C_s is the number of birds checked for marks in scan sample s, and π is the proportion of the population that is marked. Total stopover population size $\hat{N}^*$ is estimated using

$$\hat{N}^* = \frac{\hat{M}^*}{\hat{\pi}} \tag{C3}$$

where $\hat{M}^*$ is the estimate of marked birds from the JS model and $\hat{\pi}$ is the proportion of the population that is marked (from Eq. C2). Estimates of marked subpopulation sizes at each resighting occasion t, $\hat{M}_t^*$, are available as derived parameters in the analysis. An estimate of population size at each mark-resight sampling occasion, $\hat{N}_t^*$, is calculated using $\hat{M}_t^*$ and $\hat{\pi}$ as in equation C3.

To better account for the random nature of the arrival of marked birds and addition of new marks during the season, we used a time-specific model for proportion with marks in place of equation C2 above:

$$m_{s,t} \sim \text{Binomial}(C_{s,t}, \pi_t) \tag{C4}$$

for $s = 1, \ldots, n_{\text{samples}}$ and $t = 1, \ldots, n_{\text{occasions}}$

$$\text{logit}(\pi_t) = \alpha + \delta_t \tag{C5}$$

$$\delta_t \sim \text{Normal}(0, \sigma^2_{\text{occasions}}) \tag{C6}$$

where π_t is the time-specific proportion of the population that is marked, and δ_t is a random effect for time of sample s. Total stopover population size $\hat{N}^*$ was estimated by summing time-specific arrivals of marked birds to the stopover (B_t) and expanding to include unmarked birds using estimates of proportion marked:

$$\hat{N}^* = \sum_t \frac{\hat{B}_t}{\hat{\pi}_t} \tag{C7}$$

Time-specific arrivals of marked birds are estimated from the JS model using $\hat{B}_t = \hat{M}_t^* \cdot \beta_t$, where β_t is the estimated fraction of the population arriving at time t.

D Marked-ratio Scan Samples

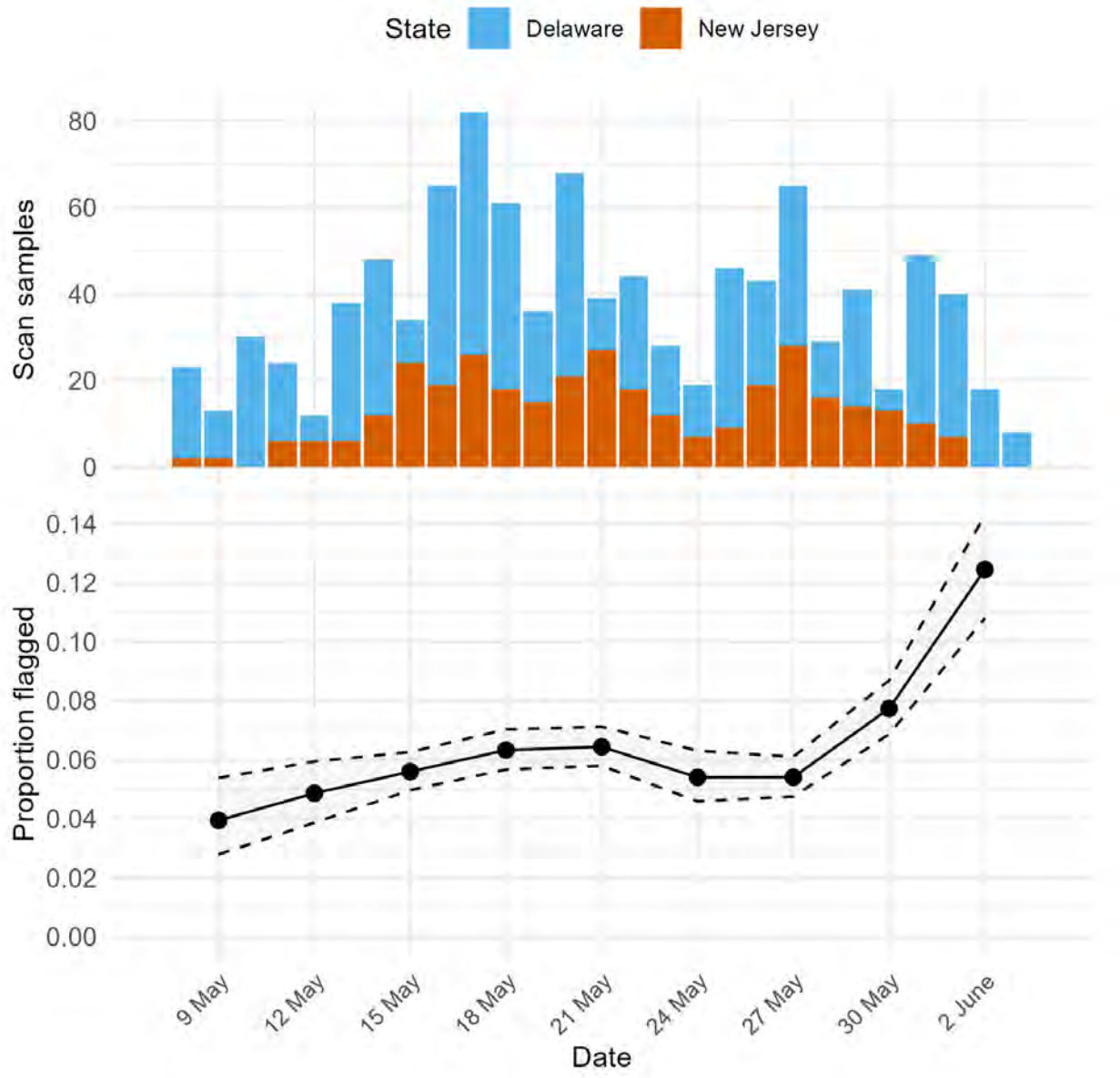


Figure D1: (top) Number of marked-ratio scan samples (n = 590) collected at Delaware Bay in 2026 by field crews in Delaware (blue, n = 327 scan samples) and New Jersey (orange, n = 263 scan samples). (bottom) Estimated proportion of the Red Knot (*C. c. rufa*) stopover population at Delaware Bay carrying leg flags in 2026 (overall average and 95% Bayesian credible interval: 0.045 [0.034, 0.055]). The marked proportion was estimated from marked-ratio scan samples for each three-day sampling period (Table 1) and the generalized linear mixed model described in Appendix C. Solid and dashed lines are estimated median proportion marked and 95% Bayesian credible interval, respectively.

Update to the horseshoe crab adaptive resource management (ARM) decision model following the January, 2026 stakeholder workshop

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Bird Conservancy of the Rockies

26 Oct 2026

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1 Introduction

During 2020-2022, The Atlantic States Marine Fisheries Commission (ASMFC) supported a revision of its Adaptive Resource Management (ARM) framework (McGowan et al., 2015, 2020) for producing recommended bait harvest limits for horseshoe crabs (*Limulus polyphemus*; HSC) of Delaware Bay origin (ASMFC, 2022). The ARM represents an extension of a Structured Decision Making program that accommodates multiple, periodic decisions (an approach generally referred to as Adaptive Management; (Williams et al., 2002)), and is fairly unique in that it incorporates information about a second taxon, a federally Threatened shorebird, the red knot (*Calidris canutus rufa*; REKN). The birds rely on HSC eggs as a food resource during a spring stopover period in May, as they travel from South America to the breeding grounds in the Canadian Arctic (Baker et al., 2020). The goal of the ARM is to make annual harvest recommendations that will maximize the probability both of a sustainable HSC harvest and a healthy REKN population over the next century.

The decision model that underlies the ARM is composed of two basic parts. The first is a set of population projection models, which are used to simulate HSC and REKN populations into the future. The second is a set of mathematical expressions that reflect stakeholder values, and are used to construct an objective function (called the reward function, in the ARM). The two parts, representing scientific findings on the one hand and stakeholder values on the other, are used together to find HSC harvest levels that will maximize the future reward from the system. The resulting solution takes the form of two harvest functions, one for male HSC harvest, one for females. In a given year, population sizes for male HSC, female HSC and REKN are estimated from monitoring data; these estimates are plugged into the optimal harvest functions to obtain the recommended harvest.

The revised ARM was designed such that the same monitoring data used to obtain the recommended harvest from the harvest functions each year can also be used to update parameters in the population projection models used in the ARM. This periodic updating of parameter values is critical to the ARM program because it allows the system model to 'learn' about how HSC and REKN populations behave, and how REKNs rely on HSC abundance.

Equally important to maintaining the ARM is the process of periodically allowing for updates to the stakeholder-informed components of the decision model. In January, 2026, ASMFC convened a group of stakeholders in Ocean City, Maryland to engage in a workshop, the primary aim of which was to assess whether and how updates should be made to three important values-based parts of the ARM (Compass, 2026). These were 1) the utility functions for both HSC and REKN, 2) the overall form of the reward function, and 3) the form of the harvest functions for male and female HSCs (Figure 1.1). The stakeholder group recommended adjustments to both the utility functions and the harvest function for female HSCs, but not to the reward function.

The aim of the work reported here was to understand the consequences of those changes for the ARM model's behavior and harvest recommendations. Solutions to the decision model were thus obtained both before and after implementing the stakeholders' recommended changes. Population estimates and other parameters informed by scientific data remained exactly the same as in model runs that appear in the original report for the revised ARM (ASMFC, 2022).

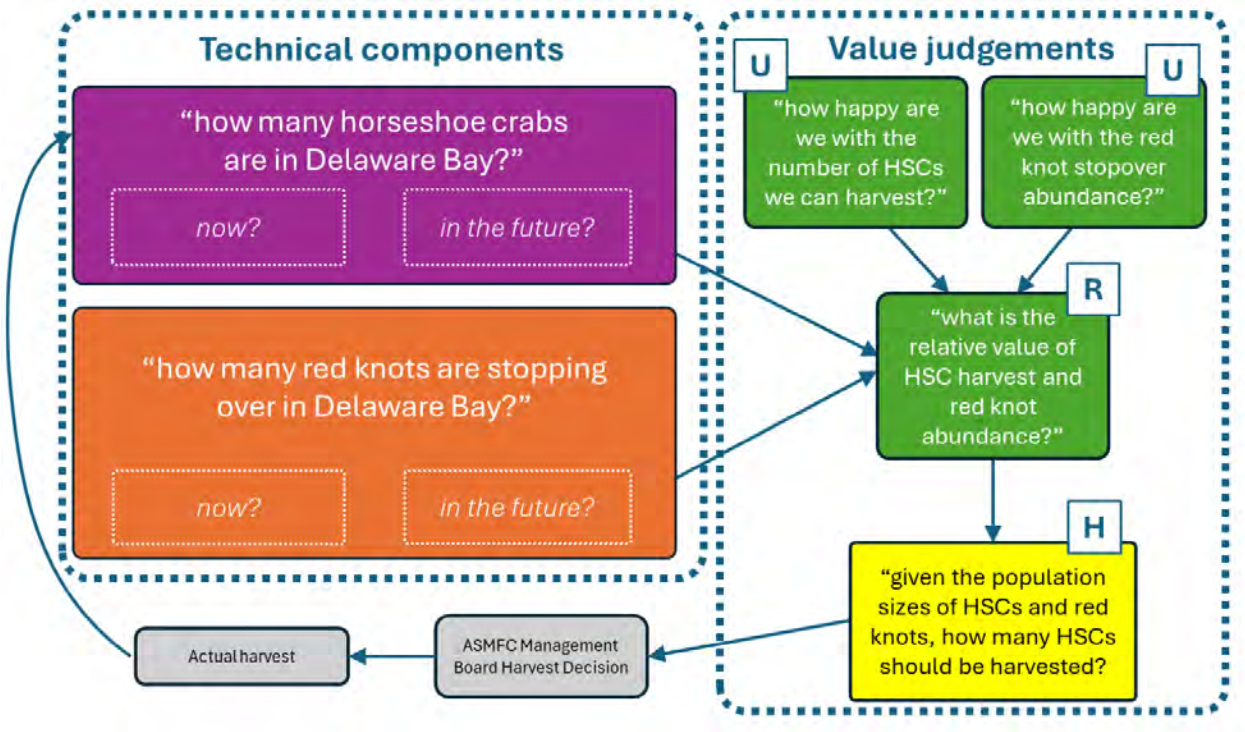


Figure 1.1: Simplified diagram of the ARM decision model, with the 'scientific' components that are informed by ecological data grouped under the heading *Technical components*, and the stakeholder-informed parts grouped under the heading *Value judgments*. The latter are labeled as: U, utility function (one each for red knots and horseshoe crabs); R, reward function; H, harvest policy functions.

During the course of this planned exercise, an error in the 2021 model code was discovered. This report describes first the nature of that error and the consequences of its correction. The planned adjustments following the January, 2026 workshop are then described along with their effects on ARM outcomes. In each section, results from a set of model runs are provided and interpreted; these were cumulative in the sense that a single adjustment was made for each run, and each run included all the adjustments that came before it. Because the coding error was deemed critical to correct, it was fixed before the stakeholders' changes were added.

2 Error correction

During the course of implementing changes to the ARM decision model code based on the January, 2026 workshop outcomes, an error was found in an important component of the model, the reward function. This error resulted from confusion over the two ways in which the term *harvest* is used in the ARM framework:

1. the bait harvest (what is usually meant by 'harvest' in the ARM framework)

2. the total anthropogenic HSC mortality, including contributions from:

    a) bait harvest

    b) a 'background harvest' consisting of mortality from handling as bycatch and use by the biomedical industry

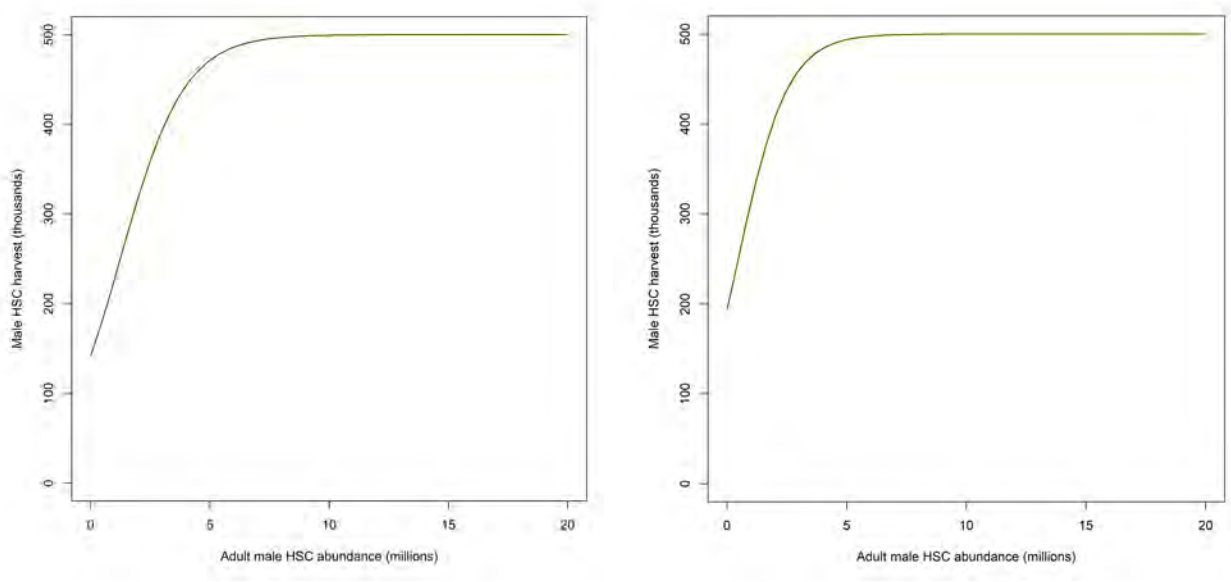
In the horseshoe crab simulation model embedded within the ARM decision model, #2 is used; to calculate the reward for a given year, only #1 should be considered. The 2021 ARM Revision code used # 2 to calculate the reward, rather than # 1. In other words, the 2021 ARM Revision was optimized using an objective function based on bait *plus* background harvest. This is incorrect and conflicts with the intention and understanding of the ARM modeling group and all other contributors to the design of the ARM framework (stakeholders, ARM Subcommittee, Delaware Bay Ecosystem Technical Committee, etc.).

2.1 Methods

To understand the implications for model behavior and the solution, the optimization procedure was conducted first on the uncorrected 2021 ARM Revision model (labeled *Rev2021*), then on the corrected version (labeled *errFix*). Except for the code correction, these model runs relied on exactly the same codebase, and used the same parameter values and input data.

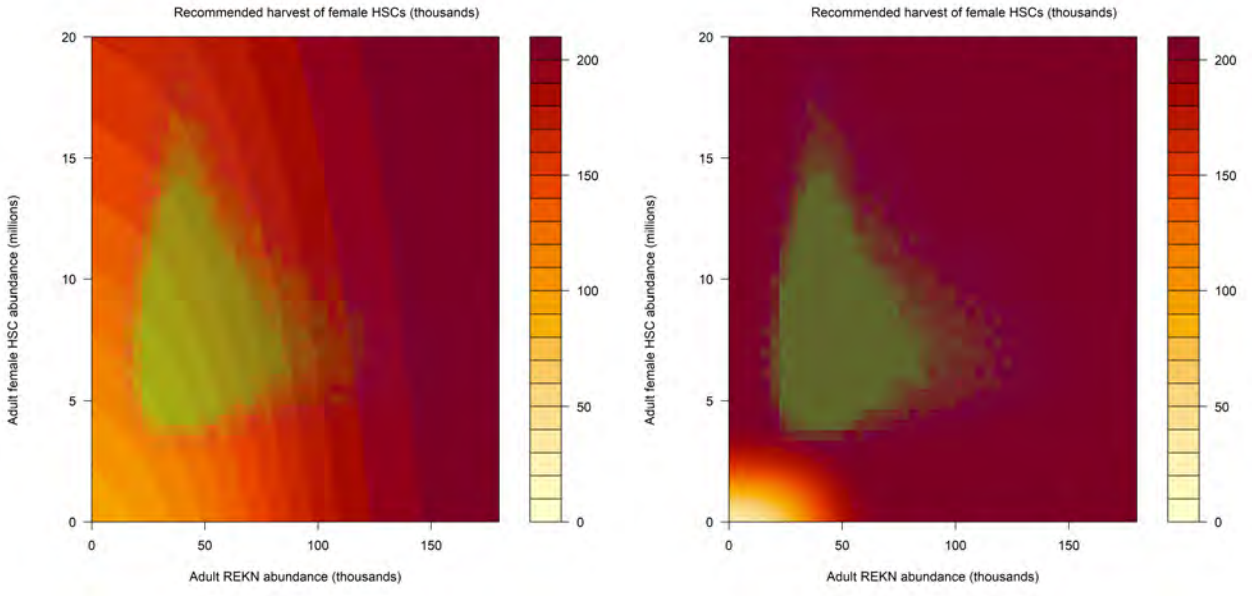
2.2 Results

Figures 2.1–2.6 compare the outcomes from the *Rev2021* and *errFix* model runs. Plots are shown side-by-side for easier comparison.



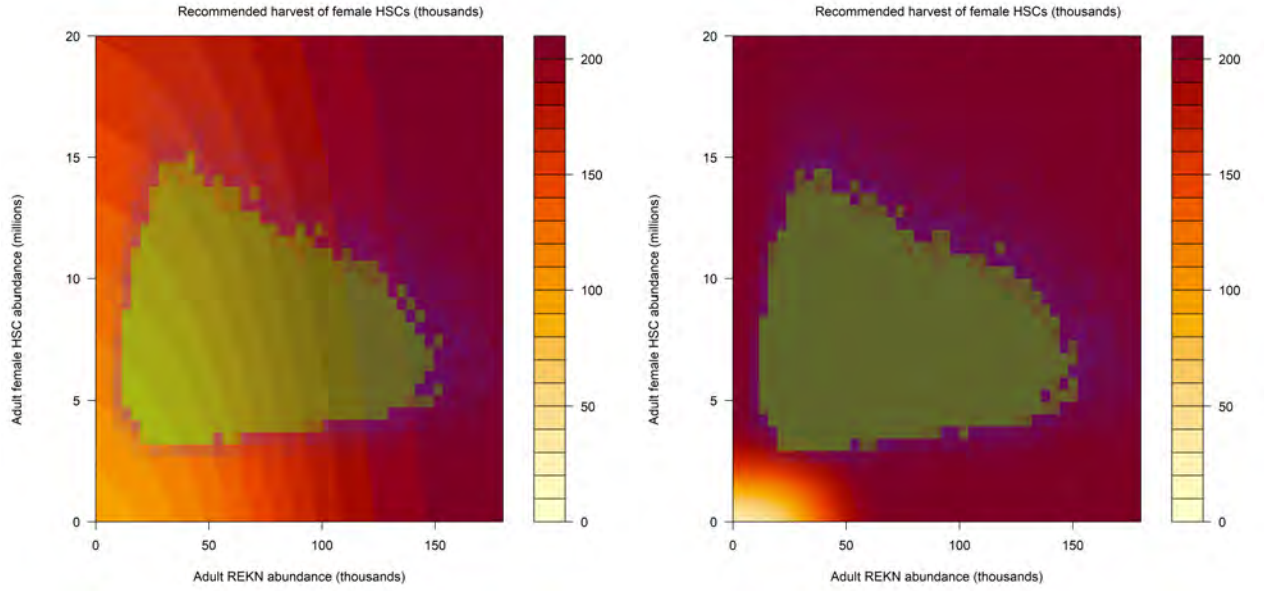
(a) *Rev2021* (b) *errFix*

Figure 2.1: Male harvest policy function from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*).



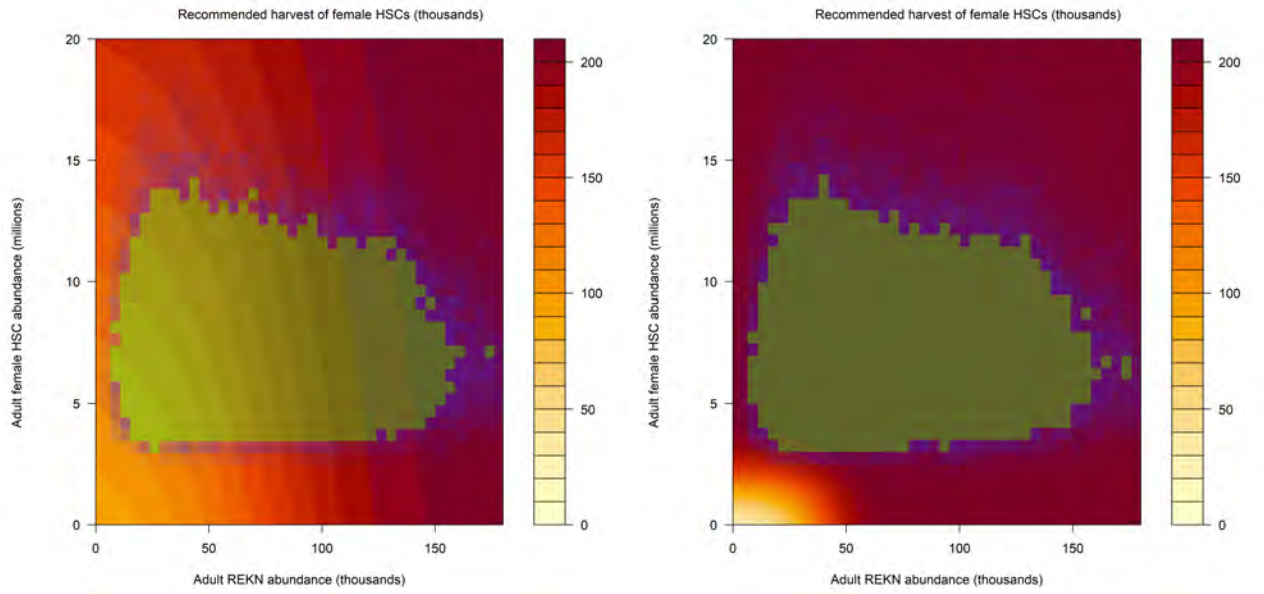
(a) *Rev2021* (b) *errFix*

Figure 2.2: Female harvest policy function from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*). The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in **years 1–10** of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.



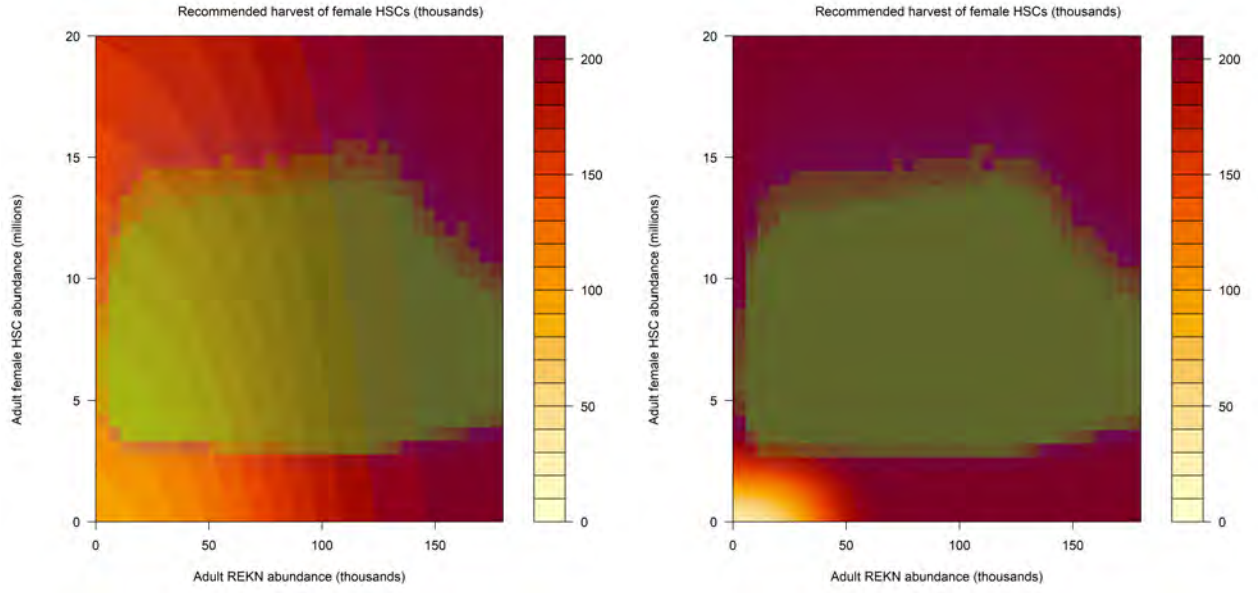
(a) *Rev2021* (b) *errFix*

Figure 2.3: Female harvest policy function from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*). The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in **years 11–20** of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.



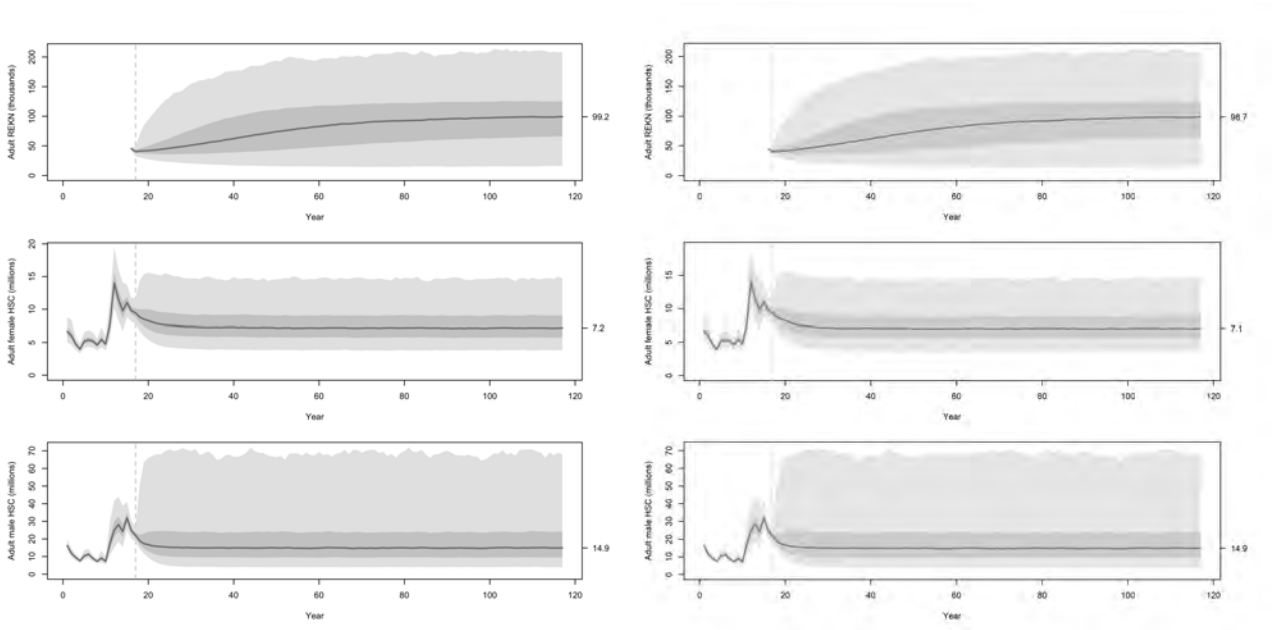
(a) *Rev2021* (b) *errFix*

Figure 2.4: Female harvest policy function from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*). The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years **21–30** of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.



(a) *Rev2021* (b) *errFix*

Figure 2.5: Female harvest policy function from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*). The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in **years 31–100** of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.



(a) *Rev2021* (b) *errFix*

Figure 2.6: Female harvest policy function Projected population abundances from (a) the uncorrected 2021 ARM Revision (*Rev2021*) model, and (b) the corrected version (*errFix*). In each figure, top plot shows red knots; center, female horseshoe crabs; bottom, male horseshoe crabs. Dashed vertical line in each plot shows where observed data series ends and simulated values begin. Trajectory line is the median of all simulated values; light gray envelopes mark the 2.5% and 97.5% percentiles; dark gray are 50% to 75%. Values shown in the right margin are the median values at year 100.

Table 2.1: Expected values in simulation year 100 of several population and management metrics, for each of the uncorrected 2021 ARM Revision (*Rev2021*) and corrected (*errFix*) model runs, along with percent change in each metric (at year 100) between the runs. Symbols: N^k, red knot abundance; N^f, female horseshoe crab abundance; N^m, male horseshoe crab abundance; H^f, female horseshoe crab harvest; H^m, male horseshoe crab harvest; ϕ^k, red knot survival; ρ^k, red knot recruitment.

	Expected value, year 100						
Model run	N^k	N^f	N^m	H^f	H^m	ϕ^k	ρ^k
Rev2021	9.92e4	7.2e6	1.49e7	1.805e5	5e5	0.93	0.05
errFix	9.87e4	7.1e6	1.49e7	2.1e5	5e5	0.93	0.05
Percent change	-0.5	-1.3	0	+16.3	0	0	0

2.3 Discussion

Correcting the error in the 2021 ARM reward function resulted in a substantial change in the shape of the female harvest policy surface (Figures 2.2–2.5). In particular, the slope of the surface along both the female horseshoe crab and red knot axes is steeper. This allows the surface to approach

zero harvest as these two abundances near zero; and causes it to rise more quickly to the harvest cap of 210,000 female crabs along both axes. Consequently, this maximum harvest is recommended over more of the region projected to be occupied by the system (green-and-blue 'blob' in Figures 2.2–2.5), and this results in a greater total harvest over the time horizon and at year 100 (Table 2.1).

However, although the projected female harvest at year 100 is 16.3% higher under the corrected model (Table 2.1), the percent change in expected red knot and female horseshoe crab abundance at year 100 are only -0.5% and -1.3% respectively. So a substantial increase in total female harvest is predicted to result in a relatively small change in population sizes. This is likely because the harvest cap of 210,000 is relatively small compared to the projected long-run abundance of female crabs, which is greater than 7 million.

Although the comparison of the uncorrected and corrected versions of 2021 ARM Revision has been presented here, it is important to note that it is crucial to use only the corrected version henceforth.

3 Outcomes from January 2026 workshop

3.1 Review of recommendations

Workshop participants chose to recommend alterations to three values-based components of the ARM: the horseshoe crab and red knot utility functions, and the female horseshoe crab harvest policy function (Figure 1.1). Stakeholders chose to retain the 2021 version of the reward function, so its functional form was not altered here. However, because the utility functions are used in the reward function, changing the utility functions does affect the reward function directly, which can in turn affect the optimal solution because it shows how value (economic and otherwise) is derived from the state of the ecological system.

The third change, to the functional form of the female HSC harvest policy function, imposes a threshold below which no female harvest will occur. This acts more like a constraint on the model, limiting the universe of system states over which it is possible to derive value (i.e., reward).

3.1.1 Horseshoe crab utility function

In the 2021 Revised ARM, the horseshoe crab utility, $u_t^h \in [0, 1]$, represents relative economic value, expressed as the ratio of the harvest in year t (H_t^m for males, H_t^f for females) to the maximum possible harvest as determined by the harvest caps placed on male ($H_{\max}^m$) and female ($H_{\max}^f$) harvest:

$$u_t^h = \frac{2 \times H_t^f + H_t^m}{2 \times H_{\max}^f + H_{\max}^m}. \tag{3.1}$$

Based on stakeholder input during the development of the original ARM framework, female horseshoe crabs were considered to have twice the economic value of males for bait harvest (ASMFC, 2009) and this relative valuation was retained in the 2021 Revision (ASMFC, 2022). Thus, in both the numerator and denominator of Equation 3.1 the term representing female harvest is doubled.

During the 2026 workshop, stakeholders determined that this relative valuation of harvested male and female HSCs should be adjusted such that one female has the value of 2.65 males. The utility function was therefore adjusted to

$$u_t^h = \frac{2.65 \times H_t^f + H_t^m}{2.65 \times H_{\max}^f + H_{\max}^m}. \tag{3.2}$$

3.1.2 Red knot utility function

Under the 2021 Revised ARM the red knot utility function used a threshold value (81,900 knots) that was established during development of the Original ARM, and the function ramped up from 0 to a value of 1 at this threshold (Figure 3.1). The ramp began at $0.9 \times 81{,}900 = 73{,}710$ knots.

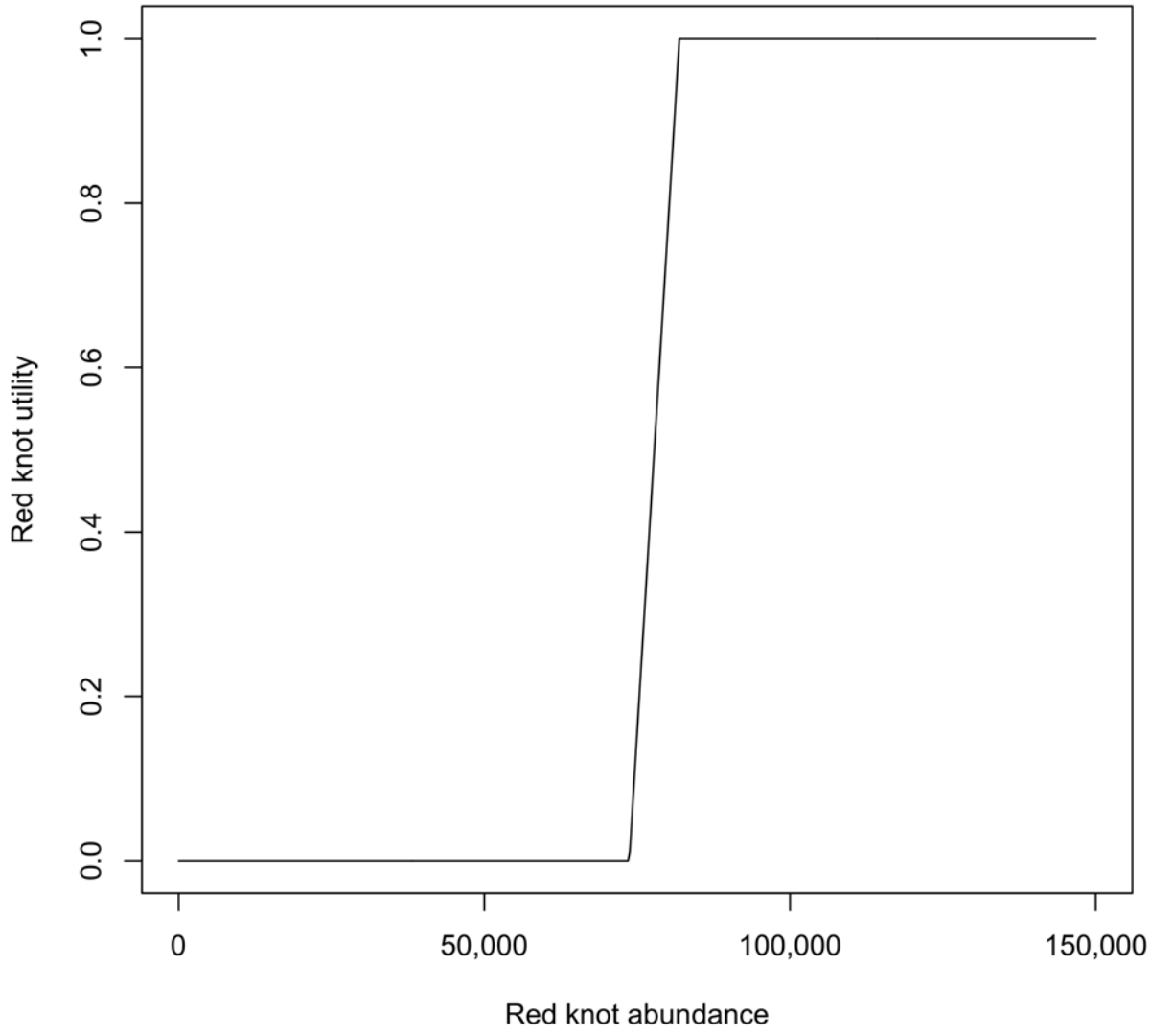


Figure 3.1: Red knot utility function used in the 2021 ARM Revision.

The utility curve recommended by participants of the January, 2026 workshop (black line in Figure 3.2), in contrast, has a smoother S-shape that rises more gradually across the range of red knot abundances. Both the new and original red knot utilities are piece-wise functions, but the new version has six connected segments, whereas the original has only three.

3.1.3 Female HSC harvest policy function

The female horseshoe crab harvest policy function in the 2021 ARM Revision is itself a function of two component functions, called *harvest factors*, one for female crabs and one for red knots. Each harvest factor has a logistic form (i.e., is S-shaped), and is a function of the abundance N_t of its focal species in year t, along with two parameters that dictate the curve's inflection point (β) and the slope at that location (α):

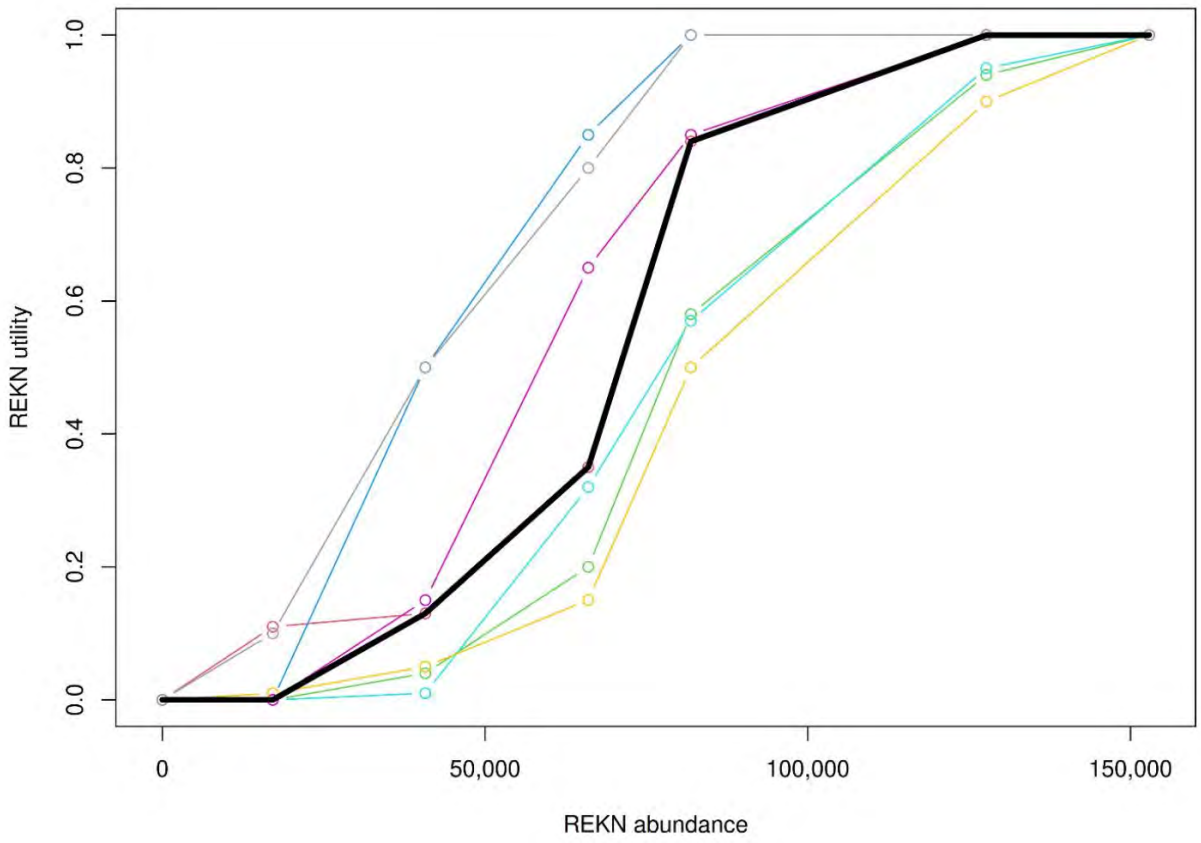


Figure 3.2: Red knot (REKN) utility function recommended by stakeholders in the January, 2026 workshop. Thin, colored lines represent individual stakeholders' suggested curves. The resulting average function (thick black line) was obtained by connecting median values across stakeholders, at each of a set of notable red knot abundances (marked with circles along each stakeholder curve).

$$f(N_t, \alpha, \beta) = \frac{1}{1 + e^{\alpha(\beta - N_t)}} \tag{3.3}$$

The two harvest factors are then used in the female harvest policy h^f in the following arrangement:

$$\begin{aligned} h^f(N_t^f, N_t^k, \alpha^f, \beta^f, \alpha^k, \beta^k) = & f(N_t^f, \alpha^f, \beta^f) \\ & + f(N_t^k, \alpha^k, \beta^k) \\ & - f(N_t^f, \alpha^f, \beta^f) \times f(N_t^k, \alpha^k, \beta^k) \end{aligned} \tag{3.4}$$

where superscript k denotes red knot parameters and f those for female horseshoe crabs. During the iterative procedure used to find the solution to the ARM decision model (i.e., the optimal harvest policy), α^f, β^f, α^k, and β^k are the values to be optimized (in addition to α^m, β^m, which determine the shape of the male horseshoe crab harvest policy curve).

Stakeholders in the January, 2026 workshop recommended that a threshold be placed on female crab harvest, below which no harvest would occur. The actual value of the threshold was later defined by the Delaware Bay Ecosystem Technical Committee; it was set to be 7,000,000 (abbreviated here 7e6). This threshold was incorporated into the policy function by first defining a step function that

takes a value of 0 or 1:

$$s(N_t^f) = \begin{cases} 0, & \text{if } N_t^f < 7\text{e}6 \\ 1, & \text{if } N_t^f \geq 7\text{e}6\,. \end{cases} \tag{3.5}$$

Then the entire righthand side of h^f was multiplied by this step function, essentially setting harvest to 0 when $N_t^f < 7\text{e}6$:

$$\begin{aligned} h^f(N_t^f, N_t^k, \alpha^f, \beta^f, \alpha^k, \beta^k) = &[f(N_t^f, \alpha^f, \beta^f) \\ &+ f(N_t^k, \alpha^k, \beta^k) \\ &- f(N_t^f, \alpha^f, \beta^f) \times f(N_t^k, \alpha^k, \beta^k)] \\ &\times s(N_t^f)\,. \end{aligned} \tag{3.6}$$

3.2 Methods

To best understand the effect—on model behavior and the resulting solution—of each change recommended in the January, 2026 workshop, a sequence of model runs was performed, with a single change made before each run. The starting place for this sequence was the corrected version of the 2021 ARM Revision (*errFix*; Section 2)

The order of these model runs and associated information appear in Table 3.1. A single change was made with each run, but the changes were cumulative, such that each run incorporates all changes added in previous runs. Except for the changes noted there, model runs relied on exactly the same codebase, parameter values and input data.

Table 3.1: Model runs to exhibit the effect of changes made to the ARM decision model; these changes are specified in the *Adjustment* column. Note that the changes are cumulative, with each run incorporating all changes from previous runs, as well as the one specified in its own row in the table.

Order	Label	Adjustment	Description	Results section
1	*errFix*	Error in reward function fixed	2.1	2.2
2	*hscUtil*	HSC utility	3.1.1	3.3.1
3	*reknUtil*	REKN utility	3.1.2	3.3.2
4	*femHarv*	Female HSC harvest policy	3.1.3	3.3.3

3.3 Results

3.3.1 New horseshoe crab utility function

Figures 3.3–3.8 show outcomes after the horseshoe crab utility function was updated.

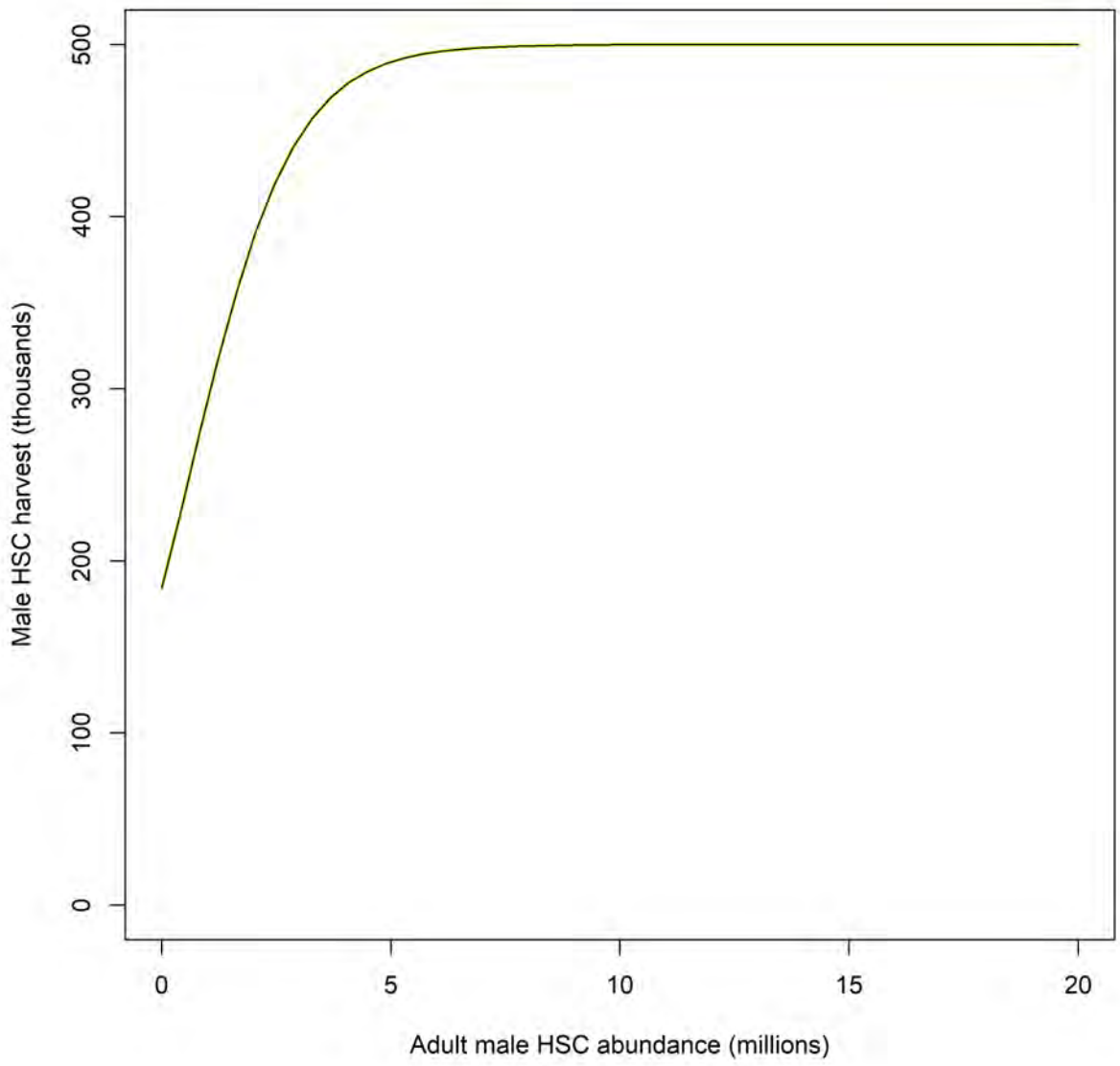


Figure 3.3: Male harvest policy function from the **hscUtil** model.

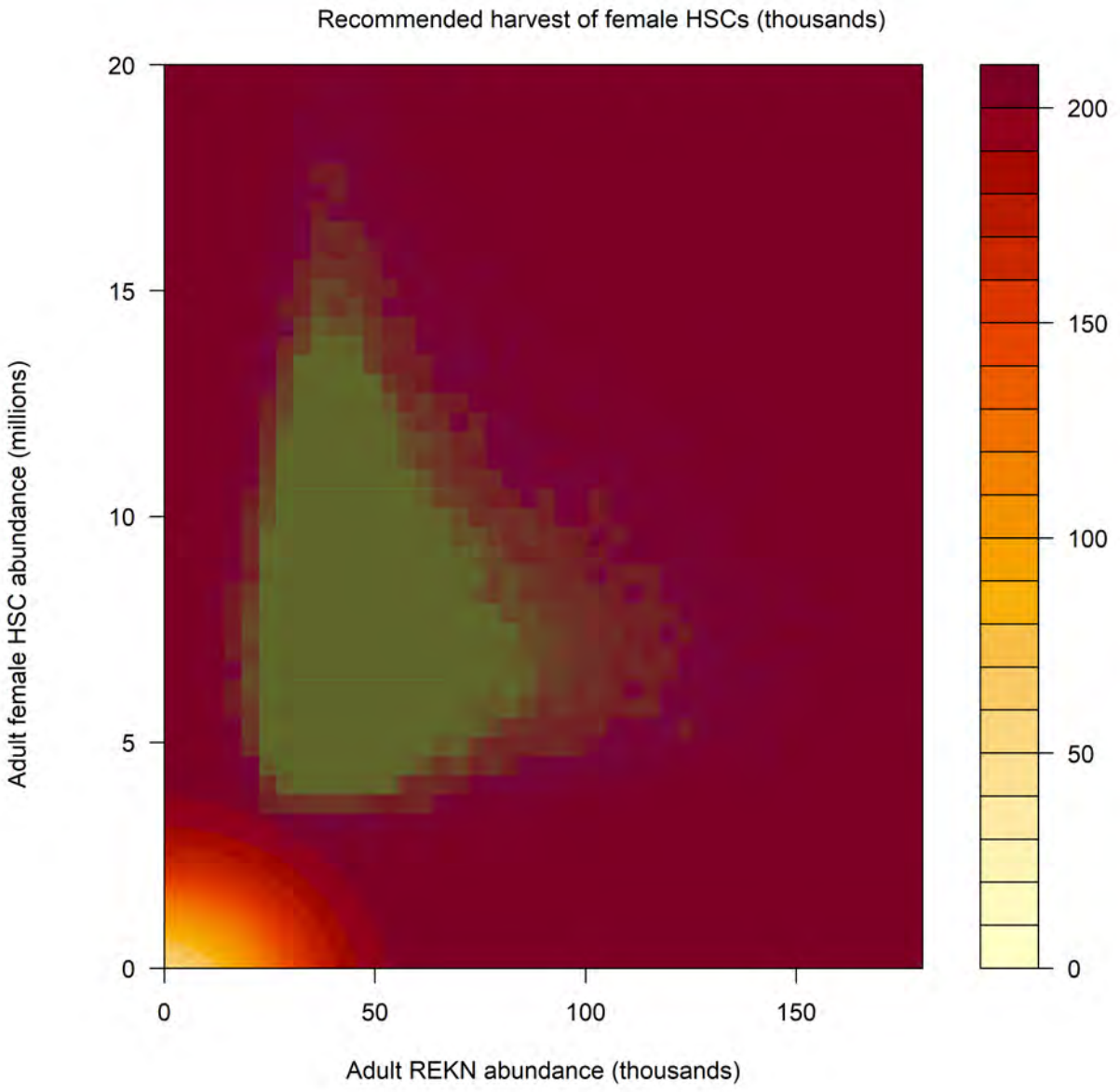


Figure 3.4: Female harvest policy function from the **hscUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 1–10 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

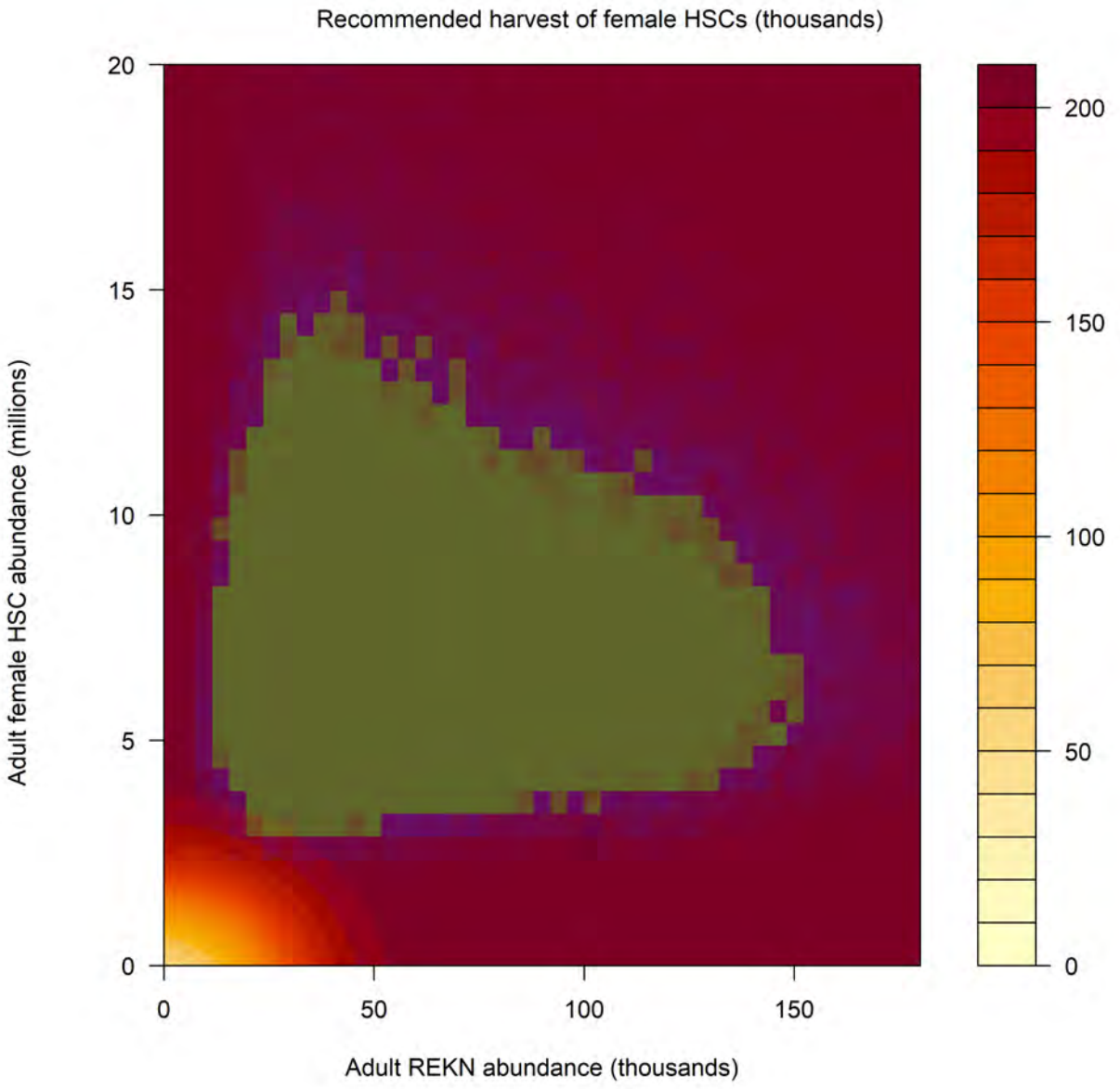


Figure 3.5: Female harvest policy function from the **hscUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 11–20 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

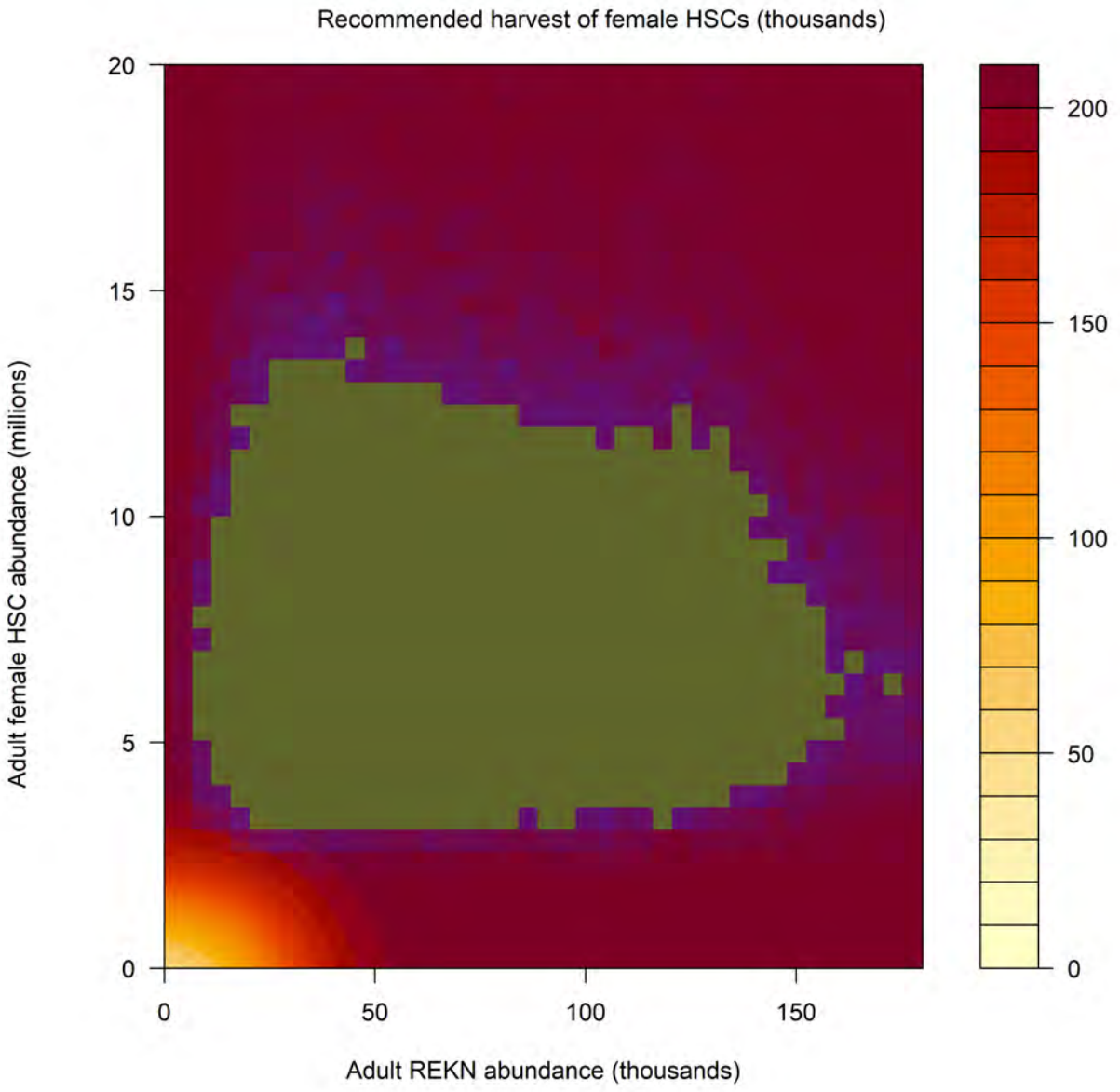


Figure 3.6: Female harvest policy function from the **hscUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 21–30 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

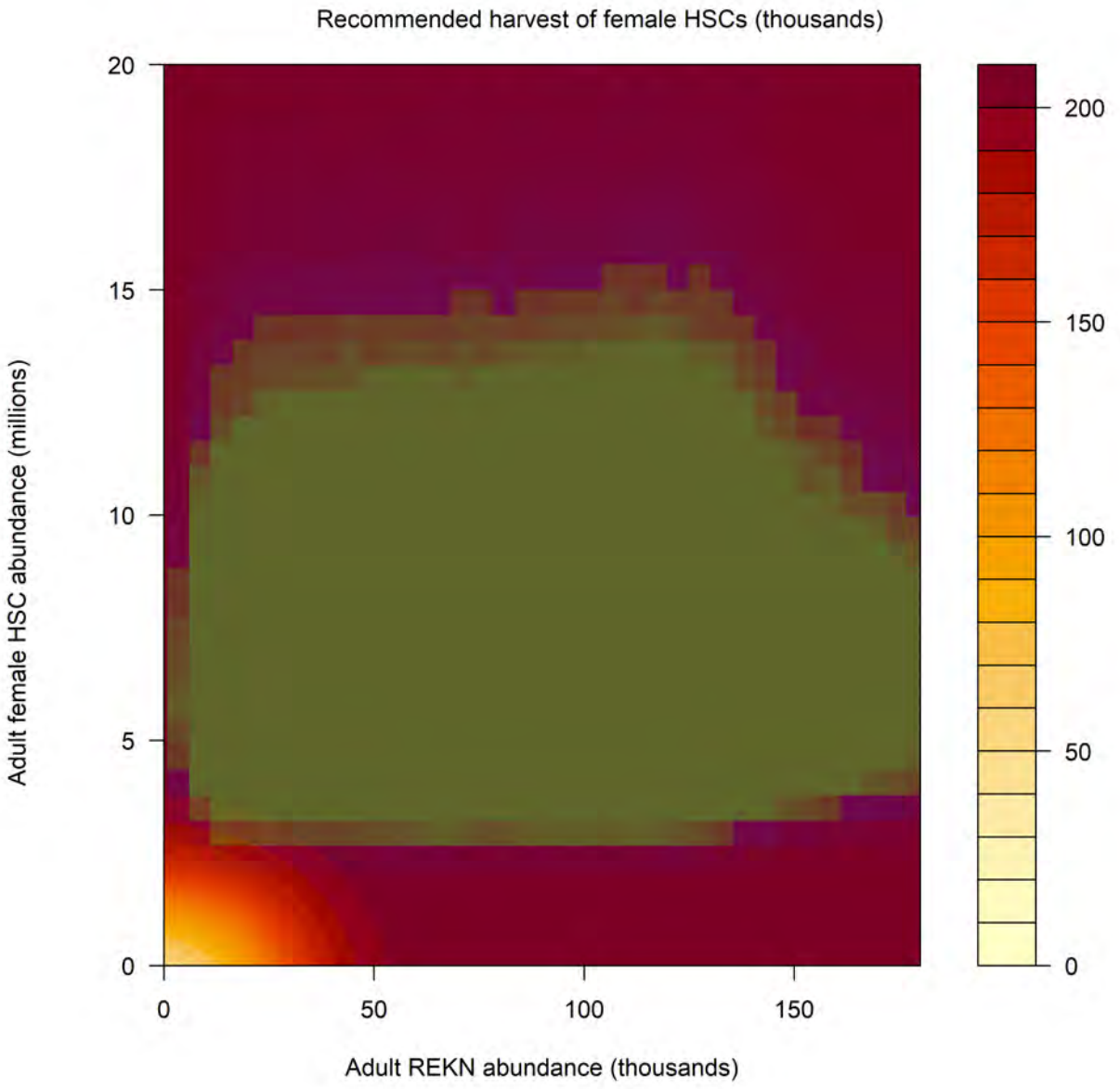


Figure 3.7: Female harvest policy function from the **hscUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 31–100 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

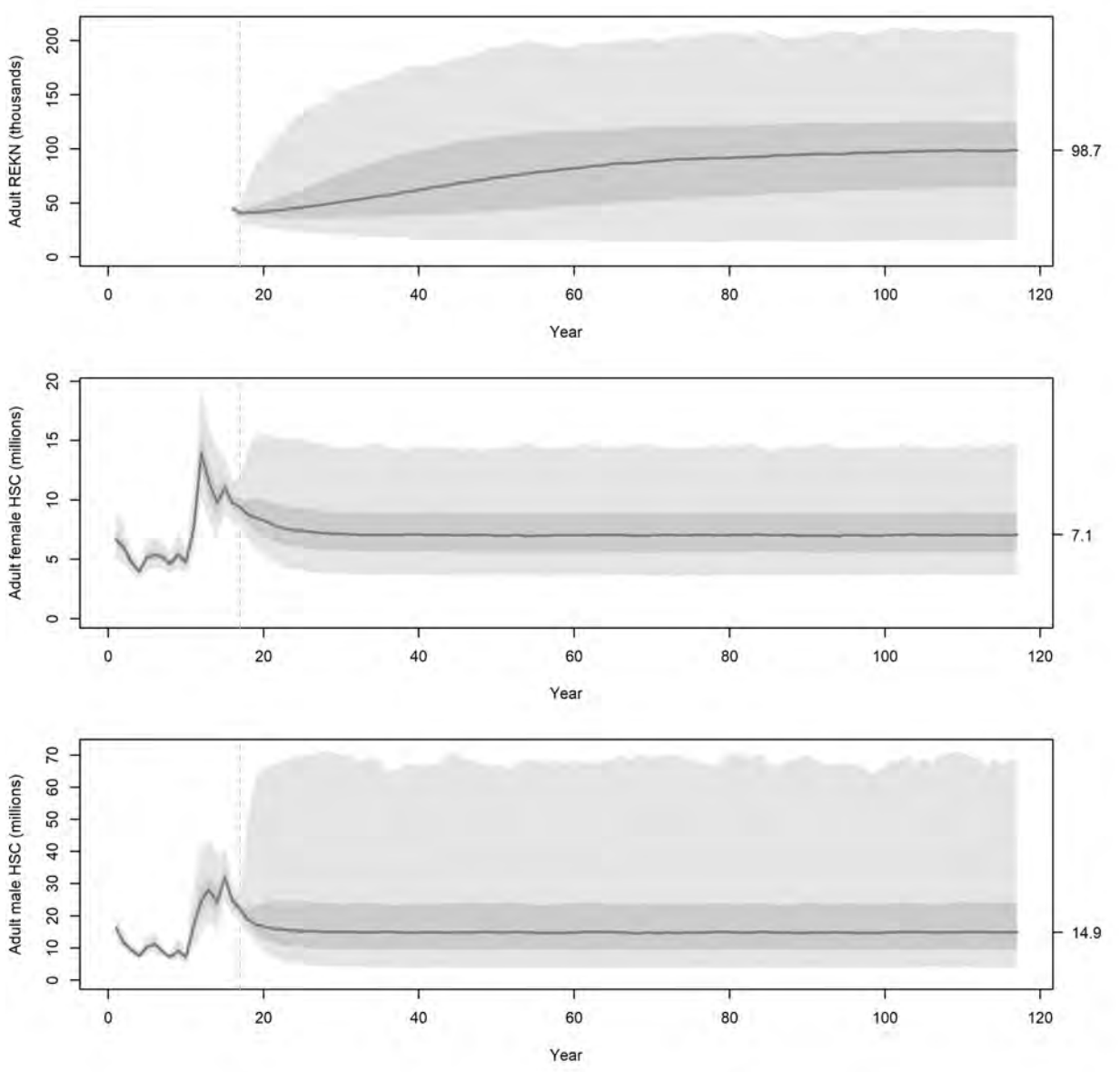


Figure 3.8: Projected population abundances under the **hscUtil** model. Top panel, red knot; center, female horseshoe crab; bottom, male horseshoe crab. Dashed vertical line in each plot shows where observed data series ends and simulated values begin. Trajectory line is the median of all simulated values; light gray envelopes bound the 2.5% and 97.5% percentiles; dark gray are 50% to 75%. Values shown in the right margin are the median values at year 100.

3.3.2 New red knot utility function

Figures 3.9–3.14 show outcomes after the red knot utility function was updated.

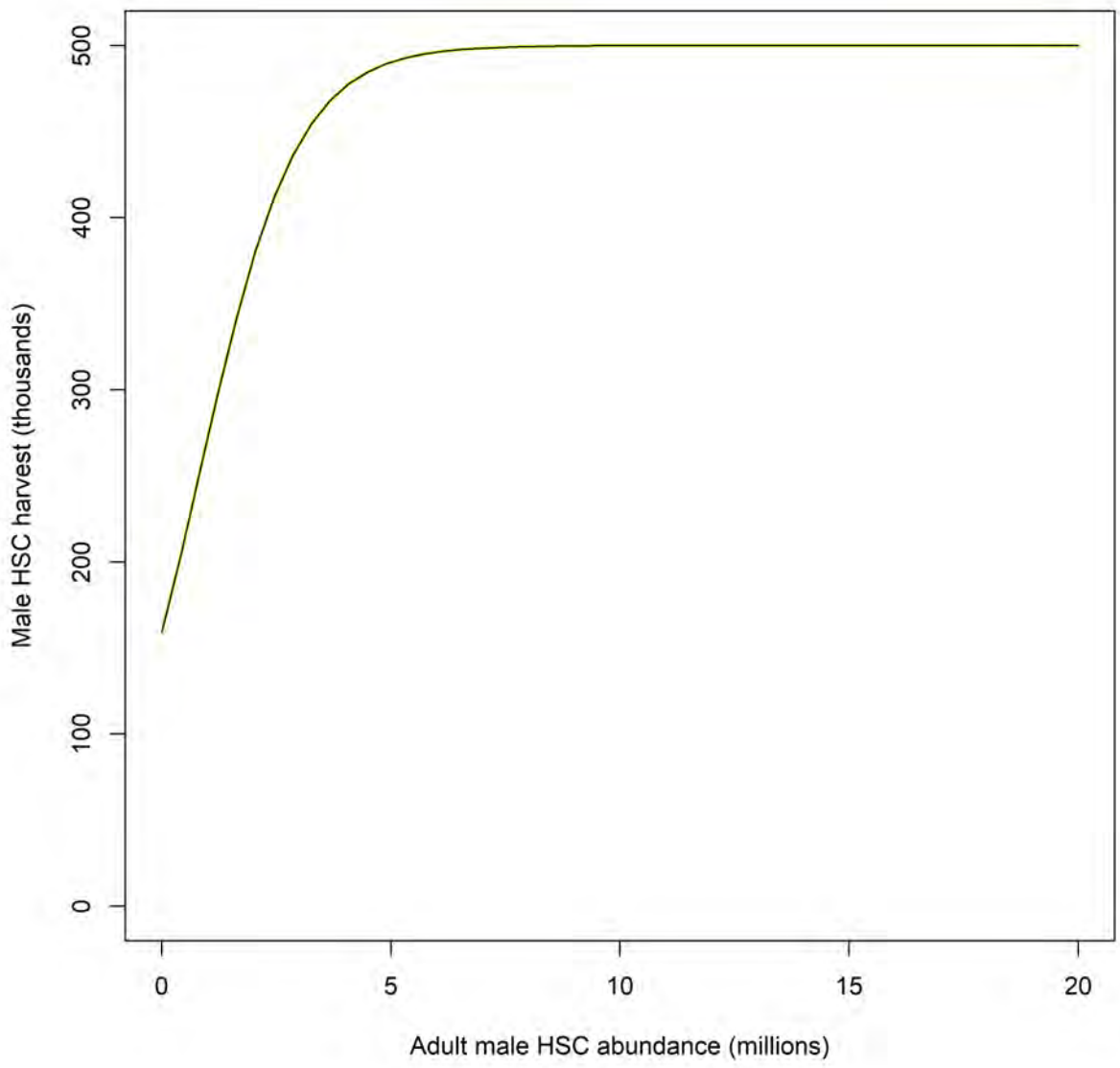


Figure 3.9: Male harvest policy function from the **reknUtil** model.

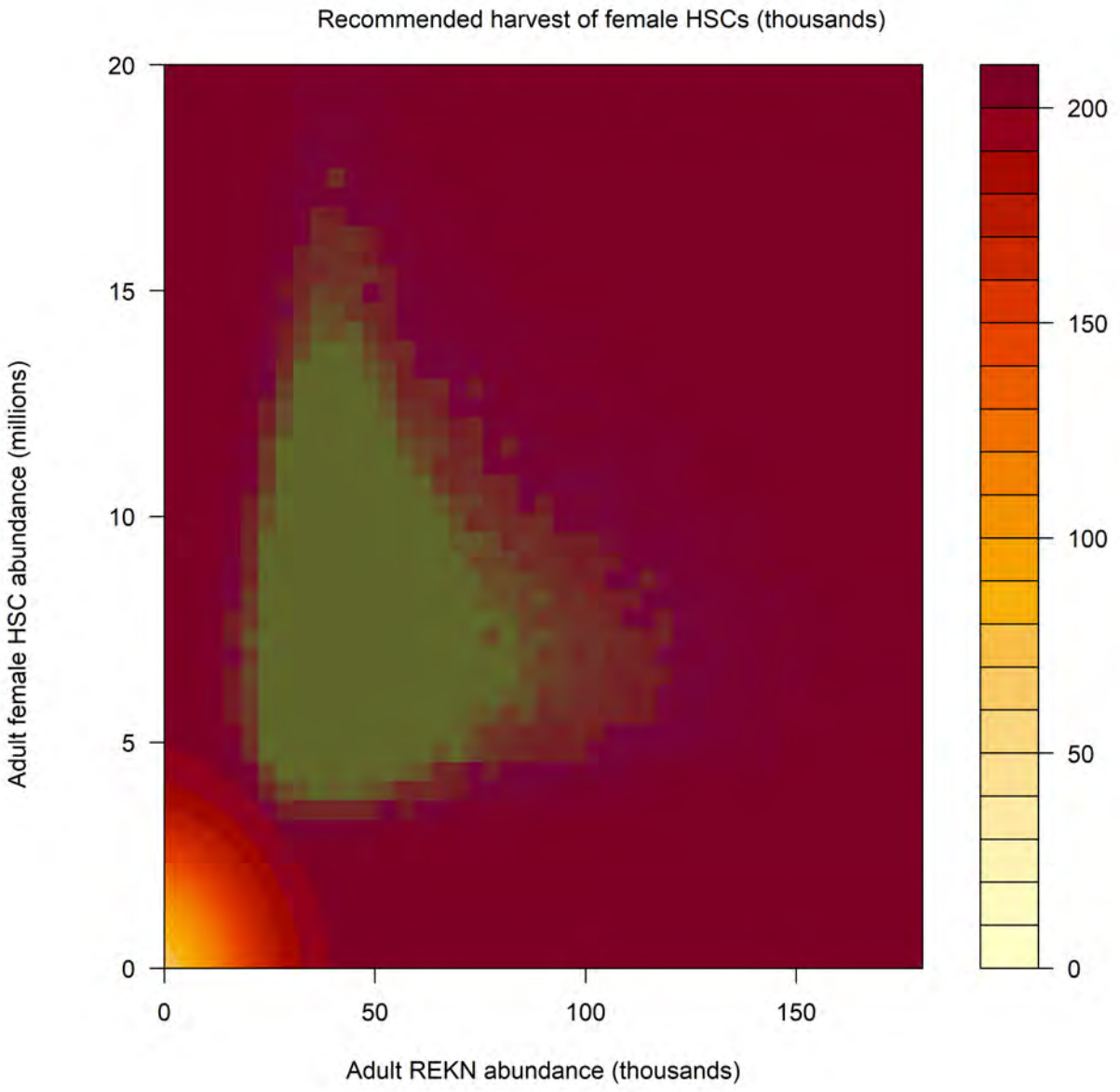


Figure 3.10: Female harvest policy function from the **reknUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 1–10 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

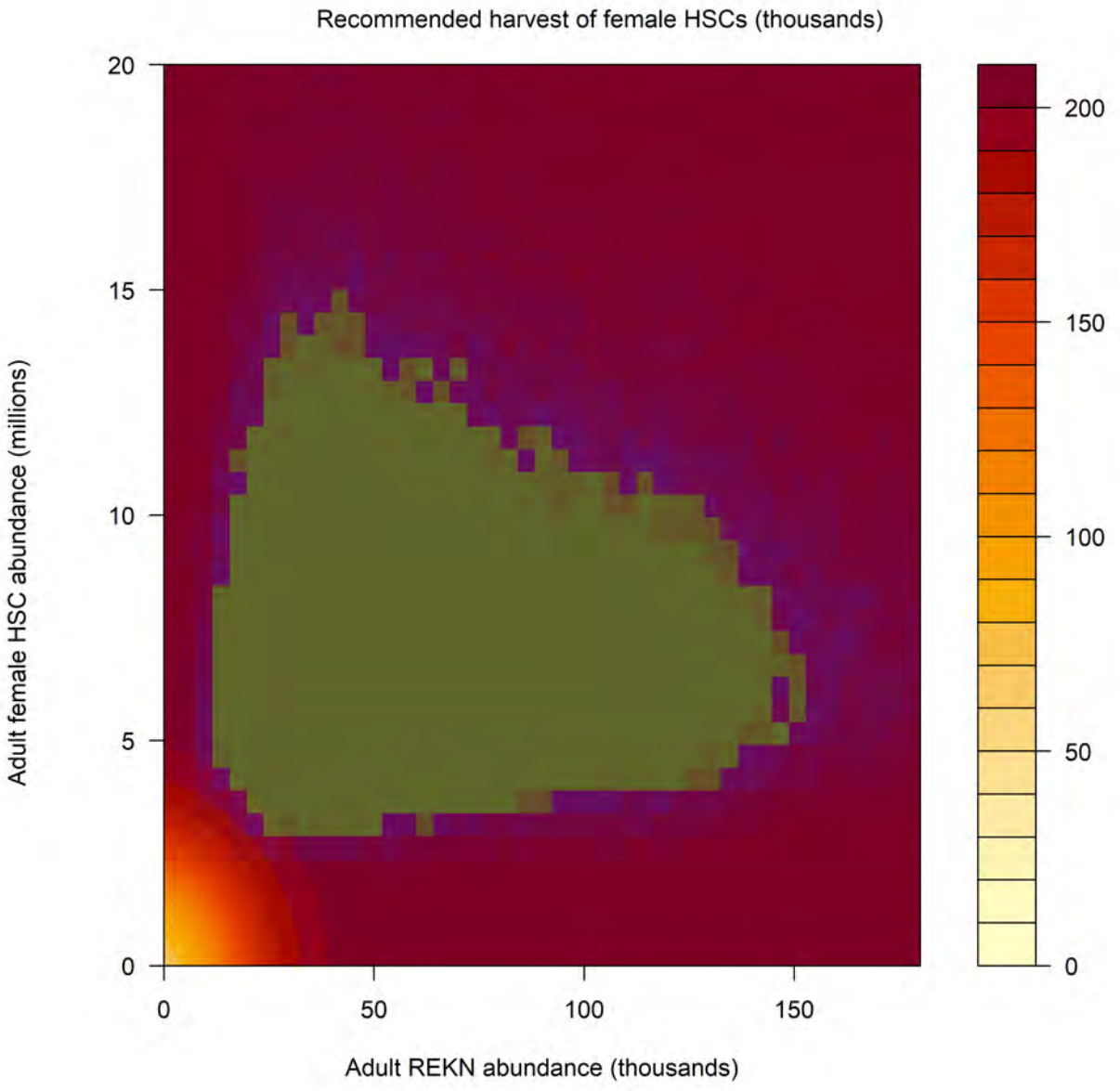


Figure 3.11: Female harvest policy function from the **reknUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 11–20 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

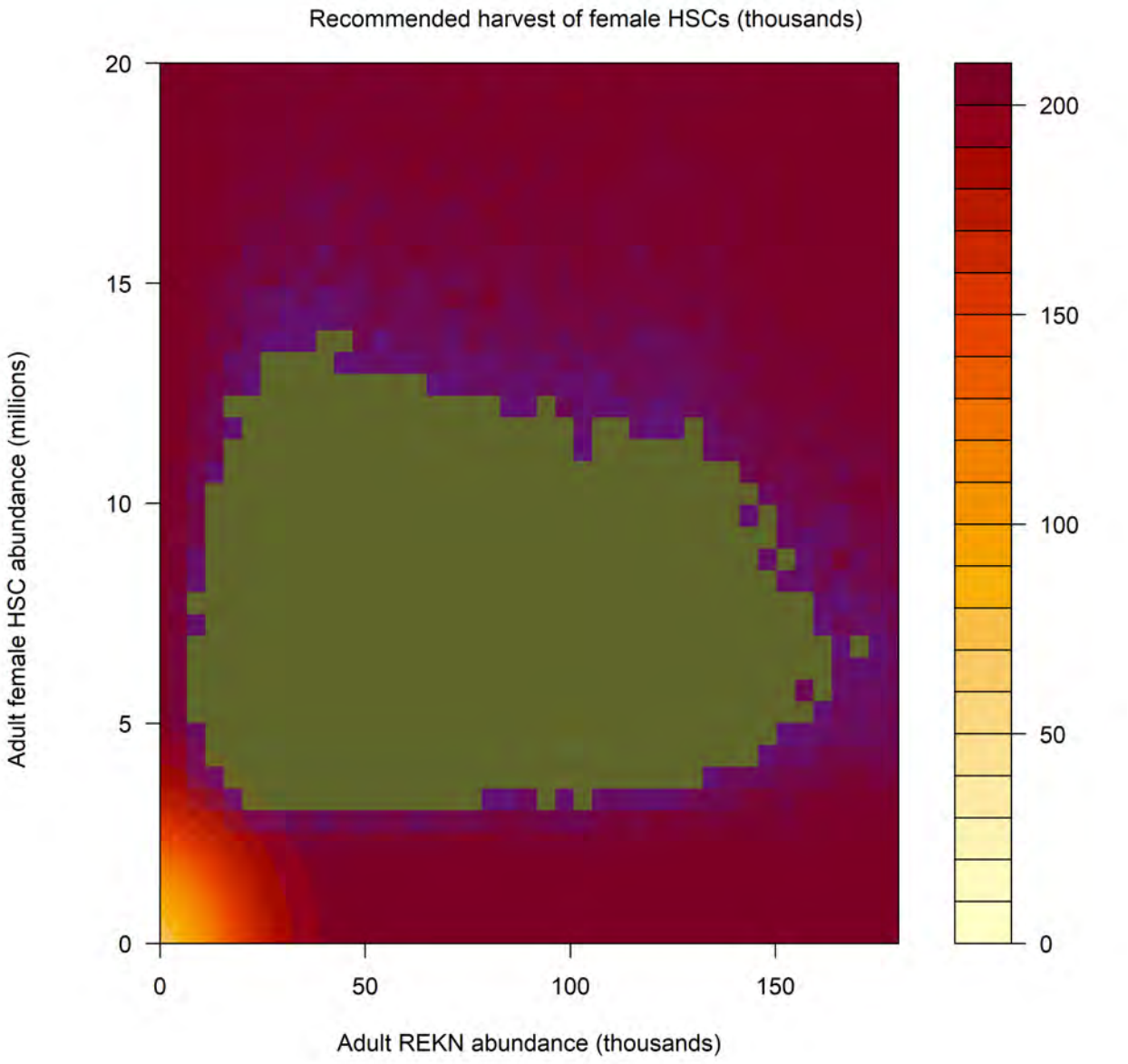


Figure 3.12: Female harvest policy function from the **reknUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 21–30 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

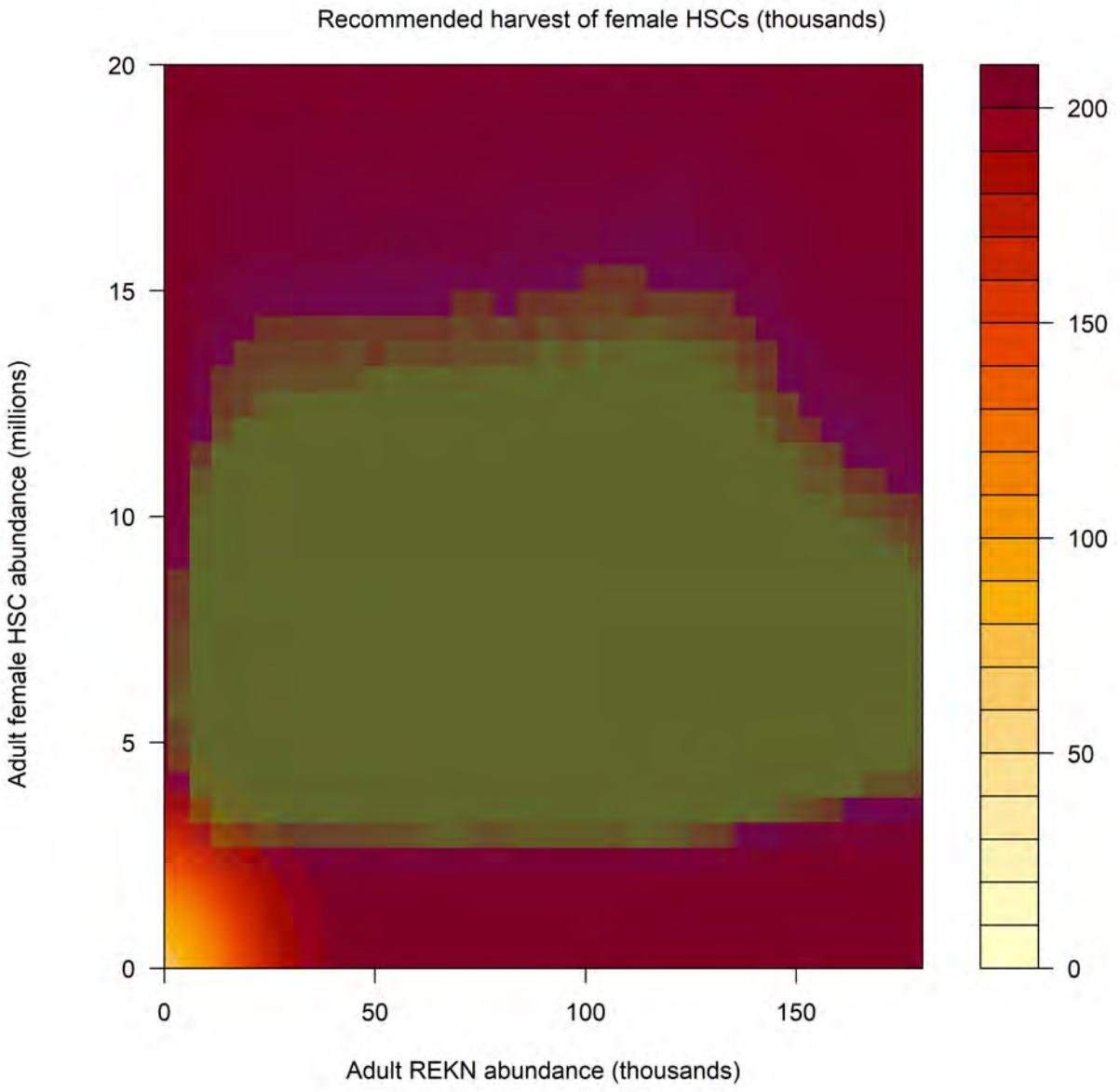


Figure 3.13: Female harvest policy function from the **reknUtil** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 31–100 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

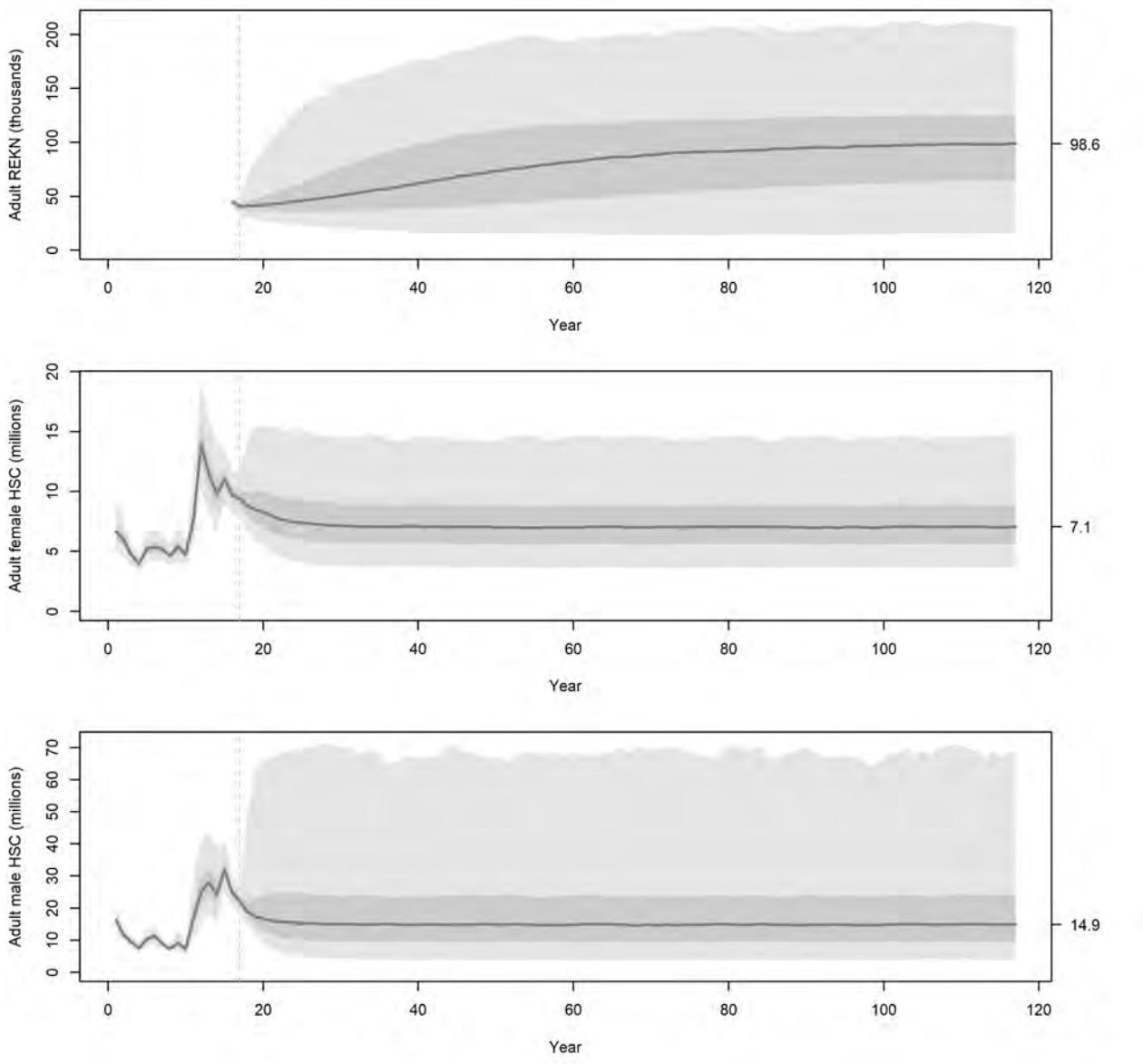


Figure 3.14: Projected population abundances under the **reknUtil** model. Top panel, red knot; center, female horseshoe crab; bottom, male horseshoe crab. Dashed vertical line in each plot shows where observed data series ends and simulated values begin. Trajectory line is the median of all simulated values; light gray envelopes bound the 2.5% and 97.5% percentiles; dark gray are 50% to 75%. Values shown in the right margin are the median values at year 100.

3.3.3 New female horseshoe crab harvest policy function

Figures 3.15–3.20 show outcomes after the female horseshoe crab harvest policy function was updated.

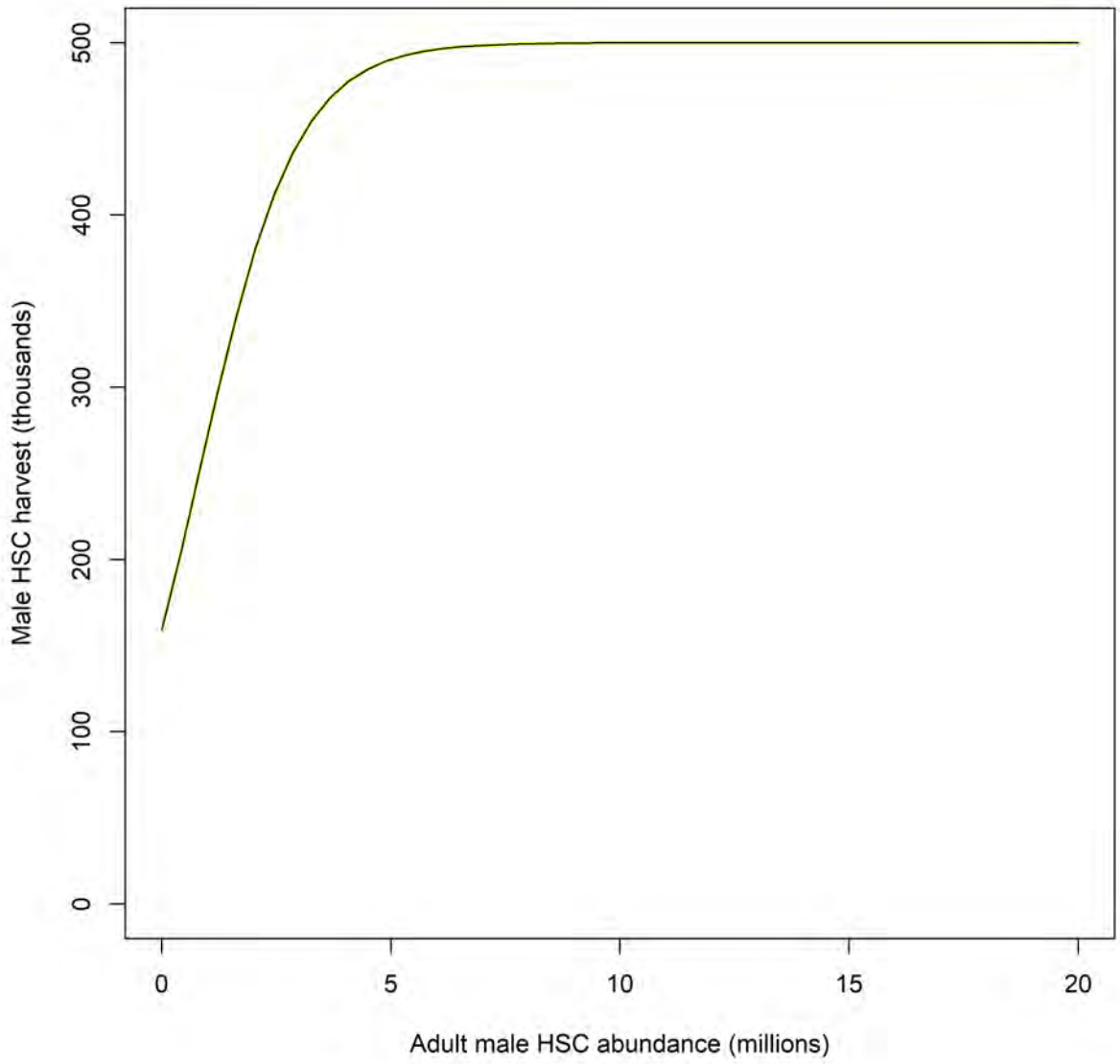


Figure 3.15: Male harvest policy function from the **femHarv** model.

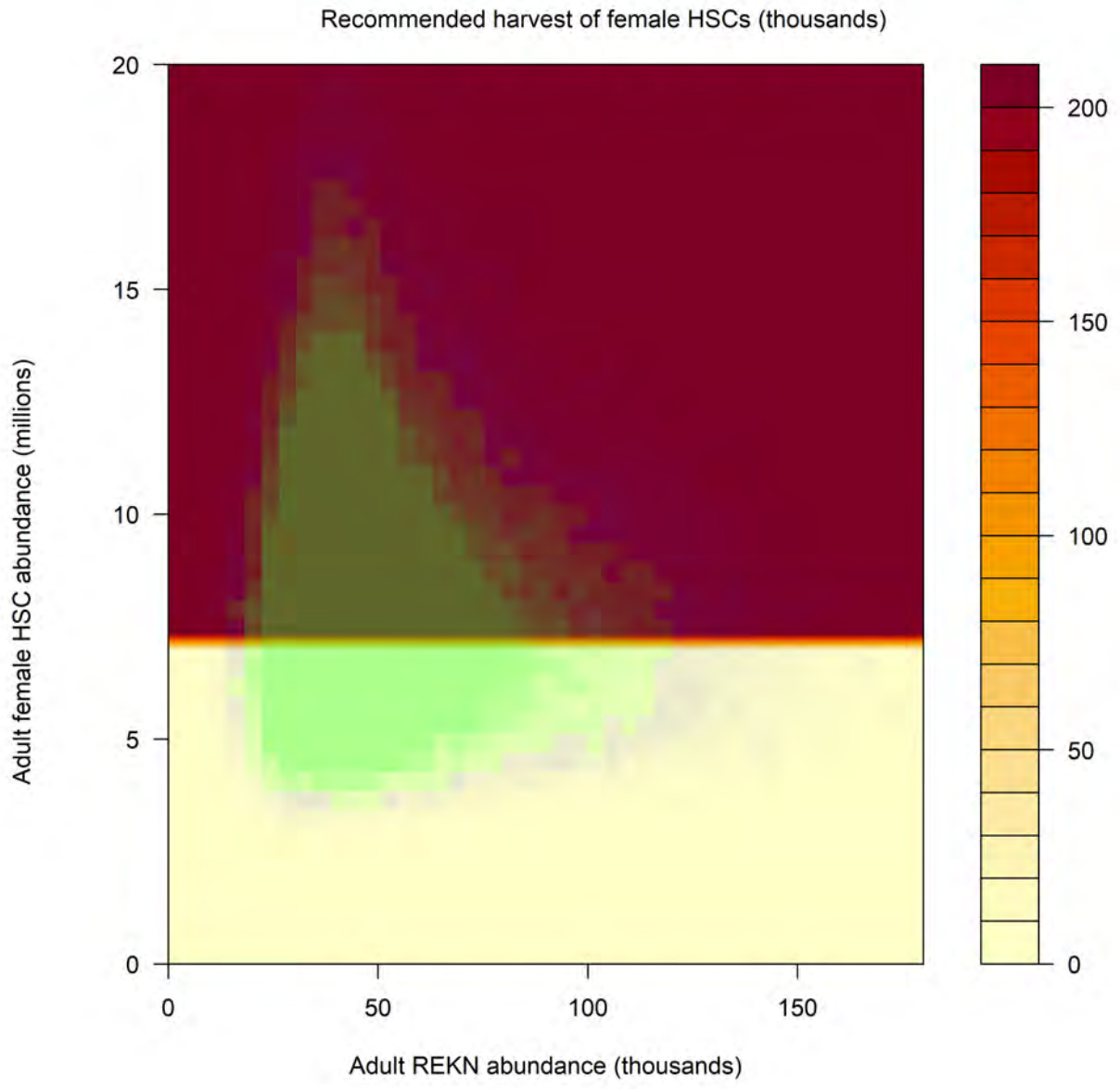


Figure 3.16: Female harvest policy function from the **femHarv** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 1–10 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

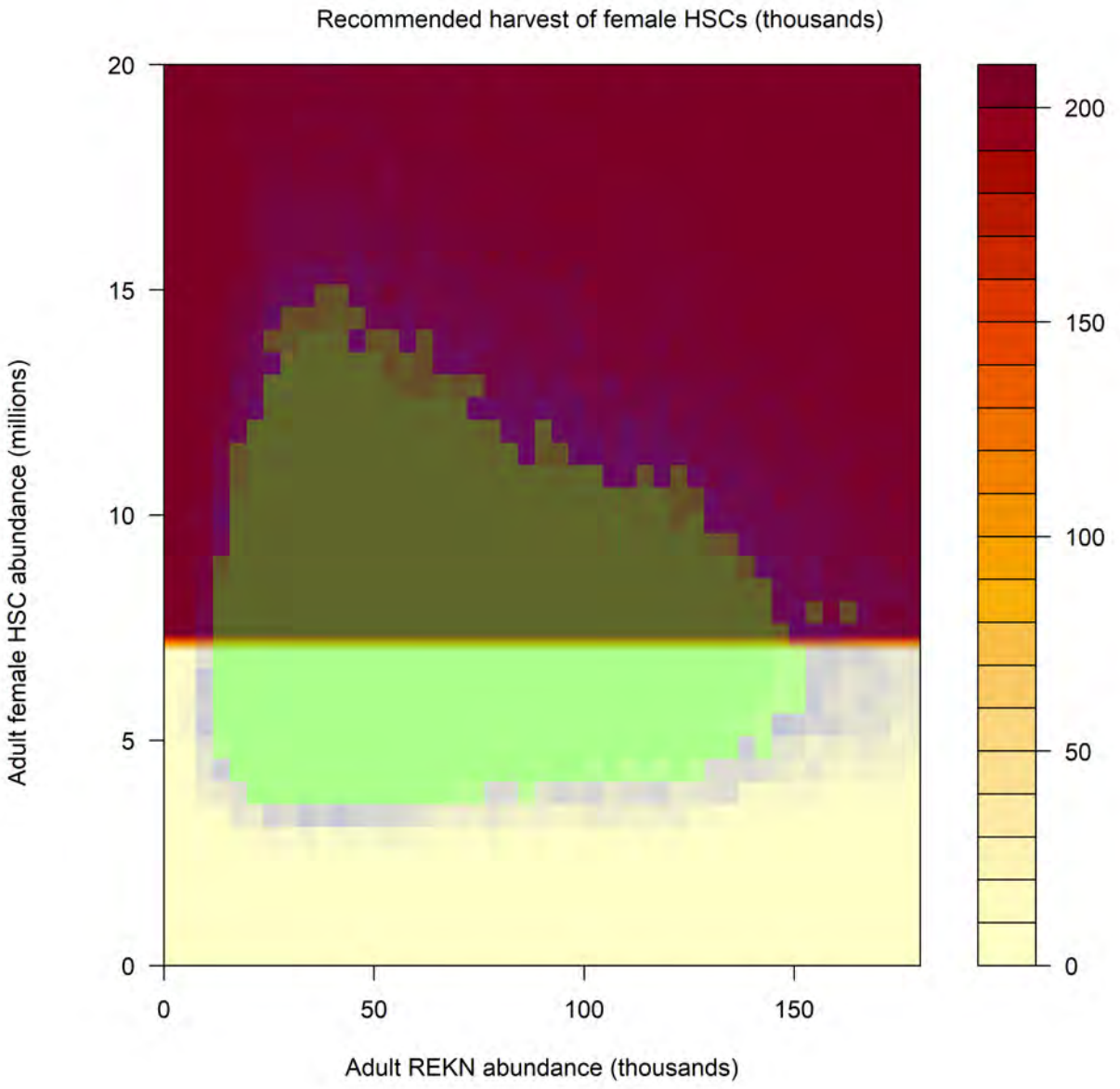


Figure 3.17: Female harvest policy function from the **femHarv** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 11–20 of the 100-year time horizon. The green cells collectively contain 75% of the observations, the blue an additional 20%.

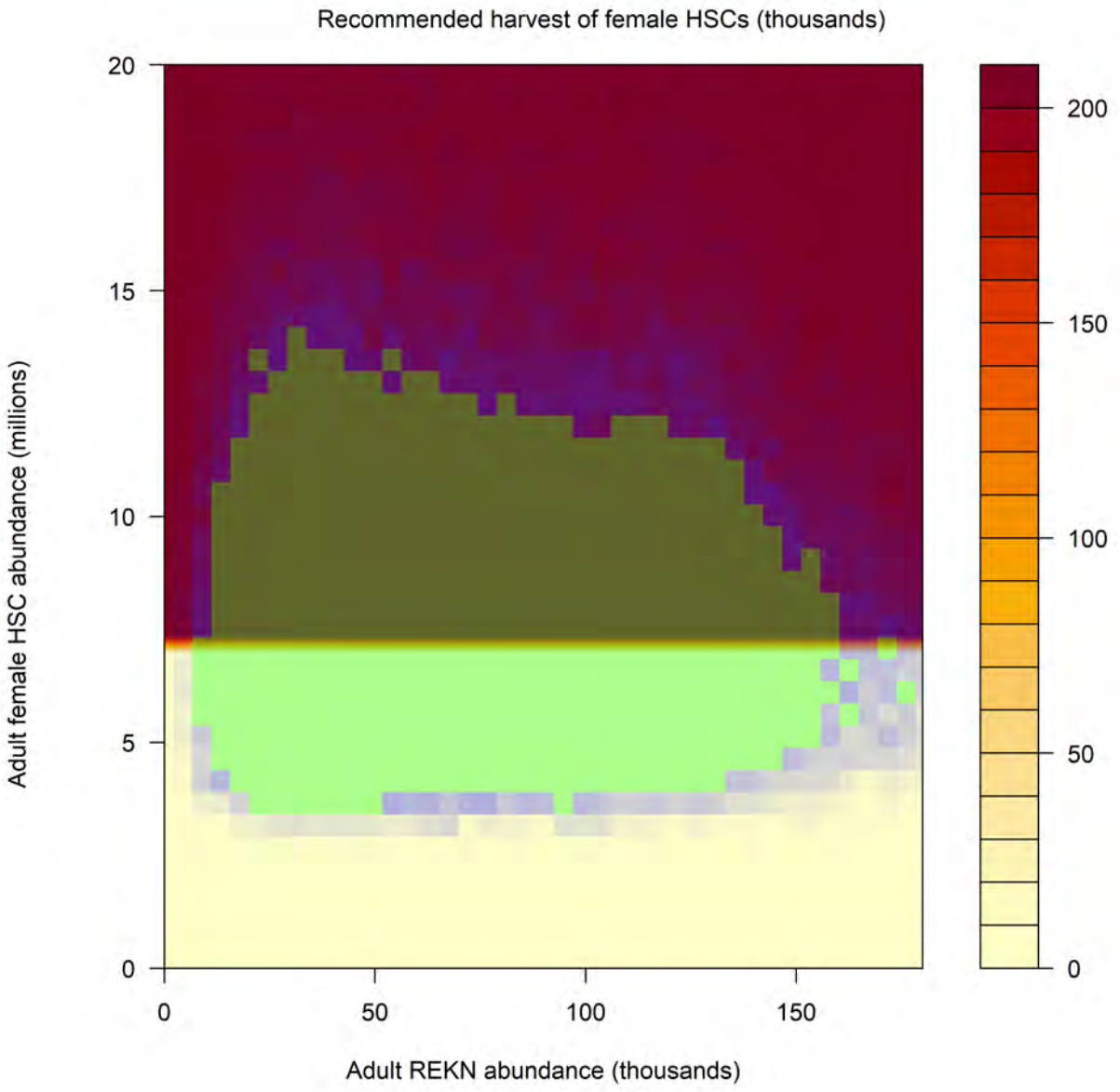


Figure 3.18: Female harvest policy function from the **femHarv** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 21–30 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

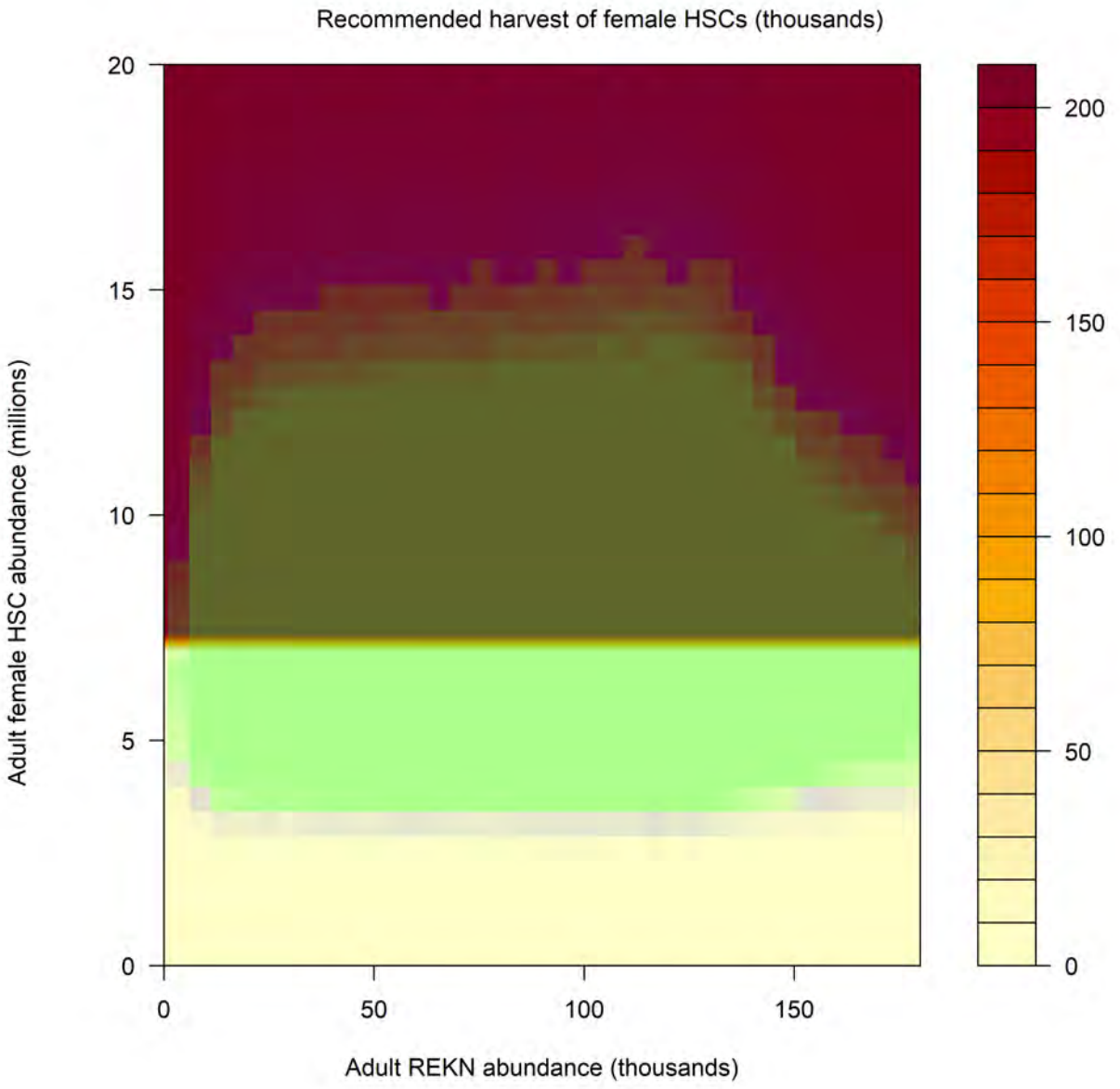


Figure 3.19: Female harvest policy function from the **femHarv** model. The green and blue 'blob' region shows where the system is projected to be (i.e., in terms of female HSC and REKN abundance) in years 31–100 of the 100-year time horizon. The green cells collectively contain 75% of the simulated values, the blue an additional 20%.

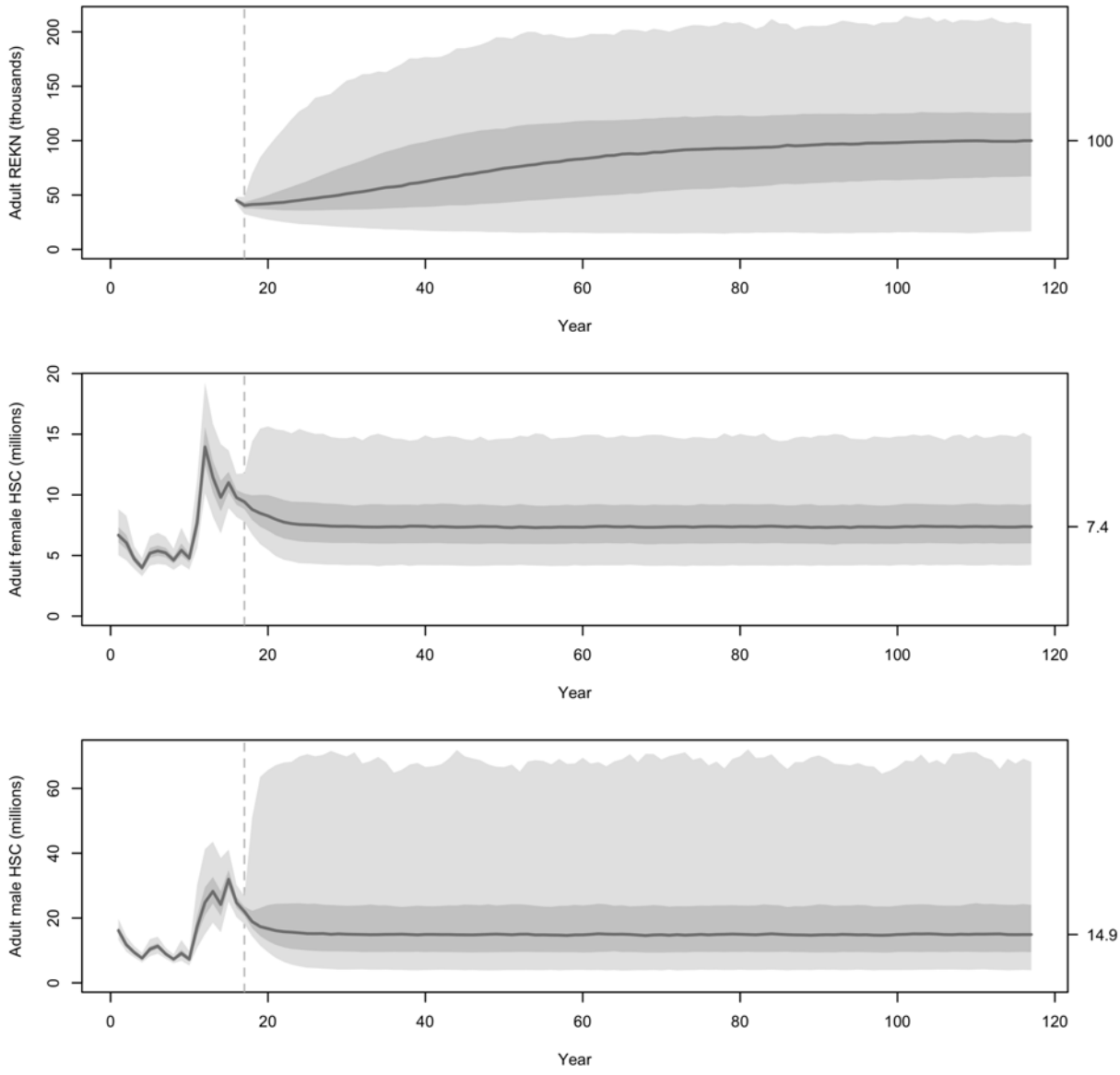


Figure 3.20: Projected population abundances under the **femHarv** model. Top panel, red knot; center, female horseshoe crab; bottom, male horseshoe crab. Dashed vertical line in each plot shows where observed data series ends and simulated values begin. Trajectory line is the median of all simulated values; light gray envelopes bound the 2.5% and 97.5% percentiles; dark gray are 50% to 75%. Values shown in the right margin are the median values at year 100.

3.3.4 Comparison of model runs

Although the ARM model uses a 100-year time horizon for population projections, these population trajectories and their associated uncertainty envelopes are seen to stabilize within about 10 years for horseshoe crabs and within about 70 years for red knots. One simple means to summarize expected population outcomes for a given model run, then, is to note the median value for a number of population metrics at the end of the time horizon (simulation year 100). These year-100 values are shown and compared in Table 3.2. An important caveat in interpreting these values is that the uncertainty around them is very large, and none of the comparative changes shown in the table are 'statistically significant'. However, a comparison of annual median values is nevertheless informative because it is these expected values, irrespective of the variation around them, that the ARM decision model itself uses to compare time paths during the optimization procedure.

Table 3.2: Expected values in simulation year 100 of several population and management metrics, for the sequence of model runs, along with percent change in each metric (at year 100) between consecutive runs. Symbols: N^k, red knot abundance; N^f, female horseshoe crab abundance; N^m, male horseshoe crab abundance; H^f, female horseshoe crab harvest; H^m, male horseshoe crab harvest; ϕ^k, red knot survival; ρ^k, red knot recruitment. For descriptions of model runs, see Table 3.1.

	Expected value, year 100							Percent change, from previous run						
Model run	N^k	N^f	N^m	H^f	H^m	ϕ^k	ρ^k	N^k	N^f	N^m	H^f	H^m	ϕ^k	ρ^k
errFix	9.87e4	7.1e6	1.49e7	2.1e5	5e5	0.93	0.05							
hscUtil:	9.87e4	7.1e6	1.49e7	2.1e5	5e5	0.93	0.05	0	0	0	0	0	0	0
reknUtil:	9.86e4	7.1e6	1.49e7	2.1e5	5e5	0.93	0.05	-0.1	0	0	0	0	0	0
femHarv:	1.0e5	7.4e6	1.49e7	1.17e5	5e5	0.93	0.05	+1.4	+4.2	0	-44.3	0	0	0

3.4 Discussion

Comparing the four model runs considered in this update effort (Table 3.2) reveals three main conclusions. First, for most of the population and management metrics, there is little to no change across the model runs.

Second, in the one instance where harvest policy was substantially altered (*femHarv*), proportionally large changes in female harvest resulted in relatively small changes in female horseshoe crab and red knot population size. This is probably due to the relatively small value of the female harvest cap (210,000) relative to the expected long-run female population size (above 7 million).

And third, the imposition of a stakeholder-defined threshold on female harvest led to a proportionally large reduction in year-100 harvest (-44.3%). The total harvest under that threshold scenario (*femHarv*), across all simulation years, would be 43.5% lower than under the *errFix* model ({2.5, 97.5} percentiles: {27.5, 44.7}). Additionally, the presence of the threshold would cause the recommended female horseshoe crab harvest to jump from 0 to 210,000, or vice versa, fairly frequently. Figure 3.21 shows the number of times the female harvest recommendation changed during the 100-year time horizon, across all 10,000 simulated time paths. The median value is 22 switches over 100 years, or once every 4.5 years. However, many time paths experienced more frequent switching: there is a 1 in 10 chance that the switching interval is less than 3.6 years (i.e., the 10th percentile across simulations was 3.57).

Finally, it is important to recall that during these updates to the ARM decision model, all input parameters and data were held constant. This means that the updated solutions do not reflect any new ecological data (e.g., horseshoe crab or red knot abundances), beyond what was used in the 2021 ARM Revision. In other words, no information about the system after 2019 has yet been incorporated into the model. An update that would fully update the model inputs and use the most recent available data and population estimates is planned for 2027.

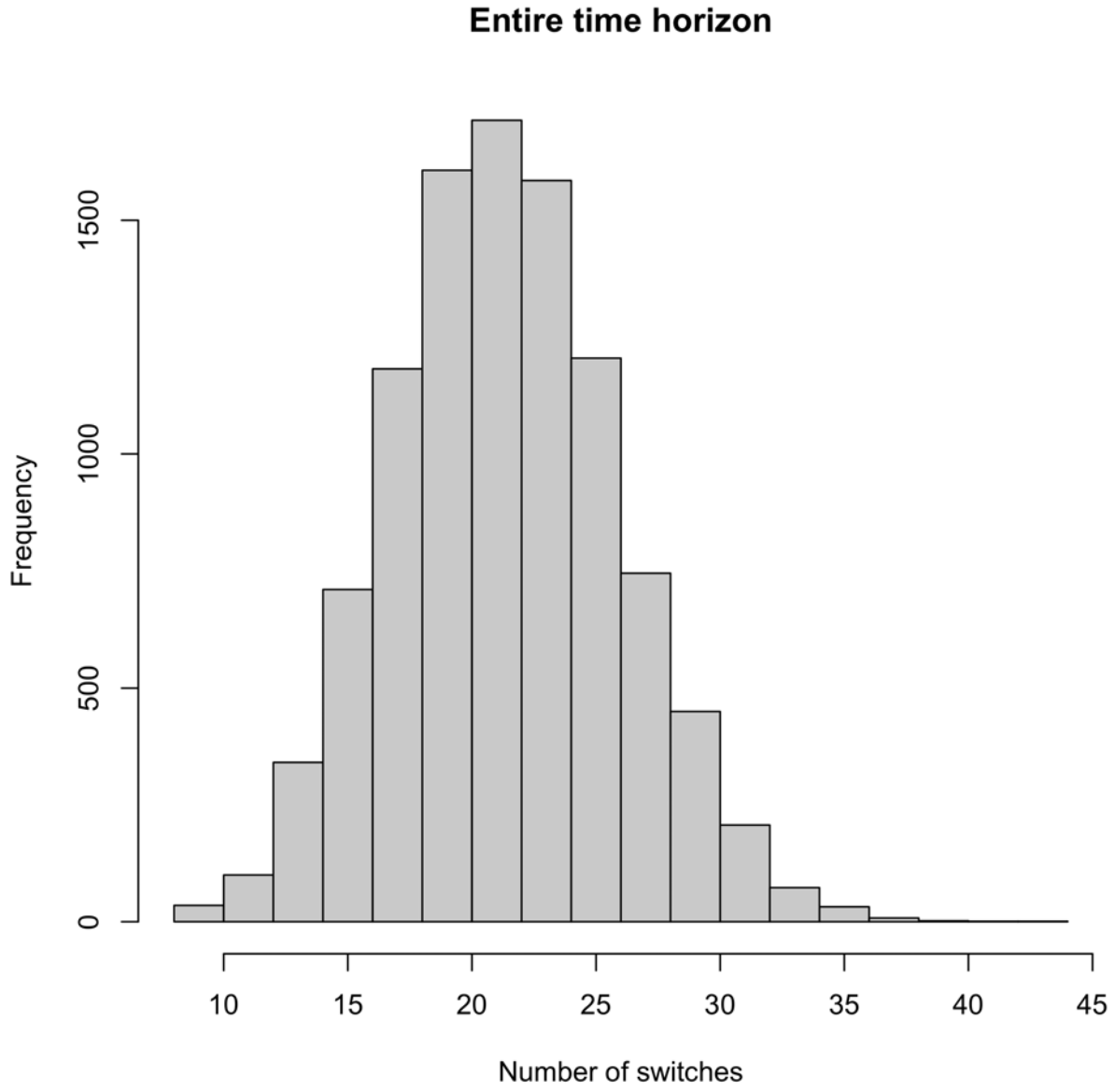


Figure 3.21: Histogram of the number of times the female harvest recommendation switched from 0 to 210,000 or vice versa, across all 10,000 simulated time paths, under the full post-workshop model (*femHarv*).

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Draft for Board Review

ATLANTIC STATES MARINE FISHERIES COMMISSION

REVIEW OF THE INTERSTATE FISHERY MANAGEMENT PLAN

HORSESHOE CRAB
(*Limulus polyphemus*)

2025 Fishing Year



Prepared by the Plan Review Team

October 2026

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft for Board Review

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I. Status of the Fishery Management Plan

Date of FMP Approval:	December 1998
Addenda:	Addendum I (April 2000) Addendum II (May 2001) Addendum III (May 2004) Addendum IV (June 2006) Addendum V (September 2008) Addendum VI (August 2010) Addendum VII (February 2012) Addendum VIII (November 2022) Addendum IX (May 2025)
Management Unit:	Entire coastwide distribution of the resource from the estuaries eastward to the inshore boundary of the EEZ
States with Declared Interest:	Massachusetts – Florida, Potomac River Fisheries Commission
Active Boards/Committees:	Horseshoe Crab Management Board, Advisory Panel, Technical Committee, and Plan Review Team; Delaware Bay Ecosystem Technical Committee; Adaptive Resource Management Subcommittee

Goals and Objectives

The Interstate Fishery Management Plan for Horseshoe Crabs (FMP) established the following goals and objectives.

2.0. Goals and Objectives

The goal of this Plan is to conserve and protect the horseshoe crab resource to maintain sustainable levels of spawning stock biomass to ensure its continued role in the ecology of the coastal ecosystem, while providing for continued use over time. Specifically, the goal includes management of horseshoe crab populations for continued use by:

1) *current and future generations of the fishing and non-fishing public (including the biomedical industry, scientific and educational research);*
2) *migrating shorebirds; and,*
3) *other dependent fish and wildlife, including federally listed (threatened) sea turtles.*

To achieve this goal, the following objectives must be met:

(a) prevent overfishing and establish a sustainable population;

(b) achieve compatible and equitable management measures among jurisdictions throughout the fishery management unit;

(c) establish the appropriate target mortality rates that prevent overfishing and maintain adequate spawning stocks to supply the needs of migratory shorebirds;
(d) coordinate and promote cooperative interstate research, monitoring, and law enforcement;
(e) identify and protect, to the extent practicable, critical habitats and environmental factors that limit long-term productivity of horseshoe crabs;
(f) adopt and promote standards of environmental quality necessary for the long-term maintenance and productivity of horseshoe crabs throughout their range; and,
(g) establish standards and procedures for implementing the Plan and criteria for determining compliance with Plan provisions.

Fishery Management Plan Summary

The framework for managing horseshoe crabs along the Atlantic coast was approved in October 1998 with the adoption of the Interstate Fishery Management Plan (FMP) for Horseshoe Crabs. The goal of this plan is to conserve and protect the horseshoe crab resource to maintain sustainable levels of spawning stock biomass to ensure its continued role in the ecology of coastal ecosystems while providing for continued use over time.

In 2000, the Horseshoe Crab Management Board approved Addendum I to the FMP. Addendum I established a state-by-state cap on horseshoe crab bait landings at 25 percent below the reference period landings (RPL's), and *de minimis* criteria for those states with a limited horseshoe crab fishery. Those states with more restrictive harvest levels (Maryland and New Jersey) were encouraged to maintain those restrictions to provide further protection to the Delaware Bay horseshoe crab population, recognizing its importance to migratory shorebirds. Addendum I also recommended that the National Marine Fisheries Service (NMFS) prohibit the harvest of horseshoe crabs in federal waters (3-200 miles offshore) within a 30 nautical mile radius of the mouth of Delaware Bay, as well as prohibit the transfer of horseshoe crabs in federal waters. A horseshoe crab reserve was established on March 7, 2001, by NMFS in the area recommended by ASMFC. This area is now known as the Carl N. Shuster Jr. Horseshoe Crab Reserve (Figure 1).

In 2001, the Horseshoe Crab Management Board approved Addendum II to the FMP. The purpose of Addendum II was to allow the voluntary transfer of harvest quotas between states to alleviate concerns over potential bait shortages on a biologically responsible basis. Voluntary quota transfers require Technical Committee review and Management Board approval.

In 2004, the Board approved Addendum III to the FMP. The addendum sought to further the conservation of horseshoe crab and migratory shorebird populations in and around the Delaware Bay. It reduced harvest quotas and implemented seasonal bait harvest closures in New Jersey, Delaware, and Maryland, and revised monitoring components for all jurisdictions.

Addendum IV was approved in 2006. It further limited bait harvest in New Jersey and Delaware to 100,000 crabs (male only) and required a delayed harvest in Maryland and Virginia.

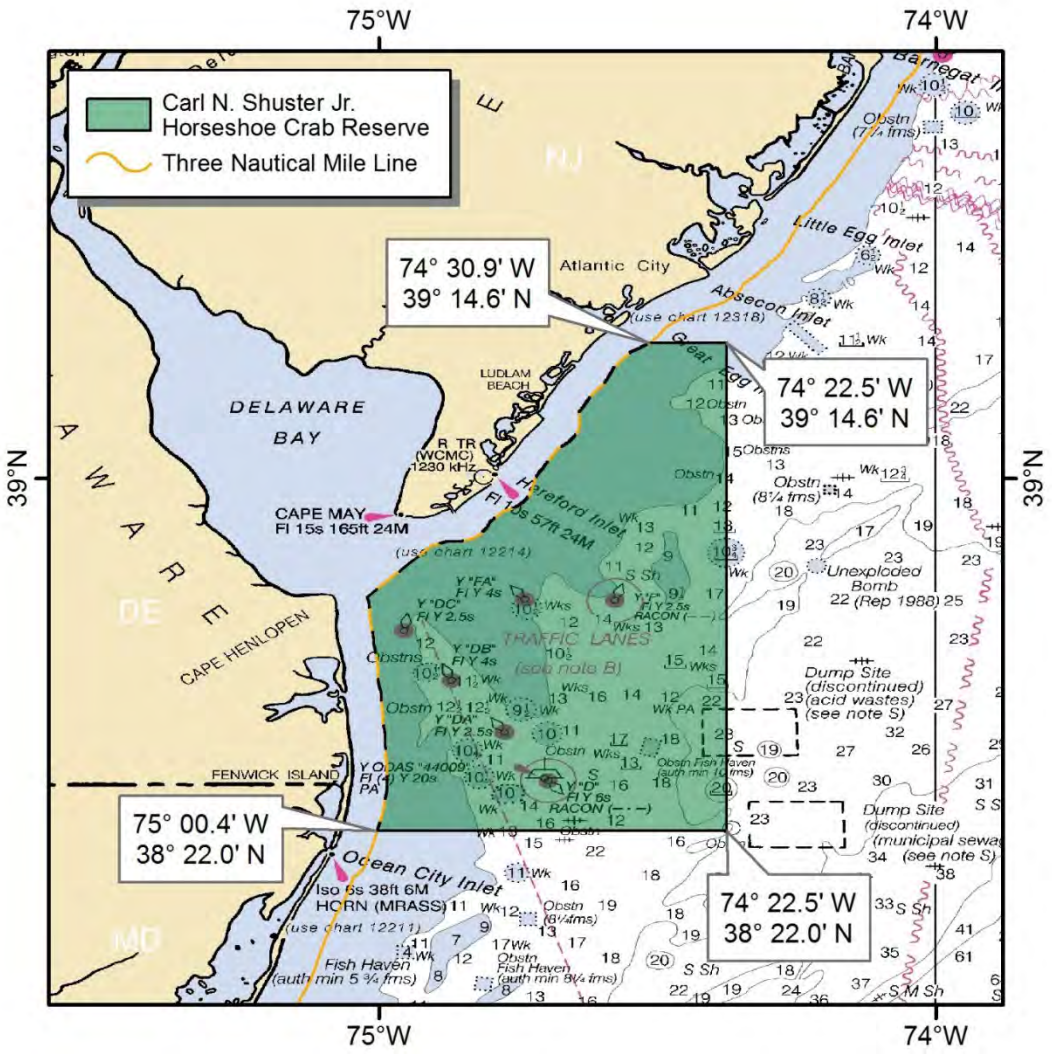


Figure 1. Carl N. Shuster Jr Horseshoe Crab Reserve.

Addendum V, adopted in 2008, extended the provisions of Addendum IV through October 31, 2010.

In early 2010, the Board initiated Draft Addendum VI to consider management options that would follow expiration of Addendum V. The Board voted in August 2010 to extend the Addendum V provisions, via Addendum VI, through April 30, 2013. The Board also chose to include language allowing them to replace Addendum VI with another Addendum during that time, in anticipation of implementing an Adaptive Resource Management (ARM) Framework.

The Board approved Addendum VII in February 2012. This addendum implemented an ARM framework for use during the 2013 fishing season and beyond. The framework considers the abundance levels of horseshoe crabs and shorebirds in determining the optimized bait harvest level for the Delaware Bay states of New Jersey, Delaware, Maryland, and Virginia (east of the COLREGS).

The ARM Framework underwent a revision process in 2021 to incorporate more available data and update the software platform. Several improvements were made to the ARM Framework during this revision. The ARM Revision improves the population models for horseshoe crabs and red knots by incorporating Delaware Bay region-specific data collected over the past few decades. Horseshoe crab population estimates from the Catch Multiple Survey Analysis (CMSA) model used in the 2019 Benchmark Stock Assessment were incorporated into the ARM Revision. Additionally, the ARM Revision includes more sources of horseshoe crab removals than the previous version, adding mortality in the biomedical industry and commercial discards from other fisheries. The maximum number of male and female horseshoe crabs the ARM Revision can recommend remains the same at 210,000 females and 500,000 males. However, harvest recommendations under the ARM Revision are now based on a continuous scale rather than the fixed harvest packages in the previous Framework. Also, the harvest of females is decoupled from the harvest of males so that each are determined separately. While additional data and model improvements are used in the ARM Revision, the conceptual model of horseshoe crab abundance influencing red knot survival and reproduction remains intact with the intent of ensuring the abundance of horseshoe crabs does not become a limiting factor in the population growth of red knots. The Board accepted the ARM Revision and Peer Review for management use in January 2022.

Addendum VIII was approved in November 2022. Addendum VIII adopts the changes to the ARM Framework as recommended in the peer-reviewed 2021 ARM Framework for use in setting annual specifications for horseshoe crabs of Delaware Bay-origin.

Addendum IX was approved in May 2025 and allows the Board to set multi-year specifications for up to three years until 2031 based on the ARM Framework. In interim years when the ARM is not used, the Board will manage maximum male harvest limits based on Delaware Bay region spawning survey data. Addendum IX also reestablishes a harvest closure for the Delaware Bay region states from January 1 through June 7, and clarifies the policy included in Addenda VII and VIII for applying Maryland and Virginia harvest caps.

II. Status of the Stock and Assessment Advice

A benchmark stock assessment was completed and approved for management use in 2019[1]. This assessment was the first to successfully apply a stock assessment model to a component of the horseshoe crab stock. A Catch Multiple Survey Analysis (CMSA) model, a stage-based model that tracks progression of crab abundances from pre-recruits to full recruits to the fishery, was applied to female crabs in the Delaware (DE) Bay region (New Jersey-Virginia). This model

[1] The 2019 benchmark stock assessment report is available at: http://www.asmfc.org/uploads/file/5cd5d6f1HSCAssessment_PeerReviewReport_May2019.pdf

estimated regional female crab abundance using relative abundance information from the Virginia Tech Benthic Trawl Survey, New Jersey Ocean Trawl Survey, and Delaware Adult Trawl Survey, and estimates of mortality including natural mortality, commercial bait harvest, commercial discard mortality, and mortality associated with biomedical use. While reference points were not approved to determine stock status, the CMSA population estimates were recommended as the best estimates for female horseshoe crab abundance in the DE Bay region.

Autoregressive Integrated Moving Average (ARIMA) models, similar to those used in previous assessments, were applied to all regions. ARIMA models were fit to fishery-independent survey indices trends of abundance in each of the regional horseshoe crab populations: Northeast (Massachusetts-Rhode Island), New York (Connecticut-New York), DE Bay, and Southeast (North Carolina-Florida). No definitions for overfishing or overfished status have been adopted by the Management Board. However, the assessment characterized the status of each regional and the coastwide population based on the percentage of surveys within a region (or coastwide) having a >50% probability of the terminal year being below the ARIMA reference point. The ARIMA reference point was the 1998 index for each survey. "Poor" status was defined as >66% of surveys meeting this criterion, "Good" status was defined as <33% of surveys, and "Neutral" status was defined as 34–65% of surveys.

An assessment update was completed in May 2024[2]. The updated CMSA model estimates were approximately 40 million mature male and 16 million mature female horseshoe crabs in the Delaware Bay region in 2022. The CMSA model results indicate that mature female horseshoe crabs have been steadily increasing in the region since the implementation of the initial ARM Framework in 2012. The ARIMA models used to determine stock status for the four regions and the coastwide horseshoe crab populations were also updated. The current stock status indicates that the Northeast region is in a neutral state, and the New York region continues to be in a poor state, with three out of four surveys being below 1998 reference points. Based on the ARIMA results, the Delaware Bay, Southeast, and coastwide populations are in good condition, an improvement since the 2019 benchmark.

III. Status of the Fishery

Bait Fishery

Historically, horseshoe crab bait fisheries have operated coastwide from Massachusetts to Florida, with most of the landings coming from the Mid-Atlantic states. The timing of harvest has varied from state to state, depending on seasonal horseshoe crab spawning migrations (to beaches in the spring, and to deeper waters in the winter). Many states regulate horseshoe crab fisheries with various season/area closures, including spring and lunar closures to protect

[2]The 2024 stock assessment update can be found here: https://asmfc.org/resources/stock-assessment/horseshoe-crab-stock-assessment-update-2024/

spawning horseshoe crabs. Some states, including New Jersey and South Carolina, have completely closed their commercial bait fisheries. New Jersey has prohibited commercial harvest of horseshoe crabs for bait in state waters since 2006. Connecticut prohibited the hand-harvest of horseshoe crabs in 2023, closing the commercial hand-harvest bait fishery in state waters. This greatly reduced harvest overall since much of the bait fishery was from hand-harvest; no harvest from trawls has been reported in the last two years.

Coastwide reported bait landings in 2025 totaled 488,887 crabs excluding confidential landings. This is 30% of the ASMFC coastwide quota of 1,609,030 crabs (Table 1, Figure 2) and represents an 11% decrease from 2024 landings of 550,909 crabs. Landings increased in Delaware and North Carolina but decreased in all other states with commercial harvest. Connecticut harvest decreased to zero in 2024 and 2025 following the ban on hand-harvest of horseshoe crabs in state waters implemented in October 2023.

Table 1. Annual commercial horseshoe crab bait landings by jurisdiction. "C" indicates confidential landings.

Jurisdiction	MA	RI	CT	NY	NJ*	DE*	MD*	PRFC	VA**	NC	SC	GA	FL	TOTAL
ASMFC Quota 2024	330,377	26,053	48,689	366,272	173,014	173,014	255,980	0	172,828	24,036	0	29,312	9,455	1,609,030
State Quota 2025	140,000	14,655	48,689	150,000	0	169,170	255,980	-	172,828	24,036	0	29,312	9,455	1,014,125
Landings by Year														
2014	130,316	13,841	20,634	134,370	0	168,044	148,269	0	145,266	24,557	0	0	2,046	787,342
2010	56,514	18,729	30,036	125,368	0	62,519	161,545	0	146,857	9,938	0	0	993	612,499
2011	89,382	12,502	20,538	147,035	0	107,583	167,053	0	121,650	27,127	0	0	0	692,870
2012	124,648	20,570	18,958	184,721	0	102,322	169,087	0	151,887	22,885	0	1,789	0	796,867
2013	148,717	18,058	21,503	169,739	0	163,582	240,688	0	156,761	26,569	0	5,745	0	951,362
2014	130,316	13,841	20,634	134,370	0	168,044	148,269	0	145,266	24,557	0	0	2,046	787,342
2015	117,611	7,867	19,632	145,324	0	151,262	27,494	0	102,235	24,839	0	0	264	596,528
2016	110,399	20,676	21,945	176,632	0	109,836	157,013	0	128,848	25,197	0	0	689	751,235
2017	134,707	3,415	19,944	195,717	0	201,132	237,146	0	160,643	25,161	0	0	1,394	979,259
2018	159,002	1,889	21,870	138,223	0	126,065	66,647	0	144,047	10,998	0	0	C	668,741
2019	172,664	C	17,588	167,181	0	170,713	118,471	0	146,687	13,463	0	0	0	806,767
2020	163,695	C	15,942	63,367	0	124,803	61,165	0	24,031	3,672	0	0	0	456,675
2021	156,013	1,706	17,492	97,860	0	172,927	181,044	0	112,497	2,145	0	0	C	741,684
2022	135,731	C	1,343	111,481	0	147,558	84,627	0	89,748	500	0	0	C	570,988
2023	139,746	2,314	3,297	130,658	0	168,208	186,466	0	107,166	934	0	0	C	738,789
2024	139,970	C	0	141,451	0	85,530	74,353	0	109,136	468	0	0	C	550,908
2025	137,261	C	0	76,077	0	122,526	56,517	0	96,506	C	0	C	C	488,887

*Male-only harvest

**Virginia harvest east of the COLREGS line is limited to 81,331 male-only crabs. Virginia harvest east of the COLREGS in 2025 was confidential.

Reported coastwide landings since 1998 consistently show more male than female horseshoe crabs harvested annually. Several states presently have sex-specific restrictions in place which limit or ban the harvest of females. The American eel pot fishery prefers female horseshoe crabs as bait, while the whelk (conch) pot fishery is less dependent on females. States with greater than 5% of coastal landings are required to report sex for at least a portion of their bait harvest; for 2025 these states include Massachusetts, New York, Delaware, Maryland, and Virginia. Excluding Massachusetts data[3], these states reported that 81% of bait landings were male, 15% were female, and 4% were unclassified in 2025.

The majority of reported commercial horseshoe crab bait landings in 2025 were taken using trawl, hand, and dredge gear types. Other gears that account for the remainder of the harvest include rakes, hoes, and tongs, fixed nets, and gill nets.

Biomedical Use

The horseshoe crab is an important resource for research and manufacture of materials used for human health. Several companies along the Atlantic Coast process horseshoe crab blood for use in manufacturing Limulus Amebocyte Lysate (LAL), and biomedical collections occurred in five states (MA, RI, NJ, MD, VA, SC). Addendum III requires states where horseshoe crabs are collected for biomedical purposes to collect and report total collection numbers, crabs rejected, crabs bled (by sex) and to characterize mortality.

The Plan Review Team (PRT) annually calculates total coastwide collections and estimates mortality associated with biomedical use. In 2025, 1,031,504 horseshoe crabs were collected coastwide solely for biomedical purposes[4] (Table 2). This represents a 3.8% decrease from 2024. Of the total biomedical collections in 2025, males accounted for 59%, and females comprised 41%. Some crabs were rejected prior to bleeding due to mortality, injuries, slow movement, and size (mortality observed while crabs were going through the biomedical process is included under 'Observed Mortality' in Table 2). Approximately 3.4% of crabs collected solely for biomedical purposes were observed and reported as dead from the time of collection up to the point of release.

[3] Massachusetts harvester data were not provided. The report will be updated with data provided at a later date.

[4] This does not include bait crabs borrowed for bleeding and then returned to the bait market; these are counted against state bait quotas. The dual use of horseshoe crabs harvested for bait is encouraged as a conservation tool. Facilities that bleed horseshoe crabs to manufacture LAL can utilize crabs from the bait market in what is often referred to as the "rent a crab" program. Permitted bait harvesters and/or dealers can "rent" crabs caught for the bait industry to the bleeding facility; these crabs are returned to the bait vendor after bleeding. These crabs are caught under bait permits, are counted against the bait quota of the state of origin, and must comply with that state's regulations for bait harvest. The dual use of crabs in this program can reduce overall harvest, may decrease overall mortality, can provide the LAL manufacturers with an additional source of raw material, and may offer harvesters and dealers opportunity within this secondary market.

During the 2019 benchmark stock assessment, a meta-analysis of literature estimates was performed to estimate post-bleeding mortality of horseshoe crabs. Although many of these studies did not implement biomedical best practices, these values are the only available estimates of mortality experienced after bleeding. Based on the literature review, post-bleeding mortality is estimated at 15%. Tagging data were used in the assessment to compare survivorship between crabs that were and were not bled. These results indicated some decrease in short-term survivorship, but greater long-term survivorship for bled crabs. These results are likely attributable to the culling process used by biomedical facilities to select healthy crabs for bleeding.

Post-bleeding mortality, calculated as 15% of the number of bled biomedical-only crabs (not from the bait market), for 2025 was estimated to be 141,971 horseshoe crabs. Total biomedical mortality (observed mortality plus post-bleeding mortality) for 2025 was estimated at 177,777 horseshoe crabs. The total estimated mortality from biomedical collections represents approximately 26.6% of the 2025 total directed use mortality (666,664 crabs), which includes both total biomedical mortality and removals for bait. While the biomedical proportion of the total directed use mortality increased slightly, the overall directed-use mortality decreased by 9% from 2024 to 2025 (Figure 3).

Table 2. Numbers of horseshoe crabs collected, bled, and estimated mortality for the biomedical industry. Numbers shown are for crabs collected solely for biomedical use. Mortality of bled crabs that later enter the bait industry is included in bait harvest.

Year	Crabs Collected	Crabs Bled	Post-Bleeding Mortality	Observed Mortality	Total Mortality
2010	480,914	412,781	61,917	6,829	68,746
2011	545,164	486,850	73,028	24,139	97,166
2012	541,956	497,956	74,693	7,370	82,063
2013	464,657	440,402	66,060	5,447	71,507
2014	467,897	432,340	64,851	5,658	70,509
2015	494,123	464,506	69,676	5,362	75,038
2016	344,495	318,523	47,778	1,004	48,782
2017	483,245	444,115	66,617	6,056	72,674
2018	510,407	479,142	71,871	5,588	77,459
2019	637,029	589,361	88,404	12,789	101,193
2020	697,025	649,546	97,432	8,907	106,339
2021	718,809	667,951	100,193	11,911	112,104
2022	911,826	828,181	124,227	21,693	145,920
2023	1,113,644	1,038,673	155,801	22,431	178,232
2024	1,073,329	1,008,943	151,341	33,352	184,693
2025	1,031,504	946,473	141,971	35,806	177,777

**Some biomedical collections were reduced in 2016 due to temporary changes in production.*

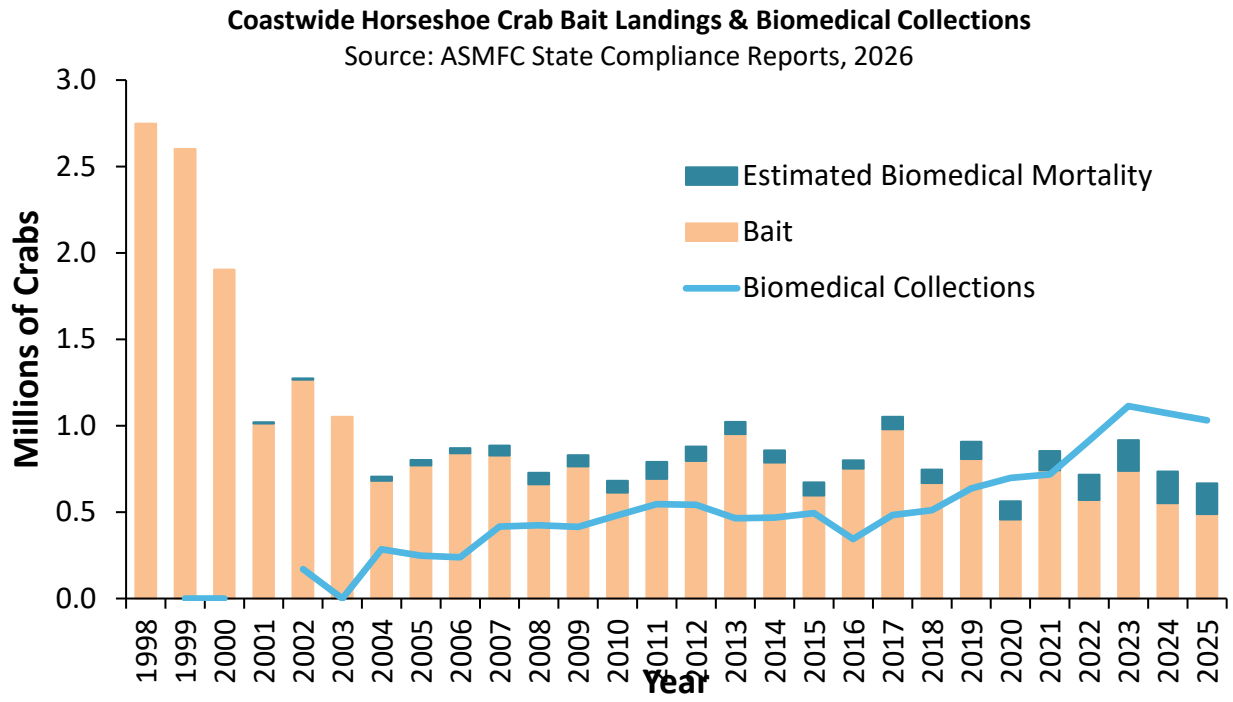


Figure 2. Annual horseshoe crab bait harvest, biomedical collections, and biomedical mortality.
*Biomedical collections are annually reported to the Commission and include all horseshoe crabs brought to bleeding facilities except those that were harvested as bait, "rented" by biomedical facilities and counted against state bait quotas.
*Crabs collected solely for biomedical crabs are returned to the water after bleeding; a 15% mortality rate is assumed for all bled crabs that are released. This number plus observed mortality reported annually by bleeding facilities via state compliance reports equals the 'Estimated Biomedical Mortality.'

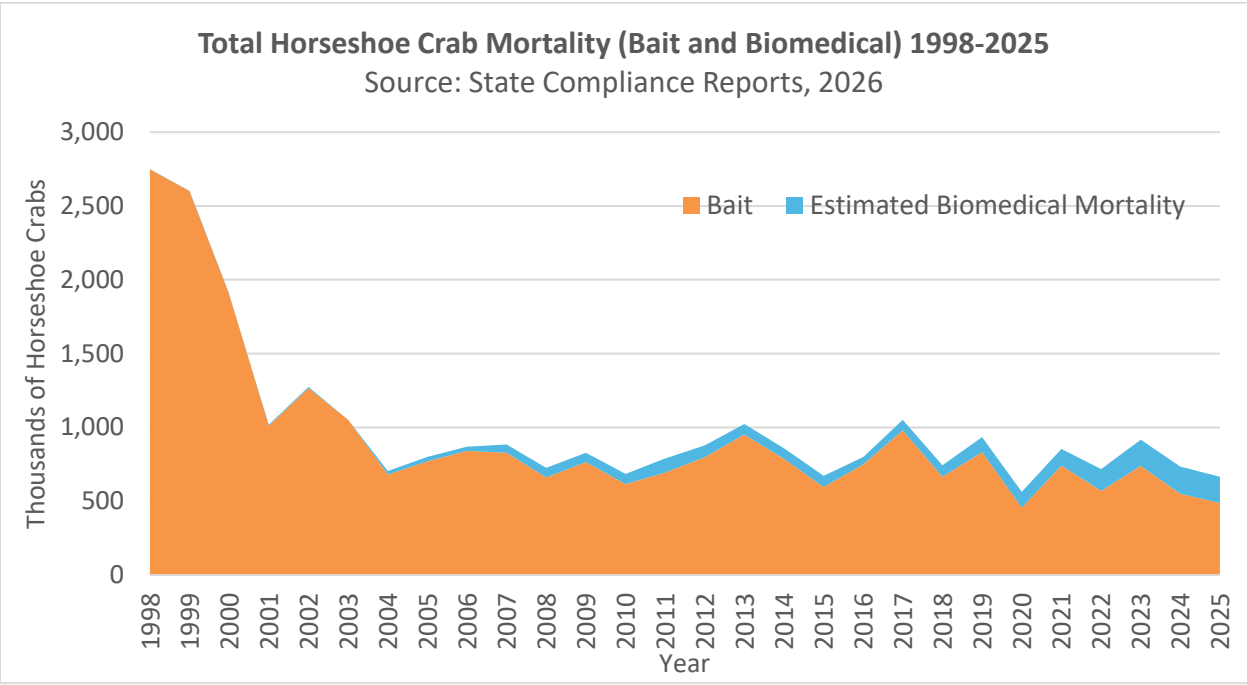


Figure 3. Total Annual Horseshoe Crab Mortality from Bait and Estimated Biomedical Mortality.

In 2023, a work group appointed by the Board reviewed and updated the *Best Management Practices for Handling Horseshoe Crabs for Biomedical Purposes*[5]. The work group included technical committee and advisory panel members with expertise in horseshoe crab biology, ecology, and biomedical processing. The purpose of the BMPs is to recommend broadly applicable industry standards that are expected to minimize mortality and injury of horseshoe crabs associated with the biomedical process.

IV. Status of Research and Monitoring

The Horseshoe Crab FMP set forth an ambitious research and monitoring strategy in 1999 and again in 2004 to inform future management decisions. Despite limited time and funding there are many accomplishments since 1999. These accomplishments were largely made possible by forming partnerships between state, federal and private organizations, and the support of hundreds of public volunteers.

Addendum III Monitoring Program

Addendum III requires affected states to carry out three monitoring components:

1. All states who do not qualify for *de minimis* status report monthly harvest numbers and subsample a portion of the catch for sex and harvest method. In addition, those states with annual landings above 5% of the coastwide harvest report all landings by sex and harvest method. Although states with annual landings less than 5% of annual coastwide harvest are not required to report landings by sex, the PRT recommends all states require sex-specific reporting for horseshoe crab harvest.
2. States with biomedical collections are required to monitor and report collection numbers and mortality associated with the transportation and bleeding of the crabs.
3. States must identify spawning and nursery habitat along their coasts. All states have completed this requirement, and a few continue active monitoring programs.

Virginia Tech Research Projects

The Virginia Tech Horseshoe Crab Trawl Survey (VT Survey) has been sampling horseshoe crab to estimate relative abundance since 2002, except for the years 2013-2015, due to a lack of funding. The survey was conducted in 2025 and is in progress for 2026. Funding sources beyond 2026 continue to be explored. The lower Delaware Bay area of the survey was not sampled in 2022-2024 as increased operational costs resulted in limitations to time on the water, but sampling resumed in 2025.

For the Delaware Bay Area (DBA), the 2025 survey results indicate that mean stratified catch-per-tow values for immature females and males increased significantly in 2025 from 2024 but

[5] Best Management Practices for Handling Horseshoe Crabs for Biomedical Purposes can be found here: https://asmfc.org/resources/management-special-report/best-management-practices-for-handling-horseshoe-crabs-for-biomedical-purposes/

remained consistent with patterns observed since 2016. Catch-per-tow of newly mature females continued to show a substantial rebound from pre-2024 levels following a revision in the sampling protocol to probe for eggs in ambiguous females, as recommended by the ARM Subcommittee and DBETC in early August 2024. Newly mature males showed a decrease in catch-per-tow. Catch-per-tow of mature females and males declined from their 2024 values, becoming more similar to abundance levels seen in earlier years. There continues to be a significant correlation between stratified mean catches of mature males and mature females, and immature males and females, but not for newly mature individuals.

2025 is the first year the Lower Delaware Bay was sampled since 2021, and the data suggests an increase in catch-per-tow across all demographic groups between these two years. Mean stratified catch-per-tow values for immature females and immature males more than doubled from 2021. Mature females more than doubled in mean catch-per-tow between 2021 and 2025, while mature males saw a substantial increase. Catch-per-tow of newly mature males and females also increased compared to 2021.

The indices from this survey, along with the New Jersey Ocean Trawl and Delaware Fish and Wildlife Adult Trawl Survey indices, are used to estimate horseshoe crab abundance in the ARM Framework to produce optimal harvest limits for the upcoming year.

Spawning Surveys

The Delaware Bay spawning survey was completed for the 26th consecutive year in 2025. Twelve beaches in Delaware and ten beaches in New Jersey were sampled. Peak spawning occurred during the first lunar period (May 10-14) in Delaware and during the third lunar period (June 9-13) in New Jersey. Bay-wide male and female spawning activity has exhibited an increasing trend across the 26 year time-series, and the increasing trend is statistically significant since 2010 for males.

Tagging Studies

The USFWS continues to maintain a toll-free telephone number and a website for reporting horseshoe crab tag returns and assists interested parties in obtaining tags. Tagging work continues to be conducted by biomedical companies, research organizations, and other parties involved in outreach and spawning surveys. Beginning with the 2013 tagging season, additional efforts were implemented to ensure that current tagging programs are providing data that benefits the management of the coastwide horseshoe crab population. All existing and new tagging efforts are required to submit an annual application to be considered for the USFWS tagging program and all participants must submit an annual report along with their tagging and resighting data to indicate how their tagging program addresses at least one of the following objectives: determine horseshoe crab sub-population structure, estimate horseshoe crab movement and migration rates, and/or estimate survival and mortality of horseshoe crabs. The PRT recommends all tagging programs approved by the states coordinate with the USFWS tagging program, in order to ensure a consistent coastwide program to support management.

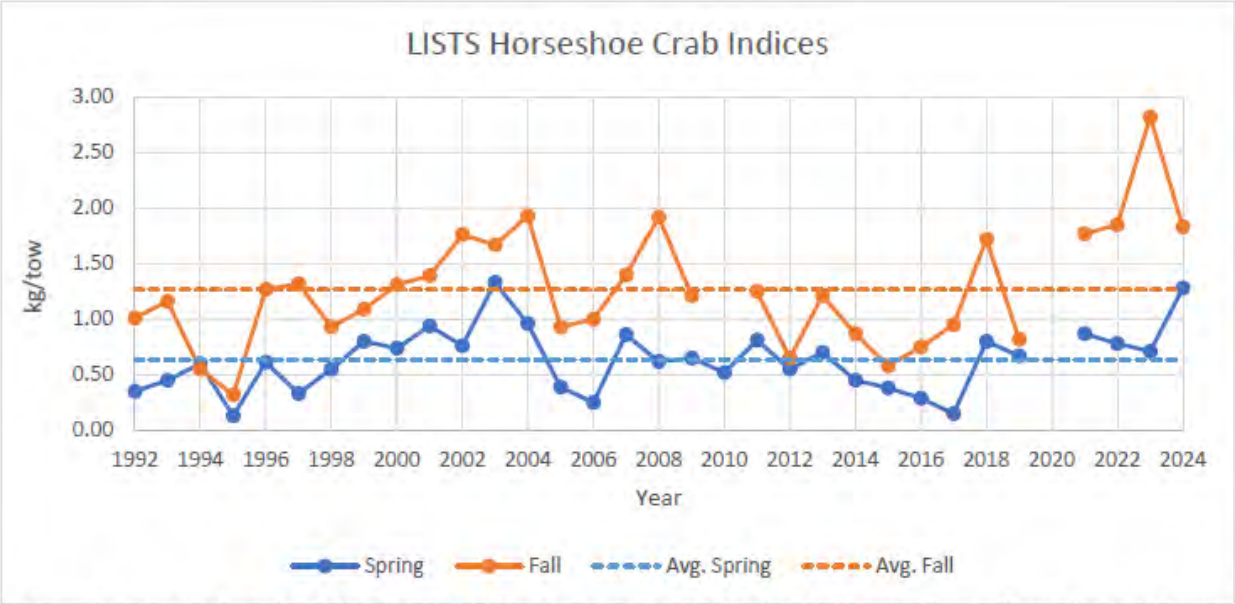
From 1999 through 2025, 472,560 horseshoe crabs have been tagged and released through the USFWS tagging program along the Atlantic coast, and 76,838 unique crabs have been recaptured. Horseshoe crabs have been tagged and released from every state on the Atlantic Coast from Florida to New Hampshire. In the early years of the program, tagging was centered around Delaware Bay; however, tagging has expanded and increased in Long Island Sound and the Southeast. Tagging information from this database is used in the Stock Assessment to define stock structure, estimate total mortality, and characterize impacts of biomedical use on horseshoe crab mortality.

New York Region Monitoring

Following the 2019 Benchmark Stock Assessment, which characterized the status of the horseshoe crab population in the New York region as "Poor", the Board directed the PRT to monitor fishery-independent surveys in this area to track progress of state management actions toward improving this regional population. During the assessment, five surveys were included in the ARIMA model to characterize this population. One of these, the Northeast Area Monitoring and Assessment Program (NEAMAP), includes sample areas outside of the New York region, making it too data-intensive to specify the regional index on an annual basis. The most recent information from the state-conducted surveys used in the assessment is summarized below, but can be viewed in greater detail in the Connecticut and New York state compliance reports. The Western Long Island (WLI), Little Neck Bay and Manhasset Bay seine surveys were combined in the assessment to form a single index, but are shown below separately. None of these beach seine surveys were completed in 2020 due to the COVID-19 pandemic but resumed in 2021. Figures 5-8 show the annual index for each survey over the time series until 2025.

Connecticut

- Long Island Sound Trawl (LISTS) (Fall) – 2024 index – The 2022 and 2023 surveys were limited in April and June due to staff limitations and in June because of mechanical issues with the research vessel. In 2025, LISTS did not operate due to boat operation issues that persisted throughout the year. Both the spring and fall 2024 indices were above the timeseries average of 0.63 kg/tow and 1.28 kg/tow, respectively. Following several years of decline, the spring index showed a small increase in 2024 (1.28 kg/tow). In contrast, the fall index declined from its time-series peak of 2.82 kg/tow to 1.83 kg/tow; although it remained above the fall time-series average.



No sampling was conducted in 2020 due to COVID-19. For more detail on the LISTS procedures and sampling visit Long Island Sound Trawl Survey (ct.gov) for the most recent report.

Figure 4. LISTS Horseshoe Crab Indices, 1992-2024. LISTS did not operate in 2025 due to boat operation issues.

New York

- Peconic Trawl – 2025 index = 0.31 (delta distribution average catch per unit effort [CPUE]), increase from 2024.
- WLI Jamaica Bay Seine (all horseshoe crabs) – 2025 index = 0.64 (geometric mean), increase from 2024.
- WLI Little Neck Bay Seine (all) – 2025 index = 0.66 (geometric mean), decrease from 2024.
- WLI Manhasset Bay Seine (all) – 2025 index = 1.93 (geometric mean), increase from 2024.

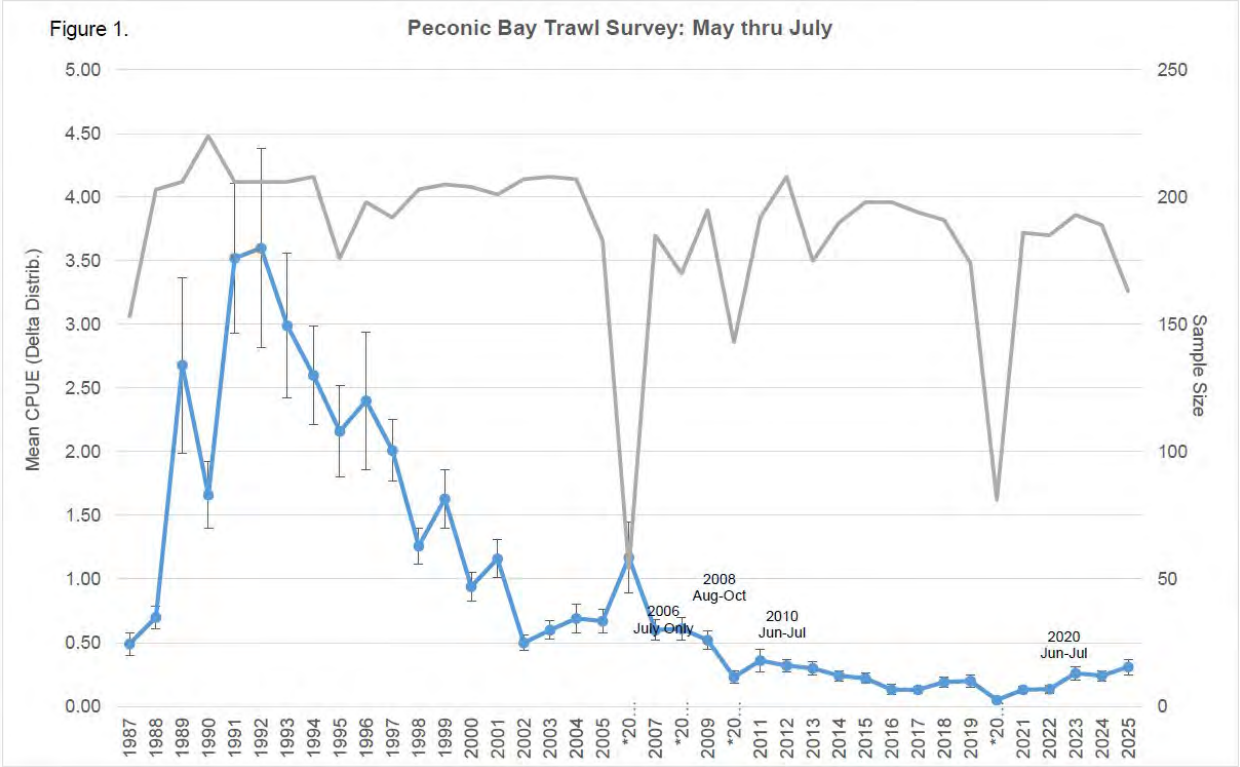


Figure 5. Peconic Bay Trawl Survey: May through July, 1987-2025. (Gray line=sample size, blue line=mean CPUE).

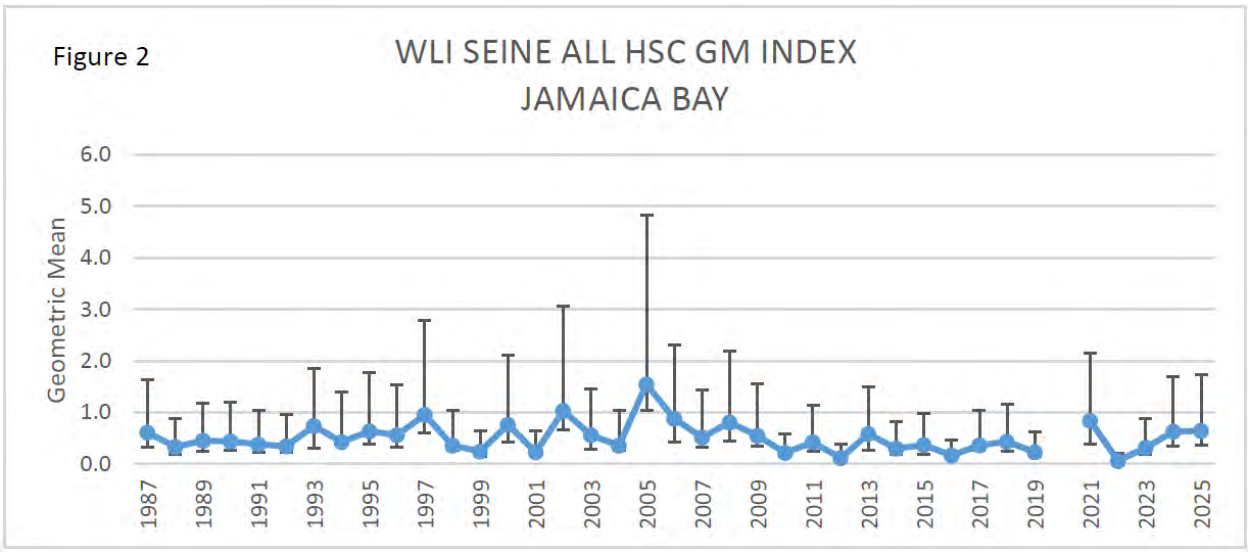


Figure 6. NYSDEC WLI Jamaica Bay Beach Seine Survey All Horseshoe Crab GM Index, 1987-2025. *Due to the COVID-19 pandemic, in 2020 sampling did not begin until July.

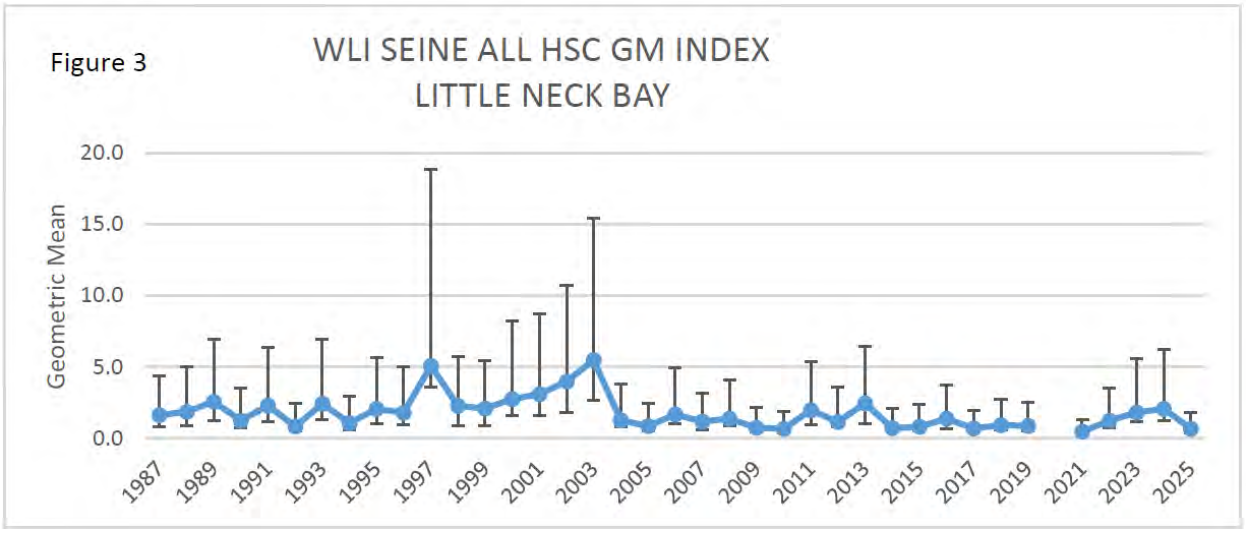


Figure 7. Little Neck Bay Seine Survey All Horseshoe Crab GM Index, 1987-2025. *Due to the COVID-19 pandemic, in 2020 sampling did not begin until July.

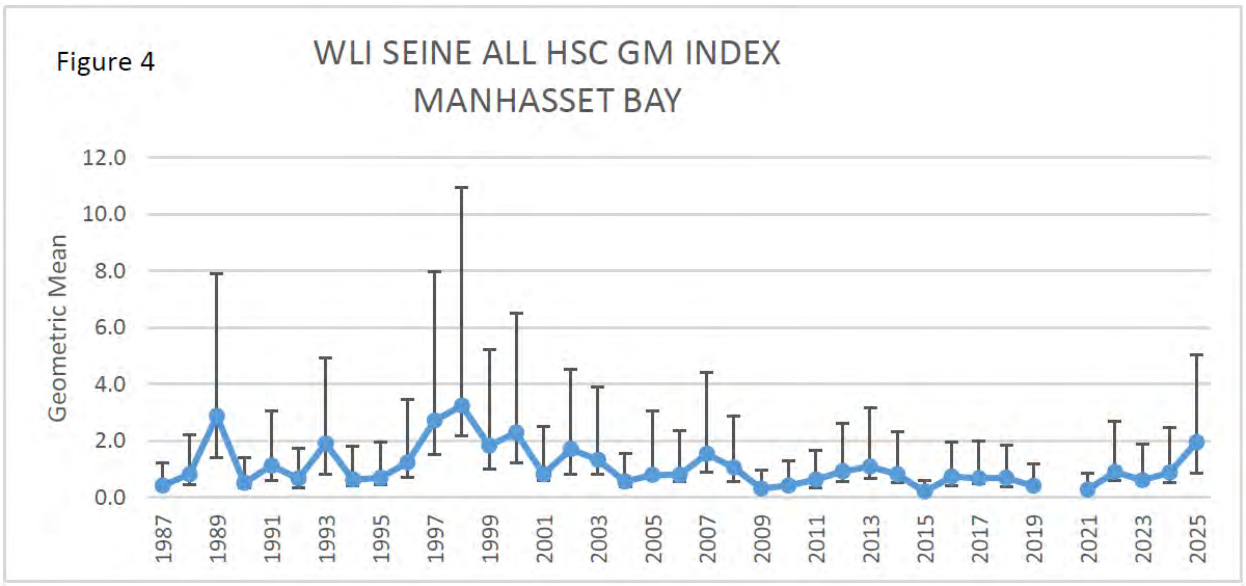


Figure 8. Manhasset Bay Seine Survey All Horseshoe Crab GM Index, 1987-2024. *Due to the COVID-19 pandemic, in 2020 sampling did not begin until July.

V. Status of Management Measures and Issues

ASMFC

Initial state harvest quotas were established through Addendum I. Addendum III outlined the monitoring requirements and recommendations for the states. Addendum IV set harvest closures and quotas, and other restrictions for New Jersey, Delaware, Maryland, and Virginia, which were continued in Addenda V and VI.

In February 2012 the Board approved Addendum VII to implement the ARM Framework; it was implemented in 2013. The ARM Framework was updated in 2021, and the Board adopted use of the revised ARM Framework through Addendum VIII in 2022. Addendum VIII maintains the Addendum VII allocation mechanism to divide the Delaware Bay optimized harvest output from the ARM Framework among the four Delaware Bay states (New Jersey, Delaware, Maryland, and Virginia east of the COLREGS line).

State-specific charts outlining compliance and monitoring measures are included in Section VII. Massachusetts did not report all required data to ASMFC by the required deadline. The PRT finds that all other jurisdictions are in compliance with the FMP and subsequent Addenda in 2025.

Changes to State Regulations

- In New York, a bill was signed by the State Governor on February 13, 2026, to enact changes providing for a phase-out of the take of horseshoe crabs, allowing time for industry to transition. This phase-out will begin in 2026, with the quota reduced to 75% of the current voluntary quota level in 2026, 50% in 2027, and 25% in 2028, followed by a full moratorium which goes into effect on January 1, 2029.

Alternative Baits

Trials testing effectiveness of alternative baits to horseshoe crab for the American eel and whelk fisheries have previously been conducted. Additionally, a survey of bait usage in the eel and whelk fisheries was conducted in 2017. This survey is available at: https://asmfc.org/resources/management-technical-committee/horseshoe-crab-technical-committee-report-on-bait-use-surveys-of-the-american-eel-and-channeled-whelk-fisheries-october-2017/.

Shorebirds

The USFWS received petitions in 2004 and 2005 to emergency list the red knot under the Endangered Species Act. In fall 2005, it was determined that emergency listing was not warranted at the time. As part of a court settlement, the USFWS agreed to initiate proposed listings of over 200 species, including the red knot. In fall 2013, the USFWS released a proposal for listing the red knot as threatened. In January 2015 the USFWS designated the red knot as threatened under the Endangered Species Act.

In 2022 the USFWS conducted an analysis of the changes to horseshoe crab management that would occur under the 2021 ARM Revision to determine the likelihood of impacts to the red knot. The finding from analysis is that there is a < 1% chance of a red knot population decline due to the implementation of potential female harvest under the revised ARM. Therefore, the Service concluded that take, defined under the Endangered Species Act as killing or injuring, of red knots is not likely.

The red knot has been listed as an endangered species in the State of New Jersey since 2012.

VI. PRT Recommendations and Research Needs

State Reporting of Biomedical Data

States with biomedical collections are required to report data on the number of crabs collected, transported to facilities, bled, and observed mortalities. Some companies have operations and/or collect horseshoe crabs from multiple states. To improve the clarity of biomedical data, the PRT recommends that state compliance reports identify the biomedical companies collecting crabs in their state waters, as well as those operating LAL manufacturing facilities in their state, and report biomedical numbers by company.

De Minimis

States may apply for *de minimis* status if, for the last two years, their combined average horseshoe crab bait landings (by numbers) constitute less than one percent of coastwide horseshoe crab bait landings for the same two-year period. States may petition the Board at any time for *de minimis* status, if their fishery falls below the threshold level. Once *de minimis* status is granted, designated States must submit annual reports to the Board justifying the continuance of *de minimis* status.

States that qualify for *de minimis* status are not required to implement any horseshoe crab harvest restriction measures, but are required to implement components A, B, E, and F of the monitoring program (Section 3.5 of the FMP; further modified by Addendum III). Since *de minimis* states are exempt from a harvest cap, there is potential for horseshoe crab landings to shift to *de minimis* states and become substantial, before adequate action can be taken. To control shifts in horseshoe crab landings, *de minimis* states are encouraged to implement one of the following management measures:

1. Close their respective horseshoe crab bait fishery when landings exceed the *de minimis* threshold;
2. Establish a state horseshoe crab landing permit, making it only available to individuals with a history of landing horseshoe crabs in that state; or
3. Establish a maximum daily harvest limit of up to 25 horseshoe crabs per person per day. States which implement this measure can be relieved of mandatory monthly reporting, but must report all horseshoe crab harvests on an annual basis.

The following states have been removed from the Management Board since its formation: Pennsylvania (2007), Maine (2011), and New Hampshire (2014). South Carolina, Georgia, and Florida are requesting continued *de minimis* status for the 2025 fishing season based on the 2023-2024 season landings, and meet the FMP requirements for being granted this status (Table 1). The PRT recommends granting these jurisdictions *de minimis* status.

Biomedical Threshold

The 1998 FMP established a biomedical mortality threshold of 57,500 crabs that, if exceeded, requires the Board to consider management action. This threshold has been exceeded in all but

one year since 2008. Results of the 2019 Benchmark Stock Assessment indicate that levels of biomedical mortality prior to 2017 (the terminal year of data used in the assessment) did not have a significant effect on horseshoe crab population estimates or fishing mortality in the Delaware Bay region.

In 2020 the Board tasked the PDT to review the threshold for biomedical use to develop biologically-based options for the threshold and to develop options for action when the threshold is exceeded. It also tasked the PDT to review the best management practices (BMPs) for handling biomedical catch and suggest options for updating and implementing BMPs. The PDT concluded that given the lack of coastwide population estimates for horseshoe crabs, it is not possible to develop a biologically-based threshold for biomedical mortality. Thus, the PDT did not recommend a change to the threshold. Based on this information the Board determined no action is warranted. A Board-appointed work group was formed in 2023, which reviewed and updated the best management practices for biomedical handling to further reduce stress, injury, and mortality to horseshoe crabs collected for biomedical purposes.

Funding for Research and Monitoring Activities

The PRT strongly recommends the funding and continuation of the VT benthic trawl survey. Sampling in recent years has had to be reduced due to increased costs. This effort provides a statistically reliable estimate of horseshoe crab relative abundance that is essential to continued ARM implementation and use of the CMSA stock assessment model.

Discard Mortality Estimation

Results of the 2019 Benchmark Stock Assessment indicate that discard mortality may be significant, of similar or greater magnitude than bait harvest. The Review Panel's report indicated that these estimates could be further refined to reduce their uncertainty and more precisely characterize this mortality source. The PRT recommends the Board take steps to increase access to and use of data from the Northeast Fisheries Observer Program (NEFOP), allowing for improved monitoring and estimation of discard mortality.

Improvement of the New York Regional Population

Results of the 2019 Benchmark Stock Assessment and 2024 update indicate a "Poor" status for the New York regional population, due to negative trends in regional abundance indices. New York and Connecticut have indicated that they will take actions within their states to improve this population. The PRT and Board have recommended such actions so that this population's status may improve.

Effective October 1, 2023, Connecticut prohibited all hand-harvest of horseshoe crabs and their eggs within the state. New York implemented two additional lunar closures for May and June, resulting in a total of four 5-day lunar closures around the full and new moons in 2025. On February 10, 2025, a bill was introduced in New York State legislation, which stated that "no person shall take horseshoe crabs, including for commercial and biomedical purposes." This bill was signed with amendments by Governor Hochul on February 13, 2026. The Governor reached

an agreement with the Legislature to enact changes providing for a phase-out of the take of horseshoe crabs, allowing time for industry to transition. This phase-out will begin in 2026, with the quota reduced to 75% of the current voluntary quota level in 2026, 50% in 2027, and 25% in 2028, followed by a full moratorium which goes into effect on January 1, 2029.

The PRT will continue to annually report regional indices of abundance so that progress of management actions may be tracked through the annual FMP Reviews.

VII. State Compliance and Monitoring Measures

MASSACHUSETTS		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota (Voluntary State Quota)	330,377 (140,000)	330,377 (140,000)
Landings	139,746	--
Other Restrictions	Bait: 300 crab daily limit year round; limited entry; Biomedical: 1,000 crab daily limit and 200,000 annual quota; Conch pot and eel fishermen: no possession limit Mobile gear: 75 crab trip limit, exempted from "no-fishing days"; All: April 15-June 7 spawning closure; 7" PW minimum size; Pleasant Bay Closed Area	Bait: 300 crab daily limit year round; limited entry; Biomedical: 1,000 crab daily limit and 200,000 annual quota; Conch pot and eel fishermen: no possession limit Mobile gear: 75 crab trip limit, exempted from "no-fishing days"; All: April 15-June 7 spawning closure; 7" PW minimum size; Pleasant Bay Closed Area
Landings	137,261	-
Monitoring Component A_1		
Mandatory monthly reporting	Yes, plus weekly dealer reporting through SAFIS	Yes, plus weekly dealer reporting through SAFIS
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	Yes – w/NPS and USFWS; Pleasant Bay, Monomy NWR, Waquoit Bay	Yes – w/NPS and USFWS; Pleasant Bay, Monomy NWR, Waquoit Bay

RHODE ISLAND		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota (Voluntary State Quota)	26,053 (14,655)	26,053 (14,655)
Other Restrictions	- Daily possession limit: 60 crabs per permit - Bait Fishery Closure: May 1-May 31 - Biomedical Fishery Closure: 48 hours prior to and 48 hours following new and full moons during May. - Biomedical quota and best management practices	- Daily possession limit: 60 crabs per permit - Bait Fishery Closure: May 1-May 31 - Biomedical Fishery Closure: 48 hours prior to and 48 hours following new and full moons during May - Biomedical quota and best management practices
Landings	Confidential	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes, weekly call in and monthly on paper	Yes, weekly call in and monthly on paper
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes, since 2000	Yes
Monitoring Component B_4 Tagging program	No	No

CONNECTICUT		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota	48,689	48,689
Other Restrictions	- Hand-harvest of horseshoe crabs or eggs in state waters prohibited, effective Oct. 1, 2023 - Daily possession limit of 150 crabs	- Hand-harvest of horseshoe crabs or eggs in state waters prohibited - Daily possession limit of 150 crabs
Landings	0	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	No – exempt under Addendum III because landings are < 5% of coastwide total	No – exempt under Addendum III because landings are < 5% of coastwide total
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes, since 1999 (methods differ from DE Bay survey)	Yes
Monitoring Component B_4 Tagging program	Yes, in collaboration with local universities (Sacred Heart University since 2015)	Yes

NEW YORK		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota (Voluntary State Quota)	366,272 (150,000)	366,272 (150,000)
Other Restrictions	Ability to close areas to harvest; seasonal quotas and daily harvest limits. Four 5-day lunar closures around the full and new moons in May and June. Daily trip limits.	Ability to close areas to harvest; seasonal quotas and daily harvest limits. Four 5-day lunar closures around the full and new moons in May and June. Daily trip limits. Phase-out of bait and biomedical harvest with quota reduced by 75% per year.
Landings	76,077	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	Yes	Yes

NEW JERSEY		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de miminis*	Does not request *de miminis*
Bait Harvest Restrictions and Landings		
ASMFC Quota (Voluntary State Quota)	164,364 (male only) (0)	173,014 (male only) (0)
Other Restrictions	Bait harvest moratorium	Bait harvest moratorium
Landings	0	--
Monitoring Component A_1		
Mandatory monthly reporting	Not Applicable	Not Applicable
Characterize commercial bait fishery	Not Applicable	Not Applicable
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	No	No
Monitoring Component B_5 Egg abundance survey	Yes, no longer mandatory	Yes
Monitoring Component B_6 Shorebird monitoring program	Yes	Yes

DELAWARE		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota	173,014 (male only)	173,014 (male only)
Other Restrictions	Closed season (Jan 1 – June 7) Daily collection limit	Closed season (Jan 1 – June 7) Daily collection limit
Landings	122,526 (male only)	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes (daily call-in reports & monthly logbooks)	Yes
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	No state program but has assisted in the past with various Delaware Bay horseshoe crab tagging initiatives	No
Monitoring Component B_6 Shorebird monitoring program	Yes	Yes

MARYLAND		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota	255,980 (male only)	255,980 (male only)
Other Restrictions	Season closure until May 1, catch limits, no harvest Saturday and Sunday	Season closure until May 1, catch limits, no harvest Saturday and Sunday
Landings	56,517 (male only)	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes (weekly reports for permit holders; monthly for non-permit holders)	Yes (weekly reports for permit holders; monthly for non-permit holders)
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	Yes	Yes

POTOMAC RIVER FISHERIES COMMISSION		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Ability to close fishery if *de minimis* threshold is reached	No horseshoe crab fishery	No horseshoe crab fishery
Daily possession limit <25 for *de minimis* state		
HSC landing permit		
Bait Harvest Restrictions and Landings		
ASMFC Quota	0	0
Other Restrictions	None	None
Landings	0	0
Monitoring Component A_1		
Mandatory monthly reporting	Yes - weekly	Yes - weekly
Characterize commercial bait fishery	Not Applicable	Not Applicable
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Not Applicable	Not Applicable
Monitoring Component B_3 Implement spawning survey	Not Applicable	Not Applicable
Monitoring Component B_4 Tagging program	Not Applicable	Not Applicable

VIRGINIA		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota (Voluntary State Quota)	172,828 (81,331 male-only east of COLREGS line)	172,828 (81,331 male-only east of COLREGS line)
Other Restrictions	Closed season (January 1 – June 7) for federal waters. Harvest of horseshoe crabs east of the COLREGS line limited to trawl gear and dredge gear.	Closed season (January 1 – June 7) for federal waters. Harvest of horseshoe crabs east of the COLREGS line limited to trawl gear and dredge gear.
Landings	96,506	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Not Applicable	Not Applicable
Monitoring Component B_3 Implement spawning survey	No	No
Monitoring Component B_4 Tagging program	No	No

NORTH CAROLINA		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	Did not request *de minimis*	Did not request *de minimis*
Bait Harvest Restrictions and Landings		
ASMFC Quota	24,036	24,036
Other Restrictions	Fishery closure May 1-July 19. Trip limit of 50 crabs; Proclamation authority to adjust trip limits, seasons, etc.	Trip limit of 50 crabs; Proclamation authority to adjust trip limits, seasons, etc.
Landings	Confidential	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	No	No
Monitoring Component B_4 Tagging program	No	No

SOUTH CAROLINA		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	*De minimis* status granted for 2025.	*De minimis* requested for 2026 and meets criteria.
Ability to close fishery if *de minimis* threshold is reached	No horseshoe crab bait fishery	No horseshoe crab bait fishery
Daily possession limit <25 for *de minimis* state		
HSC landing permit		
Bait Harvest Restrictions and Landings		
ASMFC Quota	0	0
Other Restrictions	None	None
Landings	0	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes (Biomedical)	Yes (Biomedical)
Characterize commercial bait fishery	Not Applicable	Not Applicable
Monitoring Component A_2		
Biomedical reporting	Yes	Yes
Required information for biomedical use of crabs	Yes	Yes
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	Yes	Yes

GEORGIA		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	*De minimis* status granted for 2025.	*De minimis* requested for 2026 and meets criteria.
Ability to close fishery if *de minimis* threshold is reached	Yes	Yes
Daily possession limit <25 for *de minimis* state	25/person; 75/vessel with 3 licensees	25/person; 75/vessel with 3 licensees
HSC landing permit	Must have commercial shrimp, crab, or whelk license; LOA permit required	Must have commercial shrimp, crab, or whelk license; LOA permit required
Bait Harvest Restrictions and Landings		
ASMFC Quota	29,312	29,312
Other Restrictions	None	None
Landings	Confidential	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	Not Applicable	Yes
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	No	No
Monitoring Component B_4 Tagging program	No	No

FLORIDA		
	2025 Compliance	**2026 Management Proposal**
***De minimis* status**	*De minimis* status granted for 2025.	*De minimis* requested for 2026 and meets criteria.
Ability to close fishery if *de minimis* threshold is reached	Yes	Yes
Daily possession limit <25 for *de minimis* state	25/person w/ valid saltwater products license; 100/person with marine life endorsement	25/person w/ valid saltwater products license; 100/person with marine life endorsement
HSC landing permit	See above	See above
Bait Harvest Restrictions and Landings		
ASMFC Quota	9,455	9,455
Other Restrictions	Daily possession limit	Daily possession limit
Landings	Confidential	--
Monitoring Component A_1		
Mandatory monthly reporting	Yes	Yes
Characterize commercial bait fishery	Yes	Yes
Monitoring Component A_2		
Biomedical reporting	Not Applicable	Not Applicable
Required information for biomedical use of crabs	Not Applicable	Not Applicable
Monitoring Component B_2 Continue existing benthic sampling programs	Yes	Yes
Monitoring Component B_3 Implement spawning survey	Yes	Yes
Monitoring Component B_4 Tagging program	No	No

Atlantic States Marine Fisheries Commission

Shad and River Herring Management Board

November 10, 2026
1:30 – 2:30 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to Order (*R. Owens*) 1:30 p.m.

2. Board Consent 1:30 p.m.
   - Approval of Agenda
   - Approval of Proceedings from August 2025

3. Public Comment 1:35 p.m.

4. Technical Committee Report *(M. Jargowsky)* **Action** 1:45 p.m.
   - Consider Shad and River Herring Sustainable Fishery Management Plan (SFMP), Alternative Management Plan (AMP), and Habitat Plan Updates for the Delaware River Cooperative (Habitat Plan), Maine (American Shad SFMP), South Carolina (River Herring AMP), and Florida (American Shad SFMP)
   - Review Sustainability Metrics for New York (River Herring) and South Carolina (American Shad)

5. Update from New England Fishery Management Council *(J. Cournane)* 2:10 p.m.
   - Shad and River Herring Bycatch Avoidance in the Atlantic Herring Fishery

6. Consider Timing of Next Shad and River Herring Stock Assessments *(K. Drew)* 2:20 p.m.

7. Other Business/Adjourn 2:30 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, RI; 855.860.4254) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Shad and River Herring Management Board Meeting
November 10, 2026
1:30 – 2:30 p.m.

Chair: Ron Owens (PRFC) Assumed Chairmanship: 11/26	Technical Committee Chair: Matthew Jargowsky (MD)	Law Enforcement Committee Representative: Lt. Col. Doug Daniels
Vice Chair: Vacant	Advisory Panel Chair: Vacant	Previous Board Meeting: August 6, 2025
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (19 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2025

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Technical Committee Report (1:45-2:10 p.m.) Action

Background

- Amendments 2 and 3 to the Shad and River Herring FMP require all states and jurisdictions that have a commercial fishery to submit an SFMP for river herring and American shad, respectively. Plans are updated and reviewed by the Technical Committee (TC) every five years.
- Maine (American shad) submitted an updated SFMP, South Carolina (river herring) submitted an updated Alternative Management Plan (AMP), and the Delaware River Cooperative submitted an updated Habitat Plan for American shad. Florida informed the TC that they will be transitioning to catch and release in the St. John's river; therefore, they are withdrawing their American shad SFMP. The plans were recommended for approval by the TC (**Supplemental Materials**).
- Additionally, the TC reviewed updates from New York and South Carolina on their sustainability metrics.

Presentations

- TC Report by M. Jargowsky

Board actions for consideration at this meeting

- Consider approval of updated SFMPs, AMPs, and Habitat Plans

5. Update from New England Fishery Management Council (NEFMC) (2:10-2:20 p.m.)

Background

- In September 2026, the NEFMC took final action to set Atlantic herring specifications for fishing years 2027–2031, including status quo river herring and shad catch caps. Additionally, the Council discussed a separate action that would modify river herring and shad management through an amendment as part of a multi-year priority.

Presentations

- NEFMC report by J. Cournane

6. Consider Timing of Next Shad and River Herring Stock Assessments (2:20-2:30 p.m.)

Background

- In October 2026, the TC discussed the timing of the next river herring and American shad stock assessments and made recommendations to modify the timeline to avoid overlapping the two assessments.

Presentations

- Review of assessment timeline by K. Drew

7. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

SHAD AND RIVER HERRING MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 6, 2025

These minutes are draft and subject to approval by the Shad and River Herring Management Board.
The Board will review the minutes during its next meeting.

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Adjournment 8

INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of October 23, 2024** by consent (Page 1).

3. **Move to approve the updated River Herring Sustainable Fishery Management Plan from Massachusetts, Shad Sustainable Fishery Management Plan and River Herring Alternative Management Plan from Georgia, and the Shad and River Herring Alternative Management Plan from Florida, as presented today** (Page 8). Motion by Dan McKiernan; second by David Borden. Motion passes by consent (Page 8).

4. **Move to elect Ron Owens as Vice-Chair** (Page 8). Motion by John Maniscalco; second by Joe Grist. Motion passes by consent (Page 8).

5. **Move to adjourn** by consent (Page 8).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for C. Wilson (AA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Dan McKiernan, MA (AA)
David Borden, RI (GA)
Matthew Gates, CT, proxy for J. Davis (AA)
Bill Hyatt, CT (GA)
Rep. Joesph Gresko, CT (LA)
John Maniscalco, NY, proxy for M. Gary (AA)
Emerson Hasbrouck, NY (GA)
Heather Corbett, NJ, proxy for J. Cimino (AA)
Jeff Kaelin, NJ (GA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (AA)
Kristopher Kuhn, PA, proxy for T. Schaeffer (AA)
Loren Lustig, PA (GA)
Edna Stetzar, DE, proxy for J. Clark (AA)
Roy Miller, DE (GA)
Lynn Fegley, MD (AA)
Russel Dize, MD (GA)
Allison Colden, MD, proxy for Del. Stein (LA)
Jamie Green, VA (AA)
Chris Batsavage, NC, proxy for K. Rawls (AA)
Ross Self, SC, proxy for Blaik Keppler (AA)
Malcolm Rhodes, SC (GA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Erika Burgess, FL, proxy for J. McCawley (AA)
Gary Jennings, FL (GA)
Daniel Ryan, DC
Ron Owens, PRFC
Max Appelman, NMFS
Rick Jacobson USFWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Matt Jargowsky Technical Committee Chair
Pam Lyons Gromen, Advisory Panel Chair
Thomas Gadomski, Law Enforcement Committee Rep.

Staff

Bob Beal
Toni Kerns
Tina Berger
Katie Drew
Madeline Musante
Caitlin Starks
Jeff Kipp
Samarah Nehemiah
Tracy Bauer
James Boyle
Chelsea Tuohy
Jeff Kipp

The Shad and River Herring Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Wednesday, August 6, 2025, and was called to order at 10:00 a.m. by Chair Phillip Edwards.

CALL TO ORDER

CHAIR PHILLIP EDWARDS: Good morning, everybody. I would like to call to order the Shad and River Herring Management Board Meeting. With me today is James Boyle and Katie Drew from the Commission, and Matthew Jargowski, the TC Chair from Maryland.

APPROVAL OF AGENDA

CHAIR EDWARDS: I would like to start with the approval of the agenda. Are there any proposed modifications to today's agenda? Seeing none; approved by consent.

APPROVAL OF PROCEEDINGS

CHAIR EDWARDS: Moving on to approval of proceedings from October 2024. The proceedings were in your materials. Are there any corrections or edits? Seeing none; approved by consent.

PUBLIC COMMENT

CHAIR EDWARDS: The next topic on the agenda is public comment. Is there any public comment at this time on anything that is not on the agenda? Seeing no public comment, we'll move on to Agenda Item Number 4. The Advisory Panel Report from AP Chair Pam Lyons Groman to provide an update on the 2024 River Herring Benchmark Assessment.

ADVISORY PANEL REPORT

MS. PAM LYONS GROMAN: Good morning, Mr. Chairman, members of the Management Board, just checking my sound to make sure you can hear me okay. Wonderful. It is my pleasure to be here, connected with you this morning to represent the Shad and River Herring Advisory Panel.

Our comments today are going to be focused on the 2024 River Herring Benchmark Stock Assessment. At the August 2024 meeting, just about a year ago now, the Management Board accepted the 2024 River Herring Benchmark Stock Assessment and Peer Review Report for management use.

Following this meeting the AP convened via webinar on October 7, to review the assessment findings and provide recommendations. It was a pretty rich discussion, as you recall, that was a very thorough assessment. The AP members felt strongly that we just needed some more time for some thoughtful discussion, and to develop consensus recommendations.

We scheduled an additional meeting that was held on December 2nd. We had 7 people attend our first meeting and 10 AP members attend our December 2nd meeting. Our goals at that meeting were to discuss the results of the 2024 River Herring Benchmark Assessment and to receive an update on the progress of the New England Fishery Management Council's Atlantic Herring Amendment 10. In terms of the River Herring Benchmark Assessment and our feedback.

Overall, the AP members were concerned that river herring populations are not recovering, despite the actions taken through Amendment 2, that resulted in the closure of most state fisheries. The AP discussed the contrast in the assessment results between northern New England and Southern New England, particularly considering that the report notes both regions have significant restoration programs.

2024 RIVER HERRING BENCHMARK ASSESSMENT

MS. PAM LYONS GROMAN: Our consensus recommendations, we recommend that Board task the TC to document the numbers of commercial fisheries by state over time, and use those trends to identify and evaluate attributes of effective management programs, including assessing the

impact of the Atlantic Herring Area 1A Seasonal Closure on the relative success of the Maine river herring runs.

We also recommend that we prioritize genetic sampling of river herring at-sea bycatch, particularly with portside sampling programs, as well as the development of a uniform aging protocol between states, to reduce uncertainty in the assessment results. This was a research recommendation from the Stock Assessment Peer Review.

Other assessment comments, these were not consensus but they were important points made by individual AP members. Increasing the harvest for either species is concerning, given the results of the assessment. One member suggested that the lack of a significant positive trend coastwide, since the moratorium in 2009 represents an emergency. We also discussed that 2009 reference year, and some members felt that it represented a greatly depleted stock and comparisons to 2009 do not fully convey the losses that the stock has had over the full time series.

This should be made clear to the public, the shifting baseline, basically. The assessment cannot evaluate the stocks at small enough scales for suitable management was another comment, and that recent bycatch values are artificially low, due to the lack of observer coverage. Then we moved on to Amendment 10. We received an update on the progress of the New England Council's Amendment 10.

We were given a press release from June of last year, and we had planned to meet this year to review the management alternatives, and to prepare recommendations. We did have a consensus recommendation, and that was that the AP recommends the Commission support the development of management alternatives to consider time/area closures, incidental catch caps, and improvements to incidental catch monitoring, accuracy and precision in Atlantic Herring Amendment 10.

I just want to emphasize that when we say supports in this particular recommendation, it was a form of active support. There was a lot of discussion that we would like for the Commission process to allow time for comments to be developed and submitted as part of this process. Even though our meeting was held a while ago now, and since Amendment 10 has been paused, we still feel potential actions that had been proposed to Amendment 10 remain applicable to the assessment findings. There is always a rich discussion during our AP meetings about bycatch. Most state fisheries are closed, so this is where we spend a good deal of our time. There was general agreement among AP members that there needs to be greater monitoring of offshore fisheries, and that more of the burden of sustainability should be placed on offshore fisheries that have a high incidence of river herring bycatch, rather than the in-river fisheries.

Portside sampling was seen as the most efficient method to acquire the data necessary to evaluate the possibility of disproportionate effects of bycatch on different systems. Support for coastal buffer zones in the Atlantic herring and mackerel fisheries to reduce river herring bycatch was noted by a number of AP members.

They also expressed support for exploring bycatch caps that are more responsive to existing river herring stock conditions, like genetic subregions, as defined by the Reid et al. paper, that paper has gotten a lot of attention in river herring discussions, and also formulating time/area closures based on bycatch probability, such as those investigated by Roberts et al. in the 2023 paper.

We also felt back in December that there should be a rapidly growing focus on funding in-river monitoring efforts, along with any other herring specific surveys, that's river herring, to look at population level responses to reduced Atlantic herring and mackerel effort. At that time, you know before the season really kicked off, we were thinking there could be a good response for less effort at sea, and that that should be something that is monitored.

Our consensus recommendations, in terms of future management and assessment is we would recommend that the Board identify mechanisms for improving public access and transparency of data between stock assessments, and so we talked about the Manomet study that the Mid-Atlantic Council has funded to create a coastwide river herring data portal, so that the public and others, you know anyone interested, can see trends coastwide in different runs.

We also recommended that the Board investigate the use of external collaborators for data collection. Other comments in this area, there was support for recreational personal use harvest in state sustainable fishery management plans, and again, here we are a year later and I'm providing the AP report, and there is concern that the assessment process really does not involve the AP before the assessment is approved for management use.

When the assessment was approved a year ago, Amendment 10 had been an ongoing action, and the Board decided not to take any action. Perhaps this is a good time to maybe reevaluate, based on these comments, and consider potential actions in response to the stock assessment. That is my last slide, and so I wanted to pause for any questions from the members of the Management Board.

CHAIR EDWARDS: Thank you, Pam, for the update and the presentation. Are there any questions for Pam? Dave Borden.

MR. DAVID V.D. BORDEN: Could we go back two slides, please. Yes, on the top bullet on this one, the AP members state that there is a need for greater monitoring of offshore fisheries. Is a conclusion embedded in that that the inshore fisheries are being monitored correctly in the correct manner?

MS. LYONS GROMEN: Well, the AP also noted that they would like to have more independent data collection systems investigated as potential to contributing to the stock assessment. I do believe they feel there is room for improvement. But they feel it's disproportionate, that in terms of the burden on sustainability there is just a lot more rigorous record keeping in most river systems versus the effect that offshore fisheries are having on the populations.

MR. BORDEN: I would agree that that is accurate, given the amount of fishing effort in federal waters, but I don't think we should overlook the inshore fisheries, it should be a proportionate amount of independent sampling of the inshore fisheries, to make sure that we're not catching them in nearshore waters.

CHAIR EDWARDS: Jeff.

MR. JEFF KAELIN: There is a lot of river herring taken in the whiting fishery, it's not really regulated. Only the herring fishery has caps, so Dave Borden makes a very good point. Also, back in one of the other slides, I don't know which one it was. There was a comment about bycatch is higher than estimated because of no observers in the herring fishery, or something like that. The herring fishery is monitored by the SBRM Program.

The reason why observer coverage is low is because SBRM days are assigned to fisheries that have high discard rates. The herring fishery doesn't discard. Therefore, the coverage is very, very low. We all know that PEW and Earth Justice and the Council decided that we should take 50% observer coverage when the Agency was saying that somewhere around 20% is probably accurate and precise enough to know what's going on. I have a real issue with that particular bullet point, because it's missing a point, frankly.

MS. LYONS GROMEN: Thank you for your comments, Mr. Kaelin. With the river herring catch, we call it bycatch, but it's incidental catch and so it's retained. It's not really factored in well to the standard bycatch reporting methodology. I believe that comment comes from the Atlantic Herring Amendment 10.

Some of the work that had been done early on, prior to leading up to Amendment 10 even being initiated, was looking at how the caps were administered in the Atlantic herring fishery, and noticing that some of the cap areas that had been defined had particularly low coverage in certain spaces. I do believe that was founded in some information that came to the AP. But again, that was not a consensus statement that was a statement that was voiced by some members of the AP. But I felt it important to reflect individual voices as well as consensus.

MR. KAELIN: I won't go any further. We argued that Amendment 10 should be set aside, because there is no herring fishery right now, so very, very low catches. Hopefully, Amendment 10 stays on the shelf until the stock can be rebuilt. That has been the industries position for months on this. We've also asked for some kind of an assessment of the relative impacts on river herring coastwide, inshore fishing, offshore fishing, predation and so forth. It's easy to find the fishermen and say, well gee, if we could just get rid of those offshore fish, all those river herring would be fine. But I don't think that's a very scientific approach to the issue. We'll continue to remain under siege, and continue to report tow by tow and everything else, as we have for years electronically.

We've done everything we have been required to do, and the data just never seems to be enough for the people who would like to see the fishery go away. Maybe I'm overly sensitive, but I'm disappointed that so much of this presentation focuses on bycatch and not some of these other issues, like dams, for example, just to throw out one thing.

MS. LYONS GROMEN: Thank you, and if I could just respond briefly. Our charge as an AP was to respond to the benchmark stock assessment. There was rich discussion within the assessment about bycatch, so that was grounds that we thought was necessary to cover. Thank you.

CHAIR EDWARDS: Any other questions for Pam? We do have a public comment from Jim Fletcher, go ahead, Jim.

MR. JAMES FLETCHER: Is there any way in this we could look at the eggs being affected by the chemicals, mainly surfactants? We're not getting to where the problem is on these herring. When they come out of the rivers and come back to surfactants, and I don't hear any chemicals addressed on how it's affecting it.

We're not going to get to the problem until we get the water quality. But also, the nano and microplastics. But we're not addressing the problem, we're going around and round and asking for more information. Apparently, no one wants to address water quality. Thank you, James Fletcher, United National Fishermen's Association.

CHAIR EDWARDS: Thank you, Jim, for your comment. No other questions, we'll move on to Item Number 5. Consider the Shad and River Herring Sustainable Fishery Management Plan and the Alternative Management Plan Updates. Matt, the TC Chair will provide us an update.

CONSIDER SHAD AND RIVER HERRING SUSTAINABLE FISHERY MANAGEMENT PLAN (SFMP) AND ALTERNATIVE MANAGEMENT PLAN (AMP) UPDATES

MR. MATTHEW JARGOWSKY: My name is Matthew Jargowsky, and I am the new Shad and River Herring Technical Committee Chair. Today for the Board I am presenting new and updated American Shad and River Herring SFMPs and AMPs. Before I get started, a brief background always required of these plans.

Amendments 2 and 3 of the Shad and River Herring FMP requires states wishing to have a fishery must submit a sustainable fisheries management plan that will demonstrate their stock to support a commercial and/or recreational fishery that will not diminish future stock reproduction and recruitment.

The management board can also approve alternative management programs or alternative management plans if the state or jurisdiction can show to the management board's satisfaction that the alternative proposal will have the same conservation value as the measures contained in the FMP. When the Board tasked the TC of reevaluating and reassessing what should be included in these plans, the TC determined that AMPs may be appropriate for systems with no known harvest. Regardless of the plan type, each are updated and are reviewed every five years to reassess stock status and sustainability.

There are four plans for the Board to review today. The first is a new river herring SFMP for the town of Pembroke, Massachusetts.

The next is an updated American shad SFMP for Georgia, and the final two plans are alternative management plan updates for Georgia and Florida. All four plans were reviewed and recommended for approval by the Technical Committee. I will first start with the new Massachusetts SFMP.

MASSACHUSETTS SFMP (RIVER HERRING)

MR. JARGOWSKY: Again, this is a new river herring SFMP for Herring Brook in the town of Pembroke, Massachusetts. It is important to note that while this is a new SFMP, Massachusetts does already have two approved river herring SFMPs for both the Nemasket and Herring Rivers. However, while these plans have been previously approved, no fishing has occurred under these plans to date.

Some background on Herring Brook. It has a long history of dedicated river herring management by the Pembroke Herring Fisheries Commission and prior town entities, with harvest dating back to 1790. The run is a predominantly alewife run, though there are some blueback herring that show up toward the end of the spawning run.

Since dam failures in the early 2000s, there have been substantial restoration efforts to restore the spawning run to Herring Brook. This includes the construction of new fishways, fishway improvements to existing fishways, and stream restoration in various forms, such as removal of evasive plants and removing dam barriers.

The spawning run is primarily monitored through both digital and electronic run counts. You can see a table to the right that shows these run counts dating back to 2012. The visual counts are the first column after the year, and then it's electronic counts. Then there is a ratio of those electronic to visual counts.

In the final right-hand column, you see the adjusted count column, and this is the column that is used in the sustainability measures. This column is simply the electronic run count in years where the electronic run counts exist, and then years where there is no electronic run count, the visual count is then extrapolated out based on the ratio of electronic count to visual counts, to give us this adjusted run count.

In total we have run count data for this system dating back to 2012. The past three years have been pretty high, and they are the highest three-year average in the history of the time series. However, it is also important to note that in 2021 and 2022 there were relatively low run counts. However, there seems to be no evidence of recruitment failure as to date.

Furthermore, Massachusetts believes that these lower run counts are not due to a lack of returning spawning adults, but simply due to downstream blockages. For this SFMP harvest will be capped at 10% of the run count time series mean, which is just over 26,000 fish. The town will offer up to 300 harvest permits, of which the majority of these permits will go to town residents, but there will be some non-town resident permits granted. The fishing season will be five weeks long with three open days per week for fishing. Harvest will only occur in Herring Brook Park, and this harvest will be monitored by Town Herring Wardens. Under this

plan permit holders can harvest a maximum of 15 fish per week, which results in a maximum harvest under this proposed scenario of just under 17,000 fish, which is well below 10% of the time series count.

As I mentioned before, the sustainability measure for this plan will be the ongoing spawning run counts, and the sustainability target will be the harvest cap of 10% of the time series mean. The primary action threshold for this plan will be a 25th percentile of the run count time series. Management actions on this plan include if the sustainability target is exceeded in a single year this will result in a management review, so that the town can determine how to prevent that from happening moving forward.

If the run count goes below the 25th percentile for two consecutive years, this will result in a sustainability target being reduced to 5% for the following year. If there are three consecutive years of run counts below the 25th percentile this will result in a minimum of a three-year closure for the fishery, and the fishery will not be allowed to reopen until the spawning run counts are above the time series mean, for at least three consecutive years.

For this final slide, this is the spawning run counts that are used for sustainability metrics under the SFMP, and you see the 25th percentile, which is the action threshold is that middle line, and the lower line is the 10% of the time series mean, which is the time series cap. You can see the relatively low count as I mentioned in 2021 and 2022, but overall, there does appear to be an increasing trajectory in this time series, likely due to the restoration efforts that I mentioned previously. With that I will take any questions.

CHAIR EDWARDS: Thank you, Matt, for the detailed presentation. Are there any questions from the Board for Matt? Dennis Abbott.

MR. DENNIS ABBOTT: The question for the permit holders that can harvest 15 fish a day, I think. What is the use of 15 fish per day, bait fish?

MR. JARGOWSKY: Yes, it's 5 fish per day or 15 fish per week, and it's mostly for personal use. Under the plan they are going to encourage consumption of those fish, but some of them will be used for bait.

CHAIR EDWARDS: Any other questions for Matt on the Massachusetts plan? Dan.

MR. DANIEL McKIERNAN: To Dennis' question. We do know some folks who, I would call them old timers, who do recall pickling river herring and have looked forward to this. I can tell you one anecdote that I had a dear friend who died of cancer, and he just wanted some river herring before he died. I got him some scientific samples and he pickled them. There is a small population of people out there that still would love to pickle river herring, and that's legit.

MR. ABBOTT: I look forward to you bringing us in some pickled herring at some point in the future.

MR. McKIERNAN: Consider it done.

CHAIR EDWARDS: Any other questions? Okay, Matt.

GEORGIA SFMP (AMERICAN SHAD) AND AMP (RIVER HERRING)

MR. JARGOWSKY: Next, I will present the Georgia SFMP Update. Again, this is an update to Georgia's American shad SFMP, and this plan was previously approved in 2020. Under this plan commercial harvest is allowed in select portions of the Savannah and Altamaha Rivers from January to March, and this is primarily a gillnet fishery.

Commercial landings are reported by the fishermen and these are mandatory requirements. However, it is important to note that landings and effort have declined in recent years, and you can see this in some of the tables towards the end of the plan. There is also recreational harvest allowed, with an 8

fish daily recreational creel limit throughout Georgia.

In Georgia the shad populations are monitored through a fisheries independent gillnet survey, two fisheries independent electrofishing surveys and a few juvenile seine surveys. In addition, this fishery independent gillnet survey and two electrofishing surveys are used as a management benchmarks and triggers.

There were a couple updates to this new plan, the first being that the sustainability metrics, which include a benchmark which are calculated as the 25th percentile of the time series mean, were updated to include data through 2023. They also request a suspension of the Ogeechee River Creel Survey, due to funding constraints.

This was a creel survey used to monitor recreational harvest on the system. However, the river will still be monitored through a fishery's independent electrofishing survey, as well as a juvenile seine survey. Finally, I'll present the three-sustainability metrics I mentioned previously. This first one is for the Altamaha River, which is the gillnet survey, with data dating back to 1982, with the red line indicating that sustainability benchmark of the 25th percentile.

This is the Savannah River, a fisheries independent creel survey, so again the red mark indicates the benchmark value with data dating back to 2010. Similar on the Ogeechee River there is the fishery's independent electrofishing survey with data also dating back to 2010. With that I can take any questions on Georgia's American Shad SFMP.

CHAIR EDWARDS: Are there any questions for Matt on the Georgia? Okay, Matt, back to you.

MR. JARGOWSKY: Finally, I will present the last two plans, which are Alternative Management Plans, starting with Georgia. In Georgia there is no commercial river herring fishery. However, recreationally the fishery is unregulated. There are no known river herring fisheries in the state, and the species is thought to be functionally absent. This is seen through the fact that in the two previous electrofishing surveys I mentioned, since 2010 only 10 adult blueback herring have been caught across multiple surveys. Since 2011, less than 400 juvenile blueback herring have been caught in a juvenile seine survey, compared to over 18,000 juvenile American shad. As part of the plan, Georgia states that if any creel survey indicates positive harvest of river herring for three consecutive years, Georgia DNR will take the necessary steps to ensure a sustainability for that river system, either through making the species catch and release only or the creation of a new sustainable fishery's management plan.

FLORIDA AMP (SHAD & RIVER HERRING)

MR. JARGOWSKY: For Florida's Alternative Management Plan, this is an alternative management plan for blueback herring in all Florida waters, as well as American shad outside of the St. John's River Basin, as in the St. John River Basin there is a separate American shad SFMP.

Florida states that Alosa species are functionally absent from most other coastal waters, including the Nassau River, Pellicer Creek, and Tomoka River. Blueback herring are known to occur in the St. John River system, but there is no known directed fishery or no known harvest. Since this is in Florida, there is no commercial fisheries, but there is a 10 fish daily bag limit for Alosa in aggregate.

Similar to Georgia's AMP, if any source detects non-zero blueback herring harvest anywhere in Florida for three consecutive years, or American shad harvest outside of the St. John River Basin, then Florida FWC will initiate the process to demonstrate sustainability for that river system, or prohibit harvest. That is the final plan, and I also can take questions now.

CHAIR EDWARDS: Are there any questions for Matt on the AMPs? John.

MR. JOHN MANISCALCO: I was just wondering about the state of recreational fisheries monitoring in Florida on those river systems.

MR. JARGOWSKY: I believe there is a creel survey for American shad in the St. John River Basin, but I am not sure about monitoring in other systems outside of MRIP.

CHAIR EDWARDS: Erika.

MS. ERIKA BURGESS: We have a creel survey that is in the St. Johns River, we have not had any occurrence of American shad on any other systems in Florida.

CHAIR EDWARDS: Are there any other questions on the plans? Okay, I am not seeing any, could I have a motion to approve the plans? Dan.

MR. McKIERNAN: Yes, I have a motion to approve all four plans today, it's on the screen, I'll read it. **Move to approve the updated River Herring Sustainable Fishery Management Plan from Massachusetts, Shad Sustainable Fishery Management Plan and River Herring Alternative Management Plan from Georgia, and the Shad and River Herring Alternative Management Plan from Florida as presented today.**

CHAIR EDWARDS: Okay, **is there any opposition to this motion? Seeing none; the motion is approved by consent.** Thank you, Matt.

ELECT VICE-CHAIR

Our next item is elect a Vice-Chair. Do I have a motion for our next Vice-Chair? John.

MR. MANISCALCO: I **move to elect Ron Owens as Vice-Chair**.

CHAIR EDWARDS: Joe.

MR. JOE GRIST: I was going to second that.

CHAIR EDWARDS: Second. Would anyone like to discuss around the motion? Okay, **is there any opposition to this motion? Seeing none; I welcome Ron to the Vice-Chair position**. Is there any other business to come before this Commission? Yes, Bill.

MR. WILLIAM HYATT: Mr. Chair, no new business, I just want to take a moment and make a comment. I would like to compliment the Chair and the members of the AP for the report that was presented at the beginning of this meeting. I think they clearly put in a lot of effort, I think it was well thought out, and I think they provided some valuable recommendations. I think it stands out compared to many of the AP reports that I've heard in my time here, so I just want to pass along a complement. Thank you.

ADJOURNMENT

CHAIR EDWARDS: Thank you for those comments. Are there any other comments? Well, could I have a motion to adjourn this meeting? Rhodes and a second, thank you.

(Whereupon the meeting adjourned at 10:30 a.m. on Wednesday, August 6, 2025)

Atlantic States Marine Fisheries Commission

Executive Committee

November 11, 2026
8:00 – 9:30 a.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

A portion of this meeting may be a closed session for Committee members and Commissioners only.

1. Welcome/Call to Order (*D. McKiernan)*

2. Board Consent
   - Approval of Agenda
   - Approval of Meeting Summary from August 5, 2026

3. Public Comment

4. Report of the Administrative Oversight Committee (*D. Haymans*) **Action**
   - Presentation of FY26 Audit

5. Discuss Process for Reviewing Species Declared Interests on Management Boards (*R. Beal*)

6. Legislative Update (*A. Law*)

7. CARES Update (*R. Beal*)

8. Future Annual Meetings Update (*L. Leach*)
   - 2027 – South Carolina
   - 2028 – Massachusetts
   - 2029 – Pennsylvania

9. Other Business

10. Adjourn

This meeting will be held at The Hotel Viking, (1 Bellevue Avenue, Newport, RI; 844.806.4895) and via webinar; click here for details

Atlantic States Marine Fisheries Commission

Interstate Fisheries Management Program Charter

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Sustainable and Cooperative Management of Atlantic Coastal Fisheries

~~August~~ November~~-~~ 2026~~2019~~

Preface

This document outlines the standard operating procedures and policies of the Atlantic States Marine Fisheries Commission's Interstate Fisheries Management Program. It was first developed in response to passage of the Atlantic Coastal Fisheries Cooperative Management Act of 1993, which provided the Commission with responsibilities to ensure member state compliance with interstate fishery management plans. The Act authorizes the Secretary of Commerce to pre-empt any state fishery not in compliance with a Commission fishery management plan.

The Charter was first printed in April 1995 and subsequently revised in May 1996, October 2000, and November 2002. It was further edited in April 2001 (to reflect changes in the membership of the Atlantic Menhaden Management Board); July 2003 (to correct for incorrect references); January 2006 (to reflect a policy decision on voting by specific proxies); November 2008 (to reflect the addition of a habitat addendum provision); August 2009 (minor editorial changes); May 2013 (to reflect the Technical Support Group Guidance and Benchmark Stock Assessment Process Document). The revisions were adopted in February 2016 to reflect current Commission practices regarding appealing noncompliance findings; defining final actions and two-thirds majority; public hearing requirements for public information documents, FMPs, amendments and addenda; the timing of advisory panel input on proposed management actions; and clarifying regional management council participation on species management boards that manage multiple species. Revisions were then adopted in November 2017 to reflect changes in the membership on the Committee on Economics and Social Sciences. The ~~latest~~ August 2019 revisions were ~~adopted in August 2019~~ to change the number of public hearings required for Fishery Management Plans/Amendments. The latest revisions are to address changes made to the ASMFC Rules and Regulations in 2026 regarding state declared interest in a fishery.

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Section One. Introduction and Policy

(a) **General.** The Atlantic States Marine Fisheries Commission (Commission) was formed in 1942. The purpose of the Commission is:

....to promote the better utilization of the fisheries, marine, shell and anadromous, of the Atlantic seaboard by the development of a joint program for the promotion and protection of such fisheries, and by the prevention of the physical waste of the fisheries from any cause. It is not the purpose....to authorize the states joining herein to limit the production of fish or fish products for the purpose of establishing or fixing the price thereof or creating and perpetuating monopoly.

(b) **Interstate Fisheries Management Program.** The Commission carries out an Interstate Fisheries Management Program (ISFMP), authorized by Article IV of the Commission's Rules and Regulations.

(c) It is the policy of the Commission that its ISFMP promote the conservation of Atlantic coastal fishery resources, be based on the best scientific information available, and provide adequate opportunity for public participation.

Section Two. Role of the Commission

(a) **General**. The Commission is responsible generally for the Commission's fishery management activities. These activities will be carried out through the ISFMP established under this charter.

(b) **Final Approval Authority**. The Commission will be the final approval authority for:

(1) Any fishery management plan (FMP) and FMP amendment; and

(2) Any final determination of a state's non-compliance with the provisions of a Commission approved FMP.

Section Three. ISFMP Policy Board

(a) **Membership.** The membership on the ISFMP Policy Board shall be comprised as follows:

(1) All member states of the Commission shall be voting members, and shall be represented by all of its Commissioners (or duly appointed proxies) in attendance. The position of a state on any matter before the Policy Board shall be determined by caucus of its Commissioners in attendance;

(2) One representative from the NOAA Fisheries and one representative from the U.S. Fish and Wildlife Service shall each be a voting member;

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(3) One representative from the Potomac River Fisheries Commission and one representative from the government of the District of Columbia shall each be a member, eligible to vote, on any matter which may impose a regulatory requirement upon their respective jurisdictions; and

(4) One representative of the Commission's Law Enforcement Committee shall be a non-voting member.

(b) **Proxies**. Any Commissioner from a state, or duly authorized representative of a jurisdiction or agency, that is a member of the Policy Board may designate a permanent, ongoing, board or meeting specific proxy. A change in the designation of a permanent or ongoing proxy may be made only once during the year. In the case of extenuating circumstances, a Commissioner may appoint specific proxies as needed to ensure representation. Proxies must be from the same state, jurisdiction, or agency as the individual making the designation. The Commission's code of conduct shall apply to all proxies. Only an individual who is serving as a permanent or ongoing proxy may further designate a specific proxy.

(c) The **Chair and Vice-Chair** of the Commission shall respectively be the Chair and Vice-Chair of the ISFMP Policy Board.

(d) **Role and Functions**. The ISFMP Policy Board will be responsible for the overall administration and management of the Commission's fishery management programs. In this regard it will:

(1) Interpret and give guidance concerning the standards and procedures contained in Sections Six and Seven, and generally provide Commission policy governing the preparation and implementation of cooperative inter-jurisdictional fishery management for coastal fisheries of the Atlantic coast;

(2) Establish the priority species to be addressed by the Commission's fishery management program, taking into account the following criteria:

(i) The species constitutes a "coastal fishery resource" as defined in Section 803(2) of the Act;

(ii) The degree to which the species is of importance along the Atlantic coast; and

(iii) The probability that the species and associated fisheries will benefit from cooperative inter-jurisdictional management.

(3) Establish management boards/sections described in Section Four;

(4) Review and approve declarations of interest in species management by states according to the standards contained in the Commission Rules and Regulations;

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(i) *Reviews of declared interests will be conducted by the species plan review team (PRT) as part of fishery management plan reviews. Reviews will occur at a minimum of every two years but will always occur within a year after a benchmark stock assessment. The PRT will advise the species board of any change in a member state's ability to meet the criteria for declared interest as defined in the Rules and Regulations. The species board will review the PRT advice and make a recommendation to the ISFMP Policy Board regarding a state's eligibility. If a change to a state's eligibility for declared interest is approved by the Policy Board, it would issue correspondence to that state. This does not preclude any state from petitioning to be added to or taken off a species board at any time, in which it should provide rationale and data for doing so.*

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(5) Monitor and review the implementation of FMPs for which no management board or section is currently operational;

(6) Review and approve action plans, including priorities for activities, for the ISFMP;

(7) Establish, for any matter that does not come under the purview of an existing management board or section, a committee to provide it with any relevant analysis, reviews, and recommendations;

(8) Recommend to the Commission that it make a determination of a state's non-compliance with the provisions of a Commission approved FMP, according to the procedures contained in Section Seven;

(9) Consider and decide upon appeals of states to actions of any management board or section under Section Four(h); and

(10) Take any other action that is consistent with this Charter and that is necessary and appropriate to carry out the fishery management program of the Commission; except that a final determination of a state's non-compliance with the provisions of a Commission-approved plan must be made by the Commission.

Section Four. Management Boards

(a) **Fishery Management Board**. Upon determining that a need exists in a fishery for the development of an FMP or amendment, the ISFMP Policy Board shall establish a management board for that fishery. A management board may be disbanded by the Policy Board upon a determination that it is no longer needed for the preparation, review, or ongoing monitoring of the implementation of an FMP or amendment.

(b) **Management Board Membership**. The voting membership of each management board

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shall be comprised as follows:

(1) Each state with an interest in the fishery, as defined in the Rules and Regulations covered by the management board shall be a voting member, and shall be represented by all of its Commissioners (or duly appointed proxies) in attendance. The position of a state on any matter before the management board shall be determined by caucus of its Commissioners in attendance;

(2) A representative from the Potomac River Fisheries Commission and the District of Columbia may each elect to serve as a voting member on any management board in which they have an interest or which may result in the imposition of regulatory requirements on their jurisdictions;

(3) NOAA Fisheries and the U.S. Fish and Wildlife Service may each elect to serve as a voting member of any management board; and

(4) Any one of the Executive Directors/Chairs of the Regional Fishery Management Councils may be invited to be a voting member of an ISFMP species management board when the management board determines that such membership would advance the inter-jurisdictional management of the specific species. When the management area includes more than one Council, the applicable Councils will need to identify one Executive Director/Chair to receive the invitation to participate on that board as a voting member. If a Council has been invited as a voting member of a Board/Section that manages multiple species, the Board/Section will designate which species can be discussed and voted on by the Council representative. A council staff member or member of the council may be appointed as a proxy for the Executive Director or Council Chair.

(c) **Proxies**. Any Commissioner from a state, or duly authorized representative of a jurisdiction or agency, that is a member of a management board may designate a permanent, ongoing, board specific or meeting specific proxy. A change in the designation of a permanent or ongoing proxy may be made only once during the year. In addition, a Commissioner may appoint specific proxies as needed to ensure representation. Proxies must be from the same state or jurisdiction or agency as the individual making the designation. The Commission's code of conduct shall apply to all proxies. Only an individual who is serving as a permanent or ongoing proxy may further designate a specific proxy.

(d) **Conduct of Meetings**.

(1) Meetings will generally be run according to the current edition of "Robert's Rules of Order."

(2) Any Commissioner or proxy of a Commissioner or duly authorized representative of a jurisdiction or agency that is a member of a management board may make or second any motion; provided that the maker of the motion and second (when necessary) must each come from a different state, jurisdiction, or agency.

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(3) Any meeting specific proxy appointed by a Legislative or Governor's Appointee Commissioner may not vote on a final action being considered by a board, section, or committee. For this section a final action will be defined as: setting fishery specifications (including but not limited to quotas, trip limits, possession limits, size limits, seasons, area closures, gear requirements), allocation, final approval of FMPs/amendments/ addenda, emergency actions, conservation equivalency plans, and non-compliance recommendations. A meeting specific proxy may participate in the deliberations of the meeting, including making and seconding motions. Meeting specific proxies may vote on preliminary decisions such as issues to be included in a public hearing draft or approval of public information documents. Questions of procedure will be determined by the chair of the meeting upon the advice of the Executive Director or the senior Commission employee in attendance.

(4) Advisory Panel Chairs will only be reimbursed to attend Commission meetings if the advisory panel met between board/section meetings to provide feedback on an issue.

(e) **Functions**.

(1) Each management board shall be responsible for the development of an FMP, amendment, or addendum with respect to the fisheries under its jurisdiction as established by the ISFMP Policy Board.

(2) Management boards/sections shall solicit public participation during the development of FMPs, amendments, or addenda.

(3) A management board may, after the necessary FMP, amendment, or addendum has been approved, continue to monitor the implementation, enforcement, and effectiveness of the FMP, amendment, or addendum or take other actions specified in the applicable document that are necessary to ensure its full and effective implementation.

(4) Each management board shall select its own chair and vice-chair. The chair of management boards/sections will rotate among the voting members every two years, with the vice-chair acceding to the chair.

(f) **Sections under Amendment One**. Under Amendment One to the Compact creating the Commission, one or more states may agree to designate the Commission as a joint regulatory agency; Commissioners of these states shall constitute a separate section for these purposes. In any such instance the following procedures apply:

(1) Agreements among states under Amendment One shall be in writing, and open to participation by all states with an interest in any fishery to which the agreement applies;

(2) All Commissioners from states forming a section under Amendment One shall be members of the section; and

(3) Regulatory authority exercised by the Commission under Amendment One shall be

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carried out pursuant to an FMP prepared according to this Charter. For these purposes, including determinations of non-compliance under Section Seven, a section shall have the same authority and responsibility as set forth in this Charter for a management board.

(g) **Coordination with Regional Fishery Management Councils**. Each management board shall work with appropriate committees of the Regional Fishery Management Councils and appropriate federal officials to ~~c~~insure that state and federal fishery management programs are coordinated, consistent, and complementary. It will be the policy of the Commission to develop FMPs jointly with Regional Fishery Management Councils wherever applicable

(h) **Appeal Opportunity**. Any state that is aggrieved by an action of the management board may appeal that action to the Policy Board, with the exception of a non-compliance finding in accordance with Section Three (d)(9).

Section Five. Staff, Management, Technical, and Advisory Support

(a) **Staff Support**. The Commission's Executive Director or the ISFMP Director shall serve ex-officio as non-voting members of all management boards and sections. Commission staff shall serve as ex-officio members of all technical committees and will chair the plan development teams (PDTs) and plan review teams (PRTs). Staff will provide liaison among the PDTs, PRTs, species stock assessment subcommittees, technical committees, and advisory panels and the management boards/sections. Commission staff will also provide liaison among the Committee on Economics and Social Sciences, the Assessment Science, Habitat, Artificial Reef, Law Enforcement, and Management and Science Committees and the management boards/sections, and the Policy Board.

ISFMP and Science Program staff~~s~~ have specific responsibilities with respect to supporting the activities of ~~the~~ technical support groups. These responsibilities are detailed in the *Technical Support Group Guidance and Benchmark Stock Assessment Process* (approved August 2019).

(b) **Committee Organization**. Unless otherwise specified, each group included in this section shall elect its own chair and chair-elect (or vice-chair), which shall rotate every other year among the Committee members, with the chair-elect acceding to the chair. Committees shall maintain a record of their meetings compiled by the chair-elect (vice-chair) in consultation with the chair and Commission staff.

(c) **PDTs** shall be appointed by the management boards/sections to draft FMPs, amendments and addenda.

(1) PDTs shall be comprised of personnel from state and federal agencies who have scientific and management ability, knowledge of a species and its habitat, and an interest in the management of a species under the jurisdiction of the relevant management board. Personnel from Regional Fishery Management Councils, academicians, and others as appropriate may be included on a PDT. The size of the PDT shall be based on specific need for expertise but shall generally be kept to a maximum of six persons.

(2) It shall be the responsibility of a PDT to prepare all documentation necessary for the development of an FMP, amendment, or addendum using the best scientific information available and the most current stock assessment information. Each FMP, amendment, or addendum shall be developed by the PDT in conformance with Section Six of the ISFMP Charter.

(3) PDTs shall be tasked directly by the management boards/sections. In carrying out its activities, the PDT shall seek advisement from the appropriate technical committee, stock assessment subcommittee, advisory panel, Committee on Economics and Social Sciences, and the Assessment Science, Habitat, Artificial Reef and Law Enforcement Committees, where appropriate.

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(4) Following completion of its charge, the PDT will be disbanded unless otherwise determined by the board/section.

(d) **PRTs** shall be appointed by the management boards/sections to review regulations and compliance. Members should be knowledgeable concerning the scientific data, stock and fishery condition, and fishery management issues. The PRT shall generally be kept to a maximum of six persons.

(1) PRTs will be responsible for providing advice concerning the implementation, review, monitoring, and enforcement of FMPs that have been adopted by the Commission, and as needed be charged by the management board/sections.

(2) Each PRT shall at least annually or as provided in a given FMP, conduct a review of the stock status and Commission member states' compliance for which implementation requirements are defined in the FMP. The PRT shall develop an annual plan review in order to evaluate the adequacy of the FMP. This report will address, at a minimum, the following topics: adequacy and achievement of the FMP goals and objectives (including targets and schedules), status of the stocks, status of the fisheries, status of state implementation and enforcement, status of the habitat, research activities, and other information relevant to the FMP. The PRT shall report all findings in writing to the management board/section for appropriate action. Compliance review shall be consistent with the requirements of Sections Six and Seven of the ISFMP Charter and the respective FMP requirements. In addition to the scheduled compliance reviews, the PRT may conduct a review of the implementation and compliance of the FMP at any time at the request of the management board/section, Policy Board, or the Commission. When a plan amendment process is initiated by the management boards/sections, the PRT will continue its annual review function applicable to the existing plan.

(3) In carrying out its activities, the PRT shall seek advisement from the appropriate technical committee, stock assessment subcommittee, advisory panel, Committee on Economics and Social Sciences, and the Assessment Science, Habitat, Artificial Reef Law Enforcement, and Management and Science Committees.

(e) **Assessment Science Committee**. The Assessment Science Committee (ASC) shall be appointed by the ISFMP Policy Board. All agencies should nominate individuals for appointment to the ASC based on stock assessment and population dynamics expertise. Agencies may nominate personnel that require some training prior to official appointment as a committee member. The ISFMP Policy Board should review all nominations and appoint members to the ASC based on expertise, as opposed to agency representation. The ISFMP Policy Board may appoint a limited number of ASC members that are currently being trained in stock assessment methods, with the intent of formalizing the appointment upon completion of training. ASC membership should be kept to a maximum of 25 members and periodic rotation of membership should be considered.

(1) ASC will assist the ISFMP Policy Board in setting overall priorities and timelines for conducting all Commission stock assessments in relation to current workloads.

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(2) ASC will provide guidance to species stock assessment subcommittees, technical committees, and management boards on broad technical issues (e.g., stock assessment methods, biological reference points, sampling targets, and other assessment issues common to multiple Commission-managed species).

(3) ASC may provide input and advice to the species stock assessment subcommittees mainly during a benchmark assessment, when a model change and/or a major revision of the data are conducted. The species stock assessment subcommittee will be responsible for conducting the species assessment and will report directly to the species technical committee. ASC may provide overall guidance to the development of the species assessment, but will not be involved in peer review of the assessment. Assessment updates will be conducted by the species stock assessment subcommittee, with input from the ASC upon written request.

(f) **Technical Committees**. A management board/section may appoint a technical committee to address specific technical or scientific needs requested periodically by the respective management board/section, PDT, PRT, or the Management and Science Committee.

(1) A technical committee shall be comprised of state, federal, Regional Fishery Management Council, Commission, university or other specialized personnel with scientific and technical expertise and knowledge of the fishery or issues pertaining to the fishery being managed, and should consist of only one representative from each state or agency with a declared interest in the fishery, unless otherwise required or directed by the management board.

(2) Technical committees are responsible for addressing specific technical or scientific needs requested periodically by the respective management board/section, PDT, PRT, or the Management and Science Committee. At times the board/section may task the technical committee to provide a technical analysis of species advisory panel recommendations. All requests to the technical committee should be in writing from the board/section chair and should include all specific tasks, the deliverable expected, and a timeline for presentation of recommendations to the board/section. Even though the technical committee may respond to requests from multiple committees, the management board/section provides the oversight to technical committee tasks and priorities. When tasked by multiple committees, it is the responsibility of the ISFMP staff in consultation with the technical committee and management board/section chairs to prioritize these tasks.

(3) It shall be the responsibility of a technical committee for addressing specific technical or scientific needs requested by the respective management board/section, PDT, and PRT in the development and monitoring of an FMP or amendment as requested, including evaluating fishery-dependent and fishery-independent data, evaluating state monitoring programs, and providing information on the status of the stock and the fishery to the PDT and PRT. At times the board/section may task the technical committee to provide a technical analysis of an advisory panel recommendation.

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(4) Among its duties, the technical committee shall provide a range of management options, risk assessments, justifications, and probable outcomes of various management options.

(5) The technical committee will coordinate the process of developing stock assessments for Commission-managed species.

(6) It is not the responsibility of the technical committee to conduct a review of the Commission member states' compliance for which implementation requirements are defined in the FMP. This is a responsibility of the PRTs.

(g) **Species Stock Assessment Subcommittees**. Upon the request of a management board/section, the technical committee shall appoint individuals with appropriate expertise in stock assessment and fish population dynamics to a species stock assessment subcommittee, which will report to the technical committee and shall continue in existence so long as the management board/section requires.

(1) Membership to a species stock assessment subcommittee will be comprised of technical committee members with appropriate knowledge and experience in stock assessment and biology of the species being assessed. Individuals from outside the technical committee with expertise in stock assessment or biology of the species may also be nominated and appointed, if necessary. The technical committee chair will serve as an ex-officio member of the species stock assessment subcommittee. Overall membership should be kept to a maximum of six persons, unless otherwise required and directed by the management board/section.

(2) The species stock assessment subcommittee is responsible for conducting a stock assessment for use by the PDT in formulation of an FMP, amendment, or addendum; and conducting periodic stock assessments as requested for use by the technical committee in reporting status of the stock to the respective management board. A stock assessment update consists of adding the most recent years of data to an existing, peer-reviewed, and board-accepted stock assessment model without changing the model type or structure.

(3) The species stock assessment subcommittee is responsible for data analysis and preparation of a stock assessment report. Initial input on available data and stock assessment methods may be provided by ASC and technical committee. Additional input may be requested of the ASC upon written request of the species stock assessment subcommittee. The species stock assessment subcommittee shall use the best scientific information available and established stock assessment techniques. Stock assessment techniques should be consistent with the current state of scientific knowledge.

(4) The species stock assessment subcommittee will be tasked directly by the technical committee and will report to the technical committee for review and approval of work. All subcommittee recommendations and documents must be approved by the technical committee and forwarded by the technical committee to the management board/section. Any substantive issues and concerns raised by the technical committee during the

approval process should be referred back to the species stock assessment subcommittee to be addressed.

(h) **Other Technical Support Subcommittees** (e.g., tagging, stocking – with the exception of ISFMP socioeconomic subcommittees). Upon the approval of a management board/section, the technical committee shall appoint individuals with special expertise, as appropriate, to other technical support subcommittees in order to support technical committee deliberations on specific issues. All technical support subcommittees shall report to the technical committee and shall continue in existence so long as the management board/section requires. All technical support subcommittees should elect their own chair and vice-chair, who will be responsible for reporting to the technical committee. Overall membership should be kept to a maximum of six persons.

(1) Special subcommittees may be required to address specific scientific issues important to the assessment and management of the species. These subcommittees will be tasked directly by the technical committee and will report to the technical committee for review and approval of work. All subcommittee recommendations and documents must be approved by the technical committee before being forwarded to the management board/section. Any substantive issues and concerns raised by the technical committee during the approval process should be referred back to the technical support subcommittee to be addressed.

(i) **Advisory Panels**. A management board/section may at any time establish an advisory panel in conformance with the Commission's Advisory Committee Charter, to assist in carrying out the board's/section's responsibilities. Advisory panels shall also work with PDTs and PRTs, as requested. Advisory panel chairs should present reports to Boards/Sections and answer any specific questions relevant to their report. Chairs may not ask questions or present their own viewpoints during Board/Section deliberations. If the chair would like to present their own viewpoints, they must go to the public microphone during the public comment portion of the meeting.

(j) **Habitat Committee**. The Habitat Committee is a standing Commission committee appointed at the discretion of the Chair of the Commission. The purpose of the Habitat Committee is to review, research, and develop appropriate response to concerns of inadequate, damaged or insufficient habitat for Atlantic coastal species of concern to the Commission. Among its duties for the Commission, the Habitat Committee shall:

(1) Serve as a consultant to the ISFMP regarding habitat on which the species of concern to the Commission are dependent, whether salt, brackish or freshwater;

(2) Provide comment on the habitat sections of FMPs, and provide suggested text for these sections;

(3) Propose habitat mitigation measures, comment on proposed habitat mitigation measures, and proposed alternate measures if necessary to ensure appropriate habitat conservation;

(4) Establish subcommittees or other work groups as are necessary to research various habitat related issues; and

(5) Formulate habitat specific goals for consideration of and adoption by the Commission.

(k) Artificial Reef Committee. The Artificial Reef Committee is a standing Commission committee appointed at the discretion of the Commission Chair. The Committee advises the ISFMP Policy Board with the goal of enhancing marine habitat for fish and invertebrate species through the appropriate use of man-made materials. The Committee is comprised of the state artificial reef coordinators, representatives from NOAA Fisheries, and the U.S. Fish and Wildlife Service. The Artificial Reef Committee works in close coordination with Habitat Committee, and reports to the ISFMP Policy Board.

(l) Law Enforcement Committee. The Law Enforcement Committee (LEC) is a standing committee appointed by the Commission. LEC carries out assignments at the specific request of the Commission, the ISFMP Policy Board, the management boards/sections, the PDTs, and the PRTs. In general, the Committee provides information on law enforcement issues, brings resolutions addressing enforcement concerns before the Commission, coordinates enforcement efforts among states, exchanges data, identifies potential enforcement problems, and monitors enforcement of measures incorporated into the various interstate fishery management plans. LEC is comprised of law enforcement representatives from each member state, the U. S. Fish and Wildlife Service, NOAA Fisheries, the U. S. Coast Guard, and US Department of Justice. LEC convenes a working meeting in the spring, meets in conjunction with the Commission's Annual Meeting, and convenes other meetings as needed. Among its ISFMP duties, the LEC shall:

(1) Provide advice to PDTs regarding the enforceability of measures contemplated for inclusion in FMPs, including enforcement information needed for the Source Document and Background Summary pursuant to Section Six (b)(1)(v)(E); analysis of the enforceability of the proposed measures; and if the FMP provides for conservation equivalency, enforcement procedures for alternative management measures;

(2) Provide advice to each PRT at least annually or as provided in a given FMP regarding the adequacy and effectiveness of states' enforcement of the measures implemented pursuant to the FMP;

(3) Coordinate, among law enforcement personnel, the preparation of reports concerning state law enforcement and compliance in order to ensure these analyses are comparable; and

(4) Upon request or on its own initiative, provide enforcement advice and information regarding any FMP to any committee, team, board/section, or advisory panel in order to carry out activities under this Section.

(m) **Management and Science Committee**. The Management and Science Committee (MSC) is a standing committee appointed by the Commission. MSC carries out assignments at the specific request of the Commission, Executive Committee, or the ISFMP Policy Board, and generally provides advice to these bodies concerning fisheries management and the science of coastal marine fisheries. MSC is comprised of one representative from each member state, the NOAA Fisheries Greater Atlantic and Southeast Regional Offices, and the U.S. Fish and Wildlife Service's Regions 4 and 5 who possess scientific as well as management and administrative expertise. Among its duties for the Commission, MSC shall:

(1) Serve as the senior review body of the Commission, Executive Committee, and ISFMP Policy Board;

(2) Provide oversight to the Commission's Stock Assessment Peer Review Process;

(3) Upon request of the ISFMP Policy Board for any management board/section, review and provide advice on species specific issues;

(4) Evaluate the state of the science of species interactions and provide guidance to fisheries managers on multispecies and ecosystem issues. Evaluations and/or recommendations should focus on modifying the single-species approach in development of Commission FMPs and/or stock assessments;

(5) Evaluate and provide advice on cross-species issues and including, but not limited to tagging, invasive species and exotics, fish health and protected species issues; and

(6) Coordinate Commission technical and scientific workshops and seminars, when requested.

(n) **Committee on Economics and Social Sciences**. The Committee on Economics and Social Sciences (CESS) is a standing Commission committee appointed at the discretion of the Chair of the Commission. Committee membership should consist of a balance of economists and other social scientists knowledgeable about fisheries issues in their regions, preferably distributed geographically to provide coastwide representation. Members can be nominated in two ways: (1) by member states and (2) through a widespread solicitation issued by Commission staff. Membership can consist of up to twenty individuals.

The purpose of CESS is to provide socioeconomic technical oversight for both the ISFMP and the Atlantic Coastal Cooperative Statistics Program. Among its duties for the Commission, CESS shall:

(1) Develop and implement mechanisms to make economic and social science analysis a functioning part of the Commission's decision making process;

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(2) Nominate economists and social scientists to serve on each species technical committee or socioeconomic subcommittee, and PDT, in order to provide technical support and development of socioeconomic sections of FMPs (including amendments and addenda);

(3) Upon request by species management boards or the Policy Board, provide social and economic advice, information, and policy recommendations to these respective boards;

(4) Upon request by the Policy Board, provide social and economic advice, information, and policy recommendations to the Policy Board;

(5) Provide technical recommendations to the social and economic data collection and data management programs of the Atlantic Coastal Cooperative Statistics Program;

(6) Function as the technical review panel for social and economic analyses conducted by the Commission and the Atlantic Coastal Cooperative Statistics Program; and

(7) Establish CESS subcommittees or other work groups as are necessary to research various social and economic issues;

(o) **Other ASMFC Committees**. Other Commission committees, as appointed, shall upon request or on their own initiative provide advice and information to any other committee, in order to carry out activities under this Section.

Section Six. Standards and Procedures for Interstate Fishery Management Plans

(a) **Standards**. These standards are adopted pursuant to Section 805 of the Atlantic Coastal Fisheries Cooperative Management Act (P.L. 103-206), and serve as the guiding principles for the conservation and management programs set forth in the Commission's FMPs. The Commission recognizes that an effective fishery management program must be carefully designed in order to fully reflect the varying values and other considerations that are important to the various interest groups involved in coastal fisheries. Social and economic impacts and benefits must be taken into account. Management measures should focus on conservation while allowing states to make allocation decisions. Fishery management programs must be practically enforceable, including as much as possible the support of those being regulated, in order to be effective. Above all, an FMP must include conservation and management measures that ensure the long-term biological health and productivity of fishery resources under management. To this end, the Commission has adopted the following standards:

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(1) Conservation programs and management measures shall be designed to prevent overfishing and maintain over time, abundant, self-sustaining stocks of coastal fishery resources. In cases where stocks have become depleted as a result of overfishing and/or other causes, such programs shall be designed to rebuild, restore, and subsequently maintain such stocks so as to assure their sustained availability in fishable abundance on a long-term basis.

(2) Conservation programs and management measures shall be based on the best scientific information available.

(3) Conservation programs and management measures shall be designed to achieve equivalent management results throughout the range of a stock or subgroups of that stock.

(4) Management measures shall be designed to minimize waste of fishery resources.

(5) Conservation programs and management measures shall be designed to protect fish habitats.

(6) Development and implementation of FMPs shall provide for public participation and comment, including public hearings when requested by the states.

(7) Fairness & equity.

(i) An FMP should allow internal flexibility within states to achieve its objectives while implemented and administered by the states; and

(ii) Fishery resources shall be fairly and equitably allocated or assigned among the states.

(b) **Contents**. An FMP should be a readily available, concise, and understandable document. It is designed to inform the Commission and the public of the need for and nature of management action, to provide for conservation of coastal fisheries, to allow the public to have effective participation in the management planning process, and to help Commissioners to make decisions on fishery management plans. Additionally, the FMP should facilitate implementation and enforcement of the fishery management program in the individual states. With this in mind, all FMPs of the Commission shall contain the following items:

(1) Management Program Elements:

(i) A statement of the problem being addressed by the FMP, and the objectives to be achieved through implementation, including the social and economic impacts.

(ii) The goals and objectives of the FMP, including a specification of the management unit, a plan-specific definition of overfishing when available, and, if a stock is determined to be depleted/overfished as a result of overfishing and/or other causes, a specific rebuilding program and schedule for the resource.

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(iii) A statement of management strategies, options, and alternatives.

(iv) A complete statement of the management measures needed to conserve the fishery, including:

(A) A detailed statement on a state-by-state basis of each specific regulatory, monitoring, and research requirement that each state must implement in order to be in compliance with the plan; provided that the relative burden of the plan's conservation program and management measures may vary from state to state relative to the importance of the fishery in that state as compared to its importance in other states throughout its range; and provided that each FMP shall address the extent to which states meeting *de minimis* criteria may be exempted from specific management requirements of the FMP to the extent that action by the particular states to implement and enforce the plan is not necessary for attainment of the FMP's objectives and the conservation of the fishery;

(B) If the FMP so provides, procedures under which the states may implement and enforce alternative management measures that achieve conservation equivalency;

(C) A complete schedule by which states must take particular actions in order to be in compliance with the plan;

(D) A specification of the requirements for states' reports on compliance to be submitted to the PRT at least annually or as provided in a given FMP, including the requirement for submission within a specified time line of copies of relevant laws and regulations for the record; and

(E) A detailed description of penalties and repayments that will result if a state/jurisdiction does not implement any management measure consistent with the compliance schedule established in an FMP, amendment, or addendum.

(F) A statement of the minimum notification time that the Commission must provide a state/jurisdiction prior to requiring an in-season management adjustment; and establishment of a reporting and tracking system for management changes

(G) A statement of those recommendations which states should implement in order to conserve fishery resources.

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(v) Supporting Summary Information and Analyses:

(A) A review of the resource and its biological status;

(B) A review and status of fish habitat important to the stocks, and ecosystem considerations;

(C) A review of the fishery and its status, including commercial and recreational fisheries and non-consumptive considerations;

(D) A review of the social and economic characteristics of the fishery; and

(E) An analysis of the enforceability of the proposed measures.

(vi) Impacts: A summary evaluation of the biological, environmental, social, and economic impacts of the requirements and recommendations included in the FMP.

(vii) Source Document: In addition to the FMP, the PDT and the staff shall compile a Source Document that contains all of the scientific, management, and other analyses and references utilized in preparation of the FMP.

(2) A management board/section, by two-thirds vote, may extend, after giving the public one month's notice, the period of effectiveness for any FMP or provision that would otherwise expire for a period of up to six months, and may be extended for an additional six months, if the management board/section is actively working on an amendment or addendum to address the provisions that would otherwise expire. A two-thirds majority will be defined by the entire voting membership, however any abstentions from the federal services would not count when determining the total number of votes.

(3) Adaptive Management: Each FMP may provide for changes within the management program to adapt to changing circumstances. FMPs, which provide for adaptive management shall identify specifically the circumstances under which adaptive management changes may be made, the types of measures that may be changed, the schedule for state implementation of changes, and the procedural steps necessary to effect a change. Changes made under adaptive management shall be documented in writing through addenda to the FMP. Addenda to the FMP must provide for a minimum of 30 days for public comment in making adaptive management changes. The management board/section shall in coordination with each relevant state, utilizing that state's established public review process, ensure that the public has an opportunity to review and comment upon proposed adaptive management changes.

(4) Technical Addenda: The management board/section may make technical corrections to an approved FMP, amendment, or addendum without use of the public review process. This flexibility is for the correction of accidental omissions, erroneous inclusions, and/or to address non-substantive editorial issues.

(5) Habitat Addenda: The management board/section may utilize the Adaptive Management (Section Six (b)(3)) to modify/update a habitat section contained in an FMP or Amendment. The modifications to the habitat section will be documented in writing through addenda to the FMP. The adaptive management procedures detailed in the FMP will be used when developing and approving a habitat addendum.

(c) **Procedures.** All FMPs and amendments of the Commission shall be prepared according to the following procedures:

(1) Need for an FMP - Identification of priority species by the Policy Board will initiate the process to create an FMP. A management board or section will be created pursuant to Section Four. The management board or section will appoint a PDT to develop the FMP for a particular species according to the process described in Section Five (c)(1) through (4).

(2) Need for FMP Amendment - Each PRT shall evaluate the adequacy of each respective FMP at least annually and will submit to the management board/section a written report of its findings. The report will address, at a minimum, the following topics: adequacy and achievement of the FMP goals and objectives (including targets and schedules); status of the stocks; status of the fisheries; status of state implementation and enforcement; status of the habitat; research activities; and other information relevant to the FMP. The PRT shall also solicit and consider the input of the relevant advisory panel, in preparation of its report. The PRT may recommend to the management board or section that a PDT be reinstated or convened. Using this information, the management board/section will determine whether the FMP needs amendment, including issues to be addressed, such as updating data, including results of new research or a new stock assessment, needed changes in state rules and/or enforcement, and recommended options and strategies to address the concerns. All Draft FMP Amendments shall be subject to the public comment process described under Section Six (c)(8), and shall be approved by the process described in Section Six (c)(4) through (7).

(3) Public Information Document (PID) - The species PDT shall prepare a PID containing a preliminary review of biological information, fishery issues, and potential management options for the subject FMP or amendment being prepared. The PDT shall also solicit and consider the advisement of the relevant advisory panel, if any, under the Commission's Advisory Committee Charter, in preparation of the PID. The PDT Chair (Commission staff) shall also prepare appropriate audio-visual material to accompany the PID for presentation to the public. The PID, after approval by the management board/section, shall be made available to each state with an interest in the fishery and where applicable, Regional Fishery Management Councils, for the purpose of soliciting public comment as described in Section Six (c)(8).

(4) Preparation of Source Document and Background Summaries - During review and consideration of the PID, the PDT will begin to collate and prepare the Source Document as provided in Section Six (b)(1) (vii). After consideration of the reviews of the PID, the PDT shall prepare background summaries as provided in Section Six (b)(1)(v).

(5) Preparation of Draft FMP or Amendment - After consideration of comments and views developed in response to the PID, the PDT, at the direction of the management board/section, will prepare a Draft FMP or Amendment. Upon approval by the management board/section, the Draft FMP shall be referred to all relevant states and, where applicable, Regional Fishery Management Councils, for the purpose of conducting public hearings and soliciting other public comment as described in Section Six (c)(8).

(6) Preparation of the final FMP or Amendment - After consideration of the record developed in receiving comment on the Draft FMP or Amendment, the PDT shall, at the direction of the management board/section, prepare the final FMP or Amendment.

(7) Review and Approval - The management board/section shall approve the FMP or Amendment or refer it back to the PDT for revision. The management board/section will approve revisions to established FMPs (amendment or addendum). Final approval of FMPs and amendments shall be the decision of the Commission.

(8) Advisory Panel Participation – The advisory panel may provide feedback to the board/section on FMPs/Amendments as described below. The board/section may seek additional guidance outside of the below process if necessary.

(i) **During the development of the PID**. Advisory panels provide guidance to the PDT before the Board reviews the document for public comment.

(ii) **During the development of the Draft FMP.** After the Board gives the PDT guidance on issues to include in the draft, advisory panels provide feedback to the PDT on those issues.

(iii) **During the public comment of the Draft FMP.** Advisory panels meet to give recommendations on the public comment draft of the FMP.

(9) Public Participation:

(i) The management board/section shall in coordination with each relevant state, utilizing that state's established public review process, ensure that the public has an opportunity to review and comment upon the problems and alternative solutions addressed by the PID (see Section Six [c][3]). Upon completion of a PID and its approval by the management board/section, the Commission shall again utilize the relevant states' established public review process to elicit public comment on the PID. The Commission shall ensure that a minimum of four public hearings are held, including at least one in each state that specifically requests a hearing. A hearing schedule will be published within 60 days following approval of the PID; hearings may be held in conjunction with state agencies. The hearing document will be made available to the public for review and comment at least 30 days prior to the date of the first public hearing; availability will be announced by a press release issued by the Commission. Written comments will be accepted for 14 days following the date of the last public hearing.

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(ii) Upon completion of a draft FMP or amendment and its approval by the management board/section, the Commission shall again utilize the relevant states' established public review process to elicit public comment on the draft. The Commission shall ensure that a minimum of four public hearings are held, including at least one in each state that specifically requests a hearing. A hearing schedule will be published within 60 days following approval of the draft FMP or amendment; hearings may be held in conjunction with state agencies. The hearing document will be made available to the public for review and comment at least 30 days prior to the date of the first public hearing; availability will be announced by a press release issued by the Commission. Written comments will be accepted for 14 days following the date of the last public hearing. The Commission will make the draft FMP or amendment and the accompanying PID widely available to the public, including fishermen, consumers, government agencies and officials, environmental groups, and other interested parties throughout the geographic range of the draft FMP or amendment. Records of the public hearings and summaries of the written comments will be made available at cost to anyone requesting them. Summaries of verbal and written comments will be prepared by Commission staff and provided to Commissioners, the management board/section, and advisory panel members. Copies of the summaries will be made available to other parties at cost.

(iii) Agendas for meetings of the management board/section, the ISFMP Policy Board, or the Commission, as appropriate, will include an opportunity for public comment prior to the board, section, or Commission taking action on a fishery management issue consistent with the public comment guidelines.

(iv) Public comments will be evaluated and considered prior to deciding what modifications will be made to the draft FMP or amendment, or draft final FMP or amendment, and prior to approval of the FMP or amendment consistent with the public comment guidelines. .

(10) Administrative Record - The Commission staff, with support from the PDT, shall be responsible for collating and maintaining the administrative record for all FMPs.

(11) Emergencies - A management board/section may, without regard to the other provisions of Section Six (c), authorize or require any emergency action that is not covered by an FMP or is an exception or change to any provision in an FMP. Such action shall, during the time it is in effect, be treated as an amendment to the FMP.

(i) Such action must be approved by two-thirds of all voting members (a two-thirds majority will be defined by the entire voting membership, however any abstentions from the federal services would not count when determining the total number of votes) of the management board/section prior to taking effect. The decision may be made by meeting, mail, or electronic ballot in the case of an emergency.

(ii) Within 30 days of taking emergency action, the states and the Commission shall hold at least four public hearings concerning the action, including at least one in each state that requests it.

(iii) Any such action, with the exception of public health emergencies, shall originally be effective for a period not to exceed 180 days from the date of the management board/section's declaration of an emergency, but may be renewed by the management board/section for two additional periods of up to one year each, provided the board/section has initiated action to prepare an FMP, or initiated action to amend the FMP in accordance with Section Six(c). Emergency actions taken to address a public health emergency shall remain in effect until the public health concern ceases to exist (this determination to be made by the management board/section). The management board/section may terminate an emergency action at any time with approval of two-thirds of all voting members (i.e., entire membership).

(iv) Definition of Emergencies. The provisions of this subsection shall only apply in those circumstances under which public health or the conservation of coastal fishery resources or attainment of fishery management objectives has been placed substantially at risk by unanticipated changes in the ecosystem, the stock, or the fishery.

(12) Joint FMPs with Regional Fishery Management Councils - The Commission recognizes that fish species and fisheries are transboundary across state and federal jurisdictions, and that proper and efficient fisheries conservation can only be achieved by close coordination between state and federal management systems. The Commission is committed to close cooperation with the Regional Fishery Management Councils in providing for coordinated and compatible fisheries management. To this end, each management board shall work closely with appropriate Council committees to develop coordinated approaches to management.

(i) A management board may decide with a Regional Fishery Management Council to prepare an FMP jointly with that Council, with the intent that the Council and the Commission will approve the same FMP document. In such instances the management board and the Council will establish the specific procedures and schedules to follow during FMP development, including assignments of staff responsibilities on PDTs, technical committees and other fishery management program staffing and support groups, including advisory panels.

(ii) A management board shall endeavor whether or not a joint FMP is being prepared, to coordinate its meetings, meetings of the relevant advisory panel, and public hearings with relevant Council meetings and hearings.

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Section Seven. Compliance

(a) **Implementation and Enforcement** - All states are responsible for the full and effective implementation and enforcement of FMPs within areas subject to their jurisdiction. Each state shall submit a written report on compliance with required measures of a specific FMP in conformance with reporting requirements and schedules specified in the plan, which shall include submission of copies of relevant laws and regulations for the Commission's record. At any time, according to the procedures contained in this Section, the Commission may determine a state is not fully and effectively implementing and enforcing the required provisions of an FMP, and is therefore not in compliance with that plan. All evaluations, findings, and recommendations regarding compliance determinations shall be in writing.

(b) **Schedule for Reviews** - Implementation and compliance for FMPs will be reviewed according to the Commission's Action Plan. The schedule shall provide for review of each FMP at least annually, or more frequently as provided in a given FMP. In addition to the scheduled reviews, the PRT may conduct a review of the implementation and compliance of the FMP at any time at the request of the management board/section, Policy Board, or the Commission.

(c) **Role of the Management Board/Section** - Each management board/section shall, within 60 days of receipt of a state's compliance report, review the written findings of the PRT developed according to the previous subsection. Based upon that written review, as well as other information that it has or may receive, the management board/section may recommend to the Policy Board that a state be found out of compliance, including the rationale for the recommended finding of non-compliance. The recommendation shall specifically address the required measures of the FMP that the state has not implemented or enforced, a statement of how that failure to implement or enforce the required measures jeopardizes the conservation of the resource, and the actions a state must take in order to comply with requirements of the FMP.

(d) **Role of the Policy Board** - The Policy Board shall, within 30 days of receiving a recommendation of non-compliance from a management board/section, review that recommendation of non-compliance. If it concurs in the decision, it shall recommend at that time to the Commission that a state be found out of compliance. A recommendation regarding non-compliance from the Policy Board will be submitted to the Commission in writing provided there is sufficient time between meetings to develop such documentation.

(e) **Review and Determination by the Commission** - The Commission shall consider any recommendation forwarded under Subsection(d), as quickly as possible and within 30 days of receiving a recommendation of non-compliance from the Policy Board. Any state which is the subject of a recommendation for a finding of non-compliance shall be given an opportunity to present written and/or oral testimony concerning whether it should be found out of compliance. The state may request that the Commission's consideration be held at a formal meeting by roll call vote. With the consent of the Commissioners from the state subject to the recommendation, the Commission's decision may be made by electronic ballot. If the Commission agrees with the recommendation of the Policy Board, it may determine that a state is not in compliance with the relevant FMP, and specify the actions the state must take to come into compliance. Upon a

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non-compliance determination, the Executive Director shall within ten working days notify the state, the Secretary of Commerce, and the Secretary of the Interior of the Commission's determination.

(f) **Withdrawal of Determination** - Any state subject to a moratorium that has revised its conservation program in response to a determination of non-compliance may request that the Commission rescind its findings of non-compliance.

(1) If the state provides written documentation to the Commission of implementation of every measure required of it, the withdrawal will be automatic upon issuance of a letter from the Commission Chair to the state, Secretary of Commerce, and the Secretary of the Interior.

(2) If the measures implemented deviate from those required of the state, the state shall provide a written statement on its actions that justify a determination of compliance. The management board/section shall promptly conduct such re-evaluation and make a recommendation to the Policy Board that the recommendation or determination of non-compliance be withdrawn. Upon the recommendation of the Policy Board, the Commission may withdraw its determination of non-compliance, whereupon the Executive Director shall promptly notify the state, the Secretary of Commerce, and the Secretary of the Interior. The re-evaluation by the Management board/section, review by the Policy Board, and action by the Commission shall be made within 45 days of the receipt by the Commission of the request for reconsideration by the State. It may be made by electronic ballot with the consent of the Commissioners from the subject state.

(g) **Procedure to Address Management Program Implementation Delays** - Each species management board shall evaluate the current FMP, amendment, and/or addendum to determine if delays in implementation have impacted, or may negatively impact, the achievement of the goals and objectives of the management program. Each of the species management boards, with the assistance of the respective technical committee if necessary, will conduct this evaluation and provide, in writing, a summary of its findings to the ISFMP Policy Board. Each species management board that determines that there is a negative impact due to delayed implementation will provide the ISFMP Policy Board a proposed timeline to develop an amendment or addendum to address delayed implementation.

If the ISFMP Policy Board determines that an amendment or addendum should be developed to address delayed implementation, the amendment or addendum should, at a minimum, include any penalties and repayments for delays in implementation, the minimum notification time that Commission staff must provide a state/jurisdiction prior to requiring an in-season management adjustment; and establishment of a reporting and tracking system for management changes.

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Section Eight. Definitions

(a) **Act** - The Atlantic Coastal Fisheries Cooperative Management Act, 1993. 16 U.S.C. Chapter 71, et seq.

(b) **Action plan** - A document prepared annually by Commission staff and approved by the Policy Board to provide priorities and schedules for the specific activities of the ISFMP during a given year.

(c) **Adaptive management** - An iterative process which includes evaluation of the response of the managed fishery and stock to specific management measures and adjusting such measures based on that evaluation.

(d) **Advisory Panel (AP)** - A group of interested and knowledgeable persons convened under the Commission's Advisory Committee Charter to assist in development of an FMP or amendment.

(e) **Assessment Science Committee (ASC)** - A group consisting of experts in fish population dynamics and appointed and convened by a Technical Committee, at the request of a Management Board, to prepare a stock assessment for a specified fish stock using the best scientific data available and established techniques.

(f) **Best scientific information available** - Includes but is not limited to that body of biological, environmental, ecological, economic, and social data concerning the fish stock and fisheries which are the subject of an FMP or amendment, provided that the methods of collecting such information are clearly described and are generally accepted as scientifically valid. Data may come from state, federal, or private databases and from published and unpublished sources. Information that becomes available during preparation of an FMP or amendment should be incorporated to the extent practicable.

(g) **Bycatch** - That portion of a catch taken in addition to the targeted species because of non-selectivity of gear to either species or size differences; may include non-directed, threatened, or endangered and protected species.

(h) **Compliance** - Condition in which a state has implemented and is enforcing all measures required by an FMP. States are presumed to be in compliance unless determined to be out of compliance pursuant to Section Seven.

(i) **Conservation** (from the Act, Section 803[4]) - The restoring, rebuilding, and maintaining of any coastal fishery resource and the marine environment, in order to assure the availability of coastal fishery resources on a long-term basis.

(j) **Conservation equivalency** - Actions taken by a state which differ from the specific requirements of the FMP, but which achieve the same quantified level of conservation for the resource under management. For example, various combinations of size limits, gear restrictions, and season length can be demonstrated to achieve the same targeted level of fishing mortality. The appropriate Management Board/Section will determine conservation equivalency.

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(k) **Conservation program** - Enactment of rules or statutes, research, biological monitoring, collection of statistics, stock enhancement, and enforcement activities conducted by a state to maintain, restore, and/or rebuild a fish stock and its habitat.

(l) ***De minimis*** - A situation in which, under existing conditions of the stock and scope of the fishery, conservation, and enforcement actions taken by an individual state would be expected to contribute insignificantly to a coastwide conservation program required by an FMP or amendment.

(m) **Directed fishery** - Fishing for a stock using gear or strategies intended to catch a given target species, group of species, or size class.

(n) **Emergency** - Unanticipated changes in the ecosystem, the stock, or the fishery which place public health, the conservation of coastal fishery resources, or attainment of fishery management objectives substantially at risk.

(o) **Endangered, threatened, or protected species** – Species that are regulated under the jurisdiction of the federal or a state's endangered species act (threatened or endangered) or are provided other special protection.

(p) **Fish** (from the Act, Section 803[7]) - "Finfish, mollusks, crustaceans, and all other forms of marine animal life other than marine mammals and birds."

(q) **Fishable abundance** - Numbers of fish in a stock sufficient to provide continuing harvests in the range of historic average levels without overfishing the stock.

(r) **Fishery** (from the Act, Section 803[8])

> (1) "One or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographical, scientific, technical, commercial, recreational, or economic characteristics; or
>
> (2) Any fishing for such stocks."

(s) **Fish habitat** - The environment upon which a fish stock is dependent as it conducts its normal life history functions of spawning, feeding, and migration; including biological, physical, and chemical factors which influence the choices of such areas.

(t) **Fishery management** - All activities conducted by a government to improve, restore, rebuild, or maintain fish stocks and fisheries, including statutory action and rule-making, enforcement, research, monitoring, collection of statistics, enhancement, protection, development, and habitat conservation.

(u) **Habitat Committee (HC)** - The principal body, established by the Commission, which advises the Commission on issues of habitat, habitat management, habitat requirements by the managed species, enforceability of proposed habitat management measures.

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(v) **Implementation of an FMP** - Conducting a state conservation program that meets all requirements for that state as provided in an FMP or amendment.

(w) **Law Enforcement Committee (LEC)** - The principal body, established by the Commission, which advises the Commission on issues of law enforcement and enforceability of potential management measures, comprised of representatives of each member state, Washington, D.C., NOAA Fisheries, U.S. Fish and Wildlife Service, and the U.S. Coast Guard.

(x) **Management measure** - A statute or rule enacted by a state to conserve a fishery and/or protect its habitat.

(y) **Management and Science Committee (MSC)** - The principal scientific advisory body of the Commission, comprised of representatives from member states, NOAA Fisheries, and U. S. Fish and Wildlife Service.

(z) **Minimize waste** - Process of taking specific actions, which reduce the effects of fishing activities on non-target resources (habitat and bycatch) and promote full, efficient utilization of the catch.

(aa) **Non-compliance** - A condition under which the Commission has determined that a state has failed to implement and enforce a conservation program as required in an FMP or amendment.

(bb) **Non-indigenous species** - A species of fish, plant or other organism that is not native to a particular geographic area.

(cc) **Overfishing** - In the context of the ISFMP, harvesting from a stock at a rate greater than the stock's reproductive capacity to replace the fish removed through harvest. Each FMP contains a plan-specific definition of overfishing.

(dd) **Plan Development Team (PDT)** - A group of individuals who are knowledgeable concerning the scientific facts and fishery management issues concerning a designated fish stock and who are appointed and convened by a Management Board to prepare an FMP or amendment and its supporting Source Document.

(ee) **Plan review** - An evaluation of an FMP, considering adequacy and relevance of the goals and objectives, stock status, fishery status, implementation status, research activities, and recommendations.

(ff) **Plan Review Team (PRT)** - A group of individuals who are knowledgeable concerning the scientific facts, stock and fishery condition, and fishery management issues concerning a designated fish stock and who are appointed and convened by a Management Board for the purpose of conducting an annual plan review for an FMP.

(gg) **Public Information Document (PID)** - A document of the Commission which contains preliminary discussions of biological, environmental, social, and economic information, fishery issues, and potential management options for a proposed FMP or amendment.

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(hh) **Range (functional)** - The geographic area utilized by a fish stock and its dependent fishery as defined in an FMP.

(ii) **Recommendations** - Actions identified in an FMP which should be taken by the states, but are not required, such as enactment of rules, research, monitoring, collection of statistics, and enhancement, which collectively will promote restoration, rebuilding, or maintenance of a stock.

(jj) **Regulatory** - Of or pertaining to any administrative or legislative measure in a sense that requires compliance by individuals involved in the fishery.

(kk) **Requirements** - Actions set forth in an FMP which must be taken by the states specified in such FMP, such as enactment of rules, research, monitoring, collection of statistics, and enhancement, which collectively will promote attainment of the FMP's objectives for restoration, rebuilding, or maintenance of a stock, and are the measures against which compliance is judged. Failure of a specified state to implement a required action may result in a finding of non-compliance under the Act.

(ll) **Source document** - The comprehensive support document to an FMP which is compiled by the Plan Development Team and Commission staff and contains all the scientific, management, and other analyses and references utilized in preparation of the FMP; the Source Document is kept on file with the Commission.

(mm) **State** - (from the Act, Section 803[13]) For purposes of the Act, one of the following East Coast jurisdictional entities: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida; also includes the District of Columbia, or the Potomac River Fisheries Commission.

(nn) **Stock** - A group of fish of the same species which behave (spawn, migrate, feed) as a unit.

(oo) **Subgroup** - A group of fish from the same stock which consistently conducts itself as an identifiable unit.

(pp) **Target species** - A species or group of species of fish which certain fishing gear or strategies are designed to catch.

(qq) **Technical Committee (TC)** - A group of persons who are expert in the scientific and technical matters relating to a specific fish stock and who are appointed and convened by a Management Board to provide scientific and technical advice in the process of developing and monitoring FMPs and amendments.

(rr) **Trigger** - A measure of a specific attribute of a fish stock or fishery for which values above or below an established level initiates a pre-specified management action.

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Atlantic States Marine Fisheries Commission

Commission Business Session

November 11, 2026; 9:45 – 10:45 a.m.
November 12, 2026; 11:00 – 11:15 a.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to Order *(D. McKiernan)*

2. Board Consent
    - Approval of Agenda
    - Approval of Proceedings from August 2026

3. Public Comment

4. Consider Approval of 2027 Action Plan (*D. McKiernan*) **Final Action**

5. Elect Commission Chair and Vice-Chair (*R. Beal*) **Final Action**

6. Consider Noncompliance Recommendations, if necessary **Final Action**

7. Other Business/Adjourn

This meeting will be held at The Hotel Viking, (1 Bellevue Avenue, Newport, RI; 844.806.4895) and via webinar; click here for details

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

COMMISSION BUSINESS SESSION

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 6, 2026

These minutes are draft and subject to approval by the Commission Business Session.
The Board will review the minutes during its next meeting.

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1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of Wednesday, May 6, 2026** by consent (Page 1).

3. **Move to approve the changes as presented today to the Commission Rules and Regulations** (Page 3). Motion by John Clark; second by Joe Grist. Motion passes by unanimous consent (Page 3).

4. **Move to adjourn** by consent (Page 3).

ATTENDANCE

Board Members

Carl Wilson, ME (AA)
Rep. Allison Hepler, ME (LA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dan McKiernan, MA (AA)
Raymond Kane, MA (GA)
Rep. Sarah Peake, MA (LA)
Jason McNamee, RI (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Robert LaFrance, CT proxy for Rep. Gresko (LA)
Marty Gary, NY (AA)
Emerson Hasbrouck, NY (GA)
Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ (GA)
Kris Kuhn, PA, proxy for T. Schaeffer (AA)
Loren Lustig, PA (GA)
Jordan Zimmerman, DE (AA)
John Clark, DE, proxy for R. Miller (GA)
Michael Luisi, MD (AA)
Russel Dize MD (GA)
Joe Grist, VA (AA)
Del. Adele McClure, VA (GA)
Chris Batsavage, NC, proxy for M. Loffler (AA)
Ben Dyar, SC, proxy for B. Keppler (AA)
Chris McDonough, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Erika Burgess, FL, proxy for J. McCawley (AA)
Garry Jennings, FL (GA)
Mike Ruccio, NMFS
Lowell Whitney, US FWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Business Session of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Thursday, August 6, 2026, and was called to order at 11:45 am by Chair Daniel McKiernan.

CALL TO ORDER

CHAIR DANIEL McKIERNAN: Welcome to the Business Session. I am Dan McKiernan from the Commonwealth of Massachusetts.

APPROVAL OF AGENDA

CHAIR McKIERNAN: First, approval of the agenda. Are there any objections to the agenda as listed? Seeing none.

APPROVAL OF PROCEEDINGS

CHAIR McKIERNAN: Regarding the approval of the proceedings from May, any objections to the proceedings? Seeing none.

PUBLIC COMMENT

CHAIR McKIERNAN: Public comment. To the public here or online, are there any issues you would like to bring up, issues that are not on the agenda? Seeing none. Toni, I believe we have a final action, two final actions. One is to consider changes to the Commission Rules and Regulations. Bob Beal.

CONSIDER CHANGES TO THE COMMISSION RULES AND REGULATIONS

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just a quick bit of background. For a number of meetings now the Policy Board discussed voting privileges and the criteria needed that are included in the rules and regulations for states to declare an interest in a species. There was a long discussion at the Spring Meeting about the voting privileges.

Ultimately, the Policy Board decided to hold off on that, with the awareness that there are more thoughts and perspectives on voting privileges that folks should consider as they are determining whether they should vote or abstain on an issue, but not take any formal action to develop guidelines or anything else on that issue.

However, the Policy Board did approve changes to two parts of the Rules and Regulations. One is the criteria for the declared interest in a species. The second issue that the Policy Board approved changing the Legislative Group and the Governor's Appointee Group from a Section to a Committee.

I know it sounds like semantics, but in Section 2 and Section 3 of the Rules and Regulations, under I think Article 2 maybe, there is reference to Legislative Section and Governor's Appointee Section. Day to day this really doesn't change the functioning of the Legislative and Governor Appointees (LGAs) group or the Legislative Group and the Governors Appointee Group. They met jointly yesterday, as they often do over lunch, to discuss a number of issues. One of the values of making this change is that under Amendment 1 to the Atlantic States Marine Fisheries Commission Compact, Amendment 1 declares that states can get together, form a Section and that Section actually functions as a joint regulatory agency. The Legislators and Governors Appointees never function as a Section under Amendment 1 to the Compact.

Just making this change sort of moves away from any potential confusion of that Amendment 1 Section language, and you know the way that group functions historically and how they function now. It looks like semantics, but there is a nuance there that is pretty important. I don't know Mr. Chair, if you want to talk about that one first, before you go to Declared Interest, or tackle them both. Moving on to the next one, and Toni has a question.

In the Rules and Regulations in Section 5 there has been three different criteria that have been used to declare interest in a species, which means that state sits on the species management board, essentially. Those three criteria are recommended to be replaced by two criteria. These criteria have already been reviewed and approved by the Policy Board.

This group could make changes to them, should you want to. One of the key things here is that for a state to have an interest in a species, you only have to meet one of these criteria, you don't have to meet both, it can be either one, and that state is eligible to then participate on a fishery management board based on the approval at the Policy Board.

I am happy to read these into the record, but I think they are in the briefing materials, they've already been approved by the Policy Board and you know had really extensive conversation about both of these criteria at the Spring Meeting at the Policy Board level. Happy to answer any questions on these, but we'll read through them and get more background, if necessary, Mr. Chair. But I think there has been considerable debate.

CHAIR McKIERNAN: Okay, the first one obviously is a little cleaner, the second one might generate a little more discussion. I'll take the first one about the Section being transformed into a Committee. Does anybody want to speak to that or make a motion to accept those changes?

MR. ERIC REID: I will do both. I did ask for this change for a couple of reasons, and I do appreciate the fact that you are even talking about it here. That group has been meeting for a very long time, and it was kind of my opinion that it was a very nice lunch, and nothing ever came out of two-thirds of the Commission sitting in a room together.

My intention was to change that. This is part of my vision on how to change that, the way that group behaves and the way they are recognized by this Commission. I appreciate you doing it, and we had a meeting yesterday, and it was my opinion the meeting went pretty damn well. I'm looking forward to the future and thank you for the effort.

CHAIR McKIERNAN: I've been advised that we can make a combined motion here if that is desirable, so thank you for that. Are there any other comments on the transformation of the Section to a Committee? Jason. Yes, and then we'll go to the next issue. The first one is wrapped up, so now let's go to the second one, which is the modifications to Section 5 of the Rules and Regs, further discussion. Jason, do you want to speak to that?

DR. JASON McNAMEE: Just a question, and I want to just make sure there were those two criteria, which seem reasonable, and it says either, so it just has to be one of them, is that correct?

EXECUTIVE DIRECTOR BEAL: Yes, that is correct.

DR. McNAMEE: Thank you.

CHAIR McKIERNAN: Any other questions? Yes, Spud.

MR. SPUD WOODWARD: I know we have discussed this ad nauseum, but I think just to make sure I understand, because part of a discussion we had about this is, if you were to use B as a qualifying criteria, it is the responsibility of the Management Board to sort of monitor that, to make sure that criteria remains valid over time, because you make a decision at a point in time.

Then I think there was discussion about making sure there was a monitoring process to make sure. We had a lot of discussion about *de minimis* and 1 percentage point and things like that. Is that the way we had planned for this to be executed?

CHAIR McKIERNAN: I'll ask Bob to respond. Go ahead, Bob.

EXECUTIVE DIRECTOR BEAL: Yes, thanks, Spud, that is a great point. If these changes are incorporated into the Rules and Regulations, then the question becomes, how do you want to implement that? The Policy Board did agree to reviewing the membership of each management board every two years, and/or if there is a stock assessment that is completed that may change the range of a species, or something along those lines.

Part of that conversation, or incorporating those details on how to implement this, I think is more appropriate for the ISFMP Charter than the larger Rules and Regulations on frequency of review and

how that is going to be done. The plan now, or at least the thinking at the Policy Board was to initiate that with the Plan Review Team level, and then move that forward.

One of the remaining questions is, when do you want to start those reviews? I assume it is immediately. Does the Commission want to review all the management boards for the 27 species all at once, or do we want to stagger that in over the years? What is the best way to tackle that?

Doing it all at once is a fair amount of work, but we can work through that. The way we envision this at the staff level is, if these are approved, we will bring back some recommendations at the annual meeting on implementation and timing for the reviews, and how to move forward, if that is okay with the group.

CHAIR McKIERNAN: That sounds good, Bob. Any questions for Bob at this point? All right; can we get a motion to accept both changes? We've got John Clark and seconded by Joe Grist.

MR. JOHN CLARK: **Move to approve the changes that are presented today to the Commission Rules and Regulations.**

CHAIR McKIERNAN: All right, any discussion. Not seeing any, **any objection to the motion? Not seeing any there, it passes by unanimous consent.**

ADJOURNMENT

CHAIR McKIERNAN: All right that's it, any other business? Seeing none; motion to adjourn. Mike Luisi, seconded by Ben Dyar. Thanks, everybody.

(Whereupon the meeting adjourned at 11:55 pm on Thursday, August 6, 2026)

Atlantic States Marine Fisheries Commission

Spiny Dogfish Management Board

November 11, 2026
11:15 a.m. – 12:00 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order (*J. Cimino*)	11:15 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from August 2026	11:15 a.m.
3.	Public Comment	11:20 a.m.
4.	Review Accountability Measures Proposed Rule *(J. Didden)* **Possible Action**	11:30 a.m.
5.	Other Business/Adjourn	12:00 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, RI; 855.860.4254) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Spiny Dogfish Management Board
November 11, 2026
11:15 a.m. – 12:00 p.m.

Chair: Joe Cimino (NJ) Assumed Chairmanship: 8/25	Technical Committee Chair: Vacant	Law Enforcement Committee Rep: Jack Chapin (MA)
Vice Chair: Renee Zobel (NH)	Advisory Panel Chair: Vacant	Previous Board Meeting: August 5, 2026
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NC, NMFS (12 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2026

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Discuss Spiny Dogfish Accountability Measures (11:30 a.m. - 12:00 p.m.) Possible Action

Background

• In December 2025, the MAFMC and NEFMC took final action on a framework adjustment to the federal Spiny Dogfish FMP, which proposes several changes to overage accountability measures. NOAA Fisheries published the proposed rule in October 2026 **(Briefing Materials)**.

Presentations

• Review Proposed Rule on spiny dogfish accountability measures by J. Didden
• Consider Complementary Commission Action by J. Boyle

5. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

SPINY DOGFISH MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 5, 2026

These minutes are draft and subject to approval by the Spiny Dogfish Management Board.
The Board will review the minutes during its next meeting.

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1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of February 3, 2026** by consent (Page 1).

3. **Move to approve conservation equivalency for a Northern Region weekly aggregate trip limit of 37,500 pounds from September 1-December 31, 2026** (Page 3). Motion by Nichola Meserve; second by Renee Zobel. Motion passes by unanimous consent (Page 5).

4. **Move to adjourn** by consent (Page 10).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for C. Wilson (AA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Nichola Meserve, MA, proxy for D. McKiernan (AA)
Raymond Kane, ME (GA)
Rep. Sarah Peake, MA (LA)
Nicole Lengyel Costa, RI, proxy for J. McNamee (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Rep. Joseph Gresko, CT (LA)
Jesse Hornstein, NY, proxy for M. Gary (AA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
Jordan Zimmerman, DE (AA)
John Clark, DE, proxy for R. Miller (GA)
Michael Luisi, MD (AA)
Joe Grist, VA (AA)
Chris Batsavage, NC, proxy for M. Loeffler (AA)
Laura Deighan, NMFS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Spiny Dogfish Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Wednesday, August 5, 2026, and was called to order at 9:45 p.m. by Chair Joe Cimino.

CALL TO ORDER

CHAIR JOE CIMINO: Obviously, we had some technical difficulties this morning. I think we're settling in. I'm going to call the Spiny Dogfish Management Board to order here. I am the Chair, Joe Cimino; most of you know me. I am the Administrative Commissioner from New Jersey.

I have James Boyle here with me. Just a quick spoiler alert, we're going to be with you a lot today, just to let you know, on that agenda. I am going to go to Toni before we do anything else to name the Commission members that are online. Toni, if you could do that for us.

MS. TONI KERNS: Can do, we have Chris Batsavasge, Ron Owens, Scott Wagemann, Russ Dize, Marina Owens and Sarah Peake, and then we also have Laura Deighan from NOAA Fisheries.

CHAIR CIMINO: Great, thank you, appreciate that and I think we had mic checks for everyone, so hopefully those Board members will be able to fully participate.

APPROVAL OF AGENDA

CHAIR CIMINO: I will go on to our first agenda items, which are approval of the agenda. I'm sure everyone has had a chance to look at the agenda. Are there any additions or edits to the agenda? Not seeing any; we'll consider the agenda approved by unanimous consent.

APPROVAL OF PROCEEDINGS

CHAIR CIMINO: Move on to the proceedings from the February, 2026 meeting. Does any Board member have any concerns with the proceedings, any edits? Not seeing any we will consider the proceedings from the February, 2026 meeting approved by unanimous consent.

PUBLIC COMMENT

CHAIR CIMINO: I will take public comment now on any items not on the agenda for the Dogfish Board. No hands in the room, no hands online.

CONSIDER NORTHERN REGION CONSERVATION EQUIVALENCY PROPOSAL

CHAIR CIMINO: We will move on from public comment and go into our next agenda item; which is Consideration of the Northern Region Conservation Equivalency Proposal. This is an action item for us, so I will turn it over to James.

MR. JAMES BOYLE IV: We received a conservation equivalency proposal to test out a weekly trip limit as opposed to daily trip limits. As a quick reminder, the Northern Region daily trip limit is set by the Board during specifications, and is currently 7,500 pounds, which is also the same as the Federal Trip Limit.

PROPOSED WEEKLY TRIP LIMIT

MR. BOYLE: The Northern Region states, with the exception of Maine, submitted a conservation equivalency proposal to allow a weekly limit of 37,500 pounds, which is equivalent to five days under the daily trip limit, from September 1 to December 31 of this year, for just their federally permitted harvesters with the condition that if 80% of the region's quota is utilized then it will revert back to daily limit.

The proposal is also contingent on receiving a complementary exempted fishing permit from NOAA Fisheries, to allow those harvesters who participate in the program without the restriction of the federal daily limit, again which is 7,500 pounds. In applying for that permit there was an additional note.

It's not in the proposal in the materials, that it will be limited to 50 vessels and 4 trips per week, which represents slightly more than the number of

federally permitted vessels in the region, and about the average number of trips per week over the past two years. The Exempted Fishing Permit is under review, and comments are accepted until August 12.

This proposal comes in response to consistent underutilization of the Northern Region quota, with the goal to make trips more economically viable in the fall fishery, when the resource moves offshore, as well as provide information for future specifications. The Law Enforcement Committee first reviewed the proposal and provided a few comments. Overall, there were no objections.

They did note some minor concerns that it would be difficult to monitor a weekly limit at sea, and therefore it puts a little bit more burden on the shoreside monitoring. The PRT and TC met jointly, and the AP followed that up to provide their comments. The PRT and TC discussion focused around three questions. First was, what is there likely to be an increase in discards if the processor received large batches of landings that outpace their capacity?

Second was, are states able to ensure that a harvester can be monitored if they land in multiple states, that they don't exceed the weekly limit? The last was, were there any biological concerns for these larger trip limits, especially were any brought up in past proposals? To address the first question.

There was additional information from Massachusetts that a communications link directly between the processor and the harvesters is being developed that would allow them to let them know and prevent landings from exceeding capacity. For the second question, since the proposal only includes federally permitted harvesters, they have daily reporting requirements that can be monitored by every state in the Northern Region on a daily basis between all the states.

Finally, there were no biological concerns mentioned brought up to the PRT or TC, and in the discussion, they said past concerns revolved around market concerns that should be alleviated by the seasonality of the proposal being set for the fall fishery. The AP did not add any concern; they didn't have any concerns.

There was, John Whiteside echoed comments from the PRT and TC meeting that they are establishing that communication system between the processor and the harvesters. He additionally noted that this process had already been established in the state fishery, and so since there is a single processor for the coast, this should be a relatively simple system to set up. With that I'm happy to take any questions.

CHAIR CIMINO: Any question for James on this? Not seeing any in the room, Toni, do we have any online? Okay, not seeing any online. I'm not going to speak to the proposal. I appreciate the review of the proposal. I will just, as a state director, I think we have knowledge as state directors that some folks may not have.

That is just that the system of allowing transfers in and amongst states has just been fantastic for the utilization of the safe harvest levels for species like bluefish, dogfish, even menhaden, being able to move that around to where the fish are available. I personally fully support this proposal, and would like to see it move forward for those reasons.

We have a safe harvest level. This is a species that the migration pattern set it up, and I don't think that the danger of when New England is utilizing it would put southern states in any sort of jeopardy or challenge to how we manage this quota. Really appreciate the work that has gone into making this come forward. I'll just leave it at that, and this is an action item, so we are looking for a motion. I do see a hand from Joe Grist and then I'll go to Nichola.

MR. JOSEPH GRIST: Just a comment. I want to second what you just said, Mr. Chairman. The states involved they reached out to me a couple months ago about the idea. Obviously, Virginia has received quite a bit of quota transfer during the year from this.

We're fully supportive. We think that there is a way that can utilize their quota that best serves their industry. They can try and do it and see how this works out. That type of system wouldn't work well for my state, but it may work very well for theirs. If it works out well for them, we're fully supportive of this.

CHAIR CIMINO: Thank you, Joe. Nichola.

MS. NICHOLA MESERVE: Just regarding a transfer, I would be happy to make a motion and move this along. Part of the reason for the 80% quota used reverting back to the daily limit was to avoid any potential for quota overage, but also with the idea that it would likely still leave some quota available for transfer.

You know with the program ending no later than December 1, it would be in a timeframe that it could still be used elsewhere. There was thought into that, and hopefully this will resolve in both Northern Region quota utilization increasing as well as the coastwide quota, and supporting the process there. That said, I would be happy to make a motion, if you are ready, Mr. Chairman, to approve the conservation equivalency proposal.

CHAIR CIMINO: Yes, I think so, we didn't see any other hands for questions or comments, so yes, if you are ready.

MS. MESERVE: I would **move to approve conservation equivalency for a Northern Region weekly trip limit of 37,500 pounds from September 1 to December 31, 2026**.

CHAIR CIMINO: Second on the motion from Renee Zobel. Discussion on the motion. Yes, apologies, let's start with the maker and the seconder now.

MS. MESERVE: Not much to add, James did a great job laying out the overview of it and the comments on it. I guess I just wanted to reflect upon the CESS Report that is also on the agenda. We haven't gotten to it yet, but it really reiterates a number of the reasons for this proposal, finding that the fishery is contracting due to low core utilization, market and processing constraints and increased operating costs.

Fuel costs right now particularly are driving, I believe, some of the lower landings in this fishery. The CESS Report also found that greater flexibility through increased daily or weekly landing aggregates could be beneficial and generate the volume fishers need to offset the application cost and remain profitable.

It also had as a research recommendation the evaluation of daily versus weekly landing limits. I think this proposal is trying to achieve a number of things there in that CESS Report, and in a restricted manner with thought put into seasonality of it, not having great implications in other states fisheries as well. Just hope for the Board's support for this.

CHAIR CIMINO: Yes, thanks, I appreciate that, particularly because the meeting materials for the CESS Report came out kind of late, but our Committee on Economics and Social Sciences has provided a report on this. The timing of it is a bit awkward, since we're taking final action and then we're going to discuss that. But I appreciate you highlighting some of that. I'll go to Renee. Do you have anything to add on the motion?

MS. RENEE ZOBEL: Not really anything to add, just this is a thoughtful and creative approach to utilize a little bit more of the Northern Region quota. Nichola read it out beautifully, a lot of thought, we went back and forth quite a bit on iterations on how to approach this. Thanks to Nichola for leading the charge to try and engage our industry and do something to test a little more creativity.

CHAIR CIMINO: Any further discussion on the motion? We do have a hand online, Laura, did you have something to add?

MS. LAURA DEIGHAN: Yes, this is Laura Deighan with NOAA Fisheries. I just wanted to note that this same project is under consideration with GARFO. Process is that the applicant applies for an exempted fishing permit. We review the application, make sure that it has sufficient

information, and then we publish it in the Federal Register for public comment.

Once that comment period closes, we consider the information we received, and determine whether we can approve it or not. It's currently in the public comment phase. If anybody is interested in submitting public comments, you can go on Federalregister.gov, search for dogfish EFP, you might need to filter by year for 2026, and then you will be able to find that and submit any comments that you might have.

CHAIR CIMINO: Yes, thank you so, so much. That is also an important component of this, so for those of you that have not been tracking this idea, as Renee said, this kind of novel notion on how to deal with this. There is a proposal in the Federal Register right now open to public comment on an exempted permit to allow this.

I encourage anyone interested to look into that. If there aren't any other hands from the Board, I will go to the public. Certainly not trying to rush us here. Not seeing any hands around the table, Mike, did you have your hand up? Mike Luisi, go ahead.

MR. MICHAEL LUISI: I'm fully supportive of the motion, from everything that's already been said it falls in line with what I think is necessary. I'm thinking back a few years ago. I believe we've had a weekly trip limit conversation before. I could be wrong in that. Maybe somebody can remind me. I'm thinking back maybe a coordination with the Council and this Board, maybe during the time when I was Chair of the Council.

I just can't remember the years and the dates. But if this conversation has been had before, can someone, if they remember it, remind me of some of the problems and whether or not those problems were addressed through this proposal? Again, I'm comfortable with where we are and I'm going to support this, just a little information would be helpful if anyone remembers those times and those discussions.

CHAIR CIMINO: Appreciate that, Mike, I'm going to pause to see if there are any individuals that might respond to that. I'm not sure if Jason's online for the Council, but Nichola, did you have your hand up? Go ahead.

MS. MESERVE: My recollection, in terms of talking about either a larger daily limit or consideration of a weekly limit was, at the time where the landings coastwide were much higher, and that there were concerns about market implications and the processor capacity. But based on where we are now with the landings, I think that that concern no longer exists to the same degree as before. The open line of communication between the harvesters and the processors will help to avoid that, should they see a risk.

CHAIR CIMINO: Good, Mike, okay thank you, appreciate that. Not seeing any other hands from Board members, I will open it up to the public. I believe John Whiteside had his hand up. John, go ahead.

MR. JOHN WHITESIDE: Thank you, good morning. I was, as you mentioned earlier, I was a part of the MAFMC Dogfish AP meeting yesterday. I am in support of that, and also Pierre Juillard spoke in support as well, he is the primary person from East Coast Noyes Sea Trade on the last remaining processor.

I do want to point out that there was quite a bit of confusion with the way this was worded in the Federal Register, and there were a number of fishermen who spoke, thinking that this was 37,500 pounds per trip, and that they could make 4 trips. I tried to clarify that, but I think if there is a way to have some clarifying statement on this that would be great, even if it was just when the like the press release afterwards and also highlighting that when the 80% of the northern TAL is reached, then it reverts back to the standard trip limit. I think that would help in alleviating as much of the concern and questions that were raised yesterday.

CHAIR CIMINO: Thank you, John, I really appreciate those comments. I can't lift the floor in the room,

but I'm assuming that NOAA is taking note, and staff here at ASMFC are as well. That is something that we can do to the press release and assuming that NOAA as well will make sure that that clarification is part of what happens as we move forward. Appreciate that. Not seeing any other hands online. It doesn't look like it. I'll look to the Board on final action on this. Is there any objection to the motion to moving this forward? Yes, go ahead.

MR. ERIC REID: Given the last little discussion, does the motion need to be changed that says weekly aggregate limit as opposed to weekly trip limit, which is the point of the confusion? Does that need to change?

CHAIR CIMINO: I think if there is, but obviously first and foremost it is part of the public record, but if there is no objection to putting that in the motion, it can only help in clarity, I would assume then. We can do that as a friendly to add aggregate.

MS. MESERVE: I would be fine with that amendment to it.

CHAIR CIMINO: Okay, so we are putting that in the motion and I will just look around quickly if there are any concerns or comments on that addition. Hopefully that helps clarify things, and as I mentioned, we will do our best to clarify if this motion gets approved, in the press release that that is the intent here and I guess whatever Mel can do on the Federal Register to also. If they have any inquiries to also make sure that is clear. Okay, not seeing any concerns with the addition to the motion, so one last call.

Any objections to the motion? Not seeing any we will consider that motion approved by unanimous consent. Thank you, everybody. I hope this is a help to the industry and I think all the states will continue to work together on this.

REVIEW COMMITTEE ON ECONOMICS AND SOCIAL SCIENCES REPORT ON COMMERCIAL FISHERY

CHAIR CIMINO: With that I will go to our next agenda item, which is a review from the Committee on Economics and Social Sciences, and so we have a report. Tara is coming up, so Tara Scott will be here to present that, as Nichola gave us a bit of a preview on some of that, so appreciate that and Tara, welcome.

DR. TARA SCOTT: Thank you, my name is Tara Scott, in my day job I work for NOAA Fisheries, but I am here representing the CESS. As I was saying, I work for NOAA, but I am here representing the CESS, to help provide a little bit more practical insight to guide you through your future management decisions.

Apologies for the late briefing, but hopefully it will still continue to support future management. In the fall of 2025, the CESS was tasked with looking at available socioeconomic information for the commercial fishery to help it with the assessment of low quota, and then potentially adjustments to the trip levels. I'm just going to walk you through sort of our general approach, what we've done for other Boards, a review of the literature, and then because the literature is rather old, we decided to do a snapshot of the fishery, just to provide a little bit more of current conditions, and then our recommendations for future research. As I mentioned, our approach is similar, we did not do an extensive analysis but if you need additional analyses then the Committee will be able to help with those in the future.

You guys are very well aware of the fishery, so I am not going to go over that. But I think it's really important to understand that this fishery is driven by two different very distinct markets. Domestically it is a very low consumer driven food grade product. It is mainly used for bait for fertilizer or for biomedical purposes.

Whereas, internationally it is a completely different story. The European Union and the United Kingdom, it is highly sought for as a white fish substitute, so it is commonly used in things like fish and chips, and then in Germany it is used for the belly flaps, which is where the premium price comes in, sort of this belly flaps and in the fresh market.

Again, most of the product is frozen, just because in order to get it overseas air shipment cost, and then freighter is pretty high, so it tends to be frozen. Because of the ex-vessel price, the price that were seeing at the dock is so low, many of these harvesters are having to catch the large volume of fish, just to make ends meet, and so they are bumping up against the daily limit just to try to break even.

Catching more fish for them unfortunately is not translating in to making more money. As I mentioned their literature is pretty old, but we found three relevant pieces of analyses that were done specifically for the spiny dogfish fishery. Looking at the global demand, the relationships and then also a paper by one of my fellow CESS members, Mike Carroll and his colleague Wiersma.

I am going to go through sort of what those say first, and then we'll transition into the current conditions. Starting first with the Del'Apa Paper, which was in 2013, it used a social network analysis, which is basically just sort of mapping how people, groups, organizations sort of connect with one another.

The study really highlighted the tension that goes on between those long-term biological rebuilding goals that mix with more of the short-term social and economic goals that managers are constantly faced with. The research also highlighted that there is this critical dynamic between the European Union and the UK, and the fact that they hold a significant part of the market leverage.

That is because historically 90% of the global demand has been supplied by the U.S. fishery. Of that 90% that we are supplying, that we were supplying to the European market and the Asian market, about 90% of that was directly consumed by the European Union, so that type of demand really drives our domestic prices that we're receiving at the dock.

When the U.S. restricts its exports, whether that be through quota restrictions or through logistic hurdles, obviously the folks in the UK and Europe are not stopping eating dogfish, what they are doing is they are looking for those whitefish substitutes or they are potentially looking for a supply from other countries that may often have either unregulated or less regulated fisheries. Typically, the supply was coming from South America, Africa or Asia. Like I said, once we shift away or we reduce our market shares, it is very hard to get that back, and that has been quite evident over the most recent years.

The next paper was again by Del'Apa and colleagues. What they found was that as I've already sort of mentioned, that once you move away from these markets, the foreign markets, so once we've lost our market share in the European Union, they are finding the other substitutes, it is going to be very hard to come back from that.

While we have biologically succeeded in helping to ensures a sustainable stock, at the same time it was at the loss of sort of crucial processing capacity, because it was felt that it wasn't needed, because they couldn't ensure a consistent inflow of product in order to provide that supply to the foreign market, or there was no longer a need for it.

This sort of brings us to sort of that critical economic constraint in the fishery, it's really a processing bottleneck and not what Del'Apa found was operationally dogfish meat has to be processed within a certain window of time, and because it is already a large volume, low market fishery it is forcing fishermen to land large volumes, to sort of make sure that they are maintaining economic viability at that trip level.

Unfortunately, with the loss of the southern processing infrastructure, it meant that there was not enough capacity to handle that flow coming in. Del'Apa concluded that the management actions need to consider the sort of through put when they are looking to adjust the volume, whether that is through trip limits or through quota.

If you don't consider those, then you are going to have significant inefficiency. Finally, the third paper, again from our CESS colleague Wiersma and

Carroll. This was the most recent study, it was in 2018, and this was commissioned by the state of Massachusetts. It looked at more of the global demand and looking at the processing capacity issue.

What they found was that there was an absolute cap, not only on the global demand but also on the daily throughput in the processing sector. They found that sort of the sweet spot or where we were getting ready to over supply the market, and crash prices was about 20 million pounds annually. That was the global market threshold.

Then on a daily threshold rate the processing sectors could take in about 120,000 pounds per day, before they experienced inventory glut. Anything after that amount, the price would drop drastically at around 40%. For a fishery where they are already receiving relatively low, around 22 cents a pound, a 40% drop in ex-vessel price, I mean the story tells itself.

Again, 2018 there was an issue of potential over supply, flooding the market, causing the price to drop, simply that is not the case anymore. The study mentioned that if you simply raise the trip limits without considering the processing capacity, again, you would financially harm the fishers, because of this potential for a price crash. Again, because that was 2018 when the study was done there is a lot of management actions that have occurred, a lot of changes in the market. I wanted to provide a quick snapshot of 2019 to 2024. Again, this was sort of the window of times that we also had complete data for. But over this time period as the slide suggests, it has been a fishery that is contracting, and is continually contracting.

Over the time period volume has fell sharply with a 51% drop, over a 51% drop in landings, from 17.4 million in 2019 down to 8.4 million in 2024. We're seeing a drop in participation. The number of vessels has reduced from 248 down to 142, and that is a vessel that has any spiny dogfish landings, that is not saying that they are a directed vessel.

Then the number of active dealers that are actually buying spiny dogfish has also contracted from 58 pounds to just 39. We see for the fleet dynamics this concentration of effort. As I said, we see the decline. It is even more notable when you look for the vessels and the fishers who are primarily harvesting or directing on spiny dogfish.

There were 22 vessels in 2019 that harvested more than half of the landings. In 2024 that number is down to 13, so 13 vessels who are catching 50% of the landings. Then in terms of how these fish are caught, again it is primarily dominated by bottom gillnet fishing. Over the last five years about 77% of the catch had been landed with bottom gillnet.

The other issues that the data revealed was that there is a geographic shift. Again, this does not come as a surprise, but because of the loss of processor capacity an infrastructure in the southern region, we have seen a decline. Historically North Carolina was a major percent with over 1.1 million pounds of landings in 2019.

At the time that we processed and pulled the data in 2024, they had just at 160,000 pounds, that is pretty substantial. Seeing that shift, again highlights the coordination that needs to happen between the processing and the harvesting sector for this fishery. The loss of the southern fleet has left most of the rest of the fleet entirely dependent on just a few buyers.

The few remaining processors, as it's been noted in the Mid-Atlantic Council reports and their APs, there is a single large processor if it is still operating. This creates what we economists call a monopsony, which is where it is a market condition where there are many sellers, so there are many fishers, but there are very few buyers.

They are able to sort of control the price, but they are also able to control the flow, and how much is being accepted. Because the buyers have limited labor and freezer space, they can impose these daily or weekly catch limits that are sort of artificially suppressing effort across the fleet. Just for awareness for the top three processors, they are

doing about 67% of all of the landings. Again, a majority of that is flowing through that single large processor.

A lot has happened since 2018 when Mike Carroll and his colleague did their research on the processing sector. I want to be very careful in how we use the literature in order to inform you on future management measures. From the papers we saw that the assumptions were that there was going to remain sort of this high level of quota and a potential for over supply. Obviously, that is no longer an issue. We now are seeing under utilization of the resource, so it is not biologically constrained it seems to be processing constrained by the logistics. But also, several events have happened, Brexit, COVID, you have tightening restrictions on sustainability standards with a high MSE cost and the certification and the costs that go along with that, so that single processor.

There are a lot of things that have happened, not just in the domestic fleet but also in the global market that make these not as easily translated into the current conditions that we see today. Taking that information and sort of trying to figure out how best to provide information to you.

We can sort of say with some clarity that while quotas are currently far below that global over supply level, it's a further loss of the infrastructure for processing means that those bottlenecks still exist, and that still can trigger those market corrections during peak landing times, so still cautioning on that.

At the last Board meeting in February, Mr. Didden showed that the ex-vessel prices were sort of stabilizing at around 20 to 22 cents per pound. But when you adjust that for inflation they have substantially declined. As other Commissioners have noted, the price of fuel has gone up considerably over the last year, which is also further constraining the resources and the possibility of these fishermen.

For fishermen again, they are sort of caught in this really difficult position, where their faced with these rising overhead costs; fuel, transportation cost in North Carolina, Virginia, other southern states having to truck that up to the processor is an added cost, and so making sure that you are considering those costs that are being borne to the southern fleet compared to those in others should also be considered.

I just wanted to also note that right now we have underutilization occurring, which drives inconsistent flow to the processors. In these low quota conditions, it is sort of allowing. It should be noted that if you allow fishers to sort of combine these trips, to manage these sorts of weekly volume flows, then they are able to help offset that transportation cost, and sort of combine their trips.

Get it together within a particular window of time that will allow them either to be part of the fresh product or part of the frozen, depending on how far away they are. But it has to be in coordination with that processor, so that they don't have that over supply creating that glut, and then again dropping down that ex-vessel price.

Given all of these conditions, sort of similar to the conclusion in the literature, so any adjustment to the volume of harvest you should consider that processing threshold. Then in terms of future research needs, again this is kind of our wish list, that we know that obviously a lot of key things can't happen without proper funding.

But we think that it is really important that the limitation on this fishery really is no longer biological. It is not about how many fish there are, it's really about that critical loss of market access into the European Market, and then the collapsing processing infrastructure that helps to have that flow of product into the market. To inform any of the decisions, we think it would be really important to focus on sort of the harvest that they are again getting a better idea of the vessel expenses, the fuel, the off-loading fees, overland transport fees, as well as the fleet's financial dependency on the stock. Many of these fishermen do not fish dogfish all year long, again because it is usually along the coast.

What other opportunities are available and what contributes to their portfolio when dogfish are not available. It is also important for the infrastructure piece of the processors to really understand what their current capacity is. Again, the threshold that was provided in the Wiersma/Carroll paper was 120,000 pounds a day.

There needs to be a study that sort of looks independently at what that new level is, and if additional quota or weekly limits are considered, would they be able to handle that capacity? That would need additional work; predicative modeling, market power analysis, which is really investigating the dealer's ability to sort of set that price and set those artificial sorts of daily or weekly limits, so that would be important.

Then, looking at the global flow. Again, the 2018 paper was the last paper, but there have been a lot of events that have gone on that changed that dynamic, so it would be really helpful for another analysis to determine if that 20-million-pound threshold still stands, or if there is additional room for U.S. to increase our current market share, should stocks recover and quota increase.

Then finally, one of my colleagues at NOAA reminded me that sometimes dogfish are seen as a nuisance species, and so it might be important to consider other ecological tradeoffs or impacts to higher value fisheries and what is the value associated with ensuring the population remains sustainable but does not adversely impact other fisheries as well. That would be an area that the CESS would support looking at as well. With that I will take any questions.

CHAIR CIMINO: I really appreciate the work that the CESS did on this. I think for the Commission dogfish is somewhat unique. You know you just kind of hit on some of the ecological concerns which are always there. But I think this is one of those species, unlike the Mid-Atlantic Council, which has several that there isn't a rec component to. The environmental concerns are different than we deal with in a lot.

This part of it, being able to focus on the economics of this commercial fishery is so important. It is something that both the Mid and the Commission have been working on. I really appreciate all the work that the CESS has done and for those of you that play the Six Degrees of Separation from Joe Cimino in the fisheries world, Tara and I are direct contact. While she was finishing up her PhD at VIMS we worked together at VMRC. Thank you for the presentation, Tara. Any questions for Dr. Scott? Go ahead, John Clark.

MR. JOHN CLARK: Thank you for the presentation, Tara, very interesting. Just curious when the stock went down so much and there wasn't as much export to the EU. I know attempts were made to develop a domestic market. If it's a high value product, why has it been so difficult to develop alternate markets, other than just the UK and the EU?

DR. SCOTT: Yes, thank you for your question. The Wiersma and Carroll paper did discuss trying to drive demand in the domestic market. Unfortunately, a lot of that development, the consumer demand is just not here in the U.S. The connotation associated with shark in general, most people are, if they see it on a menu, if it even shows up on a menu, it is very low presence in the domestic market.

I believe there was some development to try to get it for use in like institutionalized for education, prison systems, even industrialized biomedical. But from the reading of the literature and from most of the information I've read, that that development is not well funded and so it has not increased since 2018. Again, there are other supply chain issues. But even if we were able to process, even if there was demand domestically for it, we still don't have the processing capacity, especially in the southern region, in order to support that.

CHAIR CIMINO: Further questions, Mike Luisi.

MR. LUISI: Thank you for the presentation. Just curious. You mentioned that the EU has very high sustainability standards that need to be followed. If

we are supplying that product we need to follow those standards. I'm just curious what you might understand regarding when our product from the United States is no longer available or it is cut off. Does the EU hold Asian countries, African countries and South American countries to those same standards? They seem to have used that as a secondary market to fill the void, but I am just curious as to whether or not they are held to those standards. I am assuming they are not, but I'm curious.

DR. SCOTT: My specialty is domestic fishing not foreign global trade. But from what I read in the literature, the EU still has its higher standards. If they would just be substituting with another white fish, it may not be dogfish. Whereas, Asian countries or South American countries may not have those same standards. It's providing that supply into those other areas, and the European Market is taking basically the U.S. higher standards MSE Certified product.

CHAIR CIMINO: Further questions? Okay, not seeing any around the table. I will look to the public online and in the room. I see a hand; there is a public mic. If you could introduce yourself, I would appreciate it, thank you.

MS. SONJA FORDHAM: Sonja Fordham, Shark Advocates International, nice to see you. Thank you for the presentation. I apologize if I missed some, they are hard to see from back here, but I am going to have a closer look later. I just wanted to say, in response to EU trade standards, EU certainly has high trade standards when it comes to CITES listed species, spiny dogfish not yet listed under CITES. My recollection there was some kerfuffle a number of years ago about the standards EU has for mercury, and there was a study that set them off for mercury. I'm not sure if I'm remembering that right. What I really wanted to say is, I think in addition to, it's not just this loss of access to markets, I would say, but also changing markets. I don't think that fried belly flaps are all the rage in German beer gardens like they used to when we first started them back in the 1990s. But mainly I just wanted to flag a report on global trade and shark meat that is being read by scientists at Dalhousie that is in its final stages. I was trying to check from the authors if they had a date, but don't have a date yet, but should be coming out. I think that it's pretty close, and that it should shed some light on the situation. Thank you.

DR. SCOTT: Yes, we have noticed, again most of the literature is pre-2019, and so we only had a little bit of information to go on. That is why we recommend another global demand analysis be conducted, and additional research in that area, to have a better understanding of what the current conditions are.

CHAIR CIMINO: Thank you both, thank you for the comments and thank you, Tara. I think we had one other hand; I believe John Whiteside had his hand up. Go ahead, John.

MR. WHITESIDE: I've only been involved in the fishery for 22 years now, and in that time, there has been no mercury issues regarding spiny dogfish in the EU. I also would dispute that belly flaps are not popular in Germany's beer gardens. But we would look for better science in the U.S. in getting accurate surveys of what the biomass actually is. The industry as a whole is extremely skeptical at the very low numbers that are reported.

CHAIR CIMINO: Appreciate the comment. Back to us, James, this was informational. Is there anything in particular that we are looking for on that? No, okay. Once again, appreciate the work of the Committee. I think we've been seeing more in the last year or two from you guys, and that is fantastic.

ADJOURNMENT

CHAIR CIMINO: Thank you so much, I appreciate that. With that we will move on to our last agenda item. Is there any other business to come before Spiny Dogfish Board? Not seeing any, with that we can adjourn, as long as there are not any objections. No objection, so we will adjourn.

(Whereupon the meeting adjourned at 10:38 a.m. on Wednesday, August 5, 2026)

LEGAL STATUS

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LEGAL STATUS

Magnuson-Stevens Fishery Conservation and Management Act Provisions; Fisheries of the Northeastern United States; Framework Adjustment 7 to the Atlantic Spiny Dogfish Fishery Management Plan

A Proposed Rule by the National Oceanic and Atmospheric Administration on 10/13/2026

This document has a comment period that ends in 17 days. (11/12/2026)

1 comment received. **View posted comments**

PUBLISHED CONTENT - DOCUMENT DETAILS

Agencies: Department of Commerce
National Oceanic and Atmospheric Administration
Agency/Docket Number: Docket No. 261007-0005
CFR: 50 CFR 648
Document Citation: 91 FR 64873
Document Number: 2026-20863
Document Type: Proposed Rule
Pages: 64873-64876 (4 pages)

Publication Date: 10/13/2026
RIN: 0648-BO48

PUBLISHED DOCUMENT: 2026-20863 (91 FR 64873)

DOCUMENT HEADINGS

Department of Commerce
National Oceanic and Atmospheric Administration
50 CFR Part 648
[Docket No. 261007-0005]
RIN 0648-BO48

(printed page 64873)

AGENCY:

National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION:

Proposed rule; request for comments.

SUMMARY:

NMFS proposes measures included in Framework Adjustment 7 to the Spiny Dogfish Fishery Management Plan (FMP), as recommended by the Mid-Atlantic and New England Fishery Management Councils. Framework 7 proposes fishing year 2026 and projected 2027 specifications, which would establish allowable harvest levels for the spiny dogfish fishery to prevent overfishing while enabling optimum yield based on the best scientific information available. Framework 7 also proposes changes to the Atlantic spiny dogfish accountability measures intended to provide the commercial fishery with greater flexibility by no longer requiring full payback of annual catch limit (ACL) overages when the Atlantic spiny dogfish stock is considered healthy.

DATES:

Comments must be received by November 12, 2026.

ADDRESSES:

A plain language summary of this proposed rule is available at *https://www.regulations.gov/docket/NOAA-NMFS-2026-1321 (https://www.regulations.gov/docket/NOAA-NMFS-2026-1321)*. You may submit comments on this document, identified by NOAA-NMFS-2026-1321, by any of the following methods:

- *Electronic Submission:* Submit all electronic public comments via the Federal e-Rulemaking Portal. Visit *https://www.regulations.gov (https://www.regulations.gov)* and type NOAA-NMFS-2026-1321 in the Search box. Click on the "Comment" icon, complete the required fields, and enter or attach your comments.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *https://www.regulations.gov (https://www.regulations.gov)* without change. All personal identifying information (*e.g.,* name, address), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous).

Copies of the Environmental Assessment (EA) and other supporting documents for this action are available upon request from Dr. Christopher M. Moore, Executive Director, Mid-Atlantic Fishery Management Council, Suite 201, 800 North State Street, Dover, DE 19901. These documents are also accessible via the internet at *http://www.mafmc.org/supporting-documents (http://www.mafmc.org/supporting-documents)*.

FOR FURTHER INFORMATION CONTACT:

Laura Deighan, Fishery Policy Analyst, *Laura.Deighan@noaa.gov (mailto:Laura.Deighan@noaa.gov)* or (978) 281-9184.

SUPPLEMENTARY INFORMATION:

Background

The Mid-Atlantic and New England Fishery Management Councils (the Councils) jointly develop recommended management measures for spiny dogfish, with the Mid-Atlantic Council acting as the administrative lead. Additionally, the Atlantic States Marine Fisheries

Commission manages the Atlantic spiny dogfish fishery in State waters from Maine to North Carolina through an interstate fishery management plan. The Councils, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), develop recommendations regarding fisheries in Federal waters, and both Councils must agree on any final recommendations to modify the Federal FMP. The Councils provide their recommendations to NMFS. Under the provisions of the Magnuson-Stevens Act, on behalf of the Secretary of Commerce, the Greater Atlantic Regional Fisheries Office's Regional Administrator reviews the Councils' proposed measures for consistency with the FMP, plan amendments, the Magnuson-Stevens Act, and other applicable law. The Regional Administrator is required to publish proposed regulations, consistent with the Council's recommendations, with such technical changes as may be necessary for clarity and an explanation of those changes for public comment (section 304(b)(1)(A) of the Magnuson-Stevens Act). After public comment, the Regional Administrator may publish revisions to the proposed regulations along with an explanation of any differences between the proposed and final regulations (section 304(b)(3) of the Magnuson-Stevens Act; 50 CFR 648.239(a)(3)(ii) (https://www.ecfr.gov/current/title-50/section-648.239#p-648.239(a)(3)(ii))).

At the Mid-Atlantic Council's October 2025 meeting and the New England Council's December 2025 meeting, the Councils recommended 2026 and projected 2027 Atlantic spiny dogfish catch limits. The Federal FMP requires the specification of an acceptable biological catch (ABC), ACL, annual catch target (ACT), total allowable landings (TAL), and a coastwide commercial quota. These limits and other related management measures may be set for up to 5 fishing years at a time, with each fishing year running from May 1 through April 30. This action proposes Atlantic spiny dogfish specifications for fishing year 2026 and projected specifications for fishing year 2027, as recommended by both Councils. The Commission voted to implement complementary specifications for State waters on February 3, 2026, during its winter meeting.

The NMFS Northeast Fisheries Science Center completed an Atlantic spiny dogfish management track assessment in September 2023, which included catch and survey data through 2022. The management track assessment found that the Atlantic spiny dogfish stock is not currently overfished or experiencing overfishing and remains above its biomass target. In 2025, the Science Center provided updated projections that incorporate new Atlantic spiny dogfish catch information through 2024. It also provided a data update with new survey data through 2024, which have not been incorporated into the

assessment and projections model. The 2025 data update showed negative trends in multiple indicators including the female biomass indices, female spawning stock biomass, and mean length of mature females. In September 2025, the Mid-Atlantic Council's Scientific and Statistical Committee (SSC) reviewed the 2025 data update and the 2026-2027 Atlantic spiny dogfish stock projections and noted increasing uncertainty in the projections due to the age of the data used in the projection model (*i.e.,* terminal year 2022).

Typically, the Mid-Atlantic Council's risk policy recommends setting the ABC with no greater than a 46-percent chance of overfishing for stocks just above the biomass target, such as Atlantic spiny dogfish. However, the industry has raised significant and ongoing concerns about the continued viability of the fishery with commercial quotas below approximately 12 million (🗋 printed page 64874) pounds (lb; 5,444 metric tons (mt)). As a result, in recent years, the ABC has been set equal to the overfishing limit (OFL), through NMFS emergency action in 2024 (89 FR 44924 (/citation/89-FR-44924), May 22, 2024), and by the Council suspending its risk policy when developing specifications for 2025 (90 FR 20128 (/citation/90-FR-20128), May 12, 2025). At the request of the Council, for 2026 and 2027 the SSC provided ABCs based on the Council's risk policy and ABCs equal to the OFLs (*i.e.,* a 50-percent chance of overfishing). The SSC also provided a constant 2026-2027 ABC equal to that of the 2025 ABC and OFL as a more precautionary alternative because of its concerns about the increased uncertainty in the projections. The Councils recommended 2026 and projected 2027 ABCs equal to that of 2025 (*i.e.,* 16.81 million lb; 7,626 mt), but below these years' OFLs, to balance the SSC's concerns regarding uncertainty and industry's concerns regarding the ongoing economic viability of the fishery.

At the Mid-Atlantic Council's October and December meetings and the New England Council's December meeting, the Councils also recommended changes to the Federal Atlantic spiny dogfish accountability measures. Section 303 of the Magnuson-Stevens Act requires FMPs to “establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.” The National Standard 1 Guidelines at § 600.310 outline accountability measure requirements and guidance.

The current Atlantic spiny dogfish accountability measures at § 648.233 include: a coastwide closure when the commercial quota is reached; an annual, single-year evaluation of total catch to determine whether the ACL is exceeded; and a full ACL overage repayment as soon as possible in a subsequent year. While the repayment provision has not been triggered frequently in recent years, an ACL overage occurred in fishing year 2023, and, as a result, the fishing year 2024 ACL and commercial quota were reduced by 1.08 million lb (491 mt; 89 FR 79452 (/citation/89-FR-79452); September 30, 2024). Given the industry's concerns about the recent quotas' impacts on the sustainability of the Atlantic spiny dogfish industry, the Councils recommended changes to the accountability measures to reduce the frequency and magnitude of overage paybacks. NMFS concurs with the Councils' recommendations pending review of public comments. The proposed changes outlined below are intended to minimize year-to-year fishery disruptions to the industry while maintaining a sustainable Atlantic spiny dogfish stock.

Proposed Measures

Proposed 2026 and Projected 2027 Atlantic Spiny Dogfish Specifications

This action proposes the Mid-Atlantic and New England Councils' recommended 2026 and projected 2027 Atlantic spiny dogfish catch specifications, which are consistent with the ABCs provided by the SSC and the best available science. The proposed 2026 and projected 2027 catch limits are based on a status quo ABC equal to that of 2025 (*i.e.,* 16.81 million lb; 7,626 mt). The specifications include deductions for estimates of other sources of catch (*i.e.,* Canadian landings, domestic discards, and domestic recreational landings). Atlantic spiny dogfish discards vary from year to year, which can create uncertainty when determining the appropriate amount to set aside within the specifications. Both Councils ultimately recommended using the average ratio of discards to catch (43.8 percent) for the most recent three fishing years (2022-2024) applied to the proposed ABC. The resulting recommended coast-wide commercial quota would be 9.2 million lb (4,172 mt), which is a 1.5-percent decrease from 2025, primarily due to an increase in the estimated discards. A comparison of the implemented 2025, proposed 2026, and projected 2027 specifications is summarized below in table 1.

Table 1—Comparison of Implemented 2025, Proposed 2026, and Projected 2027 Atlantic Spiny Dogfish Fishery Specifications

	2025		2026-2027 (proposed)		Percent change
	Million lb	Metric tons	Million lb	Metric tons	
OFL	16.81	7,626	17.82	8,084	+6
ABC	16.81	7,626	16.81	7,626	0
Canadian Landings	0.01	4	0.01	4	0
Domestic ABC	16.8	7,622	16.8	7,622	0
ACL = ACT	16.8	7,622	16.8	7,622	0
Domestic Discards	7.22	3,275	7.36	3,338	+1.9
TAL	9.58	4,347	9.44	4,284	−1.4
Domestic Recreational Landings	0.24	111	0.25	112	+0.9
Commercial Quota	9.34	4,236	9.2	4,172	−1.5

Proposed Accountability Measures

This action also proposes changes to the Atlantic spiny dogfish accountability measures. Under the proposed changes, ACL overages would be calculated based on the 3-year average catch and 3-year average ACL. This approach is provided for in the National Standard 1 Guidelines at § 600.310(g)(5) and is intended to provide greater stability in the commercial quota when accounting for overages. Atlantic spiny dogfish catch, particularly discards, can vary from year to year. Calculating overage paybacks based on a multiyear average smooths out this variability, where ACL overages in one year may be balanced out by underages in others. When the 3-year average catch exceeds the 3-year average ACL, the Councils recommend paybacks would: (1) not be required when the stock is at or above its target; (2) be scaled linearly when the stock is between 75 and 100 percent of its target (regardless of the source of the overage); and (3) be required in full when the stock is at or below 75 percent of its target. Full paybacks would always be required when the stock is in a rebuilding plan, consistent with the National Standard 1 Guidelines (50 CFR 600.310(g)(3) (https://www.ecfr.gov/current/title-50/section-600.310#p-600.310(g)(3))). This approach is intended to provide the commercial fishery with greater flexibility by no longer requiring full payback of ACL overages when the Atlantic spiny dogfish stock is considered healthy, therefore maintaining higher coastwide (🗋 printed page 64875) commercial quotas while promoting the long-term sustainability of the stock and the fishery. This action does not propose changes to the existing in-season accountability measure that requires a coastwide Federal closure when the commercial quota is reached.

Classification

Pursuant to sections 304(b)(1)(A) and 305(d) of the Magnuson-Stevens Act, the NMFS Assistant Administrator has determined that this proposed rule is consistent with the Spiny Dogfish FMP, other provisions of the Magnuson-Stevens Act, and other applicable law, subject to further consideration after public comment. NMFS is issuing this rule pursuant to sections 304(b)(1)(A) and 305(d) of the Magnuson-Stevens Act, which provide specific authority for implementing this action. Section 304(b) of the Magnuson-Stevens Act authorizes NMFS to implement rules and regulations deemed necessary by the Councils, and here the Councils deemed the modifications to § 648.233 necessary to

implement Framework 7. In a previous action under section 304(b), the regulations at § 648.232 authorize NMFS to implement the Atlantic Spiny Dogfish specifications under section 305(d).

This proposed rule has been determined to be not significant for purposes of Executive Order 12866 (/executive-order/12866).

The Senior Lead Counsel for Regulation of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, would not have a significant economic impact on a substantial number of small entities. The factual basis for this determination is as follows.

An evaluation of the potential socioeconomic impacts of the proposed measures was conducted in conjunction with the Atlantic Spiny Dogfish Framework Adjustment 7 EA.

The proposed action has the potential to impact entities that hold Federal spiny dogfish permits. Vessels may hold multiple fishing permits, and some entities own multiple vessels and/or permits. According to the Northeast Fisheries Science Center commercial ownership database, there were 1,791 spiny dogfish permits held by 1,329 entities in 2024. Of those, 1,319 qualified as small businesses (combined 2024 annual receipts not in excess of $11 million), and 10 were classified as large businesses. Recent total spiny dogfish ex-vessel revenues have averaged approximately $2.2 million annually (2022-2024), and 68 federally permitted vessels participated meaningfully in the fishery (landings over 10,000 lb; 4.5 mt) in 2022-2024.

The proposed 2026 and projected 2027 specifications would set the commercial quota approximately 140,000 lb (63.5 mt) lower than the current quota. Applying the 2022-2024 average inflation-adjusted ex-vessel price of about $0.23 per pound suggests a potential aggregate revenue reduction of approximately $31,700 per year. Averaged across the approximately 68 federally permitted vessels that landed at least 10,000 lb (4.5 mt) annually during 2022-2024, this would be an approximately $470 per vessel per year reduction over the short term. Actual effects would vary among vessels and would likely be smaller if the quota remains non-constraining, as recent fishery performance suggests. Over the long term, maintaining a sustainable stock supports continued fishing

opportunity and future revenue, resulting in positive long-term economic impacts. Therefore, this change is not expected to have a significant economic impact on regulated entities.

The proposed changes to the accountability measures would reduce the influence of single-year variability in catch estimates and reduce future quota reductions when the stock is healthy and an overage is not expected to meaningfully affect the stock status. The proposed measures would retain full payback requirements when biomass is at or below 75 percent of the target or when the stock is under a rebuilding plan, which supports long-term stock sustainability and future fishing opportunity. The proposed changes are not expected to motivate fishery participants to change behavior in ways that would cause frequent quota overages because NMFS is required to close the commercial fishery when the quota is reached.

The proposed changes are not expected to impose new direct compliance costs on regulated entities. Overall, the short-term reductions in revenue are expected to be offset by the long-term positive impacts from maintaining a sustainable stock and the additional flexibility provided by the revised accountability measures. Therefore, the proposed changes are expected to have slightly positive economic impacts on regulated entities. There is no information indicating that the action would impact small businesses differently than large businesses or unduly inhibit the ability of small entities to compete. Therefore, this action is not expected to have a significant adverse impact on a substantial number of small entities. As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

This proposed rule contains no information collection requirements under the Paperwork Reduction Act of 1995.

List of Subjects in 50 CFR Part 648 (https://www.ecfr.gov/current/title-50/part-648)

- Fisheries
- Fishing
- Reporting and recordkeeping requirements

Dated: October 7, 2026.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, NMFS proposes to amend 50 CFR part 648 (https://www.ecfr.gov/current/title-50/part-648) as follows:

PART 648—FISHERIES OF THE NORTHEASTERN UNITED STATES

1. The authority citation for part 648 continues to read as follows:

Authority: 16 U.S.C. 1801 (https://www.govinfo.gov/link/uscode/16/1801) *et seq.*

2. In § 648.233, revise paragraphs (b) and (c) to read as follows:

§ 648.233 Spiny dogfish Accountability Measures (AMs).

★* ★* ★* ★* ★*

(b) *ACL overage evaluation.* The average of the most recent 3 years of total catch (including both landings and dead discards) compared to the average of the ACLs from the same 3 years, in pounds, will be evaluated to determine whether there was an ACL overage.

(c) *Overage repayment.* If the average catch exceeds the average ACL (see paragraph (b) of this section), the amount of payback required shall be determined based on the following procedure, using the most recent projected biomass (B) and biomass at maximum sustainable yield (B_{MSY}) from the years used to calculate the 3-year average. If such a projection is not available for the 3-year timeframe, the nearest preceding B and B_{MSY} projections shall be used.

(1) *If the stock is not under a rebuilding plan and B is at or above 100 percent of B_{MSY}.* No payback is required.

(2) *If the stock is not under a rebuilding plan and B is between 75 and 100 percent of B_{MSY}* . The percent of the overage required to be paid back scales linearly from 100 percent when B is 75 percent of B_{MSY} to 0 percent when B is equal to 100 percent of B_{MSY} . The amount of the overage to be paid back is equal to the overage (as determined in paragraph (b) of this section) multiplied by the

difference between the most recent projected B_{MSY} and B (as described in paragraph (c) of this section), divided by one-quarter B_{MSY} (printed page 64876) ((B_{MSY} −B)/(0.25 B_{MSY})). The payback shall be deducted as soon as possible from a subsequent single fishing year ACL.

(3) *If the stock is not under a rebuilding plan and B is at or below 75 percent of B_{MSY} or the stock is under a rebuilding plan.* The exact amount of the overage (as determined in paragraph (b) of this section) shall be deducted as soon as possible from a subsequent single fishing year ACL.

[FR Doc. 2026-20863 (/d/2026-20863) Filed 10-9-26; 8:45 am]

BILLING CODE 3510-22-P

PUBLISHED DOCUMENT: 2026-20863 (91 FR 64873)

Atlantic States Marine Fisheries Commission

Atlantic Striped Bass Management Board

November 11, 2026
1:30 – 2:30 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order *(C. Batsavage)*	1:30 p.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from August 2026	1:30 p.m.
3.	Public Comment	1:35 p.m.
4.	Update on Revised Marine Recreational Information Program Fishing Effort Survey Estimates for Striped Bass *(K. Drew)*	1:45 p.m.
5.	Discuss Work Group on Future Atlantic Striped Bass Management *(C. Batsavage)* • Steering Committee Recommendations • Discuss Work Group Next Steps	1:55 p.m.
6.	Update on 2027 Benchmark Stock Assessment *(K. Drew)*	2:25 p.m.
7.	Other Business/Adjourn	2:30 p.m.

This meeting will be held at The Hotel Viking (One Bellevue Avenue, Newport, RI; 844.806.4895) and via webinar; click here for details.

MEETING OVERVIEW

Atlantic Striped Bass Management Board
November 11, 2026
1:30 p.m. – 2:30 p.m.

Chair: Chris Batsavage (NC) Assumed Chairmanship: 2/26	Technical Committee Chair: Tyler Grabowski (PA)	Law Enforcement Committee Rep: Sgt. Jeff Mercer (RI)
Vice Chair: Nichola Meserve (MA)	Advisory Panel Chair: Eleanor Bochenek (NJ)	Previous Board Meeting: August 6, 2026
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, NMFS, USFWS (16 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2026

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Revised Marine Recreational Information Program Fishing Effort Survey Estimates for Striped Bass (1:45-1:55 p.m.)

Background

- NOAA Fisheries published updated recreational fishing effort and catch estimates, including for striped bass, reflecting the improved 2026 Fishing Effort Survey Design.

Presentations

- Overview of Revised Striped Bass MRIP Estimates by K. Drew

5. Work Group on Future Striped Bass Management (1:55-2:25 p.m.)

Background

- In October 2025, the Board approved the establishment of a Work Group (WG) on future striped bass management considering recent low recruitment and impacts on the stock as those weak year classes mature. The Board included a list of tasks for the WG to address.
- In May 2026, the Board agreed to wait until after the 2027 benchmark stock assessment is complete to address the assessment-related tasks. The Board also established a Steering Committee to provide guidance on the WG tasks and timelines.
- The Steering Committee met via webinar on September 10 and October 1 to discuss recommendations and proposed next steps for the WG **(Briefing Materials)**.

Presentations
• Overview of Steering Committee Recommendations by C. Batsavage
Board guidance for consideration at this meeting
• Next steps for the Work Group

6. Update on the 2027 Benchmark Stock Assessment (2:25-2:30 p.m.)
Background
• The 2027 Benchmark Stock Assessment is underway. The Assessment Workshop took place in August 2026. • The NRCC peer review is being scheduled for late May/early June 2027.
Presentations
• Update on the Benchmark Assessment by K. Drew

7. Other Business/Adjourn (2:30 p.m.)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC STRIPED BASS MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 6, 2026

These minutes are draft and subject to approval by the Atlantic Striped Bass Management Board.
The Board will review the minutes during its next meeting.

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Adjournment 14

INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of May 4, 2026** by consent (Page 1).

3. **Move to recommend the ISFMP Policy Board approve and send the striped bass offshore aquaculture comment letter to NOAA Fisheries as modified today** (Page 6). Motion by Joe Grist; second by Jason McNamee. Motion passes by consent with 2 abstentions (NOAA and US FWS) (Page 7).

4. **Move to approve the Atlantic Striped Bass FMP Review for the 2025 fishing year and state compliance reports** (Page 11). Motion by John Clark; second by Mike Luisi. Motion approved by unanimous consent (Page 11).

5. **Move to approve Mike Waine of North Carolina to the Atlantic Striped Bass Advisory Panel** (Page 13). Motion by Adam Nowalsky; second by Doug Grout. Motion carries by unanimous consent (Page 14).

6. **Move to adjourn** by consent (Page 14).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for C. Wilson (AA)
Rep. Allison Hepler, ME (LA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Nichola Meserve, MA, proxy for D. McKiernan (AA)
Raymond Kane, MA (GA)
Rep. Sarah Peake, MA (LA)
Jason McNamee, RI (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Robert LaFrance, CT proxy for Rep. Gresko, CT (LA)
Marty Gary, NY (AA)
Emerson Hasbrouck, NY (GA)
Sen. Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
Kris Kuhn, PA, proxy for T. Scheaffer (AA)
Loren Lustig, PA (GA)
Jordan Zimmerman, DE (AA)
John Clark, DE, proxy for R. Miller (GA)
Craig Pugh, DE, proxy for Rep. Carson (LA)
Michael Luisi, MD (AA)
Robert T. Brown, MD, proxy for R. Dize (GA)
David Sikorski, MD, proxy for Del. Stein (LA)
Joe Grist, VA (AA)
Del. Adele McClure, VA (LA)
Chris Batsavage, NC, proxy for K. Rawls (AA)
Ben Dyar, SC, proxy for B. Keppler (AA)
Chris McDonough, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Erika Burgess, FL, proxy for J. McCawley (AA)
Gary Jennings, FL (GA)
Daniel Ryan, DC
Ron Owens, PRFC
Max Appleman, NMFS
Lowell Whitney, US FWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Jeff Mercer, Law Enforcement Committee Rep.

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Thursday, August 6, 2026, and was called to order at 8:30 am by Chair Nichola Meserve.

CALL TO ORDER

CHAIR NICHOLA MESERVE: Good morning, 8:30, so we're going to get started and call the August 6, 2026 meeting of the Atlantic Striped Bass Management Board to order. I am Nichola Meserve; I'm an administrative proxy from Massachusetts. Chris Batsavage is your real chair, he couldn't be here in person today, so for ease of meeting facilitation you are stuck with me.

He'll be back next meeting, I hope. I am going to first recognize that we have some of our Commissioners from South Carolina through Florida joining us this morning, given Agenda Item Number 4, when we'll be talking about the offshore aquaculture letter. Next turn to Toni, to let us know any of our Board members that are online.

MS. TONI KERNS: We have Chris Batsavage, Ron Owens, Dave Sikorski, Sarah Peake, and then Erika Burgess from Florida.

APPROVAL OF AGENDA

CHAIR MESERVE: We'll turn to Agenda Item 2, Approval of the Agenda. Are there any additions or modifications to the agenda this morning? Seeing none; we'll consider the agenda approved by consent, and move on to the proceedings from May, 2026 that need to be approved.

APPROVAL OF PROCEEDINGS

CHAIR MESERVE: We did receive a couple minor corrections from Doug Grout on Page 9 that would be incorporated. Are there any other edits to the proceedings from May, 2026? Seeing none; we'll consider those approved as modified by consent, move on to public comment.

PUBLIC COMMENT

CHAIR MESERVE: This is an opportunity for the public to comment on items that are not on the agenda, and we'll look to the audience, in person. I see one hand and any online? Not seeing any there, so if you would like to come up to the microphone, sir and take two minutes for your comments. There is a public microphone right here, just hit the button, the light will turn on, and please introduce yourself.

MR. ROGER ANDERSON: Good morning, my name is Roger Anderson. Probably what I have to say may seem kind of parochial to you, because you are responsible for the entire Atlantic region of striped bass. I reside in Manassas, Virginia, but we have had property on the, I'm going to say in the Matthews County part of Virginia, waterfront property since 1980. We've been fishing this area for 50 years, so I consider myself somewhat of a recreational fisherman. It is particularly concerning to me, and other Virginia recreational fishermen, that gillnetting of rockfish is allowed on your spawning grounds.

As personally recognized and witnessed by my neighbor, netters were taking numerous large rockfish close to shore at the inlets of creeks and coves in the vicinity of our properties during February of 2026. They were discarding smaller rockfish, whereas otherwise it would have required tagging.

As a conservation measurement it is reasonable to restrict the rockfish season for recreational fishing, which ended in 31 December. We were allowed to keep one rockfish per day at a reasonable slot limit. However, commercial fishermen could continue to gillnet for rockfish through close to the end of March.

We consider this to be preposterous and we consider it to be a significant effect on the future spawning of rockfish in our areas. We specifically, the effect that I've personally seen, my neighbors have personally seen, since I do a lot of hook and line fishing, and I do put out minnow traps in the

summer. There is the almost absence of rockfish in our minnow traps this summer. Previous years I had caught quite a few.

I do catch a lot of rockfish in my traps, this year there was hardly any at all. We respectfully request that you immediately modify regulations to prohibit all rockfish gillnets in their spawning grounds beginning February, 2027 through the spawning season. We consider this critically needed to allow the restoration of the rockfish population. Every year action is not taken results in another lost critical spawning season. We don't want a study, we want action.

CHAIR MESERVE: If you can try to wrap up in the next 20 seconds or so, please.

MR. ANDERSON: Secondly, we request that it should be illegal for gillnets to discard any rockfish caught in gillnets. All rockfish should be tagged, kept and reported. I can understand why the commercial fishermen discard the smaller rockfish, as all fish kept require a tag, and the more weight per pound is in the larger fish. We all must sacrifice in order to save this valuable food source.

CHAIR MESERVE: Thank you for attending our meeting today and voicing your concern, take that into consideration. Seeing as there are no other hands for public comment.

CONSIDER COMMENTS TO NOAA FISHERIES ON ITS DOCUMENT: CHARTING A COURSE FOR STRIPED BASS: SCIENCE AND REGULATORY INNOVATION FOR OFFSHORE AQUACULTURE

CHAIR MESERVE: We can move on to Agenda Item 4 to Consider Comments to NOAA Fisheries on its Document Charting a Course for Striped Bass Science and Regulatory Innovations for Offshore Aquaculture. This is an action item for us.

The Board will be considering any edits to the letter and then forwarding it to the Policy Board for review as well. These comments were drafted by staff after compiling written information from Board members, after NOAA Fisheries had requested feedback on the Draft Technical Memorandum regarding Offshore Striped Bass Aquaculture. We will begin with a brief overview of the comment letter by Emilie.

MS. EMILIE FRANKE: Just a little bit of background here today. As Chair stated in February, NOAA Fisheries Office of Aquaculture provided a presentation to the Board on the Draft Technical Memorandum. NOAA Fisheries is seeking feedback from the Commission, and so we had 8 commissioners provide pretty detailed written feedback to staff over the past few months.

We compiled all those comments into the draft letter that was in your meeting materials for today. Overall, of the comments from the commissioners there is a lot of overlap, and there were a lot of concerns noted that the draft memo does not adequately address several issues, including economic, regulatory, enforcement, biological and ecological issues associated with potential offshore aquaculture of striped bass.

The commissioners also noted concerns about the risk to the wild population to seafood markets, protected species and marine ecosystems, as well as concerns about some of the regulatory and financial considerations. As you probably saw, the letter is pretty detailed, so I am not going to go over every single sentence in the letter.

But I am just going to go through some high-level summary of the various sections that the commissioners commented on. First there were comments on enforcement concerns, concerns that the striped bass aquaculture in the EEZ would create additional enforcement responsibilities. Since the EEZ is currently closed to striped bass fishing there was concern that offshore striped bass aquaculture could be used as a cover for some illegal fishing.

Comments noted there wasn't enough detail provided in the memo on the traceability, monitoring, compliance or enforcement aspects here, and that it wasn't clear which agency would be responsible for the enforcement and monitoring.

Next are the economic concerns. The Commissioners noted the potential for any striped bass aquaculture product to potentially flood the seafood markets and reduce the value of wild caught striped bass.

This would have impact on the wild fishery and on the harvesters. There were concerns that the memorandum didn't attempt to quantify those consequences, and that there needed to be an analysis of these types of market impacts. As far as user conflicts, the comments noted that this needed to be addressed in greater detail.

They noted that access to traditional fishing grounds would be reduced, and just in general needed more detail on what the offshore striped bass aquaculture farms would look like, and sort of what uses would be allowed or not allowed around those areas. As far as project siting there were some comments on the actual project sites themselves.

There was concern that the memo underestimated the challenges, sort of engineering and operational challenges needed for potential offshore striped bass net pens. There wee a couple comments noting that changing ocean conditions would likely shift where the most suitable production areas would be into the future.

It wasn't clear how the regulatory framework would address this issue. There were also some comments that noted that the areas that were identified as potentially suitable for potential striped bass aquaculture would also be highly susceptible to severe weather events. You need more information on the measures to minimize damage in those cases, and sort of what the impacts would be. There are also comments that the potential sites are being proposed outside of the aquaculture opportunity areas process. There was not a lot of information on what the public input process would be.

As far as aquaculture industry specifics, there were some questions from commissioners, first noting that any regulatory framework would need to be informed by the realistic operational practices and industry needs. Trying to understand better what the aquaculture industry is looking for here.

Commissioners noted that we need to evaluate the cost and scale required to support the economic viability of these potential operations, so sort of what would the profitability margin be. For ecological concerns some comments noted that the memo didn't address the concern that forage fish would be part of the feed, and also there were comments on the potential effect of these potential offshore sites on essential fish habitat.

For a protected species, some of the Commissioners noted that the memorandum had pretty limited information on the potential for entanglement and other interactions. They were looking for some more information there. As far as the biological risks, the comments noted concern about disease transmission, parasites, escapements and potential genetic interactions with the wild population.

Also, concerns about any therapeutants, antibiotics used and that is essential exposure for the wild population there. The comments noted that more information is needed on actually implementing genetic tracking and practice, what would that look like? Also, the comments noted that the risk of escapement or catastrophic failure of potential operations, for example due to a severe storm, is a real risk and should be given more consideration.

As far as the policy and regulatory roles, the comments noted that the memo was a little bit vague on sort of what this would all look like, and that there would need to be further discussion on which agencies would have oversight of bio security and potential impacts on the wild stock. The role of the Commission and states was sort of mentioned in the memo, but the commissioners noted it wasn't really clear how input from the Commission would be used in this process.

The conclusion of the letter, the draft letter notes that given these risks and unresolved issues that the Commission did not support moving forward with consideration of offshore striped bass aquaculture

at this time. That is all I have; I am happy to take questions. But again, several Board members submitted pretty detailed comments, so I would look to you all as well based on what you submitted.

CHAIR MESERVE: Are there questions from Board members about the content of the letter? Jay McNamee.

DR. JASON McNAMEE: Yes, we submitted pretty extensive comments from Rhode Island and you've captured them all. I really like the content of the letter. Just kind of like looking at the materials. I just wanted to throw something out and see if people pick up on it or not. I really like the letter and I'm guessing there is like a timeliness to this, so we should probably just get it out. But two of the sections, specifically user conflicts and project siting, they are separate sections in the letter, and I was just kind of thinking, really those two sections are about marine spatial planning.

We comment on that a number of times in the letter. The information that they sent us is really focused on site suitability, specifically for temperature for striped bass. Like that is the extent of it, but I think the points that we're trying to make in the letter is that there is like a lot more. The ocean is becoming a very busy place.

I guess what I was wanting to throw out there, does it matter, should we put those two sections under like a broader category of, you know a lack of marine spatial planning associated with where they were kind of proposing this stuff, or are people happy with it, and let's just get it out the door? I'm leaning towards the latter, but just wanted to offer the thought, in case folks thought it was important.

CHAIR MESERVE: I do think, Jay, that if the Board is interested to have the Policy Board look at it in about an hour and approve it, and the timeliness is the factor that any edits will need to be pretty specific, in order for staff to accommodate them. If it's just the Board changing a heading and putting some of the sections together, I think staff could probably accommodate that pretty easily, would be my take. But if you are overall, if you would like that or are okay with that, I think the more significant edits might impact that timeline.

DR. McNAMEE: Just a follow up. No, I appreciate that. I was thinking about that too, because I hadn't like drafted up something. I was like, this is too much. You know if people thought like a higher-level heading and then the two subsections that already exist, which are good, I like them.

Maybe it doesn't even matter, I am probably overthinking it. I had a lot of coffee this morning, so I'm fine with that. But I again, I didn't know if the term marine spatial planning was important, kind of putting it in there, that is why I wanted to offer it.

CHAIR MESERVE: I'm going to turn to Joe Grist.

MR. JOSEPH GRIST: First let's monitor Jay's coffee intake this morning, please. I think actually I agree with Jay's suggestion if it's manageable in the next hour, but otherwise I am good with how it is crafted now. I think it definitely conveyed many of our opinions from around the table that we've all offered, and we've repeatedly stated over this last year.

Previously when they came before us, I think it was maybe at the February meeting, at the State Directors meeting in New Orleans. I think we've been making this point very clear to the Federal Government, and they seem to keep needing to be reminded of our points. I'm looking forward to seeing this go out, and once again stating the same thing again. We don't want this.

CHAIR MESERVE: Thank you, Joe, so I think based on both those comments what staff is going to do is maybe get with you after the meeting quickly, Jay, and make sure that they can just insert a short sentence or two that would kind of capture what you have in mind. This will be going to the Policy Board next, so everyone will have a chance to look at it again there. Is there any objection to that revision? Seeing none; Megan Ware.

MS. MEGAN WARE: Just a quick suggestion on the letter. I thought it was strong. Keeping it focused to striped bass offshore aquaculture I think is key here, as opposed to someone being able to interpret this to broader offshore aquaculture.

I think just making sure anytime we use the phrase offshore aquaculture it says striped bass offshore aquaculture or in some of the conclusionary statements at the very end in those last few paragraphs, adding the work striped bass to every sentence, I think is helpful, just so it is super clear what we're referencing in this letter.

CHAIR MESERVE: Thank you for that, Megan, that one is certainly easy enough, and staff have already kind of combed through the letter and found about 15 places where they could insert striped bass to make it very clear that this letter is specific to striped bass offshore aquaculture. I see two hands online, Chris Batsavage and then Erika Burgess, so Chris, go ahead.

MR. CHRIS BATSAVAGE: Yes, I agree with the other comments regarding the fact that the letter, I think is in pretty good shape with some minor edits considering the short turnaround time. I would like to make one more suggestion, which I think would be minor, but maybe not necessary. But for the enforcement concerns there is language in there about integration of vessel monitoring systems for commercial boats.

Just make sure there is no illegal harvest in the EEZ, and we talked about the issues with that. The letter doesn't express the fact that I believe vessel monitoring systems are pretty expensive for small boats, right off the top as far as purchasing it, but also for the subscription to keep it running. I don't know if that needs to be added or not, or does the Board think there is enough meat on the bones, so to speak in this letter to just kind of work with what we have?

CHAIR MESERVE: Well, it is a meaty letter, but I think that would be something worth adding and could be done pretty quickly. If there is no objection to adding a sentence about the cost of VMS, we'll add that as well, and turn to Erika Burgess.

MS. ERIKA BURGESS: I appreciate the opportunity to participate in the discussions today, and the opportunities that we had in February. I have to admit, I was a little surprised by the conclusion of those letters that was presented to the Board. My takeaway from the February conversation was that there were a lot of concerns, a lot of lacking information.

I thought the outcome was going to be a letter saying that more information was needed and more points needed to be considered, rather than an outright opposition to this, full stop. I am curious, because it wasn't transparent to me at the February meeting if members of the Board could put on the record a more-clear through line of how they went from wanting more information to making the decision to oppose this venture.

CHAIR MESERVE: Thank you for that, Erika. I think that the process was laid out in terms of that the comments were collected by staff and put into the letter. But I would turn to the Board members, really to ask if the concluding statements of the letter are what you supported in your comments and they are reflected here. If there is a disagreement on that, then I think we will be looking at a motion at some point to approve the letter as modified today and move from there. Did I see a hand from Shanna Madsen?

MS. SHANNA MADSEN: I just wanted to express the same sentiments that my colleague across the table did, Mr. Grist. We are in full support of the way that this letter concludes. I would have love to have seen this with a different species, but with striped bass, quite frankly I am at a full stop on this.

CHAIR MESERVE: Any other comments? Thank you, Marty, go ahead.

MR. MARTIN GARY: I wanted to compose my thoughts. Several of the Commissioners noted I have a crabby tie on today, and I am going to try to keep my comments productive. But this is our third

discussion of this issue related to striped bass aquaculture offshore in the Atlantic coast of the U.S. New York was one of the contributors to the 8 letters that were submitted, and I agree with everything that was discussed here and the revisions and the modifications discussed.

From a technical perspective we're in lock step with that. I don't want to necessarily sturdily pile on, but I think we're here assembled. The Board members have had the privilege to discuss the management of this species, with all the supporting technical people that provide the insight to our management for this species, and the public.

I don't know how many people online, but typically we have hundreds. This is our flagship species, and we are arguably entering the most challenging period of time for this species in the last half century. Everybody hearing those, in the next year and a half, we're going to have some very difficult discussions for this species.

I myself have been working with this animal since day one of my career, more than 40 years ago, and there are people on this Board that have a greater depth of experience and knowledge than I do. But of all the people I've talked to, Board members, the technical folks that we all work with, the constituents. I have yet to hear one person say this is a good idea.

I am trying to understand where the idea comes from for this species in this place to go forward, when the entire community is in lockstep in their opposition to this. I just want to reiterate. I think Joe said succinctly, we are not in support of it. I think that's the end game. Maybe I'm wrong and somebody else will step up, but I've worked around, I've talked to a lot of folks.

I have yet to reach one person who thinks this is a good idea. My passion is spilling out of here a little bit, but this is the third time we've discussed it, and we're about to embark on a really difficult time for this species that we all care so much about. I'll just end it right there. The letter speaks for itself; I think it is well done. I appreciate, Emilie, your synopsis of that and I'll stop there, Madam Chair.

CHAIR MESERVE: In consideration of our time allotment, as well as providing an opportunity for any public comment, I would look to the Board for a motion at this time. Staff does have something drafted to make it easy if anyone would care to make that motion. Joe Grist, could you read that into the record for us?

MR. GRIST: I would be happy to. **Move to recommend the ISFMP Policy Board approve and send the striped bass offshore aquaculture comment letter to NOAA Fisheries as modified today.**

CHAIR MESERVE: I see a second from Jay McNamee.

MR. GRIST: And half the room.

CHAIR MESERVE: Any further discussion, Joe. I know you already got up there with some comments, but you're welcome to provide more if you like.

MR. GRIST: No, I think comments around the table speak for themselves, good consensus report for this. Again, well done for staff to help us put this all together.

CHAIR MESERVE: Jay, any further remarks?

DR. McNAMEE: Nothing more, thank you.

CHAIR MESERVE: Looking for any further Board hands. Not seeing any; I do want to provide an opportunity for members of the public to comment on this, if there is anyone. In the back, please come to the microphone, introduce yourself.

MR. DAVID O'BRIEN: Thank you, Board. My name is David O'Brien; I am with NOAA Fisheries Office of Aquaculture. I just wanted to come here and give a few remarks. First and foremost, I appreciate being invited to come today and say a few comments, and really want to express my gratitude to everyone at

ASMFC who put so much thought and effort into this, not just this letter but over the past what two years or so we've been having these conversations.

The feedback is very much appreciated; we want to make sure we work very closely with the ASMFC on all aspects of aquaculture in the Atlantic. I want to make sure that I relay a couple of things just for awareness. First of all, we will take your comments, looking forward to seeing them. We've seen the draft, of course, on your website.

Look forward to the final version. We'll be sure to go through those more carefully and incorporate the comments as appropriate. There are a lot of great comments in there, into a final version of that Tech memo. That is a next step for us to take on. But also want to point out two other things. There are a number of things we're working on and I won't go down the whole list, of course. But two things in particular I want to highlight for this group today.

One is, that I know in your letter you highlighted the value of aquaculture opportunity areas or ALA's. That is our flagship effort for aquaculture in marine waters, not just offshore but a lot of this is focused on offshore. I wanted to point out that there actually is an effort, an opening right now as an RFI went out, a request for information went out just about a week ago, I believe, asking for comments on the next round of ALAs somewhere in the country, it's not moving into the Atlantic, certainly.

But we expect some comments from, perhaps the folks around this table or your constituents. I'll make sure that is out there if some people want to add additional thoughts on any aspect of aquaculture, really, where it should go, where it shouldn't go, including striped bass. We welcome your comments during that process.

The other thing I wanted to point out is, there are some comments again in the letter about the market implications of striped bass aquaculture. For awareness, we are in the process of launching a new cooperative institute for aquaculture called sea farm, it is CI Farm, and one of the first projects out of the gate will be to look at the market implications of striped bass aquaculture in the context of commercial and recreational fishing.

Now this is not limited to this particular conversation. Striped bass aquaculture is happening already in other parts of the country, other parts of the world. It's happening in Mexico, in coastal ponds and in the Gulf, for example. This is a timely conversation regardless of what happens for offshore aquaculture in ASMFC jurisdiction.

I will make sure we are listening to those concerns and questions, and we are taking steps to address them. With that again, thank you very much, appreciate your comments. Looking forward to continuing to work with you.

CHAIR MESERVE: Thank you for attending today, Mr. O'Brien, that is some very helpful information for us to have as well, and hope the Board members will look for that RFI and for the comments if you have them. Are there any other members of the public online, I'm not seeing any hands, or in the room.

Do the Board members need a moment to caucus on the motion? Seeing no shaking of the heads for that, **is there any opposition to the motion? Seeing none, any abstentions? Two from NOAA Fisheries and Fish and Wildlife Service. The motion carries by consent with two abstentions**.

CONSIDER APPROVAL OF FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE FOR THE 2025 FISHING YEAR

CHAIR MESERVE: That will bring us to Agenda Item Number 5, to Consider Approval of the FMP Review and State Compliance for the 2025 Fishing Year. Emilie will lead us through a presentation of this, and then we'll be looking again for a motion to approve the document. Go ahead, Emilie.

MS. FRANKE: I will give our typical FMP Review presentation starting with quick status of the stock. Based on our 2024 stock assessment update the stock is overfished but not experiencing overfishing.

This assessment had a terminal year of 2023. We are of course working on the next Benchmark Stock Assessment, which will have a terminal year of 2025.

We'll hear an update from Dr. Drew right after this about the timeline of that assessment. As far as the FMP, you know we are still under these Addendum II to Amendment 7, the management measures which were implemented to achieve a reduction. As a reminder, those were implemented in May of 2024 with commercial quotas having a 7% reduction. The ocean fishery is at a 1 fish at a 20-to-31-inch slot. There are some different measures for the New York Hudson River, the Pennsylvania Delaware River and the Delaware River and Bay in Delaware. In the Chesapeake Bay the measures are 1 fish at a 19-to-24-inch slot, and then we had those two recreational filleting measures as well.

Then of course at the end of last year the Board approved Addendum III for Amendment 7, which allowed Maryland to change its recreational season baseline, which Maryland chose to do. Then states had to implement the total length definition by January 1st of next year, and then we also have commercial tagging by the first point of landing, which needs to be implemented by the end of 2028.

Moving on to status of the fishery. What did the fishery look like last year in 2025? In 2025, total removals were about 3 million fish. This is about a 25% decrease from 2024. You can see here this is part of the table we have in the FMP Review showing the breakdown of removals by sector. You can see here the commercial sector; the proportion of total removals is a little bit higher this year.

That is because there was a greater decrease on the recreational side in 2025 than there was on the commercial side. For the commercial fishery in 2025, the fishery harvested about 4.2 million pounds. Again, this is a decrease from 2024, it is about a 4% decrease by weight, about an 11% decrease by number.

As far as the commercial quota utilization last year, the ocean utilized about 75% of its quota. Of course, largely that underutilization is due to the lack of availability of fish in North Carolina, so North Carolina had zero landings for their ocean fishery.

Of course, a couple states do not allow commercial fishing so they are not using their quotas. But however, most of the ocean states that do allow commercial fishing used over 95% of their quotas last year. Chesapeake Bay used about 89% of its quota last year, and there were no state quota overages in 2025.

Here is a time series of commercial landings since 2015, you can see the top line is coastwide. That next sort of dotted line is the Chesapeake Bay, and the bottom dashed line is the ocean. You sort of see that dip in 2020, and then landings have remained relatively stable, a little bit decreasing, not surprising given the quota management.

On the recreational side, last year in 2025 harvested about 1.4 million fish or about 11.2 million pounds. This is about a 17% decrease by number from 2024 about a 27% decrease in weight. About 11.7 million fish were released alive, and based on our assumption of that 9% release mortality, about 1 million of those are assumed to have died from that fishing interaction.

These live releases were about a 39% decrease from 2024. Here is a time series since 2015. The dark blue line is recreational harvest; the dashed green line is release-mortality. Again, for harvest you can see that peak in 2022, with the 2015-year class coming through, and it's been declining since then, sort of similar with release, you can see that very slight peak in 2022, but that has also been declining since then. As far as directed trips last year, there are about 16.3 million trips with striped bass as either a primary or secondary target. This is about an 8% decrease from 2024, and overall, the coastwide directed trips for striped bass is the lowest in the past decade last year. Again, the time series, you can see that dark blue line is the ocean directed trips, you know a clear decrease since that peak in 2022.

The bottom orange line is the Chesapeake Bay, also sort of a decrease over time with a slight increase in 2025, but still low for the time series. As usual the PRT notes there are several factors that are likely contributing to the catch and effort levels. Specifically for last year the PRT talked about bad weather and high winds, especially in early fall, and lack of available slot size fish in peak season.

This is specifically for New York and New Jersey. Decreases in those two states last year really drove that coastwide decrease that we saw. Some of the other states in New England were either sort of stable from 2024 or even a slight increase, but those large decreases that we saw in New York and New Jersey really drove that decrease in 2025.

Then in the Chesapeake Bay, the PRT talked about the lack of strong year classes for the past several years and also the Addendum II measures that have been implemented since 2024 are likely contributing to the low harvest we're seeing in the Bay for '24 and '25. For North Carolina, Albemarle Sound, Roanoke River areas. North Carolina provides us with updates.

But this is actually the same update since last year. Their last stock assessment indicated the stock is overfished and overfishing was occurring, with very low recruitment. North Carolina implemented a harvest moratorium starting in 2024 for these two areas, and that is still in place. Another part of the FMP Review every year is the recruitment trigger from Amendment 7.

You may recall that if any of the 4 juvenile abundance indices used in the stock assessment is below 75% of sort of our high recruitment period, then the F reference points we use must use the low recruitment assumption. We are already doing that; we are already using the low recruitment assumption.

This trigger was tripped again, but we are already operating under low recruitment assumption. The trigger was tripped, we reviewed the last 3 years of values, '23, '24 and '25 and actually all 4 indices tripped the trigger this year. Here on the screen, you can see the 4 indices. New York Hudson River is in the top left.

Next to it is the New Jersey Delaware River Index, the bottom left is Maryland/Chesapeake Bay, and then the bottom right is Virginia, you can see those red circles are all of the years where those indices have been below their trigger level. As far as PRT comments and recommendations.

First, the PRT noted that all states in 2025 did implement management and monitoring consistent with the FMP. Then a couple of discussion point with the PRT this year. The PRT did note the issue of determining commercial quota overages based on preliminary harvest estimates. The PRT brought this to the Board's attention last year, there were overages in 2024 in New York and Maryland, so those two states adjusted their 2025 quotas based on preliminary harvest estimates, and then a little bit later when final harvest estimates were available, determined that there was an additional overage amount, which those states then planned to take in 2026.

With the compliance reports this year, sort of the PDT just noted how that played out. New York did reduce their 2025 quota based on their preliminary overage amount, which was about 15,000 pounds. Their final data indicated an additional 600 pounds of overage.

But New York noted that when they completed their reporting for 2025, they were under by more than their total overage, so they did not take any additional quota reduction in 2026. Maryland did reduce their 2025 quotas based on their preliminary overage amounts, and then followed with a 2026 quota reduction based on those additional overage amounts.

The PRT also had a brief discussion on the New Jersey Stiped Bass Bonus Program tags. As a reminder, New Jersey's bonus program is an approved conservation equivalency program and participants can harvest 1 fish between 24 inches and less than 28 inches per permit. Only 14% of issued permits were used in 2025.

The PRT did have a brief discussion on what happens to any of the unused Bonus Program tags. For-hire participants in New Jersey are required to return the tags, while private anglers are not required to return them. The PRT noted that this is inconsistent with the strict tag return requirements for the commercial fishery.

This is obviously not a commercial fishery, but the program is based on commercial quota, so the PRT wanted to point that out. But New Jersey did indicate that there is some ongoing discussion on how to improve reporting from private anglers for this program. That's all I have; I am happy to take any questions.

CHAIR MESERVE: Great thorough review. Of all the FMP reviews we look at this is on of the meatier ones for striped bass. I do appreciate the PRT digging in a little bit about how the 2025 harvest differed from what our assumptions had been about a year ago. I'll turn to the Board for questions and I see Robert Brown.

MR. ROBERT T. BROWN, SR: I've got a question, you were talking about Maryland harvest on the commercial part was 89%, which is 11% which was not caught. I heard you say that was because of low abundance of rockfish. Did I hear you correctly on that?

MS. FRANKE: The PRT talked about the several factors possibly driving this low harvest. I think the PRT discussion was a little more focused on the recreational fishery. There wasn't specific discussion on why 11% of the Bay quota wasn't utilized last year.

MR. BROWN: Okay, one of the reasons we have it with our commercial fishery, it's the way it's set up. If it is set up so we don't catch our quota, because there is no rollover if you don't catch it, but the problem is the way it is set up in Maryland, we don't allocate enough for everybody. You allocate your quota and somebody doesn't catch it full, not because there is not the fish there, it's because we've got some people who aren't fishing, we've got some people who started fishing early and then stopped and shifted over, go to oystering or whatever. The way it is set up, if they only allocate exactly the amount that we are to catch, we will never catch it, because there are a few people who don't fish anymore. Some people have such a low quota that they are not using it. That is one of the reasons that we are below.

The problem I have with it is this 11% that is not caught, not that we're not catching them. The problem I have with it is, we don't get no credit for not catching the fish. I'm not talking about a rollover, but when the following season comes you have two or three years. It's been a number of years; I don't know how many years in Maryland.

I think it's only been maybe two years since we've been doing this that we went over our quota, of course we paid it back. The last time we paid it back, we went over our quota was because the allocation came at the craw to the cut that we had to take, and that threw us over a couple percent, which we did pay back.

But I think that we need to get credit for not catching those fish when it comes to further times when we get a cut. Well, you didn't catch it for the past so many years, and now you've got to have a cut because things are bad. It just doesn't seem fair that we get cut so hard, and we are the most restricted, the commercial fisherman is. I mean we have to tag our fish; we have to weigh our fish; we've got to carry them to a check-in station.

All this stuff we do, we are so heavily regulated, and yet the recreational fisher, what do they have? MRIP. Everyone in here knows that MRIP is far from being a perfect situation. It's not real science, and I just wanted to bring this to everybody's attention. Thank you.

CHAIR MESERVE: Thank you, Robert, for the insights into the commercial harvest results there. I did see another hand from Loren.

MR. LOREN W. LUSTIG: Thank you to the presenter for a very interesting report. In one of your early

slides, I took note, I think the title was something like catch effort levels, and it related to angler behavior, which I found to be a very interesting phrase. Could you expand on what is the consideration there as it relates to angler behavior, and I appreciate the opportunity to ask a question.

MS. FRANKE: I think it can mean a lot of different things. I think one example is when the fish are more available, we tend to see an increase in effort, so folks are choosing to take trips when the fish are more available versus when they are not. I think it can mean a lot of different things. I think that is one example the PRT comes back to is sort of how does effort change, based on when the fish are available.

MR. LUSTIG: Follow up if that's okay. The word behavior often would indicate some perhaps maladaptive behavior like poaching or disregard of slot limits, that sort of thing. That was what I was wondering about.

MS. FRANKE: Got it. The PRTS, I think definition or use of the term behavior wasn't referring to things like poaching, referring more to angler's decisions on whether or not to go fishing.

CHAIR MESERVE: Appreciate that clarification, any other questions from the Board? Jason McNamee.

DR. McNAMEE: It's in the report and I think you mentioned it as well, Emilie, in the presentation about the New Jersey tagging program. The report says they are working on something, so I just wondered if the folks from New Jersey might want to offer what they are considering to help.

But the issue is I think, the issue tags have been there is no requirement to turn them in. I don't know what leverage they have to get those tags back, like you have in a commercial fishery, for instance. I am just curious as to what they are thinking about with respect to that tagging program and how they might improve it to sort of help with this issue of these tags just kind of disappearing after they are issued.

CHAIR MESERVE: Thanks for the question, Jay, similar one. I don't know if you caught all that Joe, as you are just coming back into the room, but Jason was asking abut he Bonus Program and the types of improvements that New Jersey was considering to improve the tag accountability.

MR. JOE CIMINO: The reason why it exists for charters is they are actually given like a bag of tags. With the remainder of the program for private anglers it was a single tag going out to folks. I think it may have been more administration type stuff than anything else, but it is something that we're working on, considering several different options.

One of the things that we're really interested in is just understanding the usage. Why are so many folks asking for them and not using them. Part of that tends to be, I think, kind of combined trips with folks, and so not all the tags are used. Can they all start coming back? That is what we're looking into, are we capable of handling and requiring if every individual gets the same tag back to us, worried about reporting lost tags and how to handle it kind of stuff now.

CHAIR MESERVE: Thanks, Joe, for that response there. I think it would be worth, the next time that New Jersey submits its conservation equivalency proposal for that program, that would be an opportunity to look at exactly what is being done, and whether or not there ought to be any improvements, what New Jersey is talking about now. Any further questions from the Board? Not seeing any, would anyone care to make a motion to approve the document. John Clark, go ahead.

MR. JOHN CLARK: I'm going to wait for it to pop up here. Don't make me adlib. **Move to approve the Atlantic Striped Bass FMP Review for the 2025 fishing year and state compliance reports**.

CHAIR MESERVE: I see a second from Mike Luisi, thank you, is there any further discussion. Seeing none, **is there any opposition to the motion? Seeing none are there any abstentions? No, okay, the motion is approved by unanimous consent**.

UPDATE ON 2027 BENCHMARK STOCK ASSESSMENT

CHAIR MESERVE: We will move on to Dr. Drew's update on the 2027 Benchmark Stock Assessment.

DR. KATIE DREW: This will be pretty quick. First of all, we are having our Assessment Workshop in essentially two weeks, the week of August 24. There is a webinar option if people would like to listen in to that. But I think the bigger update is that as you know we were scheduled to go through the Spring SARC, and originally with monkfish.

But given that the monkfish Research Track is indefinitely on hold, we spoke to the NRCC and they are willing to move our review date back to late May, early June, to give us more time to include the new MRIP numbers, so that we are not quite so crunched for time when they come out, essentially.

During our Assessment Workshop we'll have more time to really fold those numbers in and understand how that can pass the assessment. That means the Board will receive the new assessment in August of next year instead of May, as was originally scheduled. Happy to take any questions on that or the rest of the assessment.

CHAIR MESERVE: Any questions? John Clark.

MR. CLARK: I think the word is around that you are going to be reconsidering the recreational release mortality. I was just wondered if briefly you could state how that may affect the estimates of the stock size.

DR. DREW: I think it is hard to say right now. We are considering changing the estimate of release mortality. As you all know, we use a constant 9% rate across space and across time and across ages. The Dean et al work out of Massachusetts suggests that the rate is lower than that.

But I think probably the more important impact is that it is a function of size of the fish, so that smaller fish have a lower release mortality, older larger fish have a higher release mortality, which is consistent with some other work that has been done on that in the past. I think that would change not just the scale of the population, the way that moving to a straight 4%, 5% rate would.

But it is essentially going to change the catch at age as well, so that we will have fewer small fish in the catch at age and more old fish in the catch at age. That combined with the potential scale change in MRIP, and how that is distributed across modes and across time of year. I think it is really too hard to say, but there will most likely be a scale change, but I think it is really difficult to say how that will play out or what that would say about trend or status at this point.

CHAIR MESERVE: Any other questions about the timeline or the assessment? Mike Luisi.

MR. MICHAEL LUISI: I'm just sitting here thinking about the timing of any action that would come from the result of the benchmark. In August, not that we have any control over that, but I feel like an August report is going to be challenging if there is some type of action that is needed and we want to do it quickly. We've gone through the process of making changes within a season and we've seen just through the FMP report, whether it was an emergency action years ago. We took commercial and recreational reductions while we were already within a season a few years back, and that caused challenges and complications with our commercial management. I'm just wondering if staff have been talking about a way.

Would there be a way that we could preload something a little bit, so that when we receive information in August. If that information leads to us having to consider taking reductions, and I'm kind of anticipating that, as I think most of you are, based on what we just saw about our coastwide recruitment.

It's been pretty poor for years, and I don't anticipate we are going to be looking at review that is going to be positive. Just thoughts about, if we were going to take action, is there any way we could in 2028, without really throwing a wrench

into kind of states developing fishing guides. All of the material, everything that goes out for a year is significant for striped bass. Just asking if there has been any thought and consideration as to the timeline for action?

DR. DREW: We talked about that a little, I think. Obviously, in our opinion, it's more important that you guys receive the best scientific information than like rush through to get something that you would then rush into management. But the other thing to consider is, I think the Board Workgroup, and sort of the longer-term planning, and also the potential for things like new reference points.

I think there are probably going to be larger questions that come to you about the long-term future that a short, immediate response in 2028 is maybe not what you would want, even if you got this in May. I think it is certainly something to consider, and the Board should be ready in August to like think through these things and discuss. I don't know that there will be a way, or even if a quick action in '28 would be beneficial to the long-term plans that this Board needs to make.

MR. LUISI: Appreciate that answer, thank you

MS. FRANKE: I'll just add a different point on sort of the long-term action versus immediate response. But as far as from a process perspective, the mechanisms for response, of course do you have an addendum or an amendment. If you have the stock assessment in August and the PDT were to come back with a draft addendum in October, and the Board approved that for public comment.

Of course, final action wouldn't be until the winter of 2028, unless there were some sort of special meeting. But I also want to point out that in Addendum II there is the Board action provision, which is still in play. It says that if an upcoming stock assessment prior to the 2029 rebuilding deadline indicates the stock is not projected to rebuild by 2029, with a probability of 350% the Board could respond via Board action. Again, it sort of gets back to Katie's point of immediate versus long-term action, but that Board action provision is still there.

CHAIR MESERVE: Thank you, both. Anything further, any further questions? Yes, Marty.

MR. GARY: Question for Katie. Is it too preliminary to understand whether or not, related to natural mortality for the upcoming assessment, any emerging science will read its way into the stock assessment? I'm thinking specifically mycobacteriosis in the Chesapeake Bay.

DR. DREW: I think we're definitely going to take another shot at that, especially with the spatial model, which gives us more ability to sort of take what we know about what is happening in Chesapeake Bay versus the ocean and do some stuff there. I think it is too early to decide whether that is going to be the base case, or whether that is just going to be a sensitivity run. But it is definitely something that we are looking into, given kind of the trends that we see coming out of our tagging models and other sources of information

CHAIR MESERVE: Not seeing any further hands, that's good. We're bumping up against our time.

REVIEW AND POPULATE ADVISORY PANEL MEMBERSHIP

CHAIR MESERVE: I am going to move to the next item and turn to Tina Berger to review a nomination for the Advisory Panel.

MS. TINA L. BERGER: I offer for the Board's consideration the nomination of Mike Waine, with the Commercial Sportfishing Association as a representative from North Carolina, he replaces John Worthington.

CHAIR MESERVE: Thank you, is there a motion on the Advisory Panel nomination? Adam Nowalsky.

MR. ADAM NOWALSKY: I **move to approve Mike Waine of North Carolina to the Atlantic Striped Bass Advisory Panel.**

CHAIR MESERVE: Is there a second, Doug Grout, thank you. **Any opposition to the motion? Abstentions? Seeing none; the motion carries by unanimous consent**, welcome, Mike. That brings us down to other business.

ADJOURNMENT

CHAIR MESERVE: Any other business to come before the Board? Seeing none; is there a motion to adjourn? So moved and second, and we will consider Board meeting adjourned. Thank you all for your time this morning.

(Whereupon the meeting adjourned at 9:30 am on Thursday, August 6, 2026)

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Atlantic Striped Bass Management Board**

FROM: **Steering Committee for the Work Group on Future Management**

DATE: **October 23, 2026**

SUBJECT: **Next Steps for Work Group**

In October 2025, the Board established a Work Group (WG) on future striped bass management. The WG is intended to discuss management beyond 2029 considering the impact of recent low recruitment as those weak year classes become the majority of the spawning stock biomass in the coming years. There are six WG tasks per the October 2025 Board motion:

1. Review biological reference points and consider recruitment-sensitive, model-based approaches;
2. Formally review hatchery stocking as both a research tool and a management tool for striped bass with cost analysis;
3. Evaluate the potential for other river systems to contribute to the coastal stock;
4. Explore drivers of recruitment success/failure in Chesapeake Bay, Delaware, and the Hudson in light of changing climatic and environmental conditions, including potential impacts from invasive species;
5. Explore the reproductive contribution of large and small female fish and the implications of various size-based management tools;
6. Methods to address the discard mortality in the catch and release fishery.

In May 2026, the Board agreed to wait until after the 2027 benchmark stock assessment is complete to address the assessment-related tasks (biological reference points, other river spawning areas, recruitment drivers, reproductive contribution/size-based management). The Board also decided to establish a Steering Committee (WGSC) to provide guidance on the WG tasks and timelines. The Steering Committee members are Chris Batsavage (Chair, NC), Nichola Meserve (MA), Shanna Madsen (CT), Marty Gary (NY), John Clark (DE), and Mike Luisi (MD).

The WGSC met via webinar on September 10 and October 1 to discuss recommendations and proposed next steps for the WG tasks.

WG Composition and Timelines

As outlined in the May 2026 staff memo (M26-40), there are various options for forming the WG and/or sub-groups to address the tasks. These options include forming a WG of only Board members, forming a WG of Board members, Advisory Panel members, and Technical

Committee members, or forming a WG of the Board, AP, TC, and members of the public. There could also be sub-groups to address specific tasks.

The hatchery stocking task and recreational release mortality task are not directly tied to the assessment, aside from obtaining the updated time series of recreational removals with the new recreational release mortality rate. The other four tasks (biological reference points, other river spawning areas, recruitment drivers, reproductive contribution/size-based management) are assessment-related. The 2027 Benchmark Stock Assessment is scheduled for peer review in early June 2027 and presentation to the Board in August 2027.

The WGSC recommendations are as follows:

- For the hatchery stocking task (task #2), the WGSC recommends forming a hatchery stocking sub-group. This sub-group could include one representative from each state, which could be state staff or other experts. After nominations are received and approved by the Board, the sub-group could begin work.
- For the recreational release mortality task (task #6), the WGSC recommends utilizing the Striped Bass Advisory Panel (AP) as the starting point for discussion. The Striped Bass AP could meet in early 2027 prior to the 2027 Spring Meeting. The Board and/or AP should consider whether additional expertise beyond the current AP membership is needed to address the task.
- For the biological reference points (task #1), the WGSC recommends conducting a management objectives workshop, which would include discussion of biological reference points, after the assessment is complete. Workshop participants can be discussed at a later date.
- For the other river spawning areas (task #3), recruitment drivers (task #4), and reproductive contribution/size-based management (task #5), the WGSC recommends addressing these tasks after the assessment to be informed by the stock assessment report and input from the TC-SAS. The potential members of a core WG and/or sub-groups can be discussed at a later date.

The WGSC had extensive discussion about whether additional progress could be made before the assessment is complete, aside from progress on the hatchery stocking task recreational release mortality task. The WGSC discussed a possible workshop or stakeholder input process before the assessment is complete to collect input on the broader question of "how do we move forward with striped bass management?". The goal would be to gather perspectives on management objectives and priorities at a big-picture level before considering the specific data on stock status and projections. The WGSC recognized the motivation to make progress on this WG as soon as possible, map out stakeholder perspectives, and be prepared to take action as quickly as possible after the assessment. However, the WGSC also recognized that collecting this input after the assessment might be more valuable when Board members and stakeholders

have the full picture of the stock, the range of possible reference points is known[1], and to avoid having the same discussion multiple times. Ultimately, the WGSC recommends waiting until after the assessment to begin these discussions on management objectives and priorities, which could be addressed at the management objectives workshop noted above. In addition to the workshop, the Board could discuss an additional process to gather public input after the assessment (e.g., survey).

Hatchery Stocking Task Recommendations

WG Task: Formally review hatchery stocking as both a research tool and a management tool for striped bass with cost analysis.

The WGSC identified information that could inform WG discussions on this task and identified the following topics/reports to be compiled if available:

- 1996 ASMFC reports
    - Special Report No. 50 of the ASMFC: Recommendations Concerning the Stocking Striped Bass in Atlantic Coastal Waters (Upton 1996)
    - Special Report No. 53 of the ASMFC: Evaluation of Anadromous Striped Bass Enhancement Efforts with Emphasis on Chesapeake Bay Stocking Activities (Upton & Mangold 1996)
- 2017 Maryland DNR Report
    - Tidal Fisheries Advisory Commission Request to Investigate Resumed Stocking of Tidal Striped Bass in Chesapeake Bay (MDDNR 2017)
- North Carolina: available information on recent striped bass stocking in the Roanoke River
- North Carolina: available information on recent striped bass stocking in the Tar-Pamlico Sound, Neuse River, and Cape Fear Rivers
- New York: available information on historical stocking in the Hudson River
- Delaware: available information on the American shad hatchery, particularly related to public engagement/public interest
- Current/Future State Resources: query the states to determine what state resources may be available to support striped bass stocking/hatchery capabilities
- Small Localized Stocking Examples: available information or examples on localized striped bass stocking (e.g., Patuxent River) vs. a coastwide approach
- Large-Scale Examples Outside the East Coast: available information or examples (e.g., red drum in Texas)

[1] The intent of the Stock Assessment Subcommittee (SAS) is to develop a method for evaluating a range of biological reference points to present to the peer review panel. The goal is to provide the Board with the ability to select biological reference points after the assessment so the Board and stakeholders can consider tradeoffs between fishing mortality and abundance/ biomass/age structure, etc. to determine which meets their management objectives. Per the Board guidance to the SAS from the May 2026 meeting, the SAS will explore both empirical-based reference points and model-based reference points. The final options for reference points that the Board could consider will depend on model performance and outcomes from the peer review.

- Genetic Implications and Mixing of Chesapeake-Delaware: available scientific information

The 1996 ASMFC reports and the 2017 MDDNR reports were available to WGSC members prior to the call. Based on initial review of these reports, WGSC members expressed concern about the feasibility of a coastwide striped bass stocking effort. These reports indicate there would be a high cost and substantial challenges to start a new coastwide stocking program with potentially low return and minimal benefit to the stock. The WGSC also noted concern about potential stocking of striped bass in the Chesapeake Bay given the current concerns about survivability for young fish and the questions about the drivers of recent low recruitment.

WGSC members note there may be minimal existing resources for a new, large striped bass stocking effort. The WGSC recommends querying each state and relevant federal agencies to determine what state resources/existing infrastructure may be available to support a future striped bass hatchery stocking program. Federal hatcheries were a significant component of historical striped bass stocking, but federal resources may be very limited for a future striped bass stocking effort. Additionally, any current state hatchery capacity may be designated to other species supported by specific grants or recovery programs.

The WGSC recognized that the WG/sub-group could have a more in-depth discussion about these concerns, the objectives for any future hatchery stocking program, and incorporating the additional information to be compiled. The WGSC also notes there is public interest in discussing this topic. In addition to considering a large-scale hatchery program focused on the coastwide stock, the WGSC noted that smaller localized programs could also be discussed (e.g., Patuxent River). The WGSC developed a list of considerations for the WG to consider regarding a future stocking program (Appendix A.).

For the hatchery stocking task, the WGSC recommends forming a hatchery stocking sub-group. This sub-group could aim to include one representative from each state, which could be state staff or other experts. After nominations are received and approved by the Board, the sub-group could begin work.

Regarding the research component of this task, the WGSC recommends the TC discuss this. For example, could research in a hatchery setting be useful to address current stock research questions (e.g., recruitment drivers)?

If the Board needs to prioritize WG tasks, the WGSC recommends this task be a lower priority given initial concerns explained above about the feasibility of a new hatchery stocking program. The WGSC recognizes that prioritization may not be necessary since this task requires different expertise than other tasks. The sub-group working on this hatchery stocking task may not have much overlap with striped bass TC-SAS members who may work on other tasks.

Next Steps for Hatchery Stocking Task

- Compile available reports and materials listed above and make them publicly available.
- Query the states and federal agencies about available state resources/infrastructure.
- States submit nominations for the hatchery stocking sub-group.

Recreational Release Mortality Task Recommendations

WG Task: Methods to address the discard mortality in the catch and release fishery.

The WGSC identified information that could inform WG discussions on this task:

- Updated time series of recreational harvest and dead releases based on the revised MRIP estimates and applying the new release mortality rate (Appendix B.)
- Striped Bass Board Work Group on Recreational Release Mortality Report to Striped Bass Management Board (October 2024)
- MADMF study on recreational release mortality rate (Dean et al. In Review)
- MADMF study on circle hooks vs. J-hooks (Dean et al. 2024)
- UMass Amherst studies on recreational release mortality (Dinkelacker et al. 2025a; Dinkelacker et al. 2025b)

The WGSC noted the need to circulate and become familiar with the findings from these new studies. Given conclusions of the prior work group on recreational release mortality and the seasonal closure options previously developed for public comment, the WGSC clarified its interpretation of this task is to consider specific gear/tackle modifications to increase the probability of survival after a striped bass is released (rather than focusing on seasonal closures to reduce effort).

The WGSC noted that the updated time series of recreational harvest and dead releases, while not available during its discussions but now available in Appendix B., will likely change our understanding of the relative contribution of recreational release mortality to total striped bass removals. The new MRIP estimates of harvest and live releases are lower across the time series and the stock assessment will apply a new, lower, length-based recreational release mortality rate from the MADMF study (Dean et al. In Review) that averages about 4% across all fish compared to the previously used rate of 9%. The stock assessment will also apply a higher release mortality rate for releases in the Chesapeake Bay during July-August.

Accordingly, the WGSC recommends that the Board review the updated time series and scale of recreational release mortality (Appendix B.) and re-confirm its interest in discussing methods to address release mortality. Contingent upon a positive outcome, the WGSC recommends utilizing the Striped Bass AP as the starting point for discussion. The overall WG task is to discuss methods to address recreational release mortality, and the AP could discuss specific questions to inform that task, including:

- Which gear/tackle modifications may be better suited for angler education/best practices and which may be better suited for regulations?
- Which gear/tackle modifications would likely have a high compliance rate? Which would have a low compliance rate?
- Are there regional differences in fishing practices that need to be considered?
- For implementation of new gear/tackle regulations, should a phase-in or delayed timeline be considered to allow the industry to adapt?

The Striped Bass AP could meet in early 2027 prior to the 2027 Spring Meeting. The WGSC recommends each state review their AP seats, if needed, to ensure they are filled. The current AP roster is enclosed in Appendix C.

Next Steps for Recreational Release Mortality Task

- Compile available reports and materials listed above.
- Board to discuss the updated time series of recreational removals (Appendix B.).
- Schedule a Striped Bass AP meeting for 2027. The Board and/or AP should consider whether additional expertise beyond the current AP membership is needed to address the task.

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Appendix A.
Considerations for the Work Group/Sub-Group Regarding a Striped Bass Stocking Program

Annual striped bass recruitment has been poor for most of the past decade. The nursery areas of the Chesapeake, Delaware, and Hudson supported much larger year classes of striped bass in the recent past, so perhaps increasing the number of striped bass fingerlings in the nursery areas though stocking hatchery-reared fingerlings could help increase the adult striped bass population. ASMFC Special Reports 50 (Recommendations Concerning the Stocking of Striped Bass in Atlantic Coastal Waters) and 53 (Evaluation of Anadromous Striped Bass Enhancement with Emphasis on Chesapeake Bay Stocking Activities), both released in 1996, provide detailed accounts of the striped bass stocking efforts during the 1980s and 1990s and discuss the pros and cons of striped bass stocking programs. Based on those reports and programs focused on stocking other species into the wild to enhance the adult population, any stocking program must consider the following points:

1. Capacity – Is there existing hatchery capacity that can be shifted to produce striped bass fingerlings? If not, are any government or private entities willing to fund a new hatchery? Regardless of whether there is existing hatchery capacity or new hatcheries would need to be built, capacity ties in with the major consideration of:

2. Cost – Hatchery operations are expensive and building new hatcheries is extremely expensive. The Work Group may want to consider the cost – benefit for hatchery produced striped bass. For example, what is an acceptable production cost per striped bass fingerling stocked? ASMFC Special Reports 50 and 53 (Upton 1996; Upton and Mangold 1996) estimated an average cost of $1 per stocked fingerling in 1995 dollars (roughly $2.20 in 2026 dollars), but it must be noted that cost was based on existing hatchery capacity. Cost per fingerling will depend on:

3. Size of fingerlings to stock – Larger fingerlings typically have better survival than small fingerlings but the cost per fingerling goes up with size. ASMFC Special Reports 50 and 53 (Upton 1996; Upton and Mangold 1996) suggested that stocking a mix of Phase I (smaller, less expensive to produce) and Phase II fingerlings was the best combination. As important as size at stocking is where to stock:

4. Stocking locations – Stocked fingerlings may compete with wild fingerlings and density dependent mortality could reduce the effectiveness of a stocking effort. ASMFC Special Reports 50 and 53 (Upton 1996; Upton and Mangold 1996), in reviewing striped bass stocking efforts, found the largest impact of stocked fingerlings in small, heavily stocked systems like the Patuxent River, as stocked fingerlings made up close to 35% of striped bass in age 1 samples the year after stocking but the impact was negligible in large systems like the Potomac. Striped bass are highly cannibalistic and the reports also found that predation on fingerlings by adult striped bass was substantial as stocked fingerlings composed 29 – 83% of food by weight of the stomach contents of adults

sampled near the stocking area, especially during first week of stocking. Timing of stocking is also a crucial factor:

5. Stocking period – Stocking fingerlings of the same size as wild fingerlings during the same period that wild fingerlings are at peak abundance in the stocking area can lead to competition between the stocked and wild fingerlings. This can lead to density dependent effects – slower growth, higher susceptibility to predation and disease, and lower condition – and thus higher mortality, which may greatly reduce the population benefits of stocking. Texas has been stocking red drum fingerlings, which the state produces in the millions at several large hatcheries, in its many coastal bays for close to 50 years (Texas stocked its billionth red drum fingerling in 2024). Texas Parks and Wildlife reports that stocking red drum fingerlings 'out-of-phase', that is stocking the red drum fingerlings at a time when they wouldn't compete with wild fingerlings, led to enhancing the red drum population in certain bays by an average of 21.5% over their estimate of the wild red drum population (McEachron et al. 1998). However, stocking was more effective in some bays than others. Stocking at large scale also raises concerns about the fitness of the hatchery reared fingerlings:

6. Genetics – The hatchery environment is obviously much different than the wild and traits that confer advantages for fingerlings in the hatchery may be deleterious in the wild, causing high post-release mortality. Stocked fingerlings that survive to adulthood in the wild may have genes that lower the adult's fecundity or the survival of its gametes, larvae or juveniles.

References

McEachron, L. W., R. L. Colura, B. W. Bumgardner and R. Ward. 1998. Survival of Stocked Red Drum in Texas. Bulletin of Marine Science (62)2: 359-368.

Upton, H.F. 1996. Special Report No. 50 of the ASMFC: Recommendations Concerning the Stocking Striped Bass in Atlantic Coastal Waters. Report from the Striped Bass Stocking Subcommittee of the ASMFC. March 1996. 59p.

Upton, H.F. and M. Mangold. 1996. Special Report No. 53 of the ASMFC: Evaluation of Anadromous Striped Bass Enhancement Efforts with Emphasis on Chesapeake Bay Stocking Activities. March 1996. 89p.

Appendix B.
Striped Bass Recreational Harvest, Live Releases, and Release Mortality

Table 1. New estimates in number of fish of recreational harvest, recreational live releases, recreational dead releases, and recreational removals; commercial harvest is included for comparison purposes. Recreational estimates are for Maine through Virginia plus North Carolina Ocean Waves 1 and 6. Source for Recreational Harvest and Live Releases: NOAA Fisheries, Recreational Fisheries Statistics Query, October 2026. Source for Recreational Dead Releases: ASMFC, October 2026 based on recreational release mortality rates from Dean et al. (In Review). Source for Commercial Harvest: State Compliance Reports, 2026.

	MRIP 2026 Calibration from Improved Fishing Effort Survey and Updated Release Mortality Rates from Dean et al. (length-based release mortality rates ranging from 3.8% to 5.4%, except for Chesapeake Bay Wave 4 which ranges from 7.6% to 10.2%)				Commercial Harvest
Year	Rec. Harvest (#)	Rec. Live Releases (#)	Rec. Dead Releases (#)	Rec. Removals (# Harvest+ Dead Releases)	Commercial Harvest (#)
1982	200,514	1,411,781	58,312	258,826	359,773
1983	333,686	698,251	36,318	370,004	271,874
1984	144,085	452,877	21,340	165,425	466,965
1985	361,518	588,576	26,532	388,050	68,848
1986	170,546	767,076	33,400	203,946	6,352
1987	76,166	1,063,967	45,872	122,039	3,727
1988	77,155	1,291,370	53,665	130,820	27,601
1989	106,707	2,167,961	95,028	201,735	3,908
1990	209,327	2,430,931	112,408	321,735	93,888
1991	387,019	4,088,943	188,062	575,081	158,491
1992	358,304	4,931,951	217,256	575,561	256,476
1993	392,050	5,138,223	243,342	635,392	314,526
1994	519,746	8,186,693	391,511	911,257	325,401
1995	1,044,399	10,854,480	447,520	1,491,919	537,412
1996	1,266,474	14,662,952	624,081	1,890,555	854,102
1997	1,339,679	15,457,560	663,527	2,003,206	1,076,561
1998	1,305,269	15,326,881	644,067	1,949,335	1,215,219
1999	1,319,004	13,843,215	582,920	1,901,924	1,223,572
2000	1,889,422	16,485,333	715,346	2,604,768	1,216,812
2001	1,856,888	13,375,550	577,962	2,434,850	931,412
2002	1,793,846	13,950,228	591,419	2,385,264	928,085
2003	2,471,630	15,610,542	691,781	3,163,411	854,326
2004	2,144,254	19,357,712	833,726	2,977,980	879,768

	MRIP 2026 Calibration from Improved Fishing Effort Survey and Updated Release Mortality Rates from Dean et al. (length-based release mortality rates ranging from 3.8% to 5.4%, except for Chesapeake Bay Wave 4 which ranges from 7.6% to 10.2%)				Commercial Harvest
Year	Rec. Harvest (#)	Rec. Live Releases (#)	Rec. Dead Releases (#)	Rec. Removals (# Harvest+ Dead Releases)	Commercial Harvest (#)
2005	2,452,212	19,556,976	846,741	3,298,953	970,403
2006	2,749,489	27,300,868	1,142,180	3,891,669	1,047,648
2007	2,481,563	18,858,505	807,015	3,288,578	1,015,114
2008	2,708,561	16,062,572	714,944	3,423,505	1,027,824
2009	2,366,117	11,723,400	520,709	2,886,826	1,050,055
2010	3,059,911	11,316,086	532,360	3,592,271	1,031,448
2011	2,784,603	9,087,941	389,634	3,174,237	944,777
2012	2,218,770	10,965,921	505,615	2,724,385	870,684
2013	3,150,621	15,683,211	694,717	3,845,339	784,379
2014	2,799,893	16,612,849	784,642	3,584,535	750,263
2015	2,120,714	16,682,383	736,984	2,857,698	621,952
2016	2,504,293	23,635,807	1,046,194	3,550,487	609,028
2017	1,959,415	26,655,076	1,145,227	3,104,642	592,670
2018	1,699,185	21,551,843	967,966	2,667,152	615,649
2019	1,594,325	21,169,733	965,940	2,560,265	652,777
2020	1,289,577	22,480,752	992,844	2,282,422	581,832
2021	1,417,329	20,286,403	881,607	2,298,936	644,204
2022	2,442,708	20,435,596	887,071	3,329,779	622,335
2023	1,795,767	18,295,704	828,566	2,624,333	600,631
2024	1,212,496	13,111,145	584,459	1,796,955	611,704
2025	1,139,855	9,160,771	417,351	1,557,205	548,410

Table 2. Percent change of the new estimates in number of fish of recreational harvest, recreational live releases, recreational dead releases, and recreational removals from the previous estimates. Recreational estimates are for Maine through Virginia plus North Carolina Ocean Waves 1 and 6. Source for Recreational Harvest and Live Releases: NOAA Fisheries, Recreational Fisheries Statistics Query, October 2026. Source for Recreational Dead Releases: ASMFC, October 2026 based on recreational release mortality rates from Dean et al. (In Review).

	Percent Change in the New Estimates (MRIP 2026 Calibration & Dean et al. Release Mortality Rates*) from the Previous Estimates (MRIP Pre-2026 Calibration & 9% Release Mortality Rate)			
Year	% Change in Rec. Harvest	% Change in Rec. Live Releases	% Change in Rec. Dead Releases	% Change in Rec. Removals (Harvest+ Dead Releases)
1982	-37%	-34%	-70%	-49%
1983	-46%	-44%	-68%	-49%
1984	-45%	-49%	-73%	-52%
1985	-51%	-44%	-72%	-53%
1986	-37%	-45%	-73%	-48%
1987	-33%	-34%	-68%	-53%
1988	-40%	-53%	-78%	-65%
1989	-34%	-52%	-77%	-65%
1990	-64%	-51%	-75%	-69%
1991	-52%	-49%	-74%	-62%
1992	-59%	-53%	-77%	-68%
1993	-50%	-43%	-70%	-60%
1994	-51%	-46%	-71%	-62%
1995	-54%	-51%	-78%	-65%
1996	-49%	-49%	-76%	-63%
1997	-52%	-53%	-78%	-65%
1998	-55%	-58%	-80%	-68%
1999	-58%	-60%	-81%	-70%
2000	-50%	-51%	-77%	-62%
2001	-54%	-51%	-76%	-63%
2002	-55%	-55%	-79%	-65%
2003	-48%	-51%	-76%	-59%
2004	-53%	-52%	-77%	-64%
2005	-45%	-49%	-75%	-58%
2006	-44%	-49%	-76%	-60%
2007	-37%	-42%	-73%	-52%
2008	-38%	-40%	-70%	-49%

	Percent Change in the New Estimates (MRIP 2026 Calibration & Dean et al. Release Mortality Rates*) from the Previous Estimates (MRIP Pre-2026 Calibration & 9% Release Mortality Rate)			
Year	% Change in Rec. Harvest	% Change in Rec. Live Releases	% Change in Rec. Dead Releases	% Change in Rec. Removals (Harvest+ Dead Releases)
2009	-50%	-46%	-73%	-57%
2010	-43%	-42%	-70%	-50%
2011	-44%	-45%	-74%	-51%
2012	-45%	-47%	-73%	-54%
2013	-39%	-41%	-71%	-49%
2014	-31%	-31%	-64%	-42%
2015	-31%	-35%	-68%	-47%
2016	-28%	-29%	-65%	-45%
2017	-33%	-30%	-67%	-51%
2018	-24%	-31%	-66%	-47%
2019	-26%	-26%	-63%	-46%
2020	-25%	-27%	-64%	-49%
2021	-23%	-29%	-66%	-48%
2022	-29%	-31%	-67%	-46%
2023	-32%	-30%	-65%	-47%
2024	-30%	-31%	-66%	-48%
2025	-20%	-21%	-60%	-37%

*Release mortality rates applied from Dean et al. (In Review) are length-based rates ranging from 3.8% to 5.4%, except for Chesapeake Bay Wave 4 which ranges from 7.6% to 10.2%.

Table 3. Proportion of recreational removals by harvest and dead releases. Source for Recreational Harvest and Live Releases: NOAA Fisheries, Recreational Fisheries Statistics Query, October 2026. Source for Recreational Dead Releases: ASMFC, October 2026 based on recreational release mortality rates from Dean et al. (In Review).

	MRIP 2026 Calibration from Improved Fishing Effort Survey and Updated Release Mortality Rates from Dean et al.*		MRIP Pre-2026 Calibration and 9% Release Mortality Rate	
Year	% of Rec. Removals from Harvest	% of Rec. Removals from Dead Releases	% of Rec. Removals from Harvest	% of Rec. Removals from Dead Releases
1982	77%	23%	62%	38%
1983	90%	10%	85%	15%
1984	87%	13%	77%	23%
1985	93%	7%	89%	11%
1986	84%	16%	68%	32%
1987	62%	38%	44%	56%
1988	59%	41%	34%	66%
1989	53%	47%	28%	72%
1990	65%	35%	57%	43%
1991	67%	33%	53%	47%
1992	62%	38%	48%	52%
1993	62%	38%	49%	51%
1994	57%	43%	44%	56%
1995	70%	30%	53%	47%
1996	67%	33%	49%	51%
1997	67%	33%	48%	52%
1998	67%	33%	47%	53%
1999	69%	31%	50%	50%
2000	73%	27%	56%	44%
2001	76%	24%	62%	38%
2002	75%	25%	59%	41%
2003	78%	22%	63%	37%
2004	72%	28%	55%	45%
2005	74%	26%	57%	43%
2006	71%	29%	50%	50%
2007	75%	25%	57%	43%
2008	79%	21%	65%	35%
2009	82%	18%	71%	29%
2010	85%	15%	75%	25%
2011	88%	12%	77%	23%
2012	81%	19%	69%	31%

	MRIP 2026 Calibration from Improved Fishing Effort Survey and Updated Release Mortality Rates from Dean et al.*		MRIP Pre-2026 Calibration and 9% Release Mortality Rate	
Year	% of Rec. Removals from Harvest	% of Rec. Removals from Dead Releases	% of Rec. Removals from Harvest	% of Rec. Removals from Dead Releases
2013	82%	18%	68%	32%
2014	78%	22%	65%	35%
2015	74%	26%	57%	43%
2016	71%	29%	54%	46%
2017	63%	37%	46%	54%
2018	64%	36%	44%	56%
2019	62%	38%	45%	55%
2020	57%	43%	38%	62%
2021	62%	38%	42%	58%
2022	73%	27%	56%	44%
2023	68%	32%	53%	47%
2024	67%	33%	50%	50%
2025	73%	27%	58%	42%

*Release mortality rates applied from Dean et al. (In Review) are length-based rates ranging from 3.8% to 5.4%, except for Chesapeake Bay Wave 4 which ranges from 7.6% to 10.2%.

Appendix C.
Striped Bass Advisory Panel Roster October 2026

Maine	Peter Fallon	For-Hire
Maine	Bob Humphrey	For-Hire
New Hampshire	Peter Whelan (Vice Chair)	Recreational
Massachusetts	Craig Poosikian	Commercial
Massachusetts	Patrick Paquette	Recreational
Rhode Island	Andrew Dangelo	For-Hire
Rhode Island	Peter Jenkins	Recreational/Tackle shop
Connecticut	Kyle Douton	Recreational/Tackle shop
Connecticut	Toby Lapinski	Recreational
New York	Julie Evans	Commercial, For-Hire
New York	Bob Danielson	Recreational
New Jersey	Tom Fote	Recreational
New Jersey	Eleanor Bochenek (Chair)	Recreational, Fishery scientist
Pennsylvania	*Vacant*	Recreational
Delaware	Leonard Voss	Commercial
Delaware	Steven Smith	Recreational
Maryland	Charles Green	For-Hire
Maryland	*Vacant*	Recreational
Virginia	Kelly Place	Commercial
Virginia	Bill Hall	Recreational
District of Columbia	Will Poston	Recreational
Potomac River Fisheries Commission	Dennis Fleming	Recreational, Commercial
North Carolina	Jamie Lane	Commercial
North Carolina	Mike Waine	Recreational

From: Emilie Franke
To: Emilie Franke
Subject: FW: Striped Bass Fishery Concerns
Date: Friday, October 23, 2026 2:53:57 PM

From: Rick Drew <rpdrew@hotmail.com>
Sent: Monday, October 19, 2026 3:14 PM
To: Emilie Franke <EFranke@ASMFC.org>
Subject: [New] [External] Striped Bass Fishery Concerns

Dear Emilie,

I hope this email finds you well. As I trust you know I am a fan of yours and appreciate the difficulty of your job. That said there are some very serious issues with our Striped Bass fishery. Please see below.

I am writing you regarding my ongoing concerns regarding our precious Striped Bass fishery. Clearly, the Atlantic Striped Bass fishery is in very bad shape. Much worse than everyone, myself included realized going into this year. It appears the science used to estimate Striped Bass biomass was badly flawed. Frankly, I am shocked to see what shallow science was used for such an important metric of measurement. Recreational participation has been overstated and commercial participation understated as a percentage of removals.

Please refer to the video below for a quick and light look at what seems to have happened. My friend made this video.

https://striperrecount.gotoneapp.com/

I have done quite a bit of research on Striped Bass over the years and other than the young of year index charts, I don't see the passionate science that was compiled many years ago. I will send you some of these documents in my next email. I believe that I may have sent them before. Furthermore, my understanding is that in addition to underestimating bio mass, the data on bi-catch both recreational and commercial is inaccurate. Recreational bi-catch was over-stated and commercial bi-catch has been understated. I believe some models like NYS tagging records do not have any provision for bi-catch?

I am also attaching a video of a gill net from an East Hampton, NY Ocean Beach with over-slot Striped Bass in the net dead on the beach taken yesterday October 18th. The net may have dragged up on the beach due the weight of the fish and rough sea conditions. Many people are upset with lack of oversight of the south shore-Long Island gill net fishery which is acknowledged due to a lack of NYS DEC funding. The gill net fishery is not sustainable and makes little sense at a time when a multi-billion dollar Striped Bass fishery is in jeopardy. I will send you the economic study on Striped bass in my next email or two

based on file size.

I have taken 5 fishing trips for Striped Bass this September and October finding very few Striped Bass across eastern Long Island waters.

In summary, I find myself somewhat frustrated and confused by the lack of solid science, lack of oversight and the lack of willingness to engage members of the public in open discussion on this matter. Over the years I have submitted comment and similar emails without any follow up from a single board member. There are many brilliant, successful people in the Striped Bass fishing community that are willing to help, but honestly feel like we've been asked to sit quietly on the sidelines while certain groups work to figure it out? I sincerely hope this will change, as will the direction of Striped Bass management from optimizing take when the numbers are down and oversight is lacking, to truly rebuilding the fishery in a responsible manner. Please share this submission with the Striped Bass commission board members.

I am available any time to review this important matter. Thank you for your time and consideration.

Yours truly,

Rick Drew
631-903-0751

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

From: Emilie Franke
To: Emilie Franke
Subject: FW: [External] Concerned Fisherman
Date: Friday, October 23, 2026 2:28:42 PM

From: Duncan Fox <duncangfox@gmail.com>
Sent: Friday, August 14, 2026 5:09 PM
To: Info (ASMFC) <info@ASMFC.ORG>
Subject: [External] Concerned Fisherman

Hi ASMFC,

I am reaching out because i'm very concerned about three things. One being the amount of brown sharks in Long Island Sound and around Block Island. I have never seen so many brown sharks in these waters. They have made it so impossible to fish for striped bass or any fish really. I have brought countless brown sharks to the boat this year and even more striped bass bitten in half. Secondly, the number of striped bass i've seen throughout the spring until know is very concerning. I love fishing for these fish but i think there needs to be a moratorium while figuring out how to manage the brown shark infestation. Thirdly, my concern is there are no bunker. I know the industrial fishing of bunker in Chesapeak Bay has been overharvested by millions of tons.

I have never reached out to you before which shows my dire concern.

Best,
Duncan

--

Duncan Fox
Duncangfox@gmail.com
(203) 912-0715

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From: Sal Muto
To: Emilie Franke
Subject: [External] Striped Bass Managment
Date: Thursday, August 20, 2026 5:28:45 PM

Mr. Franke for what it is worth I am a 58 year old man that has fished the northeast for striped bass since I could think for myself. Ive always practiced catch and release and only kept when accidental mortality occurred. I've seen these fish and these fisheries go from near extinction to a strict moratorium status that brought back the stock in 10 years. Only to purposely reverse it all to be at the brink of extinction again.

Please let's correct the overfishing, commercial takes and the allowance commercial trawlers to decimate the bait fish stock to the point of non-existence.

We've proven a turnaround is possible in a decade why not let history repeat itself.

THE TIME IS NOW TO GIVE THE STRIPED BASS GAMEFISH STATUS!

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From: jcvarch@aol.com
To: Comments
Cc: Emilie Franke; Joe Cimino; Jason E. Mcnamee
Subject: [New] [External] Atlantic Striped Bass — Suggestions for Additional Conservation Measures
Date: Sunday, October 18, 2026 9:13:29 AM

To the Atlantic Striped Bass Management Board,

I am a recreational saltwater angler who regularly fishes in New Jersey and Rhode Island. I recently reviewed the updated recreational fishing estimates and the Atlantic Saltwater Guides Association's analysis of striped bass catch rates.

The reported decline from approximately 2.48 striped bass per trip in 2017 to 0.89 in 2025 is extremely concerning, particularly given the continued poor spawning recruitment and the stock's existing overfished status.

I would encourage the Board to consider additional conservation measures without eliminating recreational fishing opportunities.
Specifically, I would suggest:

1. Temporarily eliminating or substantially reducing recreational harvest until the spawning population shows sustained recovery.
2. Considering artificial-lures-only regulations for recreational striped bass fishing to reduce deep hooking and associated release mortality.
3. Substantially reducing commercial harvest during the rebuilding period, while encouraging aquaculture as an alternative source of seafood.

I recognize that catch-and-release fishing still results in mortality, particularly from handling, exhaustion, and predation. However, reducing intentional harvest and deep-hooking injuries would address two avoidable sources of mortality while preserving the recreational fishery.

Please include these comments in the materials distributed to the Atlantic Striped Bass Management Board for its November 2026 meeting.

Thank you for your consideration.

Sincerely,
Jensen C. Vasil

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Atlantic States Marine Fisheries Commission

ISFMP Policy Board

November 12, 2026
8:00– 11:00 a.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary

1. Welcome/Call to Order *(D. McKiernan)* 8:00 a.m.

2. Board Consent 8:00 a.m.
   - Approval of Agenda
   - Approval of Proceedings from May 2026

3. Public Comment 8:05 a.m.

4. Executive Committee Report *(D. McKiernan)* 8:15 a.m.

Joint Discussion with the MAFMC

5. Discuss Sector Separation Amendment Stakeholder Workshop Results (*T. Bauer, C. Tuohy, K. Dancy*) **Possible Action** 8:25 a.m.
   - Provide Direction to the PDT/FMAT on Amendment Options

6. Update on the Marine Recreational Information Program Fishing Effort Survey Estimates (*K. Papacostas)* 9:55 a.m.

7. Update on Recreational Angler Partnership Improvement Directive (*A. DiJohnson*) 10:25 a.m.

8. Committee Reports 10:35 a.m.
   - Habitat Committee (*S. Kaalstad*)
   - Atlantic Coast Fish Habitat Partnership (*S. Kaalstad)*
   - Law Enforcement Committee (*K. Blanchard*)

9. Stock Assessment Updates (*K. Drew*) 10:50 a.m.

10. Review Noncompliance, If Necessary **Action** 10:55 a.m.

11. Other Business/Adjourn 11:00 a.m.

The meeting will be held at The Viking (One Bellevue Avenue, Newport, RI; 401.847.330) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

ISFMP Policy Board
Thursday November 12, 2026
8:00 – 11:00 a.m.

Chair: Dan McKiernan (MA) Assumed Chairmanship: 10/25	Vice Chair: Doug Haymens (GA)	Previous Board Meetings: August 6, 2026
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (19 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 2026

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Executive Committee Report (8:15 -8:25 a.m.)

Background

- The Executive Committee will meet on November 11, 2026

Presentations

- D. McKiernan will provide an update of the Executive Committee's work

Board action for consideration at this meeting

- None

This Agenda Item will be Joint with the MAFMC

5. Discuss Sector Separation Amendment Stakeholder Workshop Results (8:25 – 9:55 a.m.) Possible Action

Background

- The Sector Separation Amendment is being developed jointly by the Policy Board and the Mid-Atlantic Fishery Management Council. The Amendment explores options/alternatives for managing the for-hire (charter/headboat) and private recreational fishing modes separately for summer flounder, scup, black sea bass, and bluefish, as well as options for for-hire permitting and reporting.
- In December 2025, recognizing that additional stakeholder input was needed, the Policy Board and Council agreed to delay the development of a Draft Amendment

Document to conduct a stakeholder workshop in 2026 to further refine the amendment options/alternatives.

- The Sector Separation Stakeholder Workshop was held September 23-24, 2026, in Baltimore, Maryland, bringing together diverse perspectives from across the recreational fishing community to explore management approaches that reflect the unique needs and priorities of different recreational fishing modes. (**Briefing Materials**).
- Draft options/alternatives are scheduled for approval at the Commission's Winter Meeting in late January 2027, with final action tentatively scheduled for August 2027 (**Briefing Materials**).

Presentations

- Staff will present summary recommendations from the stakeholder workshop

Board action for consideration at this meeting

- Provide Direction to the PDT/FMAT on Amendment Options

6. Update on the Marine Recreational Information Program Fishing Effort Survey Estimates 9:55 - 10:25 a.m.)

Background

- NOAA updated its Marine Recreational Information Program (MRIP) Fishing Effort Survey (FES) design in 2026 to address overreporting in private boat and shore fishing trips. NOAA modified the order of fishing recall questions (asking about 12-month activity before 2-month periods) and increased survey frequency from bi-monthly to monthly to reduce reporting errors and illogical responses. The revised FES design corrects past overreporting, resulting in systematically lower recreational effort and total catch estimates with smaller margins of error.

Presentations

- NOAA will present the recently published updated recreational fishing effort and catch estimates focusing on ASMFC species

Board action for consideration at this meeting

- None

7. Update on Recreational Angler Partnership Improvement Directive (RAPID) Initiative (10:25 – 10:35 a.m.)

Background

- In April 2026, NOAA Fisheries introduced RAPID as a core component of its updated National Saltwater Recreational Fisheries Policy. RAPID is designed to modernize the way saltwater recreational fishing data is collected and managed by transforming the existing Marine Recreational Information Program (MRIP)

Presentations

- A. DiJohnson will present an update on the progress of the initiative

Board action for consideration at this meeting

- None

8. Committee Reports (10:35 – 10:50 a.m.) Action

Background

- The ACFHP will meet on November 9 and 10,2026
- The Habitat Committee will meet on November 11, 2026
- The Law Enforcement Committee will meet on November 9 and 10, 2026

Presentations

- S. Kaalstad will present the work of the ACFHP and Habitat Committees
- K. Blanchard will present the work of the Law Enforcement Committee

Board action for consideration at this meeting

- None

9. Stock Assessment Updates (10:50 – 10:55 a.m.)

Background

- The Atlantic sturgeon and Cobia stock assessments are on-going.

Presentations

- K. Drew will present an update on species assessment whose management board did not meet during summer meeting (Atlantic sturgeon and AMG Cobia)

Board action for consideration at this meeting

- None

10. Review Non-Compliance Findings, if Necessary Action

11. Other Business

12. Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ISFMP POLICY BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

August 6, 2026

These minutes are draft and subject to approval by the ISFMP Policy Board.
The Board will review the minutes during its next meeting.

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INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Approval of Proceedings of Wednesday May 6, 2026 by** consent (Page 1).

3. **Move on behalf of the American Lobster Management Board, move to send a letter to NOAA Fisheries recommending the modification of the federal regulations for the LCMA 5 season closure to allow black sea bass fishermen that hold a lobster permit to set and haul gear to fish for black sea bass beginning on March 9 instead of March 24 while maintaining the prohibition on lobster and Jonah crab harvest and possession from February 1 through March 31** (Page 1). Motion by Renee Zobel. Motion passes by consent with two abstentions (NOAA, FWS) (Page 2).

4. **Move on behalf of the Atlantic Striped Bass Board, move to recommend the ISFMP Policy Board approve and send the striped bass offshore aquaculture comment letter to NOAA Fisheries as modified today** (Page 2). Motion by Nichola Meserve. Motion passes 15 in favor, 1 opposed, 2 abstentions (Page 2).

5. **Move to approve the Commission Stock Assessment Schedule, as modified today (Option 1, delay weakfish and assess tautog in 2028)** (Page 16). Motion by Jason McNamee; second by Marty Gary. Motion passes (12 in favor, 1 opposed, 5 abstentions) (Page 17).

6. **Move to adjourn** by consent (Page 24).

ATTENDANCE

Board Members

Carl Wilson, ME (AA)
Rep. Allison Hepler, ME (LA)
Renee Zobel, NH (AA)
Doug Grout, NH (GA)
Dan McKiernan, MA (AA)
Raymond Kane, MA (GA)
Rep. Sarah Peake, MA (LA)
Jason McNamee, RI (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Shanna Madsen, CT (AA)
Bill Hyatt, CT (GA)
Robert LaFrance, CT proxy for Rep. Gresko (LA)
Marty Gary, NY (AA)
Emerson Hasbrouck, NY (GA)
Monica Martinez, NY (LA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ (GA)
Kris Kuhn, PA, proxy for T. Schaeffer (AA)
Loren Lustig, PA (GA)
Jordan Zimmerman, DE (AA)
John Clark, DE, proxy for R. Miller (GA)
Michael Luisi, MD (AA)
Russel Dize MD (GA)
Joe Grist, VA (AA)
Del. Adele McClure, VA (GA)
Chris Batsavage, NC, proxy for M. Loffler (AA)
Ben Dyar, SC, proxy for B. Keppler (AA)
Chris McDonough, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Erika Burgess, FL, proxy for J. McCawley (AA)
Garry Jennings, FL (GA)
Daniel Ryan, DC
Mike Ruccio, NMFS
Lowell Whitney, US FWS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Staff

Bob Beal
Toni Kerns
Tina Berger
Madeline Musante
Alexander Law
Caitlin Starks
Emilie Franke
Tracey Bauer
James Boyle
Chelsea Tuohy
Pat Campfield
Katie Drew
Jeff Kipp
Samara Nehemiah
Jainita Patel

The ISFMP Policy Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Thursday, August 6, 2026, and was called to order at 9:50 am by Chair Daniel McKiernan.

CALL TO ORDER

CHAIR DANIEL McKIERNAN: Good morning, everyone. We're a few minutes late so let's get going. I am Dan McKiernan, the Administrative Commissioner from Massachusetts and the Chair. On my left is Doug Haymans, the Vice-Chair from the state of Georgia.

APPROVAL OF AGENDA

CHAIR McKIERNAN: First on the agenda we have the approval of the agenda. Do we have any additions to the agenda? I have one, which is after public comment I am going to invite the Board Chairs of the Lobster Board and the Striped Bass Board to present letters that the Policy Board is being asked to submit to NOAA Fisheries. One on the Area 5 Lobster Fishery and the other Ms. Starks with the Striped Bass Aquaculture Technical Memorandum. Any objection to those changes? Seeing none; thank you. All right; we have approval of the agenda. No ready changes to the agenda, other than mine.

APPROVAL OF PROCEEDINGS

CHAIR McKIERNAN: Any discussion of the proceedings from the last meeting, the minutes of the meeting. Seeing none; can I get a motion to accept the proceedings. Doug Grout, second by Joe Grist. Any objections? Seeing none; thank you.

PUBLIC COMMENT

CHAIR McKIERNAN: Now we're going to take public comment. Is there anyone either in the room or virtual, who would like to speak to any issues not on today's agenda? I don't see anyone in the room, and there are no hands up, so we'll move on.

LETTERS FOR THE POLICY BOARD

CHAIR McKIERNAN: Next, we are going to invite the Board Chairs from the Lobster Board and the Striped Bass Board to discuss the letters that have been approved to go to NOAA Fisheries. I do want to mention that Nichola Meserve, who is my proxy is at the table, but for purposes of this issue only. Renee Zobel, you want to speak to the letter regarding the Area 5 Lobster Fishery.

MS. ZOBEL: Sure, I think we have something being pulled up. **On behalf of the American Lobster Management Board move to send a letter to NOAA Fisheries recommending the modification of the Federal Regulations for the LCMA 5 season closure to allow black sea bass fishermen that hold a lobster permit to set and haul gear, to fish for black sea bass beginning on March 9 instead of March 24 while maintaining the prohibition on lobster and Jonah crab harvest and possession from February 1 through March 31.**

CHAIR McKIERNAN: Can I get a second? Joe Grist. Would you like to speak to it?

MS. ZOBEL: Sure, this was all at the recommendation of both the TCs. This was reviewed by the PRT, the LEC and then the discussion by the Board put this forth. We did modify some language that was originally intended to clarify that Jonah crab harvest would also continue to be prohibited and this would just allow for black sea bass harvest.

CHAIR McKIERNAN: Is there anyone else who would like to speak to this issue, or have any clarifying questions? Seeing none; **can I get a motion to approve? That is the motion. Any objections to the letter? I see none. Any abstentions? I see NOAA Fisheries, Fish and Wildlife Service is abstaining. How about NOAA Fisheries?**

MIKE RUCCIO: I'll abstain.

CHAIR McKIERNAN: Okay, we have abstentions from the two federal agencies. All right, so it

passes with unanimous consent with those two noted abstentions. Next striped bass. Nichola.

MS. NICHOLA MESERVE: We have a motion from the Striped Bass Board. I'm going to introduce the topic first about the Board with all of us here. This doesn't need much introduction, I believe. But the Striped Bass Board has reviewed and forwarded a letter to the Policy Board's duration that is in response to a NOAA Fisheries document charting a course for striped bass science and regulatory innovations for offshore aquaculture.

The letter lays out the Board's concerns with NOAAs draft technical memorandum, and includes that the Board does not recommend moving forward with striped bass offshore aquaculture, based on the information available in the Technical Memorandum at this time. During the Board's discussion there were several modifications made to the draft letter that was compiled from Commission members.

Those are available on the board, did you want me to read those, Toni? Not necessary. In short, they add a new sentence about the cost of VMS devices and an introduction to the user conflict. Site selection paragraph said that it addresses the larger issue of marine spatial planning. The Board also added in the words striped bass to a number of places, so that it was very specific, that the letter was very specific to striped bass.

With those modifications **the motion is that on behalf of the Atlantic Striped Bass Board move to recommend the ISFMP Policy Board approve and send the Striped Bass Offshore Aquaculture comment letter to NOAA Fisheries as modified today.**

CHAIR McKIERNAN: Thank you, Nichola, can I get a second? I see John Clark seconding. Any discussion on the motion? Erika, online, go ahead.

MS. ERIKA BURGESS: I participated in the Board's discussion on this memorandum in February, as well as this morning. My takeaways from the conversation in February were about a lack of information and wanting additional things to be taken into consideration. I believe those things hold true. I asked for clarity this morning on how the Board arrived at outright opposition to the activities in the memorandum instead of waiting for and responding to additional information. I didn't receive any satisfactory or compelling response. My position is still that there are a lot of questions here, there are a lot of unknowns. There are things that haven't been considered but I think need to be.

But this activity has been proposed in the area outside of the management unit of Atlantic striped bass, and there are other parties who have interest here that are not represented on the Striped Bass Board. At this point in time, Florida is not prepared to take a position that no, this should not occur, but would still take the position that additional information is needed and should be considered. For that reason, we will be voting no on this motion.

CHAIR McKIERNAN: Okay, thank you, Erika. Anyone else who would like to comment on this? All right, seeing none. Toni, what is your preference on the vote? Okay, so we are going to vote by hands. **All in favor of endorsing the letter, raise your hand.**

MS. TONI KERNS: New Hampshire, Maine, Delaware, Maryland, Virginia, South Carolina, Georgia, Pennsylvania, New Jersey, New York, Connecticut, Massachusetts, Rhode Island, North Carolina, and Potomac River Fishery Commission.

CHAIR McKIERNAN: Any in opposition? We have Florida.

MS. KERNS: Florida.

CHAIR McKIERNAN: Any abstentions, we have NOAA Fisheries and U.S. Fish and Wildlife Service. Motion passes 15 to 1 to 2. Thank you.

DISCUSS DE MINIMIS POLICY GUIDANCE

CHAIR McKIERNAN: Next on the agenda is the discussion on the De Minimis Policy Guidance. Toni, I believe that is you.

MS. KERNS: A little background on this. The Sciaenids Management Board had a discussion on the de minimis measures for the sciaenids species, which are slightly different for each of the species within their FMPs. At that meeting there was a request to have the Policy Board discuss the De Minimis Guidance that we have for all FMPs.

I'm going to just go through that, and that is why we're here today having this conversation. As a reminder, de minimis provisions in FMPs are meant to reduce the regulatory burden for states whose measures would have a negligible effect on the conservation of an individual species. The de minimis guidelines that we have put together create standards that management boards can build their de minimis provisions for their species FMPs within.

They identify that you can have de minimis by sector, so individually for recreational and commercial, or you can combine together. It presents a threshold and an average number of years that you would use to qualify for de minimis, and that is 3 years of landings and a 1% threshold, and it provides that you can exempt a de minimis state from biological sampling. It does put some qualifiers in there about stock assessments and considerations. But these guidelines, they are guidelines and if individual FMPs have rationales for why these guidelines should be different for that FMP, you as any management board can make changes to these standards to fit the need of that species. As I said, the Sciaenids Board had a discussion about this, and that was because states, particularly on the edge of the species management board have had some very variable landings of sciaenids in recent years.

The states have noted concerns around this, in that either you have unusually high landings and we averaged it. It still contributed to the update falling just above that 1% threshold. There was a lot of uncertainty around MRIP estimates for some of the species, and so it had people falling in and out of de minimis.

Then other states in the management area, which previously contributed to a majority of the coastwide harvest, experienced either a large decline in landings, and so then all of a sudden it impacted those de minimis states. In addition, the states that are just above or at the 1% threshold had been requesting de minimis despite not technically qualifying for it.

This was happening multiple years in a row, and the PRT had noted that there were concerns with whether the current definition was still appropriate, and how meaningful regulations from the states would be on the stock if you took into consideration the state's relatively low contribution to the coastwide landings, and the administrative burden that it puts on states as you pull in and out of de minimis.

The PRT for the sciaenid species looked at what could they do to address these concerns and problems that the sciaenid species is, and just some general things that they had stated is that they cautioned the leeway provided to de minimis states, because it may allow states to remain de minimis despite not qualifying for it if there are concerning trends in the stock or a negative stock status.

They suggested that as changes to the definition of de minimis or the process that it undergoes review by the species TC, to make sure that it is not having a negative impact on the TC. The PRT made several recommendations or considerations to the Sciaenids Board, modifications to the current definition of de minimis and modifications to the de minimis process itself.

They suggested that we could change the number of years of harvest or average, so right now we're 3 years, you could increase it 4, 5, 6, who knows or you could have multiple thresholds, meaning like what percentage do you fall under. I'm going to sort of fly through some of these slides, but if you need me to focus in on them, we can come back to them based on the recommendations.

This is just thinking about how many years you should be using to base that de minimis on. For longer-lived species landings data, whether you

take into account whether or not they are a longer-lived species, you take into account if landings data are highly variable or not. Then where it is suspected that the stock may be undergoing expansion.

Then this is one place where I want to focus. There was a suggestion on thinking about multiple thresholds, and this concept is not really in the de minimis guidelines. I do think that within the De Minimis Guidance you could still do this, (Static) but if you wanted to spell this out you could at least try one. It just looks at a couple different notions of de minimis. You could have full de minimis where you have your number of years that you're considering and what that threshold is, and FMP regulations did not need to be implemented, and no monitoring or compliance would be needed, unless suggested otherwise.

Then you could have a provisional de minimis where you still have landings based on an average number of years and falling into a threshold that is a range, for this example between 1 and 3%. And under these regulations would not be liberalized, but regulations in an FMP would not be needed to be implemented.

Then there would be a full non de minimis where the average landings would be potentially a range of years, and are greater than or equal to a higher threshold than what is under the simple de minimis area, and all non de minimis FMP compliance measures would apply, and if a state hits the threshold, then it cannot request continuation of de minimis or provisional de minimis.

Then there were some suggestions to the modification to the de minimis process. Because the guidelines do not make any suggestions about how often a state could request de minimis when they are no longer in de minimis. It was a suggestion that the guidelines could provide information on that, and states would remain non de minimis or de minimis for a certain number of years. It could go back into the guidelines as well.

Then they also had talked about splitting de minimis by sector, that is already allowed. They also discussed splitting de minimis by stock, which is not spelled out in the guidelines potentially, and the consideration of total removals when determining de minimis, because right now we use landings.

For this Board there was a request to discuss what came out of the Sciaenids Board. I think there was in particular a focus on that tiered de minimis notion, and whether or not that should be added to the guidelines. If the Board does want to make changes to the De Minimis Guidelines, then what areas of focus would you like us to look at, and we can bring that back to the Policy Board at a future meeting.

Again, I do think that all the provisions that are in here can be done, because of the freedom that you have within the De Minimis Guidelines. Just as a board has to provide justification of why you're doing something different. Even in the not using landings and using total catch, that still would be possible in my mind in this, but if you wanted to be more explicit to state that, then you could.

CHAIR McKIERNAN: Any questions for Toni or any discussion? It's pretty open ended, do we need direction? Go ahead, Doug.

MR. DOUG HAYMANS: Since I've been sitting around, I know that Delaware, New Jersey and Georgia have asked for exemptions because they are slightly over. Are there other states, other species outside of sciaenids where this is an issue?

MS. KERNS: I think it is an issue with cobia at times. I am going to look to the back table to ISFMP staff to see if there are other species outside of cobia and the sciaenids that we run a problem with this for. I'm not seeing anyone who had their hand raised. Tracey, what species? Just come to the table. Weakfish sometimes as well, yes.

CHAIR McKIERNAN: Still looking for some guidance. Spud.

MR. SPUD WOODWARD: Just to make sure I'm clear. What the Sciaenids Board is contemplating is within the parameters of the existing De Minimis Guidelines.

MS. KERNS: Correct, and I didn't say this before, but the Sciaenids Board is considering making changes to their de minimis provisions, but we put it on hold until we got the results of the croaker stock assessment to determine whether or not we needed to do an addendum for that, and if so then we would consider the changes to the de minimis when we do that addendum. If the results of the assessment say everything is hunky dory, then they'll initiate an addendum just to make the changes to the de minimis provisions.

MR. WOODWARD: If that is the situation and we don't have any other management boards that have uniquely similar things, then I would say that we leave the De Minimis Guidelines as they are. If they give the Board the flexibility they need to adopt these kinds of modifications, then I think, I'm saying this for selfish reasons, because we chewed this piece of gristle a lot when I was chair. Maybe leaving well enough alone if it's okay where it is, is a good approach.

CHAIR McKIERNAN: I've got Joe Cimino and Shanna Madsen.

MR. JOE CIMINO: I apologize, because I was one who thought that it may need to come to this and there was a lot of work. I really do kind of like the tiered approach, but I doubt that everyone has had a chance to digest that, to see that that should be a new part of this policy. In the end, again I apologize. I agree with Spud. I think this should stay the way it is.

One of the things, as you go in and out of de minimis, changing regulations is a real pain in the butt. I think Toni said something important about an exemption for biological sampling. Weakfish is a good example of that; it would have requirements for biological sampling. I don't think that should ever be a reason for a state to fight going in and out of de minims. I think, you know triggering a requirement to sample a fish you may not see a lot. I can't see the Board actually finding that state out of compliance if they are not meeting their sampling requirements. I would hope that that is something that as a Board we acknowledge that is not really a reason so try and stay in de minimis status, if that is all it is. If it is the regulations, obviously it is a tougher challenge. I think we'll continue to look at that for spot and croaker in particular, and cobia.

MS. KERNS: As a reminder, any species board can make a change to their de minimis provisions through an addendum.

CHAIR McKIERNAN: Shanna.

MS. SHANNA MADSEN: I just wanted to echo the last two comments, where I think as I was reading through this document, and Toni had that actually up on the screen. There was a really common theme and the theme was that people were thinking of the needed species by species flexibility. I think that if our Guidelines already allow us to do that, let's continue to do that, because we want to be able to have these discussions at the species level.

CHAIR McKIERNAN: I've got Ben Dyar.

BEN DYAR: I chair the Sciaenids. During this discussion, not to belabor the point, but just wanted to drive home that I echo those sentiments. If needed, it seems like the threshold approach, if that is desired, could then come back to the Policy Board if it would like to address that. Maybe not put the cart before the horse, and try to put that in there when maybe it never even gets used, once it gets into the discussions within each board.

CHAIR McKIERNAN: Toni, did you have a response?

MS. KERNS: I think it's fine, and I just note that I still think that even if a Board wanted to do the tiered approach for thresholds, I think you can, I don't know, it doesn't say you couldn't. But if it is helpful for other species boards to have that concept

outlined in the Guidelines, then in the future we can do that

CHAIR McKIERNAN: I've got Chris Batsavage and then I'm going to go to Adam. Go ahead, Chris.

MR. CHRIS BATSAVAGE: I agree with all the comments so far, I'm glad to know that the De Minimis Guidelines already offer the possibility for some of the things we're thinking about. In terms of, I guess another species where this could come into play, at least in North Carolina is American eel, where our landings are right around that 1%, sub-1% amount.

But we haven't requested de minimis, or is it kind of going over and under that 1% because part of the requirements for non de minims states is the logbook reporting by commercial eel fishermen. The concern we have is if we were falling in and out of de minimis, then we are requiring and not requiring the logbooks for fishermen, which just adds a lot of confusion to those folks. Just adding some other FMPs where these de minimis issues could be a problem.

CHAIR McKIERNAN: Adam.

MR. ADAM NOWALSKY: I endorse the current approach being discussed with leaving the Commission Guidelines the same and let boards take it up. I think the only additional comment I would make is that if this were to come back before us in the future, I think it would be helpful to have some look at where states have not met de minimis criteria.

But yet boards have granted them de minimis regardless, and then be able to say, which of these or some other mechanism would address those issues, and so that we would know, okay this is what we really need to do to prevent putting boards in the position of having to have to allow de minimis when the Guidelines would say otherwise. I would just offer that that would be helpful should this come back to us in the future.

CHAIR McKIERNAN: Thank you, Adam, that is well put. Toni, it sounds like this just might be a prototype that should it be adopted by the species board in a future addendum, then it could create sort of a path forward if other species had similar challenges.

MS. KERNS: Based off of what the Sciaenids Board did, I think that each species has its own unique struggles in how states go in and out of de minimis. I don't think that there is a one size fits all solution. If anybody requests that the Policy Board bring up de minimis again in the future, I can come to the Board and show where state haven't met it, but stayed in de minimis.

Like I can provide a table of that. But I'm not sure that we would have a solution to say, if you had just stretched out to five years it would have worked for everybody. I think you would have to create some individual solutions for each scenario, if that makes sense.

CHAIR McKIERNAN: All right. Joe, go ahead.

MR. CIMINO: Something that I think was a recommendation was to consider total catch and not just landings. Adam's comments triggered that memory. I think that makes sense, but I think that that would really impact how often states, there is probably going to be a lot more cases of states going in and out of de minimis if we're looking at total catch, especially with D2s. I guess, do we have a solid? Does the Board have a direction that they would like to see that go?

MS. KERNS: I said before, if a species board wants to move to total catch again, they can do so when they develop their new de minimis guidelines trough their FMP. They provide a rationale for why they think total catch is better than landings, and you go that direction and then you test it out, and if it's not doing so great for you then you probably have to go back and make a change.

CHAIR McKIERNAN: I've got Ben, Ben you had your hand up, and then John Clark.

MR. DYAR: Adam's points duly noted and good points. I think the Sciaenids PRT and TC kind of already attacked that to some degree for those species specifically. Those recommendations that were in that sciaenids memo came from that analysis. Then I think as eluding to what Toni mentioned. The decision was to not necessarily put it on hold, but so not to continuously task the TC with looking at these and creating multiple addendums.

The good timing was because of croaker being one species and spot being another, that we would time that with those assessments to have that more in-depth look and be able to knock that all out, potentially in one addendum, and maybe move forward. That is kind of where that might lie if there is a larger move or change to be made, kind of time it with an assessment, and then from there on it can be done through any of the FMPs.

CHAIR McKIERNAN: John Clark, and then I think I'm going to close this discussion and move on in the agenda.

MR. JOHN CLARK: As a state with a lot of de minimis species, and one that has gone in and out of de minimis. One thing that has never been clear to me is once you go out of de minimis and you set the regulations, for example with spot. We put the 50-fish recreational possession limit in. Let's say down the road we go back into de minimis.

It's not clear whether a state, not that we would, but could a state then move that regulation, because now they are de minimis again? Same with like a commercial reduction. It's not clear whether that happens, or once you lost de minimis you've lost it for good, even if you do go back into de minimis situation.

MS. KERNS: I think I followed all that, John. The PRT had those questions of whether or not, how long you should be able to continue to ask or not, then you have a hard stop. I think there are consequences to that, as you have kind of just laid out. The Board should think about that, and again, I think a Board can set those boundaries within the guidelines that we have currently. But it could run into trouble on the way if you get locked out, but that is a species board consideration.

MR. CLARK: Just a follow up, as I said. We probably can't get de minimis, but we have bounced back and forth between de minimis and non de minimis, and we've maintained all the things that we put in place once we were not de minimis. Going back, as I just said, it's not that we were planning to do anything, but just wondering if a state could approach a Board about that.

CHAIR McKIERNAN: Bob Beal.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Yes, just really quickly. I know you're trying to wrap this up, Mr. Chair. But as the plans are written right now, the answer to your question, John, is yes. If a state falls out of de minimis and they have to implement a suite of regulations or sampling, or whatever it might be.

Then a subsequent year they are back within the de minimis status, they can relax those regulations and avail themselves of any advantages that de minis provides. But with that you may be whipsawing in and out. Your regulations may be building around a whole lot. But the way they are written right now, yes you can, you can do that.

EXECUTIVE COMMITTEE REPORT

CHAIR McKIERNAN: Okay, I am going to move on to the next issue, and actually I am going to back up to Number 4, I overlooked the Executive Committee Report. I'm going to give a report that is proportional to the length of the meeting that we had, so I'll be very brief. We got a Legislative Report from Alexander, focusing on the Federal Budget.

We also learned that there is a bill that is floating through the House to potentially pause additional lobster management regulations, an additional 7 years beyond this current 6-year hiatus that we're involved in. We also got a CARES update from Executive Director Beal concerning the status of funds that are in, I think the two states of Florida

and New Jersey. Some of those cases are involved with the judicatory hearings, where the resolution of those cases is yet to be resolved. There is a December deadline that extended to December before the Commission has to begin paying back some of those funds, like we were going to have to ask for that to be extended again, especially pending the outcome of some of those adjudicatory hearings.

Then finally, the annual meeting schedule was discussed with Rhode Island this November, South Carolina a year out for October, and Massachusetts the following year. Are there any questions on my report? All right, seeing none.

DISCUSS SECTOR SEPARATION AMENDMENT TIMELINE AND STAKEHOLDER WORKSHOP PROCESS

CHAIR McKIERNAN: I believe next on the agenda is the discussion of the Sector Separation Amendment Timeline and Stakeholder Workshop Process. Chelsea.

MS. CHELSEA TUOHY: I'm going to give a brief update on the Sector Separation Amendment, the Timeline and the Stakeholder Workshop stats and some Policy Board considerations. The Sector Separation Amendment Stakeholder Workshop has been scheduled for September 23 through 24 at the Sheraton Baltimore Washington Airport Hotel.

Twenty-two participants have been selected from up and down the coast from a variety of recreational sectors. That list was e-mailed to the Policy Board on July 21 for comment, and then those participants were notified on July 28. Just as a reminder for everyone, back in February when the Policy Board met jointly with the Council, the Workshop objectives that were discussed were for the participants to review the list of draft alternatives.

Discuss and provide feedback on questions that were highlighted by the FMAT and PDT, and recommend to the Policy Board and Council any additional options that should be considered in the action, provided that they are within the scope. Another reminder is that the workshop was not identified for one specific recreational sector, but the recreational fishery as a whole.

Moving on to the timeline. What is on the screen right now is the current plan sequence of events with that stakeholder workshop happening in September. Then in December of 2026, the Council and Policy Board would meet jointly to both review the results of the workshop, as well as approve a final range of alternatives. Then in the winter of 2027, the FMAT and PDT would work on developing a draft amendment document.

In the spring of 2027 that document would come to the Council and Policy Board and you all could approve or disapprove it for public comment. We would do the public hearings and public comment period if approved in the spring and summer of 2027, with final action happening in August of 2027 for implementation, or the 2028-2029 measure setting cycle pending how long rulemaking takes. As it stands right now, the current timeline does not provide a meeting between the Stakeholder Workshop and approving a final range of alternatives.

The Commission's typical process would add a joint meeting to review those workshop outcomes, so that the Council and Policy Board or just the Policy Board could provide feedback to the FMAT and PDT before approving a final range of alternatives. The setback here is that if we add a meeting at the Commission annual meeting there is not enough time for the FMAT and PDT to develop options for the joint meeting in December.

The two paths that you all could take if you wanted an additional meeting would be to have a special virtual meeting in mid to late October, and that would allow the Policy Board to provide feedback to the FMAT and PDT to further develop those options, and we could stay on the timeline to approve a final range of alternatives in December, or we could request that the Council in December, or we could request that the Council in December is when we would come to you all, Policy Board and

the Council with the results of the Stakeholder Workshop, and we would push approving a final range of alternatives until the Commission or Council's February meeting.

For Policy Board discussion today, we just ask. Does the Board want to follow the typical Commission process to meet in between when the workshop happens and approving a final range of alternatives to provide feedback into that FMAT and PDT about how those alternatives should be developed following the Workshop.

Does the Board want to discuss with the Council shifting the timeline, and so that in December we could review the results of the Workshop and then later approve a final range of alternatives, or hold a special meeting in October and stay on the current timeline? With that I will take any questions.

CHAIR McKIERNAN: Jason.

DR. JASON McNAMEE: Thanks for that, Chelsea, that was helpful. Just thinking through the timeline, a little bit. Not thinking about the need to sort of sneak a meeting in here at some point. Say everything went kind of on its current plan. It's likely that we couldn't implement anything, even in 2028 at this point. You know I think you kind of spill into the winter period, and so now it is kind of too late to implement like big major changes in the state regs, so we'll probably be looking at 2029. Is that correct?

MS. TUOHY: Right now, final action is tentatively scheduled for the summer of 2027. I think we would have to have discussions with GARFO about the rulemaking timeline and what they believe is possible if we wanted to implement for the 2028-2029 spec setting cycle, and Toni may have something to add here.

MS. KERNS: I think it really depends on what changes are made, because as you know we do have mode management within the purview of our spec setting measures. Depending how far it veers from those management, you may be able to do what is in there, because the state-specific measures fall within the Commission process. Now we have to make sure we're blending okay with NOAA, but we might be able to, as long as they can finish the action before the start of the season.

CHAIR McKIERNAN: Follow up.

DR. McNAMEE: I appreciate what you said, so it sort of depends. But if it were something more complicated then what we're already allowed to do, we would be really hard pressed to kind of get things done there. Thanks for that clarification, and so I wonder how that factors in to this. If we didn't do this, would that push us even further? Do we have potentially some slack in 2028? I guess what I'm thinking about is, I think it is super important to have a meeting. One way or the other it would be best if that meeting could be in person. I'm just wondering, is there a reason to kind of really jam ourselves up here or just sort of looking forward is there some slack, just accepting that this might not happen until 2029 under certain circumstances.

CHAIR McKIERNAN: Joe Cimino.

MR. CIMINO: Yes, I would like to follow up on that. The two paths would be, it is pretty simple options, not too far from what we can do right now, or maybe even the same, or it's complex and then we're probably talking about 2029. I'm curious, is the annual meeting far enough away that maybe we could either say, it's simple and we know, because the Workshop is in September.

It is simple and we have a summary by the annual meeting or by the annual meeting we could decide we are really talking about 2029, and then have a later discussion. But at least know at the annual meeting which way it's going.

MS. KERNS: I'm not sure. I guess it depends on what the stakeholders are recommending. At this point, I think the way the options are developed in the document it's not highly complex right now. It depends on what comes out of the Stakeholder Workshop, so it's very difficult to predict that, if they are going to suggest something that the FMAT

and PDT are going to have to wrangle into some more complex options.

But again, it depends on the direction or options, but we wouldn't be able to predict which option the Board and Council are going to lean towards, because there will still be some simple options in the document, and there might be more complex options in the document.

CHAIR McKIERNAN: Toni, I have a concern that it is one thing to get stakeholder recommendations. It's another thing for a bunch of state administrators to actually execute something that might come out of this workshop. For instance, if limited entry becomes a core component of this.

I don't think states are going to be able to pull that off as fast as maybe the recommendations that come out of the Work Group, which is a group of stakeholders. I would suggest that time would be really valuable, because I think we all need to process what the sequence is going to be to adopt these measures or not. Go ahead, Doug.

MR. HAYMANS: It sounds like we ought to just plan to review the stakeholder input at the annual meeting rather than having this additional meeting in between, which is basically pushing the whole thing back.

MS. KERNS: We can do that, and that can potentially put us in a separate path with the Mid-Atlantic Council if the Mid-Atlantic Council does not agree to delay. That is a possibility, and as long as this Board is okay with moving at a different timeframe as the Mid-Atlantic Council if they do not concur with us in the delay, then that is possible. I just want to make a note that we could be veering.

CHAIR McKIERNAN: Chris Batsavage remote, go ahead.

MR. BATSAVAGE: Yes, trying to think through the options here considering all the unknowns. I guess to the most recent point. I would want to hear more about the disadvantages of kind of moving out of step from the Mid-Atlantic Council and the process on this joint amendment. That seems kind of awkward, maybe extra work for staff.

But to look at the options up on the screen now. I was originally leaning towards following the Commission process with a virtual meeting in mid to late October, to give direction to the PDT and FMAT. The reason for that is shifting the timeline to where I think Chelsea mentioned that we could meet jointly with the Mid at their February meeting.

The February meeting for the Mid-Atlantic Council is completely virtual. We can do that; we've done that plenty. But I heard some concern about what we're facing with this amendment of, would it be better if we were meeting jointly in person to approve this to go out for public comment, as opposed to meeting virtually for the Mid's meeting in February.

MS. KERNS: Chris, we had two options up there, just to make sure we know that we could invite the Council to come to the Commission meeting. We've had several meetings where this Board has gone to the Council meeting, so we could request that they come to our February meeting.

MR. BATSAVAGE: Yes, thanks, Toni. It's more towards the Mid's calendar. That would probably be the better option, I would say.

CHAIR McKIERNAN: Adam.

MR. NOWALSKY: I would be adamantly opposed to doing this not in lock step with the Council. There is so much of this that is dependent on federal rulemaking, particularly from New York and South, where pretty much everyone who participates in multiple of these fisheries occur in federal waters.

From Delaware South, all black sea bass is almost exclusively federal waters. There was a commitment early on in this process to work in concert with both bodies. I have long looked at the action plan that had a stakeholder workshop in September, a range of alternative discussion in December, with this Workshop Report presented to Council and Board in fall of 2026, with a where,

when, how, and now we're having that discussion. Good, need to have it.

I think we should have some ideas here today. I would hope that staff could take some of the things that we talked about today, talk to Council leadership and staff about them, and hopefully there is a place for this conversation to potentially be continued next week, when we're already, most of us will be meeting together with them in some capacity. But I can't endorse a way forward, given how much of these fisheries take place in federal waters. I can't endorse a way forward where we're going to go down a path of getting out of lock step with the Council on this.

CHAIR McKIERNAN: Given those sentiments, would you endorse inviting the Mid-Atlantic Council to our February meeting, to have that joint meeting at that time?

MR. NOWALSKY: I would definitely. I think the place for slippage here is potentially where this December timeline that said Council and Board approve a range of alternatives. I think that could be slipped to February, either here or virtually, and still keep the timeline in place for anything that could be implemented for 2028. That I would endorse.

CHAIR McKIERNAN: Can we continue on that vein and get support for that or any competing ideas? I like that. Toni.

MS. KERNS: I think we would just need to spell out what the full list that we would be bringing to the Council. I think what I'm hearing is that we would like to meet in person, that we would like to meet at the Commission's annual meeting, we can invite the Council. Annual meeting to hear the results of the Workshop, and we can invite the Council to that meeting either in person or virtually. But this Board wants to provide their feedback to the FMAT and PDT at that time.

Then we would discuss with the Council this shifting, reviewing the final range of alternatives at the Commission's February meeting. It may be that the Council may or may not want to come to our annual meeting, but regardless, this group would get that feedback to the FMAT and PDT at that time. I think that that provides the FMAT and PDT a good chunk of time to develop those final range of alternatives in time for our February meeting, which is slightly earlier than the Councils.

CHAIR McKIERNAN: Thank you, Toni, Mike Luisi.

MR. MICHAEL LUISI: Thank you, Mr. Chair, I was just giving you the thumbs up that what Toni was saying sounded good on my part.

CHAIR McKIERNAN: Joe.

MR. CIMINO: Just one other thought too. Adam mentioned next week. I think if there is some further discussion that needs to happen next week, that the Bluefish Board is meeting jointly for an hour to do specs. I don't believe it is going to take that long. Then the Board will meet separately for a moment.

That might be a chance. I think the vast majority of folks, certainly that would be affected by policy, would be covered in that Board. Whereas, Flounder, Scup and Sea Bass has less of the Policy Board involved. I will keep that in mind, if we need a further discussion and a joint discussion that we could use the Bluefish Meeting.

CHAIR McKIERNAN: Okay, so at this point do we have kind of clear consensus? Yes, all right, thank you everyone that was good. Thank you, Chelsea.

COMMITTEE REPORTS

CHAIR McKIERNAN: All right, next Committee Reports, Committee on Economics and Social Sciences.

COMMITTEE ON ECONOMICS AND SOCIAL SCIENCES

MS. JAINITA PATEL: I'm just going to provide quick updates on both the Committee on Economics and Social Sciences as well as the Assessment Science

Committee. This week the CESS or the Committee on Economics and Social Sciences met to discuss several ongoing topics, including how to management requests, how to address the socioeconomic section of the Risk and Uncertainty Tool, as well as the Striped Bass Bioeconomic or Recreational Demand Model and other socioeconomic topics. Of those topics, I did want to provide just a quick update for the Board on the Recreational Demand model, as well as the task that the CESS will be working on in the next few months. For the Rec Demand Model, we had contractors Scott Steinback and Lou Carr-Harris present the work that they've done this year.

In short, the modeling framework links angler behavior and stock dynamics and regulations, with the goal of improving evaluation of future striped bass and bluefish management strategies. They used focus-group surveys, choice experiment design, econometric evaluation, and bioeconomic simulation to create this model.

Currently they are drafting a technical report of their work to wrap up what is possible with their year Commission funding. They started this project last August, so they will be coming to the end of their contract toward the end of this month. Currently as the model stands it is sound for bluefish management. It will need a little more work to make it useful for striped bass.

There was a lot of work that went into this, and I've obviously distilled this down quite a bit into just a few bullets. But if you would like more information on this, please feel free to reach out to me. Outside of the Risk the CESS has several ongoing tasks, some of which some of you may have heard during this week.

In addition to that they are working to adjust the socioeconomic metrics in the Risk and Uncertainty Tool, alongside the Assessment Science Committee's Risk and Uncertainty Work Group. A lot of those adjustments will be based on some of the discussion that they've had during this week's meeting.

Additionally, staff members are also open to future questions about some of the work they presented this week on menhaden and spiny dogfish, as well as the socioeconomic section of the draft addendum. For lobster in the future, if the Board initiates a management objective process, the CESS can provide input depending on the outcome of that process.

For striped bass, I know we have a future management work group, so if there are any specific tasks from them, the CESS can assess feasibility and potentially help with that as well. We also had a request to create an infographic with a current snap shot of striped bass economic data for this year. We will be working on that in the near future as well.

One thing that I believe isn't mentioned on this slide is that the CESS could also potentially help with any social of economic questions that arise from the Sector Separation Workshop in September. Outside of that, if there is something that we didn't cover that you would like to see addressed, I would love to hear about it, so I could bring it to the committee for consideration. I will just take a pause there, just in case the Board has any questions or any requests for the Committee.

CHAIR McKIERNAN: Any suggestions for the Committee. Adam.

MR. NOWALSKY: Not a suggestion, but can I ask a Recreation Demand Model question, or do you prefer I take that completely offline?

MS. PATEL: Go for it, I will do my best.

MR. NOWALSKY: The Recreation Demand Model has been used for summer flounder, scup and black sea bass. It has been run by the Science Center. It has been the property of the Science Center. They have determined when, how people would have access to it. It has been dependent on their funding for when to make it available.

In making it available for bluefish and more importantly striped bass, is there a plan in place

that would provide some ownership by the Commission for access to running it, or is the intention for this still to remain entirely the property of the Science Center, and access to it, running it is purely at discretion of their funding, their resources, their timeline?

MS. KERNS: Thanks for that question, Adam. I don't have an answer for you yet; it is things that we have been talking about and trying to figure out what is the most cost-effective way to have all of these models. Then because striped bass is Commission species, like whether or not they can carry those costs that are associated with the cloud and the running of that RDM or not, and if not, then like what is the cost?

Because there is a cost to like building it outside of that cloud version, I believe. We're still trying to find funds in order to finish up the additional work that needs to be done for the two species, in order to be able to make them work. Thinking about it and trying to figure out how to do it, and where the money would come from.

CHAIR McKIERNAN: Adam.

MR. NOWALSKY: My comment would just be that that is a very high risk, I think, to those species' boards here right now and the endorsing of utilizing it, while it certainly brought an awful lot to management. That is a large risk to those management boards if it remains completely their property, in my opinion. Thank you.

MS. KERNS: We are having discussions about how we as a Commission can, and Council, take, I'm not going to say take over all of the species, but ways so that we can make decisions about when we want to go in and work on the model and making sure that the states have enough individuals that are fully up to speed on how to run and work the model for all of the species, so that we can utilize it when we need it and not have to rely on the Center to do so, and this is an ongoing discussion that we are having.

CHAIR McKIERNAN: Jason, did you have your hand up?

DR. McNAMEE: Jainita, great meeting. I had the opportunity to kind of sit in for a portion of the meeting and it was excellent. The folks on the Committee are great. One thing that came up, and I'll apologize, because you guys were meeting, I think in a jet engine. I was having a little bit of trouble hearing the discussion in parts. I thought I heard one of the Committee members talk about potentially developing like little mini reports, or something like that based on data and access to data that the Science Center has. Could you clarify, were they talking about just like specifically about one of the species you were talking about, or were they speaking more broadly about hey, we could kind of do something like this.

If it's the latter, I wonder if it's like akin to some of the stuff that the Science Center puts into the State of the Ecosystem Report, but would just be kind of you know customized to their Commission species, or something like that. Just a little bit of info on that part of the conversation, just because I couldn't hear it well.

MS. PATEL: Yes, good question, Jay. I believe it is for the latter, not just for species of interest. But eventually the vision is to do it for every fishery managed species, to have an economic snapshot that is available for you all to readily access, that would be updated once a year, and would tentatively be automated, it would update annually.

I am in conversation with our Federal CESS members who have access to those resources at the Center, to be able to sort of move that process along. But we're still in very preliminary conversations about what that Dashboard something would look like, but it would be for Commission species specifically.

CHAIR McKIERNAN: Any other questions or comments? No, all right, thank you, next report.

ASSESSMENT SCIENCE COMMITTEE

MS. PATEL: Thank you all, so I'll just move quickly into the Assessment Science Committee updates. First there is a little bit of background. More than

15 years ago, Pat Kildruff, John Carmichael, Rob LaTour and Tina put together a very useful Guide to Fisheries Science. This document is really meant for folks to understand the science behind what we do here.

However, given that there has been 15 years since the last update of this document, we thought that it was time for an upgrade, and to make it a little more accessible and a little bit more relevant to the way that the science has evolved since then. Over the past few months staff has put a lot of time and effort into pulling together an interactive version of this guide, which I think we can put on the screen. Yes, there it is.

The Assessment Science Committee did have a chance to also review this and provide their input. This should be accessible through the Commission's website. You also understand that this is a digital version of this slide, and some of you might want something offline to use or to print, so we aim to have a PDF version of this new and updated guide in the next few months as well. Moving right along. During spring meeting, the Tautog Management Board asked about the feasibility of advancing the tautog benchmark, currently scheduled for 2029.

The request waws mainly prompted by increasing retrospective patterns during assessment updates, changes in stock status determinations and the availability of new fishery independent indices. This matter was brought to the Assessment Science Committee, and I believe a memo was drafted for your consideration, and it has been included in the meeting materials, along with a copy of the current stock assessment schedule.

Details of the Assessment Science Committee's discussion are in that memo, but I will very briefly summarize the carry offs that they came up with here for your discussion. If the Board is still interested in moving up tautog, the first option would be to stop tautog with weakfish. This would move up the benchmark, but it would also increase the time before the next weakfish assessment, the last of which was in 2016.

The second option would be aiming for a tautog benchmark by 2028 and pushing back the work on spot, which is currently scheduled for next year, but likely work on spot will realistically extend through 2028, based on the current schedule. Then the third option would be to maintain the current schedule. For discussion today we would just like to see where the Board settles on these options and what path forward, we would like to take with a timeline for this assessment.

CHAIR McKIERNAN: Any input on these three options? Yes, Rich.

MR. RICHARD A. WONG: I would just like the Board to understand a little more context with tautog. We have regional assessments for tautog, and probably the regional assessment with the most uncertainty is the Southern assessment for DMV. We've been using this assessment to manage, and it's kind of hard for me not to keep a straight face and use this assessment.

But in any case, moving the tautog assessment up I know has benefits for the Northern Regions, but if we can get one or two more years in our indices for the Southern assessment, it would be really, really valuable. Because we have two indices that will be added to that assessment, which really could have huge and profound impact on the quality of that assessment.

It's just something. I know there are some benefits that people are aware of to moving it up, but there are also some benefits to keeping it on schedule. Also, we're in the middle of an addendum for tautog, and we'll be implementing new regulations right when those regulations will go into place, and then we'll have an assessment moved up really quickly.

Then we'll be potentially whip-sawing back or undoing the restrictions, which may be good or may be bad. For me it sends a little bit of a weird message to our anglers that hey, we have to restrict the fishery because of a very recent stock assessment, but we're going to do another assessment really, really quickly and try to undo

them. I feel like that kind of sends a weird message to our anglers. But anyway, those are some thoughts for the Board to consider.

CHAIR McKIERNAN: Jason.

DR. McNAMEE: I appreciate the thought that went into this. I have two questions, maybe the first one is more of a comment. I think the incentive to push tautog or pull tautog off to do a quicker, was premised around the notion at the time that there was going to be a delay in doing anything with the Addendum.

It is a question, so I wonder if the pressure to move tautog up is kind of released, because we sort of solved that problem whatever day that was. It feels like a week ago, but maybe it was two days ago. Just a question/comment there for folks to ponder, and that would be, I guess if people feel the same way, then that would allow us to keep it on its current schedule. Then my follow up is, on weakfish how does that impact some of the multispecies work?

Maybe the alternative here is we don't benchmark it but we just do an update, and we can kind of keep on schedule with the multispecies modeling. But weakfish is one of those species that is in that mix, so I want to make sure there is not some indirect impact to this that we haven't thought about.

MS. KERNS: We'll let Katie speak to the one, but I will say for tautog that is a question to you all, not for staff to answer. Maybe it did really make you all feel better, and so you don't feel like you need to shift tautog anymore. Because this was a recommendation from the May meeting, not this meeting if you recall. Katie, you can speak to what happens to weakfish.

DR. KATIE DREW: Jay, you may not know this, because you were not part of the weakfish group, but the last assessment was, the SAS did not recommend using it for management use, given basically the way some new information we had on M and the way the model is parameterized to task natural mortality at a level that is lower than what you could measure recently by some tagging studies.

The SAS and the Technical Committee felt that given that issue with the model, it's not really ready for management and we would not recommend an update, instead we would recommend a full benchmark to really reevaluate this. In terms of the timing for multispecies work; it is a great question.

Obviously, weakfish will also be influenced a little bit by the MRIP changes, as will striped bass and bluefish. I think there may be some other considerations around multispecies modeling that are bigger than whether weakfish is reviewed in 2028 versus 2029. I think there is probably a benefit to keeping it in 2028 from that perspective, but there are also going to be other considerations around, again striped bass and bluefish in that model.

CHAIR McKIERNAN: Okay, I've heard from Rich and Jason and from Katie that they would be leaving the order as is may have some benefits. Joe.

MR. CIMINO: The other side of this from me is, taug isn't just a heavily recreational species like bluefish or striped bass, it is also one that has almost no other input other than MRIP catch, including in some of our assessments. To me the push to update has always been, I don't want to be managing on the wrong information, so getting the new MRIP estimates and putting that in for taug.

I think is, in my opinion, more important than an update for weakfish, because I can't imagine us doing anything with that information. We already are managing without an assessment, and another year of that I don't see an interest in folks taking action to changing weakfish. I don't know what a status update would do there. Now that was not considering multispecies concerns.

CHAIR McKIERNAN: All right, Marty Gary.

MR. MARTIN GARY: Just in concurrence with Joe on this, and I think New York's preference if the Board

would support it would be to go with Option 1, for the record.

CHAIR McKIERNAN: Toni.

MS. KERNS: Again, you know it's should the tautog assessment be shifted forward. If so, which option, and if you want to move it I would suggest making a motion for someone, or however you want to move it, if it needs to be moved.

CHAIR McKIERNAN: Jason.

DR. McNAMEE: Yes, sorry, I know that you probably want me to go to the motion, but I have one more question.

CHAIR McKIERNAN: Would you make a motion after your question?

DR. McNAMEE: Maybe. We've been talking about weakfish and tautog, swapping those. What about spot? I don't know enough about that tradeoff to understand the impacts, whether the weakfish impact is greater than or less than the impact of spot.

DR. DREW: I'm not sure if Ben would like to comment on that specifically, or I can say something about it. I think the issue with spot is, spot has never had a model. Like there is no model for it right now. I think spot is probably in a situate. Unlike weakfish, which even though the TC recommended not using that model, we said it's likely that there are no significant changes to stock status.

It remains kind of at that low depleted level, based on the fishery independent information that we have. I think for spot we are definitely more in a situation where there is the potential that we need some kind of management for this, and we don't have a good quantitative tool for it.

In addition, like sort of the work that has been done on croaker, I think has sort of set that group up to do a good job with spot. However, I think again, it comes back to what are the priorities of the Board in terms of spot. Can spot hang out another year in this traffic light situation? I think that is up to the Board to decide.

CHAIR McKIERNAN: Ben and then I am going to get to Shanna. Go ahead, Ben.

MR. DYAR: I would very much echo concerns for delaying spot for any length of time. Previously the benchmark, the last benchmark that was done was in 2017, it was not considered for management use. Right now, the abundance and fishing are unknown for that species. We are managing under a traffic light assessment.

The plan was typically spot and croaker were lumped together under a traffic light, and the plan was to split those apart and sequentially do those in order for those assessments, which is much needed. We do have some concerns regarding some of our spot landings in South Carolina. That assessment is definitely needed and wanted. That would be not in favor of Option 2.

CHAIR McKIERNAN: Shanna.

MS. SHANNA MADSEN: I think Ben just covered what I was also going to say, just knowing a lot about that species and congratulations on just, I heard, passing croaker potentially. Now we actually have something set up for spot, and so that having been on a traffic light for so long, Option 2 for me was a nonstarter.

CHAIR McKIERNAN: Jason, are you going to give us a motion?

DR. McNAMEE: I would make a motion if you would like, Mr. Chair. I think that was a really good discussion. Thinking more about what Katie said about weakfish, with respect to the multispecies work, I think there is a way forward. Just given the status of that and the really low level of the species. I will **make a motion that we adopt Option 1 as a way to modify the assessment schedule to move tautog up and trade it off with weakfish**.

CHAIR McKIERNAN: Is there a second, Marty Gary. Do you want to speak to the motion or do you feel you've already done that.

DR. McNAMEE: There was enough discussion there, so I heard enough compelling reasons to move, tautog is my fav, so I am always happy to move it up. Moving tautog up, and I don't think the impact with weakfish will be terrible.

CHAIR McKIERNAN: Marty, would you like to speak to it?

MR GARY: No adds, nothing bad, thank you.

CHAIR McKIERNAN: Any discussion on the motion? Yes, Adam.

MR. NOWALSKY: To Rich's point about additional indices potentially being available. If we didn't integrate those in the benchmark, what would be a next available time to integrate them? Could they be integrated through an update, or would they have to wait for another benchmark

DR. DREW: I think all of the ones that we have examined would have enough years of data to be included in this benchmark. It would be sort of right on the edge of what we would consider acceptable, in terms of time series length. As Delaware was saying, a few years ago is a boon. But I think everything we've seen so far have discussed with the states, in terms of new indices, would be available to be considered and used in this benchmark, and we would not have to wait on that front for just an extra year.

CHAIR McKIERNAN: Mike Luisi, go ahead.

MR. LUISI: I support the motion. I think listening to the discussion, I think tautog is just more relevant right now. We had a big discussion about that already this week, and look forward. I just think it makes sense to delay weakfish, so I'll support the motion.

CHAIR McKIERNAN: Chris Batsavage online.

MR. BATSAVAGE: Not sure if I'll support this or not. I've heard plenty of reasons why this could make sense. What would help me is a question for Katie. Is there some benefit to the Stock Assessment Subcommittee for moving weakfish back, considering the challenges they had with the last assessment that wasn't used for management? Buy them a little more time do them some good?

DR. DREW: I think it would give us maybe a little more, like essentially whatever species we choose to be completed in 2028, needs to like start now. We are having a little bit of extra time, so it means tautog is going to have to like turn this around really quick, and also versus weakfish might have a little extra time, so that we could maybe dig into some of these issues a little more deeply. But I think there is nothing in particular that is in the works that an extra year would be specifically.

CHAIR McKIERNAN: I would like to **call the question, any objection to that? All those in favor, hold on, do you need a minute to caucus, Eric? Give you one minute, Eric. Okay we're back to a vote on the question. Are there any objections to the motion? All right, so we will take a vote. All in favor.**

MS. KERNS: Rhode Island, Massachusetts, Connecticut, New York, New Jersey, Florida, Georgia, South Carolina, Virginia, Maryland, PRFC and North Carolina.

CHAIR McKIERNAN: Any opposed?

MS. KERNS: Delaware.

CHAIR McKIERNAN: Any abstentions?

MS. KERNS: Maine, New Hampshire, NOAA Fisheries, Fish and Wildlife Service and Pennsylvania.

CHAIR McKIERNAN: Any null votes? No. Motion passes 12 to 1 to 5 that is 5 abstentions. Very good, thank you.

FISHERIES COMPENSATION FUND FOR ATLANTIC COAST OFFSHORE WIND PROGRAM OVERVIEW AND RECENT WORK

CHAIR McKIERNAN: Next on the agenda, Number 8, the Fisheries Compensation Fund for the Atlantic Coast Offshore Wind Program Overview and Recent Work. I believe Deirdre Boelke, is she online? Okay, Deidre.

MS. DEIRDRE BOELKE: Thank you for this opportunity, I'll try to keep it brief, keep you on an agenda, hopefully. Just want to share a brief overview of the Regional Fisheries Compensation Program that has been under development for offshore wind impacts. I have worked with many of you before during my time on the New England Council staff, and regret that I can't be with you today.

Thanks to Toni and Dan for finding time on the Policy Board agenda for this overview. My name is Deirdre Boelke, I am an independent consultant and Principal of Fisheries Insight Network. I am definitely only the messenger here. The bulk of this work has been developed by a much larger team, with input from many advisors and stakeholders, which I will explain in a future slide.

The main objective of this presentation is really just to introduce the Regional Fund Administrator or RFA Initiative, to those that might not be familiar with it, and give you an update of where the process is as it's beginning to kind of close into its last few months. Specifically want to inform you that a draft compensation program design is scheduled to be released later this month, and let you know how you could provide comments, how to review the document if you are interested.

Just one background slide in case folks are not familiar. The RFA is an 11-state initiative, all the states from Maine through North Carolina. The intent is to develop a more consistent fair and transparent process for distributing future compensation funds for projects that may be developed off the east coast in the future.

Brown Greer is the administrator who was selected to serve as the primary firm responsible for designing this program together with Carbon Trust. Laura Singer, which some of you may know and myself are subcontractors hired really to support engagement efforts for the project. What is an RFA? Essentially it is a third-party entity, again responsible for designing and distributing these funds, which are separately negotiated through agreements between offshore wind developers per project and relevant state agencies.

I briefly want to clarify the scope of this process, because we do get two questions in particular pretty often. I want to clarify that this process is focused on future compensation programs, so the details of it will not in any way effect programs that are already in place for the several projects that are under development or already developed in the region.

It does address the money and how it is distributed out to fishermen, and it does not directly affect how much money goes into the fund. I just want to clarify that; we get that question a lot. This is not focused on evaluating or assessing how much money should go into this regional fund. Instead, it is the process of how to distribute it.

Also want to point out then, it is probably obvious, but really different in that the idea is that there would be one potential strategy overall throughout the region. Again, a difference of this process is that there is an exterior body that has really been informing this work from the start, compared to previous params, which have been much more kind of project specific.

This is the structure of the Advisory groups. It is somewhat similar to the Commission process in terms of there being numerous advisory bodies that all give input directly to the overall design. This has been in place and was in concept several years ago, but the Design Oversight Committee, the box in the center with the DOC is kind of the main advisory body informing this work.

It is made up of six commercial fishing interests, three offshore wind developers and three state representatives. There are additional kind of secondary members and other designees from all three of those groups that participate in meetings as well, and then on the left-hand side you see FHC stands for For-Hire Committee.

There is a separate group that is advising any for-hire related issues, and then on the right-hand side, not directly involved, but were through the DOC but there are ex-officio federal government employees from primarily NOAA and the Marine Minerals Administration, formally BOEM that are also advising into this, and providing being available for questions. These are the individual involved in the process. The names I have here, I am not going to go through them, but they are probably familiar names to you within the region. The intent initially was to have representative voices from various fisheries gear types throughout the region.

The membership has changed a little bit over time, because this process has been two years in the making, basically. But many or most of these names have been involved from the start and it's a huge commitment of their time and energy, much more than they bargained for, and there have literally been dozens and dozens of calls and meetings over the last year and a half plus.

This is just to give you a very high-level sense of the types of issues and conversations that the DOC and others have been having over the last two years. These are just examples, there are many more, in terms of you know which vessel should be eligible, what actually is a loss that you could submit a claim for.

Will shoreside businesses and crew consider it separately or within the same claim? Will there be an appeals process, any of these. It's just to give you a sense of the types of conversations that these groups are having. This will give you a sense of engagement approach, and there has been extensive engagement throughout this process.

I know it's hard to hit every port of course from Maine through North Carolina. There have been various strategies used that have evolved over the course of the project, depending on the phase that the project is in, definitely in the beginning. First year was focused on listening and learning and hearing from individuals that had direct experience with compensation programs, and trying to gather all those lessons learned over time.

More recently it's been a bit more of an inward focus, kind of really working closely with those EOC and FHC members to get specific feedback on what this design should look like. To give you a sense, we do try to attend events and regional webinars and meetings like this one today. Some examples are shared there on the right-hand side of the screen. You know we do try to get to different regions and have separate phone calls when possible.

The actual draft agreement itself as I mentioned, that is hopefully going to hit the streets soon will probably be in a 50-page state. It's a lot. It's dense, it's complicated, there is a lot of detail in it. This is literally a one-slide teaser to maybe give you a sense of the overall architecture as it is currently envisioned in the draft.

I'm definitely not going to have time to go through the details of all of these various components, but wanted you to at least have a little sense of where it's headed. Right now, there is definitely in the draft a vision for a separate program which export cable route, you know the space of the ocean connecting the project to land, versus the actual offshore project area.

The thought there is the Offshore Export Cable Corridor, as it's called, would be this one-time advanced payment that would be equal, in exchange for temporary access restrictions while the cable is being laid. Different from the actual project area itself, the thinking here is there would be two different phases, the construction part of the project, as well as the operations, and then also within those two paths, so that there could be an expedited review process, which would be more streamlined, more formulaic up front. Kind of know

what you're going to potentially get as a payment with lower burden of proof, versus an individual review, which would be much more based on demonstrated impacts if an individual vessel felt that their claim and impact was higher than the values considered under the expedited review.

There are these two different paths to have this flexibility. A vessel can go down one path and then switch lanes, as it were, to go in a different direction. Really quickly the eligibility to hopefully simplify things. There has been lots of discussion about which vessels would be eligible. A lot of different ideas here.

But right now, the draft is leaning toward, at least for now, considering and getting more public input on a sense of having activity, at least one trip some level of revenue connection to a project area in three out of the last ten years, before the project basically investment decision was made final. That is the current thinking about what the eligibility standard would be.

There definitely would be an exceptions process that vessels, you know if they fall outside of that there could be this other way to still be considered, if they have some unique circumstances that should be considered. Finally, the next steps, just to give you a sense of what is ahead.

Just earlier this week the DOC, the group I mentioned before met, and basically their final meeting before the draft would be released. It's being finalized now. Again, hoping to release the draft later this month, very early September. There will be, although it's not required, a formal public comment period where the document will be available online.

Folks can send and submit comments directly through the website and an e-mail address provided during September and October for a minimum of 45 days. There will be a public webinar. Staff is also going to present at the upcoming New England and Mid-Atlantic Council meetings during that public comment period.

If there are states online that want to try to coordinate something with us in addition to those opportunities, please reach out about that. Finally, later in the fall there would be a final, and then another webinar to take all of that input, make any necessary updates and release the final before the end of the year.

Finally, the last slide I have is just the website, essentially, to let you know there is more information on there if you are curious to dig into this a little further. The actual draft will be posted. We'll send a notice to Commission staff, and they are welcome to forward it to everyone to know when it is available.

Definitely encouraging folks to view it. There will be public webinars to kind of walk through it, and very open to suggestions and ways to improve it. Thank you so much for your time, if we have any time left, I am happy to take questions. Otherwise, please send an e-mail to the address on the screen, or get in touch with me directly. Definitely appreciate your time.

CHAIR McKIERNAN: Thank you, Deirdre, and thank you for all the work that you and the team are doing. I know my state supported the development of this group to bring about some logic and order to the various agreements each developer was making with each different state, so this makes a lot of sense.

Even though you mentioned that you're not covering what money goes in, I really believe that the net result of all your efforts is going to be kind of a shift in the thinking of what money should go in, in the future. I think there will be some net benefits in that realm as well. Any comments or questions for Deirdre? Yes, Rich Wong.

MR. WONG: Deirdre, could you elaborate a little bit more on the separate program, the addition of conversation for the Export Cable Route, because this is occurring in state waters, and using a different pool of money than the offshore compensation.

MS. BOELKE: Sure. I am happy to do that a little bit. There is not really too much detail. I was going to say we can go back to Slide 7, but there is really nothing on there anyway. Again, this process again was just mentioning won't get into the value of what is available. But whatever the RFA is instructed from that agreement, and whatever fund dollar amount is available.

The current draft is thinking that for that Export Cable Corridor Area there would be a buffer that is recommended around either side. The premise would be an optional kind of one-time advance payment, you know before construction even starts, to any affected vessel that can show that there was some demonstrated connection to that offshore area with a buffer.

Right now, the draft considers 500 meters around that cable centerline. The thinking is that it would be one payment amount, and once they know that amount that is available and how many people are in there, that amount would be more known than it is today, like we have essentially no idea what the funds values would be.

If a vessel decides to participate in that, submit into that program, there would be an agreement not to fish in that cable corridor area during the construction period. Without going into lots of the details now, there are pros and cons of that. But that is currently how the draft is developed. Does that help a little bit? There definitely will be a lot of details about this in the draft when it's released.

CHAIR McKIERNAN: Rich, follow up?

MR. WONG: Yes, thank you, Deirdre, I was just actually curious about the export cable wrap that goes through state inland waters, or are you referring just to the export cable wrap that is in the ocean?

MS. BOELKE: Sorry, not to hone in on that, but the sense is that program would work the same, in terms of the rules of who could apply and who could be eligible. In terms of limitations on, if it comes from a certain state water account or a federal water account. That could be addressed in the background, but the idea is that the draft currently is suggesting that the rules apply the same, if I'm touching your question.

CHAIR McKIERNAN: Seeing no more hands up, thanks for the presentation, Deirdre, and good luck getting that over the goal line.

UPDATE ON RECREATIONAL ANGLER PARTNERSHIP IMPROVEMENT DIRECTIVE

CHAIR McKIERNAN: Next on the agenda is a RAPID update from Alex DeJohnson.

MR. ALEX DiJOHNSON: I'm just going to give a pretty quick update. I think a lot of resource has already been released about where we are with the Recreational Angler Partnership Improvement Directive, and I've had a good opportunity to talk to a lot of folks so far being here yesterday, just sort of catch up and hopefully answer some questions that folks are having about where this directive is moving.

Just really quickly I wanted to highlight a few things out loud for folks, one of them just being that the RAPID is intended to sort of be a transition from the existing data collection enterprise to some new ideal version. What we're looking at here, and what we think we would gain is the need to have a couple of workshops, regional workshops throughout the nation to sort of figure out what this ideal version would look like.

I think the Steering Committee has been really adamant about making sure that we are communicating that there are no predetermined outcomes. We don't know what the future state is going to look like, in the different regions, different coasts. We're here to sort of work through this with the partners, and part of that is going to be what we call extending.

I sort of think of it as maybe refreshing, some of the shared governance relationships with partners for state, federal, Commission, Council and then also obviously the stakeholder is going to be setting a

direction in this codesign approach to improve trust in and quality of the data that are being collected for use in management.

The sub-bullet under there I think is important, something that maybe should have been even more bold. It's just the idea of what that could look like. We have a couple of different options; we just outlined the three easiest options here. But the idea is, there is potential to sort of enhance existing data collection methods.

We could supplement the existing methods or we could potentially look at replacing those methods. There are a number of different approaches beyond that, but those are sort of the easiest to reach, sort of what I offer right now, as we think about planning these workshops.

Then the last thing I wanted to just reiterate that I think has been really clear in my communication so far. But in the Atlantic especially, this data collection that exists already is going to continue as is until the future state is designed and being executed. For now, the current state, the current status on the Atlantic will continue forward.

Rather than go through in a lot of detail, the page that was released back in June 8 of this year has a lot of detail in what is going on in there. That page is intended to sort of be a living, breathing version of what the current update is on RAPID. That could be updated every week, but the idea is that any major updates about what is going on, progresses of RAPID can be found on that page. It's just a website page that has been distributed widely at this point on the NOAA Fisheries site. Some of the updates since the last ASMFC meeting in May was that the Workshop facilitator that is going to be Keystone Policy Center, has actually been hired at this point. They actually just had a first sort of kick-off call earlier this week.

We ended up with 8 applicants for the RFP, so it was pretty competitive. There was a lot of really good proposals that came through. But we are really excited with Keystone. That closed in mid-June. They are actually going to be joining the Steering Committee starting today at 1:00 p.m. continuing into the future.

We're excited to have that facilitator on, because we wanted a lot of feedback on the facilitator about how those workshops are going to be run and organized. Then one of the other items that has been solidified has been an increase to the APAIS allocation brought for the Atlantic, that is Maine down through Georgia.

We ended up with about a 13% increase September through December of this year, which is no nothing, essentially a pretty nice increase. Then we're working on having, it will probably end up being more like a 20 to 30% increase, maybe a little bit higher throughout all of 2027. We will be finalizing that increase late this year, probably in November for 2027 for the rest of the Atlantic.

One of the biggest things that you all have probably heard about and maybe have questions about would be that we are solicitating sort of members for these Regional Planning Teams. They are going to be helping with the logistics, then also be setting the agendas and planning each regional workshops.

I think at this point pretty much covered everyone, all the different regions. But if you have additional thoughts, obviously, I think Bob reached out last week, I think that was, for requests. I think we pretty much heard back from everybody, but if you have additional thoughts, let us know. Then we should be having communication finalizing those groups, and setting up the first meetings, maybe this week.

Definitely by the end of next week though I would say this communication should be going out. Then one of the last things that we've been working on is a formal communications plan about exactly what is the plan with RAPID and where this directive will be moving forward.

I think a part of that will also involve reaching out, maybe for a little bit of the state communication ideas, to sort of make sure that we're using s standard voice, a singular voice to move forward

with feedback from all the different partners, not just having communications come from one partner, sort of a countdown approach.

Where we're going. I would say that these timelines are best guesses right now, that this will sort of be solidified a little bit more once we have these Regional Workshops planning committees sort of set up and thinking about when these meetings are going to be, how many meetings we even are going to have. But right now, the idea is that we need to first have an inventory. That was one of the things that we were waiting for the facilitator to jump on. Now that we have the facilitator, we are going to be starting that maybe even in August, definitely by September to start that. That is one of the first pieces that needs to go into the planning of these workshops.

Then obviously, we need to actually hold the workshops. Right now, the rough timeline we've been saying is something like October through March. The reason we're ending in March of next year. The goal is right now to make sure that we're not rushing anything, we want to make sure that there is actually quality through these workshops, obviously, understanding that we do want to do this quickly, but we also want to do it right.

Then we're also trying to do, we're targeting March, because that would get us before the Rec Summit, the 2027 Rec Summit, because we plan on having this, at least a piece of that summit that is currently planned for, I think it is the 23rd or 24th of March. But that is also key for the summit. After the workshops, the workshops are sort of going to be rolling.

They are not going to happen all at once. It will be over the course of weeks/months. We plan on just having a rolling synthesis of what comes out of those workshops, because a part of that will be to have not just regional workshops with management, but also to have a public workshop, and then to have one final workshop at the very end to help synthesize everything collectively. That is going to be done on a rolling basis. Then we want to have the regional reports and action plans at least drafted by May 2027. Then we're hoping to be able to announce and then start executing what that future state of data collection would be in summer of next year. With that I can take any questions.

CHAIR McKIERNAN: Any questions for Alex? Go ahead.

MR. LOREN W. LUSTIG: Thank you very much for a very interesting report to us. I am wondering if you could be specific regarding the lack of trust issue that you brought up. What is the cause of a lack of trust in the current programs that are producing data, and what would be helped by the new RAPID proposal that you put on the table?

MR. DiJOHNSON: The easiest answer is that I hope that that comes out in the workshop. But I think that the trust component is sort of twofold, right? There is sort of constituents, the public and building trust. But I think the more important piece that we're hoping to tackle in the workshops is trust.

Buy-in through a reenvisioned partnership between states, federal, NOAA Fisheries as well as with the Council's and Commission, sort of have everybody together designing. The idea is that by building that system together that the trust would be built in, sort of differently than it exists right now, which tends to be a little bit more top down from NOAA down.

CHAIR McKIERNAN: Good question, Loren. Anyone else? I've got Joe Cimino.

MR. CIMINO: I promise I know that I am no longer Chair. I wanted to make a comment, not to Alex's work. I appreciate all that Alex and Jeff and Bob are doing on this. You know we're a group of member states, but I really feel no one better could do the work that is being done by the Commission on this.

I feel it was kind of foisted on us. I kind of wrestle with that a little. Not necessarily saying that we should maybe go as formal as a letter to the Service.

I had a chance to talk to some of the folks from NOAA at the State Director's Meeting and at the CCC. I know as individuals I really appreciate the work that the Commission has taken on for this. I don't feel like, for something this big, that we had a real discussion in how this was coming to us.

CHAIR McKIERNAN: All right, we'll take that under advisement. You got that off your chest, Joe? All right, anyone else?

STOCK ASSESSMENT UPDATES

CHAIR McKIERNAN: Next on the agenda is Stock Assessment Updates, Katie Drew, oh, Toni is going to cover it, very good.

MS. KERNS: In order to end on time is the end desire. The croaker assessment had its peer review last week, and it will be coming at the annual meeting. The sturgeon will have a workshop next week. If you have further questions about it then see Katie.

CHAIR McKIERNAN: Brilliant, Toni. We have no non-compliance findings. Any other business at this time? John Clark.

MR. CLARK: This is the topic I mentioned to you, Dan. I know everybody want to get out of here, I'll be extremely parsimonious with my palaver here. We just want to bring up the issue. We were approached by anglers in Delaware through our Tidal Finfish Council about putting regulations in place for sheepshead, since we're seeing a lot more sheepshead being caught.

Delaware's laws don't allow us to regulate a tidal species that does not have an FMP, but it does allow us to create and FMP with New Jersey. We contacted Joe Cimino and his staff in New Jersey, and they've also been hearing the same thing. Just wanted to make the Board aware that we're looking at developing an FMP For our two states.

But Joe's state put together a chart showing that pretty much every state south of Delaware already has regulations in place. I don't know if sheepshead might be something on the horizon that ASMFC might want to consider management. I'm sure Bob and Toni are glad to hear that.

CHAIR McKIERNAN: Bob and Toni, would you like to respond? Go ahead, Bob.

EXECUTIVE DIRECTOR BEAL: Thanks, John, it's good to keep those additional species on the radar. You know we've had a number of suggestions on additional species, including southern flounder, the welk fishery and I know there are a couple others that are out there, I guess false albacore and some others.

It's a bandwidth issue, really. If we take on additional species, do we sort of reduce priority for some of the existing species? Easy to say. If the Policy Board wants to have that conversation and those states want to bring something forward, we can have that conversation, for sure.

ADJOURNMENT

CHAIR McKIERNAN: John, thanks for the heads up and good luck with your collaboration with New Jersey. I think that brings us to the end of the meeting. Any objection to adjourning? No objection meeting is adjourned.

(Whereupon the meeting adjourned at 11:40 am on Thursday, August 6, 2026)

Recreational Sector Separation Amendment to the
Summer Flounder, Scup, and Black Sea Bass and Bluefish Fishery Management Plans

Action Plan
As of October 2026

Amendment Goal: This amendment is being developed by the Mid-Atlantic Fishery Management Council (Council) and Atlantic States Marine Fisheries Commission (Commission). The purpose of this amendment is to review and consider options for managing for-hire recreational fisheries separately from other recreational modes (referred to as sector separation or mode management) as well as options related to for-hire permitting and reporting requirements for the summer flounder, scup, black sea bass, and bluefish fisheries.

Recreational mode management is being considered as a potential way to account for differing motivations, preferences, fishing behaviors, economic considerations, operational needs, and data reporting requirements between for-hire vs. private/shore components of the recreational fisheries. Revisions to the Recreational Measures Setting Process, the conservation equivalency process, and recreational accountability measures may be considered if needed to implement mode management approaches.

Additional for-hire permit and/or reporting requirements will also be considered with the goal of ensuring the effectiveness of any sector separation approaches. Limitations may be needed on the flexibility of fishery participants to enter and leave the for-hire sector at will based on preferred regulations under sector separation, and increased consistency in state for-hire permitting and reporting requirements may be needed to effectively analyze mode management approaches going forward.

Types of Measures Expected to be Considered: The Council and the Commission's Interstate Fisheries Management Program Policy Board (Policy Board) have agreed to consider the conceptual approaches listed below. These approaches are currently being further developed to add additional detail and sub-options as appropriate.

Recreational Sector Separation

- No action/status quo
- Managing the recreational for-hire and private/rental fisheries with separate management measures (bag limits, size limit, seasons, or other measures). Although this is already done for some species/state/mode combinations, this amendment may consider a more uniform approach to separate measures, including the potential development of guidelines or specific requirements to consider or implement mode management approaches. If the Council and Policy Board choose to prioritize separate measures over other types of sector separation, an amendment may not be necessary depending on the options considered.
- Managing the recreational for-hire and private/rental fisheries with separate management measures (bag limits, size limit, seasons, or other measures) and a separate timeline. This would allow for-hire measures to remain stable over multiple recreational measures setting cycles to

accommodate the differing needs and priorities of the industry. The Council and Policy Board directed the development of this alternative in February 2026.

- Letter of Authorization (LOA) program for separate for-hire measures. The Council and Policy Board are considering whether a special program could allow authorized for-hire vessels to opt into a specialized set of recreational management measures tailored specifically for the for-hire mode, while still meeting the overall conservation objectives.

For-Hire Permit Requirements

- No action/status quo
- Limitations on the total number of for-hire permits (federal and/or state level)
- Additional or modified requirements to obtain or retain a federal and/or state for-hire permit
- Requirements that states implement permitting and/or reporting requirements at the state level

Fishery Management Action Team (FMAT)/Plan Development Team (PDT)

An FMAT/PDT has been formed to assist with development and analysis of potential alternatives. FMAT/PDT members are listed in the table below. Other Council, Commission, and NOAA Fisheries staff, as well as other experts, will be consulted as needed.

Name	Agency	Role/Expertise
Tracey Bauer	Atlantic States Marine Fisheries Commission	FMAT/PDT Co-Chair
Chelsea Tuohy	Atlantic States Marine Fisheries Commission	FMAT/PDT Co-Chair
Kiley Dancy	Mid-Atlantic Fishery Management Council	FMAT/PDT Co-Chair
Hannah Hart	Mid-Atlantic Fishery Management Council	FMAT/PDT Co-Chair
Savannah Lewis	NMFS Greater Atlantic Regional Fisheries Office	Fisheries policy and legal requirements
Marianne Randall	NMFS Greater Atlantic Regional Fisheries Office	National Environmental Policy Act requirements
Sara Turner	NMFS Greater Atlantic Regional Fisheries Office	Scientific and technical analysis of federal fisheries management
Rachel Sysak	New York Department of Environmental Conservations	State fisheries management
Corrin Flora	Maine Department of Marine Resources	State fisheries management
Matt Ayer	Massachusetts Division of Marine Fisheries	State fisheries management
John Lake	Rhode Island Division of Marine Fisheries	State fisheries management
Craig Weedon	Maryland Department of Natural Resources	State fisheries management

Expected Amendment Timeline:

This amendment was initiated in October 2020 along with several other Recreational Reform Initiative Topics. However, in February 2021, work on this amendment was put on hold to prioritize development of the Recreational Harvest Control Rule Framework/Addenda. In December 2022 the Council and Policy Board agreed to continue to develop the Recreational Sector Separation and Catch Accounting Amendment; however, it was later put on hold again to prioritize development of the Summer Flounder Mesh Exemptions Framework/Addendum.

In December 2025, the Council and Policy Board agreed to delay development of a public hearing document/draft Amendment document in order to hold a workshop to further refine the draft alternatives. A revised amendment timeline is below (as of October 2026; pending additional guidance from the Council and Policy Board). However, **this timeline is subject to change depending on the outcomes of the workshop** and how those outcomes ultimately impact the range of alternatives and level of analysis required.

Fall 2024	Confirm/Finalize Fishery Management Action Team (FMAT)/ Plan Development Team (PDT) Membership; Development of draft scoping/public information document
December 2024	Council and Policy Board approve a scoping and public information document for public comment
February/March 2025	Scoping hearings and comment period
March 2025	FMAT/PDT and APs review scoping comments and provide input to Council and Policy Board on scope of amendment and possible approaches
April 2025	Council and Policy Board review scoping comments and FMAT and AP recommendations; define scope of action
Summer 2025	FMAT/PDT begins to develop draft alternatives
August 2025	Council and Policy Board review and provide feedback on preliminary conceptual alternatives
Fall 2025	Continued FMAT/PDT development and analysis of alternatives; AP input on draft alternatives
December 2025	Council and Policy Board provide further guidance on draft alternatives for inclusion in a public hearing document/Commission draft amendment document
Winter/Spring 2026	Staff work with FMAT/PDT and Council/Policy Board leadership to plan stakeholder workshop logistics, including identifying a workshop facilitator
Spring/Summer 2026	FMAT/PDT work with facilitator to prepare workshop materials and identify participants
September 2026	Stakeholder workshop to further develop draft alternatives
November 2026	Council and Policy Board review workshop results and provide direction to FMAT/PDT
January 2027	Council and Policy Board approve a range of alternatives for inclusion in a public hearing document/draft amendment document

Winter 2027	FMAT/PDT develops public hearing document/Commission draft amendment document
Spring 2027	Council and Policy Board approve public hearing document; Policy Board approves draft amendment document for public comment
Spring/Summer 2027	Public hearings and comment period
Summer 2027	AP meeting to provide input on preferred alternatives; FMAT/PDT meeting to provide recommendations to Council/Board
August 2027	Final action
Summer/Fall 2027	Staff develop and submit draft environmental assessment (EA)
TBD	NMFS and other agencies review EA; final edits completed; Rulemaking and comment periods (4-7 months after EA finalized)

Recreational Sector Separation Amendment

Summary of Draft Alternatives Under Development – November 2026

Background

The Mid-Atlantic Fishery Management Council (Council) and Atlantic States Marine Fisheries Commission (Commission) Policy Board (Policy Board) are developing an amendment to consider modifications to the recreational management program for summer flounder, scup, black sea bass, and bluefish. Specifically, the draft alternatives below describe alternatives for managing for-hire vessel recreational fishing separately from other recreational fishing modes (i.e., private/rental vessel and shore-based) as well as alternatives related to for-hire vessel permitting requirements for the summer flounder, scup, black sea bass, and bluefish recreational fisheries.

The current draft alternatives described below were discussed at the Recreational Sector Separation Workshop held in Linthicum, MD on September 23-24, 2026. A separate workshop report summarizes participant feedback on these alternatives and is included in the meeting materials for the November 12 Policy Board and Council meeting in Newport, RI. **The draft alternatives below have not yet been modified based on workshop feedback. At their joint meeting on November 12, the Council and Policy Board should consider recommendations from workshop participants and provide direction to the Fishery Management Action Team/Plan Development Team (FMAT/PDT) on further development of the alternatives, including which alternatives should be carried forward, which require modification or further development, and which alternatives should not be carried forward.** In addition, the Council and Policy Board could identify additional information, and analysis needs to inform final approval of a range of alternatives in early 2027 (see Action Plan as of October 2026 also included in the meeting materials).

Management approaches that were previously considered but removed from further consideration in this action are described in Appendix A. It is important to note that one of the alternatives removed from consideration was separate allocations of catch or harvest to the for-hire and private fishing modes. As such, the draft alternatives below do not include any approaches that would establish mode-specific allocations.

Draft Purpose and Need Statements

In late 2025, the FMAT/PDT worked to revise the draft purpose and need statements for this action, based on feedback received from previous discussions of the Council and Policy Board

and advisors (summarized in the December 2025 Discussion Document). The current purpose and need statements, as revised, are as follows:

- **Purpose:** The purpose of this action is to evaluate whether the for-hire and private angler components of the recreational fisheries, also referred to as modes, for summer flounder, scup, black sea bass, and bluefish should be managed separately. The action also seeks to determine whether additional permitting and reporting requirements are needed to support this approach. Together, these considerations are intended to improve the responsiveness of management to the needs of recreational stakeholders across the two modes.

- **Need for action:** Currently, the for-hire and private recreational modes are managed under a single combined harvest target in each year for each species. However, management measures designed to achieve that target (i.e., bag limits, size limits, seasons, and other requirements) can vary across modes in some cases. To date, these types of "mode management" approaches have been implemented in an ad hoc fashion, usually at the state level, with varying approaches for different species and regions. Managers have expressed a desire for greater consistency in the application of mode management by species and state/region, and for an increased use of mode management approaches where necessary to support the unique needs of the for-hire sector and to better tailor management to the unique characteristics of each recreational fishing mode.

  Differing management measures by mode can better account for mode-specific differences in operations, incentives, reporting practices, and economic vulnerability. For-hire operators must manage fixed business costs and depend on predictable regulations for financial planning and trip marketing. Advisory Panel Fishery Performance Reports in recent years have consistently raised concerns about declining for-hire participation and economic viability in some areas, and the Mid-Atlantic State of the Ecosystem Report indicates a trend of declining recreational fleet diversity due to a shift away from party/charter fishing. Private anglers have more flexible participation patterns and different financial considerations based on personal expenses as opposed to business profitability. A single set of recreational measures may therefore distribute constraints unevenly and create management outcomes that are not well aligned with the needs of each group.

  Additional permit and reporting requirements may be necessary in order to support effective implementation of mode management approaches adopted through this action or via future actions. Federal for-hire permits are currently open access, with few eligibility criteria, and state level permit requirements vary widely. This flexibility allows participants to move in and out of the for-hire mode based on preferred regulations, which could undermine the effectiveness of mode specific measures. Increased consistency among states in permitting and reporting requirements would also improve the ability to analyze and apply mode-based regulations for the full recreational fishery.

Alternative Set 1. Recreational Mode Management Guidelines

Concept: Set different management measures (size/bag limits, seasons) by recreational mode without separate sub-allocations of catch or harvest. Different approaches could be taken for different species.

Draft Alternatives:

1A. No Action/Status Quo. Continued use of mode management for each fishery at the state and/or federal level (most commonly at the state level). Current approach: Flexible, state-tailored, ad hoc, variable by species.

- *Black Sea Bass/Summer Flounder:* Annual determination whether to manage the recreational fishery under 1) coastwide measures or 2) conservation equivalency (state- or region-tailored management that applies to federal waters).
- *Scup/Bluefish:* Recreational measures in federal waters cannot be waived in favor of state measures. State measures can differ from federal waters measures if they are more restrictive.

Please see the Current Use of Mode Management background document for additional details on how mode management is currently applied.

1B. Uniform Approaches or Guidelines for Considering Mode Management. The current approach varies by species and area (e.g., differences in state/federal measures, across which modes measures vary, etc.). This alternative would consider establishing either binding or non-binding guidelines or best practices for implementing mode management to increase the use of mode management or increase consistency in its application. If the Policy Board/Council wishes to specify, this alternative could include specific considerations to implement mode management between different modes, e.g., the private and for-hire modes, private shore and private vessel, etc. Approaches could include:

- Recommended analytical approaches
- Degree of difference between measures by mode (e.g., whether there should be a minimum or maximum amount of difference across different modes)
- Approaches to minimize enforcement concerns

> ***A key consideration:*** The current process is already flexible in allowing mode management approaches to be implemented at the state level. There are tradeoffs between increased consistency in the application of mode split regulations across species and regions, and the existing flexibilities for states to implement mode management approaches tailored to the needs and preferences of their anglers. The FMAT/PDT found it challenging to develop mode management guidelines that did not limit this flexibility or otherwise make the recreational measures process more restrictive.

1C. For-Hire Resiliency Measures Setting Process. Would modify the current Recreational Measures Setting process. Specifically, this approach would modify the recreational measures setting process timeline for the for-hire mode, and allow for-hire measures to be set every four years as opposed to every two years, with the following exceptions:

- If annual directed effort significantly increases for the for-hire mode (threshold TBD)
- If annual harvest significantly increases for the for-hire mode (threshold TBD)
- If the Recreational Measures Setting process indicates that a total harvest reduction of greater than XX% is needed (threshold TBD)
- If the Recreation Demand Model (RDM) used to estimate the impact of management measures changes significantly or if modifications to the model show significant changes in estimated harvest (e.g., due to a recalibration of MRIP data)

> ***A key consideration:*** In years when measures are set for both modes, measures could be developed based on a rolling percentage of catch and/or effort by mode from recent years, or via some other approach. In years where the for-hire measures do not change, additional discussion is needed to determine how private mode measures may need to be adjusted to meet the requirements of the Recreational Measures Setting Process.

1D. Regional For-Hire Measures. Would apply regional for-hire measures (size/bag limit/ season) to two or three regions along the coast, likely applied as identical measures in state and federal waters. States could deviate only if measures are more restrictive than regional measures. This approach is already used (or required) to some extent in state waters for summer flounder, black sea bass, and scup (see the Current Use of Mode Management background document for additional details). If this approach is carried forward for further development, it is possible that the existing regions for summer flounder and black sea bass will be reevaluated. Additionally, different approaches may be needed for scup and bluefish as conservation equivalency is not available for these species.

1E. Letter of Authorization (LOA) Program for Federally Permitted For-Hire Vessels. Would enable federally permitted for-hire vessels to opt into a specialized set of recreational management measures (e.g., size, bag, season) different from state, regional, and/or coastwide measures tailored specifically for the for-hire mode that would still meet the overall conservation objectives. Alternatively, other types of flexibilities (TBD) could be offered to LOA holders aside from specific measures.

Key elements:

- Voluntary (annual or every two years); eligibility criteria may be established
- Would require state agreement/authorization for participants to apply – states would not be required to participate (participants would need to land in a participating state)
- Participants subject to enhanced reporting or other additional requirements (TBD)
- Would become part of the routine recreational measures setting process

Letter of Authorization (1E)—Draft Sub-Alternatives:

1E-1. Participating Species	1E-2. Length of Participation	1E-3. Eligibility for LOA	1E-4. Additional Reporting Requirements	1E-5. Regional Configuration of LOA Program
1E-1-a. All four species **1E-1-b.** Species eligible for conservation equivalency (CE) (summer flounder, black sea bass) **1E-1-c.** Species not eligible for CE (scup, bluefish)	**1E-2-a.** Annual–states opt-in and participants apply for LOA program on annual basis. **1E-2-b.** Length of specifications–states opt-in and participants apply only when for-hire management measures are specified.	**1E-3-a**. Any federal permit-holder (if state has opted into LOA program) **1E-3-b**. Additional eligibility criteria (e.g., control date, activity level, additional reporting)	**1E-4-a**. Must complete and cooperate with surveys (e.g., requirement to participate in For-Hire Survey) **1E-4-b**. Flexible Data Gap Reporting–required collection of specific data gap elements.	**1E-5-a.** Regional LOA Program with regional LOA measures specified in this action (no more than two regions) **1E-5-b**. Regional LOA measures with regions set via measures process (regions adopted at same time as measures) **1E-5-c.** Coastwide LOA measures

1F. One-Time Baseline Measures Recalibration for For-Hire Vessels. Previously, some stakeholders and Council/Policy Board members have suggested that mode management alternatives should include a one-time "reset" of measures for the for-hire fishery. This would involve resetting for-hire measures to measures similar to those in years prior to recent restrictions, and/or to measures that have previously allowed the for-hire fisheries to operate more successfully than under current conditions.

This draft option was included in the background materials for stakeholder workshop discussion; however, there are concerns about whether it is within the scope of this action. In addition, when this topic was raised during the development of a previous action, an appropriate method to quantitatively determine the basis for "reset" measures could not be determined. The RDM is currently configured to analyze regulations for 2026 using recent historical data and projected stock conditions for 2026. In its current configuration it cannot be used to analyze regulations using past conditions or retrospective analyses; it can only evaluate proposed measures looking forward. In order to quantitatively develop a recalibration of measures based on historical effort patterns and management measures, a new methodology

and analysis process would need to be developed, which is likely outside of the scope of this action and would require additional work and support.

Alternative Set 2. Federal For-Hire Permit Requirements

Concept: The goal of this alternative set is to increase the effectiveness of any mode management approaches by limiting the ability of anglers to freely switch between the for-hire and private modes to take advantage of specific measures or programs. However, some of the permitting reforms described below could also be considered independently of mode management. Note that Alternative Set 2 applies only to federal for-hire permits, while Alternative Set 3 addresses state permitting.

Draft Alternatives:

2A. No Action/Status Quo. Federal for-hire permit requirements and qualification criteria for these four species would remain unchanged (open-access, issued by species, associated with a particular vessel, may be dropped/added at any time). A characterization of recent federal permit utilization can be found in Appendix A of the December 2025 meeting materials.

2B. For-Hire Permit Capacity Limitations. Would address concern that under mode management any angler could easily obtain (or drop) a permit to fish under for-hire (or private) measures if desired. None of these alternatives would impact state-level for-hire permits.

For-Hire Permit Capacity Limitations Sub-Alternatives:

2B-1. Moratorium on new for-hire permits.	2B-2. Limited entry system with qualification criteria designed to reduce latent effort.	2B-3. Tiered Permit System.
Intent: Limit number of federal permits to recent levels – no new permits issued to those who hadn't been issued one prior to the control date (2/11/2025). Transfers allowed. ● **2B-1-a.** No sunset provision. ● **2B-1-b**. 5-year sunset provision (could use this time to consider transition to permanent limited entry system).	**Intent:** "Active" permits with reported harvest are only 22-37% of total issued species-specific for-hire permits→ this alternative would limit permits to recently active vessels in these for-hire fisheries, with different levels of activity thresholds considered in the different sub-alternatives below. ● **2B-2-a.** Have submitted at least one for-hire VTR in last five years. ● **2B-2-b.** Have submitted at least one for-hire VTR in at least 3 of last 10 years. ● **2B-2-c.** Have reported landings of the relevant species at least once in last 10 years. ● **2B-2-d.** Have reported landings of the relevant species in at least three of last 10 years. ● See table below for qualification criteria statistics **Sub-alternatives to allow new entrants (feasibility still TBD):** ● **2B-2-e.** Relinquished permits into new entrants pool, with availability based on waiting list. ● **2B-2-f.** Relinquished permits into new entrants pool, with availability based on lottery (likely the least complicated) ● **2B-2-g.** Issue new permits to special new entrant program (e.g., student/apprentice permits with special requirements TBD).	**Intent:** Establish two levels of federal for-hire permits based on activity level. Note that this option has some similarities to the LOA program alternative. **Tier 1:** Active participants: requires meeting a certain threshold of activity (TBD). Measures to meet needs of the for-hire sector **Tier 2:** Open access. New entrants or part-time vessels who do not frequently fish or target these species. Measures would likely match private mode or possibly developed specific to Tier 2 permit holders.

For-Hire Permit Capacity Limitations Sub-Alternative 2B-2. Qualification Criteria: Summary of vessels with for-hire permits for summer flounder, scup, black sea bass, and bluefish from 2016 – 2025. Source: GARFO APSD, October 2026. "Vessels with at least one VTR" means any for-hire VTR was submitted without consideration of species landed. "Reported landings for relevant species" means that landings were reported for the species in that row. The maximum number of permits issued in any given year between 2016 and 2025 is provided for reference.

Qualification Criteria Sub-Alternatives	Summer Flounder	Scup	Black Sea Bass	Bluefish
2B-2-a: For-hire vessels that have submitted at least one for-hire VTR in the last 5 years (2021-2025)	757	680	775	803
2B-2-b: For-hire vessels that have submitted at least 1 for-hire VTR in at least 3 out of the last 10 years (2016-2025).	602	533	599	627
2B-2-c: For-hire vessels that have reported landings of the relevant species at least once in the last 10 years (2016-2026).	638	446	691	617
2B-2-d: For-hire vessels that have reported landings of the relevant species in at least 3 out of the last 10 years (2016-2025).	373	263	406	346
Max. number of permits issued in any one year 2016-2025	1027	891	1033	1023

2C. Require Minimum Threshold of Participation in the For-Hire Survey: This alternative would establish a certain threshold (TBD) of for-hire survey participation with the aim of enhancing for-hire data collection, potentially in combination with other alternatives that provide additional flexibilities to for-hire participants.

Alternative Set 3. State-Level Permitting and Reporting Requirements

Concept: State-level permitting and reporting are currently highly variable across states; increased consistency would enable better evaluation of the performance of mode management measures.

Draft Alternatives:

3A. No Action/Status Quo. As of 2026, 13[1] of 14 states have a state-level permit for charter/party vessels (none are species-specific), with three (NY, MD, VA) having some form of limited entry. States have a wide variety of reporting requirements.

[1] Although New Jersey does not require an explicit for-hire permit or license, all for-hire owners and operators are required to register their vessels annually with the New Jersey Saltwater Recreational Registry Program, with strict penalties for operating without a registration.

3B. Require state-level for-hire limited entry programs. Could be limited to the four species in question or broadened, with qualification criteria determined by each state. More than half of the states have reported legislative and/or regulatory burdens that implementing such a program would entail.

3C. Require state-level for-hire reporting. Would adopt minimum requirements for state for-hire reporting for the four species (states would determine exact requirements and whether to limit to the four species or broaden). Several states have noted financial/administrative burdens associated with developing/implementing such a program.

> ***A key consideration***: This set of alternatives has yet to be discussed in great detail by the Council and Policy Board. It is likely that changes to state level reporting requirements will be challenging for some states due to existing legislation, state decision making processes, and/or other limitations. Council and Policy Board members should consider these barriers and the potential need for extended implementation timelines when reviewing the alternatives in this section. It should also be considered that changes may be needed at the state level to complement changes at the Federal level to prevent equity access concerns between state and Federal permit holders.

Appendix A: Alternatives Previously Considered But Rejected

Alternatives are still being refined and added to the Amendment. However, there are several alternatives that have been proposed in the past but were subsequently rejected for inclusion in the Amendment by the Council and Commission and will not be discussed further as part of this action.

These include:

- **Separate sub-allocations for different components of the recreational fishery** (for example, separate overall catch limits for for-hire and private modes) (removed by the Council/Policy Board in August 2025); the recreational fishery as a whole will continue to be managed under a single Recreational Harvest Limit, Annual Catch Target, and Annual Catch Limit. These alternatives were removed due to concerns about extending the amendment timeline and adding complexity to the fishery management plans, as well as concerns about uncertainty in the mode-specific data that would inform separate allocations.

- **Coastwide for-hire measures for a given species** (as opposed to region-specific for-hire measures). The Council and Commission chose not to further pursue this alternative. This decision was due in part to the coastwide variability in a) species availability and b) the behavior and preferences of anglers who target these species, which could make agreement on uniform measures across states difficult. In addition, there were concerns

regarding the mechanics and timeline associated with implementing coastwide measures, including the ability to conduct the needed analyses.

- **Requirements for considering or implementing mode management at the state level.** This alternative would have modified the Commission's Fishery Management Plan to require consideration of mode management at the state level. There was concern that such a requirement could limit process flexibility and also increase workloads/costs associated with developing and analyzing the impacts of alternatives.
- **Temporary limitations on the ability to renew inactive federal for-hire permits**. This alternative was removed in August 2025 due to concerns that it would not address the needs of this action and that permit inactivity can be driven by regional and temporal variations in availability.

Recreational Sector Separation Stakeholder Workshop



A Workshop of the Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission

September 23-24, 2026
Sheraton Baltimore Washington Airport Hotel
Linthicum Heights, Maryland

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

ATLANTIC STATES MARINE FISHERIES COMMISSION

Image: On The Water Media

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EXECUTIVE SUMMARY

On September 23–24, 2026, the Mid-Atlantic Fishery Management Council (Council) and Atlantic States Marine Fisheries Commission (Commission) convened the Recreational Sector Separation Stakeholder Workshop in Linthicum Heights, Maryland. The workshop brought together 22 stakeholders representing charter and headboat operators, private recreational anglers, supporting businesses, and advocates from along the U.S. east coast. The workshop sought to gather stakeholder input to inform continued development of the Recreational Sector Separation Amendment (Amendment), which is considering approaches for managing the for-hire and private recreational fishing modes separately for summer flounder, scup, black sea bass, and bluefish, along with related permitting and reporting requirements.

Through facilitated plenary discussions and breakout sessions, participants reviewed draft Amendment alternatives, identified potential refinements and additional approaches, and discussed implementation challenges and data/analysis needs. Discussions highlighted substantial interest in changes to recreational management approaches that better account for the differing needs of fishing modes and support viable for-hire fisheries. However, participants also emphasized the importance of maintaining opportunities for private anglers, avoiding unintended barriers to for-hire participation, and accounting for differences among species, regions, and fishing operations.

Key Findings

Table ES-1 summarizes the principal findings and areas of agreement emerging from workshop discussions. Characterizations of agreement reflect the facilitator's qualitative assessment of expressed perspectives rather than formal votes or consensus positions. Not all participants expressed views on every topic, and agreement on general management principles did not necessarily extend to specific alternatives or implementation details.

Table ES-1. Summary of key findings and areas of agreement at the Recreational Sector Separation Stakeholder Workshop.

Topic/Alternative	Key Findings and Areas of Agreement
Overarching Comments	Participants across roles recognized the need for action to provide relief to the struggling for-hire fleet. Broad support for removing bluefish from further consideration in the Amendment, with one opposing view.
Mode Management: Overall	Broad interest among for-hire participants in separate management measures for the for-hire and private modes. Participants emphasized the importance of accounting for species- and region-specific differences, while concerns were raised regarding impacts on private anglers, accountability, and transparency in development of measures. Substantial interest in exploring shore-based measures, particularly lower size limits, but differing views on whether these should be developed through the Amendment or by individual states.
For-Hire Resiliency (Alt. 1C)	Participants generally viewed the potential risks of a four-year management cycle as outweighing the benefits of increased stability and predictability. The underlying measures were considered by for-hire operators to be more important than their duration, and any longer cycle would require clearly defined triggers for reverting to a two-year cycle.
Specialized For-Hire Approaches (Alts. 1E and 2B-3)	Greater interest emerged in tiered permitting (Alt. 2B-3) than in the proposed Letter of Authorization (LOA) program (Alt. 1E). Participants generally favored eligibility and reporting requirements that distinguish more active for-hire operators while maintaining pathways for legitimate new entrants. Some suggested testing specialized measures through a pilot or temporary approach.
Federal Permitting (Alts. 2B-1 and 2B-2)	Broad opposition to federal for-hire permit moratoria and limited-entry programs, primarily due to concerns about barriers to new entrants and future industry growth. However, participants generally expressed support for other enhanced permit requirements to validate the fleet, as well as interest in approaches that establish qualifications for specialized measures (i.e., tiered permitting) while maintaining opportunities for new entrants and legitimate fleet growth.
Federal Reporting (Alt. 2C)	Broad support for requiring a minimum level of participation in the NOAA Fisheries For-Hire Survey (e.g., 75-100% compliance) and reinstating a "Did Not Fish" for-hire reporting requirement.
State Permitting and Reporting (Alts. 3B and 3C)	General opposition to state-level limited-entry programs (Alt. 3B), alongside substantial interest in strengthening for-hire permit qualifications and improving state-level reporting (Alt. 3C). Participants encouraged further Commission-state coordination, recognizing differences in existing requirements and implementation feasibility.

Considerations for Further Amendment Development

Across the workshop's sessions, several broad considerations and needs emerged as particularly important for continued Amendment development, including:

- **Evaluate the implications of Amendment alternatives on different modes**—in particular, how more liberal for-hire mode measures could impact private angler measures. The Recreation Demand Model could be helpful, though its limitations should be recognized.
- **Better characterize for-hire permit activity and potential eligibility requirements** to qualify for specialized measures, such as activity thresholds, consideration of vessel history and state-only permit holders, and maintaining opportunities for new for-hire entrants.
- **Consider state-federal implementation challenges**—specifically, additional work is needed to determine how specialized for-hire approaches would interact with state regulations, conservation equivalency, and enforcement. Federal coordination with states, as well as coordination among states, is needed.
- **Consider phased/pilot approaches** to test performance of novel strategies such as the tiered permitting approach before implementing a more permanent system; some for-hire operators, however, emphasized the urgency of decisive action sooner to provide needed relief.
- **Maintain stakeholder engagement in the development of measures related to the Amendment,** as there were concerns about the transparency of mode-based measures development in previous instances.

Conclusions and Next Steps

The workshop identified substantial common ground among participants on several management principles, including the importance of supporting viable for-hire fisheries, improving reporting and accountability, and avoiding unnecessary barriers to entry. At the same time, participants expressed differing perspectives on the design and implementation of specific management approaches, including how their benefits and costs would be distributed among modes and strategies for mitigating risk.

The findings summarized in this report are intended to inform continued refinement and evaluation of draft Amendment alternatives by the Council, Commission, and Fishery Management Action Team/Plan Development Team (FMAT/PDT). They do not represent formal consensus positions or recommendations adopted through a workshop vote. The report provides additional detail on participant perspectives, suggested refinements, unresolved questions, and analytical needs associated with each alternative set.

1.0 INTRODUCTION

1.1 WORKSHOP BACKGROUND

Over the past several years, the Council and Commission have jointly engaged in the development of the Recreational Sector Separation Amendment[1] (Amendment) to explore whether the for-hire (charter/headboat) and private recreational fishing modes for summer flounder, scup, black sea bass, and bluefish should be managed separately. This effort arose in response to broad recognition of the differing motivations, needs, and economic considerations of the for-hire and private recreational fishing modes, respectively. As a result, a single set of management measures may not always meet the needs of both sectors. In addition, the Amendment is exploring options related to for-hire permitting and reporting requirements.[2]

Table 1. An overview of the alternatives included in the draft Recreational Sector Separation Amendment discussed at the workshop.

1. Recreational Mode Management Guidelines ➢ ***Approaches to setting different measures for different recreational modes***
2. Federal For-Hire Permitting Requirements ➢ ***Limitations on, or additional requirements for, federal for-hire permits***
3. State-Level Permitting and Reporting Requirements ➢ ***Requirements for states to implement certain minimum permitting and/or reporting requirements***

The Amendment was initiated in 2020 but was put on hold due to other priorities before work resumed in 2024, with scoping and development of draft Amendment alternatives occurring over the course of 2025. During the December 2025 joint meeting of the Council and the Commission's Interstate Fisheries Management Policy Board (Policy Board), the groups recognized that further stakeholder input was needed to inform continued refinement of alternatives.

[1] For more information on the Recreational Sector Separation Amendment, please visit the Council's and/or Commission's dedicated Amendment landing pages:
Council - https://www.mafmc.org/actions/recreational-sector-separation-amendment.
Commission - https://asmfc.org/actions/recreational-sector-separation-and-data-collection-amendment/.

[2] Information on the Amendment's draft alternatives can be found here:
http://www.mafmc.org/s/SectorSep_AltsSummary_Oct2026.pdf.

To move the Amendment discussion forward, the Council and Commission hosted the Recreational Sector Separation Stakeholder Workshop on September 23-24, 2026, at the Sheraton Baltimore Washington Airport Hotel in Linthicum Heights, Maryland. Workshop feedback, summarized below, will help the Council and Policy Board further develop options under consideration for this action.

1.2 Workshop Goal, Objectives and Intended Outcomes

The broad goal of the workshop was to bring together diverse perspectives from across the recreational fishing community to explore management approaches that account for the unique needs and priorities of different recreational fishing modes and inform continued development of the Amendment.

Workshop objectives and intended outcomes were defined to help ensure achievement of this overarching goal and position the workshop to better inform further Amendment development.

Objectives

1. Achieve an understanding of the current concerns and challenges encountered by each component of the recreational fishery
2. Gather feedback and recommendations on existing draft alternatives, including identifying priority actions and areas of consensus
3. Recommend any additional options/analyses that should be considered within the existing scope of the action

Intended Outcomes

1. A list of recommendations for the Council and Commission, including:
    a. Priority alternatives/management approaches and other areas of consensus
    b. Key considerations for further development of alternatives
    c. New ideas for alternatives not previously considered
    d. Recommendations for any analyses to support existing/newly identified draft alternatives

1.3 Workshop Approach

A five-member workshop planning team consisting of relevant staff from the Council, Commission, and NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) met regularly with the workshop facilitator in the months preceding the workshop to coordinate participant selection, development of the workshop agenda and other meeting materials,

and workshop logistics. Additional meetings with the Recreational Sector Separation Amendment Fishery Management Action Team/Plan Development Team (FMAT/PDT) were held as needed to provide feedback on workshop planning.

To ensure that workshop participants reflected a broad cross-section of the recreational community that targets the affected species, participants were selected via an application-based process. A total of 22 recreational fishery stakeholders participated, who represented a range of roles in the recreational community and locations along the U.S. east coast (Figure 1; Appendix I).

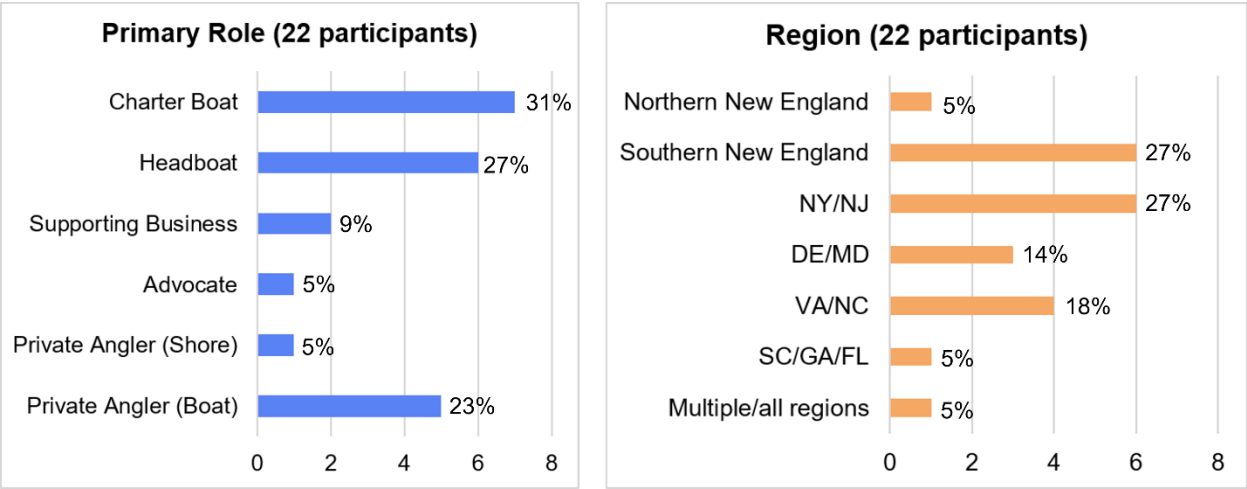


Figure 1. Workshop participants by primary role (left) and region (right). "NNE" refers to Northern New England (ME, NH, and MA north of Cape Cod); "SNE" refers to Southern New England (MA from Cape Cod south, RI, and CT).

To inform development of the workshop agenda, a short questionnaire was distributed to participants approximately one month prior to the workshop. The questionnaire asked about participants' Amendment engagement to date, familiarity with the coastwide measures setting process, initial viewpoints on draft Amendment alternatives, and priority species.

Several background materials were developed and distributed prior to the workshop to bolster participants' familiarity with the Amendment and draft alternatives and align workshop expectations. These materials were posted on the workshop landing page. [3]

[3] Links to background materials can be found on the Council's Recreational Sector Separation Workshop webpage: https://www.mafmc.org/council-events/rec-sector-separation-workshop.

Workshop Format

The workshop agenda (see Appendix II) included a mix of facilitated plenary sessions and breakout discussions (each with a facilitator and note-taker from the planning team), along with introductory presentations by Council and Commission staff on the Amendment overall and its draft alternatives. Each session included a series of prompting questions to catalyze discussion among participants. To facilitate constructive dialogue, the workshop agenda did not align exactly with the draft Amendment structure but rather grouped draft alternative sets thematically into four sessions:

- Session 1: Mode Management (Alternatives 1A, 1B, 1D, and 1F)
- Session 2: For-Hire Resiliency (Alternative 1C)
- Session 3: Specialized For-Hire Approaches (Alternatives 1E and 2B-3)
- Session 4: Federal For-Hire Permitting and State Permitting and Reporting (Alternatives 2A, 2B-1, 2B-2, 2C, and 3A-3C)

In addition, workshop participants were provided with an opportunity to suggest new alternative ideas that fell within the Amendment's scope as well as to discuss key priorities for further development—or conversely, alternatives that should not warrant further consideration.

How This Report Is Structured

This report provides a brief introduction to each workshop session, followed by a summary of key discussion points and an associated synthesis table. Discussion points are not necessarily limited to the session in which they are presented, as related topics sometimes arose during multiple sessions.

The levels of agreement presented in the synthesis tables reflect the facilitator's qualitative assessment of perspectives expressed during workshop discussions, rather than formal votes or consensus determinations. "Broad agreement" indicates a widely shared perspective with little substantive opposition expressed, while "general agreement" indicates a predominant perspective accompanied by some differing views or qualifications. "Minority view" identifies a perspective expressed by a smaller subset of participants. Not all participants expressed views on every topic. Accordingly, the report identifies general areas of common ground, differing perspectives, concerns, and suggested refinements rather than formal consensus positions.

This report is intended to serve as a reference for the FMAT/PDT, the Council, and the Commission's Policy Board. Additional information about the Amendment and draft alternatives is available in the workshop background materials.

2.0 Opening Remarks

The workshop opened with introductory remarks by Dan McKiernan, Director of the Massachusetts Division of Marine Fisheries and Chair of the Commission, and Joe Cimino, Director of the New Jersey Department of Environmental Protection's Marine Resources Administration and Chair of the Council. Chair McKiernan emphasized the importance of sustaining viable recreational fisheries and for-hire businesses for the Amendment's four species while recognizing the challenges associated with managing diverse recreational fisheries across states and regions. He noted the tradeoff between standardization of management measures and flexibility, as well as the need to consider unintended consequences. Chair Cimino encouraged participants to focus on practical solutions and lessons learned from previous management experiences, including the importance of carefully considering how mode-based recreational management approaches are designed and implemented. Both McKiernan and Cimino noted that the path taken through the Amendment may inform approaches for other species and recreational fisheries in other jurisdictions. They also stressed the value of the workshop as an opportunity for stakeholders with different perspectives to engage constructively and provide critical input on the draft Amendment.

3.0 Mode Management

Staff provided an overview of the Amendment's draft alternatives related to mode management—the development of different management measures for different components of the recreational fishery. Mode management is currently used in some capacity for each of the Amendment's four species,[4] but application of such a management tool has been inconsistent at both the state and federal levels. The draft Amendment includes alternatives related to developing uniform mode management guidelines (Alternative 1B), establishing two or three standardized regions along the coast for which to apply for-hire measures (Alternative 1D), and a one-time "reset" of measures for the for-hire fishery (Alternative 1F). In addition to feedback on these specific alternatives, workshop participants were asked to share views on which modes most

[4] An overview of how mode management is currently applied for the four species can be found here: https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/6aa2de2e61041b6fb8fe13d4/1789058606311/Guide+to+Current+Uses+of+Mode+Management.pdf.

warranted separate measures, which mode-based measures (e.g., size limits, bag limits, seasons) were most needed, and potential risks or unintended consequences that could arise with the application of mode management.

Some of the key discussion topics emerging from this session are summarized below and in Table 2. The discussion points summarized apply broadly to the draft alternatives included within the Mode Management alternative set (Alternative Set 1); discussions specific to the For-Hire Resiliency (1C) and Letter of Authorization (1E) alternatives are described in Sections 4.0 and 5.0, respectively.

Priority Modes and Measures

Participating members of the for-hire community generally agreed that **mode-based measures between the for-hire and private components of the recreational fishery were most urgently needed**. They cited years of increasingly restrictive measures, which have reduced angler satisfaction and led to challenges in booking trips as well as a reduction in the size of the for-hire fleet. Many participants mentioned that for-hire vessels provided a unique experience/opportunity to target these species that would not otherwise exist and also cited the for-hire fleet's additional reporting requirements for federally permitted vessels (and in some cases for state-permitted vessels). At the same time, several participants voiced that there should be guidance to avoid overly disparate differences in measures between the private and for-hire modes.

Some participants, including private anglers, also recognized that mode management between charter boats and headboats may be desired as well. They acknowledged that headboats may afford the only opportunity for anglers of limited means to fish on a boat and as a result may warrant more liberal measures. However, it was also noted by both charter boat and headboat operators that a key barrier to such mode management is establishing a uniform definition of a charter boat versus a headboat (e.g., discerning them as inspected versus uninspected vessels); this inconsistency could undermine enforcement efforts. **Generally, participants viewed the establishment of specific measures for charter and headboat modes as a second-order concern.**

Participants from multiple backgrounds expressed **interest in mode management for shore-based anglers**, recognizing that anglers targeting the draft Amendment's four species from shore are generally at a disadvantage regarding the numbers and/or size of fish that are available to them. There was also recognition that young anglers, subsistence fishermen, and anglers without access to a boat are often restricted to fishing from shore, and without specialized measures they might not have the opportunity to harvest fish.

Moreover, shore-based angling is often a "gateway" for anglers to eventually participate in other modes such as purchasing their own boat or sailing on charter/headboat vessels; as a result, preserving these opportunities is important. There was substantial interest in further pursuing shore-based mode management, although given that shore fishing is inherently a state waters activity and flexibility for states to develop shore-based measures already exists, views differed on whether this should occur through individual state action or within the scope of the Amendment. One private angler opposed the idea of introducing a schism within the private angler community through separate shore-mode management, and expressed that if it were to be considered at all, it should occur on a state-by-state basis.

While some participants noted reducing size limits as a priority for for-hire and shore-based modes, there was also broad recognition that the specific **measures most urgently needed were highly dependent on species and region.**

Priority Species

There was interest in developing mode-based management for scup, black sea bass, and summer flounder, with black sea bass and summer flounder measures viewed as key priorities by many attendees. **Bluefish was widely regarded as the lowest priority species for further pursuing mode management, with numerous participants recommending that it be removed from the Amendment altogether.** Participants across regions noted that bluefish measures are mostly uniform along the coast and tend to be fairly stable (unlike for the other three species), with mode-specific measures already applied in most states and in federal waters. Participants also highlighted that continued inclusion of bluefish in this action could slow progress on implementing mode-based measures for the other species. However, one participant questioned why bluefish should be removed if it already is subject to mode management and this effort is attempting to standardize mode management approaches across species.

Specific Measures of Most Interest and Regional Considerations

Workshop participants generally supported the concept of region-specific measures (Alternative 1D), recognizing the need to balance implementation feasibility with the unique characteristics of fisheries along the species' range and necessary flexibilities to accommodate those differences. At the same time, there was general concern about overly restricting regulations via less flexible regional approaches (e.g., through the establishment of only two regions). There was also recognition that the current regions established for summer flounder and black sea bass may not be suitable, but also that it is

inherently difficult to develop appropriate regions for these species**.** In some cases, the most appropriate regional borders may in fact fall *within* states (e.g., Barnegat Bay, NJ for summer flounder) as opposed to state lines to better reflect differences in species ecology, abundance, and distribution.

Mode Management Concerns

While there was broad interest in further exploring mode-specific management measures, **participants from both the for-hire and private communities expressed concern with how mode management would be developed and applied.** Specific concerns raised included the following:

- One private angler noted the perverse incentives and unintended consequences that could result from for-hire-based mode management—for example, motivating private anglers who own their own vessels to acquire a for-hire permit for the sole purpose of fishing under less restrictive measures and potentially catalyzing development of limited-entry for-hire programs (see Section 6.0).
- A for-hire captain stressed that the application of any mode-based measures would need to have associated accounting (i.e., reporting requirements) as well as accountability.
- A participant noted that in past instances (e.g., for bluefish and Atlantic mackerel[5]), the actual process for setting specific mode-based measures (i.e., development of options) has been unclear, and expressed hope that future development of mode-based options would be transparent and provide ample opportunity for stakeholder input.
- The potential consequences for private angler measures of implementing more liberal for-hire measures under mode management. One private angler noted that the catch "has to come from somewhere" and encouraged using available analytical tools, such as the Recreation Demand Model, to evaluate potential impacts on private anglers under different mode management scenarios.

[5] Atlantic mackerel are currently subject to mode-based recreational management, with the federal possession limit currently 25 fish for private boats and 50 fish for for-hire patrons. More information can be found here: https://www.fisheries.noaa.gov/species/atlantic-mackerel/recreational.

Table 2. Key discussion topics, levels of support, and unresolved questions raised during the Mode Management workshop session.

Mode Management (Alternative Set 1)		
Workshop Discussion/Recommendation	**Level of Support/Interest**	**Unresolved Questions/Needed Analysis**
Mode-based measures between the for-hire and private modes are most urgently needed.	Broad agreement among for-hire participants	Guidance needed to avoid overly disparate differences in measures between private and for-hire
Interest in mode management for shore-based anglers (especially lower size limits).	Broad agreement, one dissenter	Should this be pursued through this Amendment, through individual state action, or via another avenue?
Separate measures for charter and headboat modes is a second-order concern.	General agreement	If pursued, need to establish a uniform definition of charter boat versus a headboat (e.g., inspected vs. uninspected)
Specific measures most urgently needed depend on species and region.	Broad agreement	
Bluefish should be removed from consideration for further mode management (and from the Amendment entirely)	Broad agreement, with one dissenter	
Region-specific measures are needed but should be refined to better reflect species ecology and fishery characteristics.	General agreement	Can available data and implementation/enforcement capabilities support redefining regions to better reflect fishery differences (e.g., boundaries set within states)?
Reservations about pursuing mode-based management, including concerns about potential unintended consequences.	Minority view, including several private anglers and one for-hire captain	A need to develop associated accounting/ accountability for any modes granted different measures. Analytical need: How will more liberal for-hire measures affect private angler measures?

4.0 FOR-HIRE RESILIENCY

Staff introduced the draft For-Hire Resiliency Measures Setting Process (Alternative 1C), which would modify the current recreational measures setting process to allow for-hire measures to be set every four years as opposed to every two years (Figure 2), the latter representing the current assessment cycle for these four species. Measures could be developed based on a rolling percentage of catch/effort by mode or using another approach. The For-Hire Resiliency alternative is intended to provide additional predictability/stability for the for-hire sector, although open questions remain regarding how private mode measures should be adjusted (if needed) when for-hire measures remain stable and how accountability measures may need to be altered. In addition, the draft alternative would establish exceptions/triggers that would require for-hire measures to be adjusted earlier than four years, examples of which could include:

- A significant increase in for-hire effort and/or harvest (thresholds to be determined)
- A need for a total harvest reduction above a certain threshold
- Changes to the Recreation Demand Model that demonstrate significant changes in annual harvest

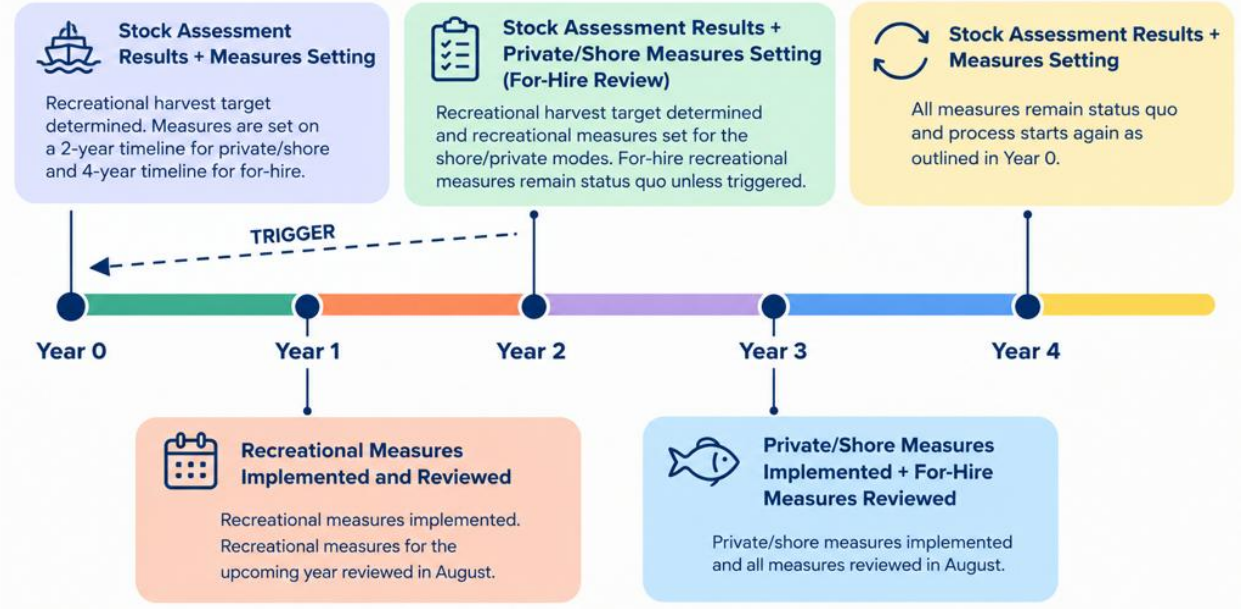


Figure 2. Illustration of the For-Hire Resiliency approach described during the workshop.

4.1 For-Hire Resiliency Breakout Sessions

Workshop participants divided into three breakout groups to discuss the For-Hire Resiliency draft alternative, including the potential benefits/drawbacks of a four-year cycle, potential triggers/thresholds to revert to a two-year cycle, and key risks and uncertainties.

While views on this alternative were mixed, with one breakout group more supportive of the For-Hire Resiliency approach than the other two, **workshop participants generally expressed that the potential risks of a four-year management cycle outweighed the perceived benefits.** The sections below and Table 3 summarize some of the key themes emerging from the breakout sessions and ensuing plenary discussion.

Management Cycle Duration Is a Second-Order Concern

For-hire participants stressed that the **duration of measures was secondary to ensuring that the measures themselves were favorable or at least acceptable to clients.** Generally, participants viewed current measures for few if any species as falling into this category; as a result, pursuit of the For-Hire Resiliency alternative alone would not be sufficient for addressing the needs of the for-hire community. Being "locked in" to restrictive measures for four years was largely viewed as worse than maintaining the existing two-year management cycle with the potential for liberalization during the following two-year cycle.

Some members of the for-hire community as well as supporting businesses (e.g., fishing tackle shops/distributors) did note that a longer management cycle would be beneficial for business planning purposes, as it facilitates marketing/booking charters and anticipating demand for tackle. While the four-year cycle would ensure greater stability, for-hire participants expressed concern about potentially forgoing any liberalization after two years, while less restrictive measures under that scenario would be available to private anglers. At the same time, some viewed the likelihood of such liberalizations as low given their perception of regulations as becoming increasingly restrictive over time. Some for-hire participants also highlighted opportunities to improve predictability within the current two-year cycle; namely, through notification of upcoming measures well in advance of the fishing year.

Key Risks

In addition to for-hire concerns about potentially forgoing liberalizations in the event of shifting to a longer management cycle, several workshop participants highlighted other key risks that the For-Hire Resiliency alternative could engender, including:

- Participants were concerned that managers may apply larger uncertainty buffers if a four-year cycle were to be applied, which could further constrain for-hire catch.
- If measures are tied to the assessment cycle, and if in the future NOAA Fisheries is not able to provide assessments for these four species every two years, the duration of for-hire measures could extend longer (e.g., if future assessments are conducted every three years, the for-hire management cycle could potentially extend to six years).

Triggers For Reverting To a Two-Year Cycle

There was a general understanding of the need for specific triggers/thresholds (e.g., for changes in for-hire effort/catch) to be established that would result in reverting the for-hire management cycle back to two years. However, participants provided limited feedback on the specific trigger examples provided during the workshop. Regarding monitoring substantial increases in catch and/or effort, one participant did express concern with the ability to effectively estimate for-hire catch and effort at the state level given that not all states require for-hire reporting (see Section 6.2). Others proposed that the For-Hire Resiliency alternative be considered in conjunction with changes to the for-hire permitting system that would separate full-time from part-time captains and thereby better control effort and catch (see Section 5.0), reducing the risk of exceeding predetermined thresholds.

Table 3. Key discussion topics, levels of support, and unresolved questions raised during the For-Hire Resiliency workshop session.

For-Hire Resiliency (Alternative 1C)		
Workshop Discussion/Recommendation	**Level of Support/Interest**	**Unresolved Questions/Needed Analysis**
The potential risks of a four-year management cycle outweigh the perceived benefits of increased stability and predictability.	General agreement	Could a longer management cycle increase uncertainty and associated management buffers? Evaluate implications of potential changes to the current two-year assessment cycle. Identify data needs/implementation considerations for combining For-Hire Resiliency with Regional Mode Management.
The duration of measures is secondary to ensuring that the measures themselves are favorable or at least acceptable to clients.	Broad agreement among for-hire operators	
If For-Hire Resiliency is pursued, clearly defined triggers for reverting to a two-year cycle would be needed.	Broad agreement	How can for-hire catch and effort be estimated at the state level given that not all states require for-hire reporting?

5.0 Specialized For-Hire Approaches

Staff described two draft Amendment alternatives that would provide specialized access (e.g., management measures or other flexibilities) for a subset of the for-hire fishery, coupled with additional requirements and qualification criteria. Development of these alternatives was spurred by the interest in separating high-activity operators (e.g., full-time captains or those earning substantial portions of their income from for-hire activity) from more casual/occasional for-hire captains. These approaches could help eliminate the perverse incentive for primarily private anglers to obtain a for-hire permit to take advantage of more liberal for-hire measures while also reducing implementation uncertainty given increased accounting requirements and a smaller universe of for-hire operators fishing under different measures.

Letter of Authorization (LOA) Program (Alternative 1E)

This alternative would establish an LOA program that would implement measures that are conservationally equivalent to federal/coastwide measures but specifically crafted to meet the needs of the for-hire fleet. Federally permitted for-hire vessels could opt in to an LOA program annually (or biennially) if the state in which they operate agrees to recognize special measures for LOA holders. LOA participating vessels could be subject to special eligibility criteria and enhanced reporting requirements. The draft approach shared with workshop participants included multiple sub-alternatives regarding program design (Table 4).

Table 4. Overview of the draft sub-alternatives for the Letter of Authorization Program for for-hire vessels (Alternative 1E).

1E-1. Species	1E-2. Length of Participation	1E-3. Eligibility	1E-4. Reporting Requirements	1E-5. Regional Configuration
1E-1-a. All four species **1E-1-b.** Species eligible for conservation equivalency (CE) (summer flounder, black sea bass) **1E-1-c.** Species not eligible for CE (scup, bluefish)	**1E-2-a.** Annual–states opt-in and participants apply for LOA program on annual basis **1E-2-b.** Length of specifications–states opt-in and participants apply only when for-hire management measures are specified	**1E-3-a**. Any federal permit-holder (if state has opted into LOA program) **1E-3-b**. Additional eligibility criteria (e.g., control date, activity level, additional reporting)	**1E-4-a**. Must complete and cooperate with surveys (e.g., requirement to participate in For-Hire Survey) **1E-4-b**. Flexible Data Gap Reporting – required collection of specific data gap elements	**1E-5-a.** Regional LOA Program with regional LOA measures specified in this action (no more than two regions) **1E-5-b**. Regional LOA measures with regions set via measures process (regions adopted at same time as measures) **1E-5-c.** Coastwide LOA measures

Tiered Permit System (Alternative 2B-3)

The tiered permitting approach is similar to the LOA Program in that it would bifurcate the for-hire fleet, but its design and implementation differ (Table 5). It would establish two for-hire tiers. One tier, as with the LOA Program, would operate under measures tailored to fit the needs of for-hire participants, and like the LOA program may have specific eligibility and reporting requirements. Tier 2, meanwhile, would include other for-hire operators who do not meet the eligibility criteria and would be subject to measures matching the private mode (or potentially developed specifically for Tier 2 permit-holders).

Unlike the LOA Program, which would allow individuals to opt in/out every one or two years, a tiered permitting approach would be a more permanent program, which would improve fishery predictability and analysis. In addition, given that the permit would be issued at the federal level, no opt-in from states would be required, although how this

system works with state measures and state permits emerged as an unresolved question (e.g., is there a way to apply this to vessels that only have a state for-hire permit; what happens if state waters measures are more restrictive, etc.).

Table 5. A preliminary comparison between the LOA (Alternative 1E) and Tiered Permitting (Alternative 2B-3) alternatives reviewed by workshop participants.

LOA	Tiered Permits	Both
• Requires state and vessel opt-in process (increased process complexity) • Non-participants would fish under "typical" for-hire regs • May be easier to establish in near term (long term admin. burden less clear) • Likely easier to modify/suspend/reverse	• More "permanent" approach (would need another action to revise) • Tier 2 regs TBD - separate regs or fish under private angler regs? • Participation more predictable - advantage for analysis • Movement between tiers and/or rolling eligibility could be high admin. burden • No state opt-in proposed - need to consider interaction with state measures	• Eligibility criteria established (should criteria be similar?) • Measures/flexibilities more tailored to for-hire needs (LOA and Tier 1) • Additional requirements under consideration (LOA and Tier 1) • Non-participants/Tier 2 have opportunity to participate in future years

5.1 Specialized For-Hire Approaches Breakout Sessions

Workshop participants again broke into three groups to review the broad concept of specialized for-hire approaches as well as the pros and cons of the LOA program and tiered permitting approaches, respectively (Table 6)**.** As in the For-Hire Resiliency discussion (see Section 4.0), some participants noted that the implementation vehicle (i.e., tiered permitting versus an LOA) was a secondary concern to the actual mode-based measures (e.g., size limit, bag limit, season) that would result. One breakout group appeared to favor the LOA approach while the other two favored the tiered permitting approach; however, in the ensuing report-out discussion, **there was generally greater interest in pursuing a tiered permitting strategy (Alternative 2B-3) as opposed to an LOA program (Alternative 1E).**

Specific advantages to the tiered permitting approach raised by participants included:

- It represents an intermediary approach for putting guardrails on for-hire permitting without necessitating a full transition to limited entry (see Section 6.1).
- Its relative permanence compared to the LOA program would facilitate business planning.

- It would require Tier 1 permit-holders to have a federal permit and thus submit VTRs, improving data collection if it prompted more participants to obtain a federal permit.

Some participants did note potential challenges associated with tiered permitting, including a) its potential perception as de facto limited entry, b) the associated requirement for current state-only permit holders to obtain a federal permit, and c) the need for states to devise a system to recognize/enforce Tier 1 measures. The need to understand how tiered permitting interacts with conservation equivalency and state-specific measures was also noted; for example, what happens if a Tier 1 permit-holder is in a state with stricter state measures? Overall, however, many participants felt that the benefits of a tiered permitting approach outweighed these concerns and noted that there may be lessons to be learned from tiered permitting approaches that have been applied to commercial fisheries. One participant suggested that piloting such a tiered approach through an LOA or Exempted Fishing Permit (EFP) may be a prudent first step prior to full-scale development and implementation.

Some participants did appreciate the proposed LOA approach's flexibility given the one- or two-year opt-in structure and also recognized that it may be easier/faster to modify if needed should challenges arise. However, they also noted key challenges. For instance, the LOA approach would restrict management measures to two regions and thus would not account for the coastwide variability and need for flexibility discussed during the Mode Management discussion (see Section 3.0). A for-hire operator noted that implementing an LOA could also complicate MRIP estimates. Participants also cited potential issues that could result from the need for states to opt into the LOA program, including a) putting for-hire operators in states that do not opt in at a disadvantage and b) presenting enforcement challenges for states given the need for states to enforce multiple sets of measures.[6] To mitigate implementation uncertainty related to the LOA approach, one strategy could be to require states that opt into the LOA program to *not* have state-specific mode splits (private/for-hire) for those species.

Regardless of an LOA or tiered permitting approach, participants generally emphasized the importance of **establishing appropriate eligibility criteria for LOA holders or Tier 1 permit holders to ensure that these programs were only available to more active for-hire vessels**. Examples of such eligibility criteria discussed included: 1) a minimum of 50 for-hire trips (per Vessel Trip Reports [VTRs]) each year, regardless of target/harvest

[6] Some of these challenges may also be relevant to the tiered permitting alternative pending future discussions on the mechanics of that approach.

species; 2) vessel/business insurance; and 3) passage of U.S. Coast Guard vessel safety inspections and drug tests. Provisions to account for changing vessel history for a single individual should also be explored, as well as strategies for assessing past effort for state-only permitted vessels primarily fishing in state waters (i.e., not submitting federal VTRs) whose state does not require reporting. Participants also noted that **neither approach should restrict legitimately interested new participants intending to pursue full-time for-hire work**. For such individuals, a secondary qualification criterion such as proof of income as a for-hire deckhand could be appropriate.

Table 6. Key discussion topics, levels of support, and unresolved questions raised during the Specialized For-Hire Approaches workshop session.

Specialized For-Hire Approaches (Alternatives 1E and 2B-3)		
Workshop Discussion/Recommendation	**Level of Support/Interest**	**Unresolved Questions/Needed Analyses**
The tiered permitting strategy (Alternative 2B-3) is a preferable specialized for-hire approach compared to the LOA Program (Alternative 1E).	General agreement	States need to devise a system to recognize/enforce Tier 1 measures and develop Tier 2 measures. How will tiered permitting interact with conservation equivalency and state-specific measures? Are available data/analytical tools sufficient to evaluate potential impacts?
Either specialized approach should include eligibility criteria that ensure that such approaches are only available to more active for-hire vessels (see text for specifics).	Broad agreement	Specific eligibility criteria need to be refined, including accounting for changing vessel history for a single individual. Strategies are needed for assessing past effort for state-only permitted vessels fishing primarily in state waters whose state does not require reporting.
Neither specialized approach should restrict legitimately interested new participants.	Broad agreement	There is a need to develop secondary qualification criteria for these individuals.

6.0 Federal For-Hire Permitting and State Permitting and Reporting

The draft Amendment included several alternatives intended to increase the effectiveness of any mode management approaches by limiting the ability of permitted for-hire vessels to freely move in between modes to take advantage of specific measures. In addition, draft for-hire reporting requirements at the state and/or federal levels were proposed to improve data collection from this sector. A summary of alternatives, along with key discussion points by workshop participants, are described below and in Table 8.

6.1 Federal For-Hire Permitting

Staff described draft federal for-hire permitting alternatives to limit and/or prohibit new entrants, which could be considered in conjunction with or independently of mode management alternatives (Section 3.0). Alternative approaches to the current open-access for-hire system included: 1) a moratorium on new for-hire permits (Alternative 2B-1) with or without a sunset provision; or 2) for-hire capacity limitations (Alternative 2B-2), which would establish qualification criteria (e.g., effort, landings thresholds) to reduce latent effort in the fishery (Table 7) and thus mitigate implementation uncertainty while providing potential pathways for new entrants.[7]

Workshop participants broadly understood the rationale for these alternatives and the need to mitigate perverse incentives while ensuring that any mode-based management approaches were applied to those who most needed them for business purposes. However, **participants generally expressed opposition to implementing a federal for-hire permit moratorium (2B-1) or a limited entry system (2B-2)**. Participants noted that the decline of full-time participants has been a defining issue and that while limited entry could reduce the risk of individuals' ability to "game the system," it was outweighed by the perceived barriers to new industry entrants (and future for-hire industry growth). Participants also cited the unintended consequences that could result from limited entry, including permit consolidation. The specialized for-hire approaches discussed in Section 5.0 (with eligibility criteria to identify potential LOA holders or Tier 1 permit holders) were viewed as a better strategy for addressing permitting challenges than a moratorium or limited-entry program. Participants favored these approaches as they would establish a pool of more full-time operators while maintaining an open-access option with the potential to move between categories based on activity.

[7] Discussion on a third approach to reform federal for-hire permitting, the development of a tiered permitting strategy (Alternative 2B-3), can be found in Section 5.0.

Table 7. The number of for-hire permits that would qualify based on the Amendment's federal for-hire permitting sub-alternatives (2B-2). The maximum number of permits issued in any given year between 2015 and 2024 is provided for reference, as well as the actual total number of unique permits issued prior to 2/11/2025.

Qualification Criteria Sub-Options	Summer Flounder	Scup	Black Sea Bass	Bluefish
2B-2-a: For-hire vessels that have submitted at least one for-hire VTR in the last 5 years (2021-2025)	563	501	567	583
2B-2-b: For-hire vessels that have submitted at least 1 for-hire VTR in at least 3 out of the last 10 years (2016-2025).	601	532	598	626
2B-2-c: For-hire vessels that have reported landings of the relevant species at least once in the last 10 years (2015-2024).	847	769	852	877
2B-2-d: For-hire vessels that have reported landings of the relevant species in at least 3 out of the last 10 years (2016-2025).	479	431	474	481
Max. number of permits issued in any one year from 2015-2024	964	967	831	954
Number of total unique vessel permits issued at any time prior to 2/11/2025	4,053	2,791	3,158	3,195

Federal For-Hire Reporting

In addition, this alternative set included establishing a minimum threshold of participation in the NOAA Fisheries For-Hire Telephone Survey to enhance data collection (Alternative 2C). For-hire and private workshop participants alike agreed that **requiring participation in the For-Hire Survey would be beneficial for data collection and should be explored further**. One participant noted that submitted data could potentially be used to validate electronic Vessel Trip Report data. Recommended required compliance with the For-Hire Survey varied but ranged from 75-100%.

The group also discussed not only developing requirements for the For-Hire Survey but also enhancing requirements for VTRs. **Namely, for-hire workshop participants strongly**

supported reinstating a "Did Not Fish" (DNF) report requirement in order to get a better sense of vessel activity levels and latent effort, including assessing whether there are some permitted vessels that are fishing but not complying with reporting requirements.

6.2 State For-Hire Permitting and Reporting

Staff described that state-level for-hire permitting and reporting requirements are highly variable among states. The draft Amendment includes alternatives designed to standardize such requirements, including requiring implementation of state-level for-hire limited entry programs (Alternative 3B) and required state-level for-hire reporting (Alternative 3C). The goals of these alternatives are to increase the effectiveness of any mode management approaches, improve consistency among states, and enhance the ability to analyze the performance of mode-based management measures. At the same time, there may be barriers to implementing such requirements (e.g., legislation) in some states.

As with the federal for-hire permit discussion (Section 6.1), **there were broad concerns about instituting limited entry programs at the state level**, although some private anglers did view it as potentially valuable from a client safety perspective (e.g., risks associated with a for-hire operator who does not possess required safety gear or appropriate insurance). At the same time, there was interest in ensuring that for-hire permits were only issued to legitimate and active for-hire operators as opposed to those simply seeking to take advantage of favorable mode-based measures. Criteria could include some minimum activity threshold and other evidence of good standing (liability insurance, drug tests, etc.[8]), similar to what was discussed for Specialized For-Hire Approaches (Section 5.0). Rhode Island's for-hire permitting program in particular was cited as having appropriate criteria for issuing for-hire permits that could be used as a model elsewhere. That being said, there was some tension between opposition to limited entry based on past activity or other criteria and support for using activity/criteria to restrict permit issuance to legitimate for-hire operators (or legitimate new entrants) moving forward. **There was interest in the Commission's further exploring strategies to strengthen and standardize state-based for-hire requirements—in particular, determining what is possible/feasible for states to achieve.**

Workshop participants generally viewed **state-level reporting requirements (currently only in place in a handful of states) as important for catch monitoring and**

[8] While individual states can include these as criteria for issuing for-hire permits, they cannot be used as criteria at the federal level.

understanding the outcomes of mode-based management, particularly in states or regions where for-hire operators holding only state-level permits account for substantial catches of the relevant species.

Table 8. Key discussion topics, levels of support, and unresolved questions raised during the Federal For-Hire Permitting and State For-Hire Permitting and Reporting workshop session.

Federal For-Hire Permitting and State For-Hire Permitting and Reporting (Alternatives 2A, 2B-1, 2B-2, 2C, and 3)		
Workshop Discussion/Recommendation	**Level of Support/Interest**	**Unresolved Questions/Needed Analysis**
Opposition to implementing a federal for-hire permit moratorium (2B-1) or limited entry system (2B-2)	Broad agreement	Eligibility criteria sub-options could be refined for potential application to other alternatives that maintain new entrant access (e.g., tiered permits); suggest a higher activity threshold for these options (e.g., submission of 30, 40 or 50 eVTRs for any species in a year).
Required participation in the For-Hire Survey (2C)	Broad agreement	What is an acceptable compliance rate? 75%? 100%?
Reinstate a "Did Not Fish" (DNF) for-hire report requirement	Broad agreement	Revisit status of recent Northeast Region Coordinating Council (NRCC) discussions of reinstating these requirements.
Opposition to implementing uniform, mandatory state-level for-hire limited entry programs (3B)	General agreement; some private anglers suggested that limited entry could be helpful from a client safety perspective	
The Commission should further explore strategies to strengthen/standardize requirements for for-hire permits (i.e., enhance permit requirements without requiring development of limited entry programs).	Broad agreement	Rhode Island's program may be a useful model. Is a need to determine what is possible/feasible for states to achieve.
State-level for-hire reporting requirements should be further pursued	Broad agreement	Feasibility needs to be explored among states.

7.0 Workshop Synthesis and Priorities

Workshop discussions highlighted substantial interest in exploring changes to recreational management approaches to better support the ongoing viability of the for-hire fishery. At the same time, there is no one-size-fits-all solution to this challenge, as substantial regional variability in fishery characteristics and for-hire needs must be taken into account. As a result, state-federal coordination is critical to develop and implement appropriate strategies, as is leveraging lessons learned from past efforts (e.g., on mode splits, permitting and reporting).

Table 9 synthesizes some of the key messages on draft alternatives emerging from workshop discussions, including views on existing alternatives, ideas for new alternatives/approaches, and open questions/data needs. Please note that the below table does not represent consensus views of participants; for additional details please visit the relevant report section.

There were differing perspectives regarding the pace at which the Amendment should move forward, in particular with regard to the implementation of mode management approaches, For-Hire Resiliency, and Specialized For-Hire approaches. Some cautioned against the wholesale application of these approaches in the near term, with suggestions including piloting an approach for one species and/or delaying implementation until recalibrated Marine Recreational Information Program catch and effort estimates are available. Others emphasized that these challenges and potential approaches had been discussed for years, and it was urgent that such strategies be implemented quickly to provide relief to the for-hire industry.

Table 9. Synthesis of workshop perspectives and areas of agreement. For views on unresolved questions and/or needed analyses, please see the relevant report section.

Key Workshop Discussion Topics and Recommendations		
Alt. Set	**Workshop Discussion/Recommendation**	**Level of Support/Interest**
Overarching Comments	*There is an urgent need for action to provide relief to the struggling for-hire fleet.*	Broad agreement among for-hire participants
	Remove bluefish from further consideration in the Amendment.	Broad agreement, with one opposing view
Mode Management: Overall	*Mode-based measures between the for-hire and private modes are most urgently needed.*	Broad agreement among for-hire participants
	Interest in mode management for shore-based anglers (especially lower size limits).	Broad agreement, one dissenter
	Separate measures for charter and headboat modes is a second-order concern.	General agreement
	Specific measures most urgently needed depend on species and region.	Broad agreement
	Region-specific measures are needed but should be refined to better reflect species ecology and fishery characteristics.	General agreement
	Reservations about pursuing mode-based management, including concerns about potential unintended consequences.	Minority view, including several private anglers and one for-hire captain
For-Hire Resiliency (Alt. 1C)	*The potential risks of a four-year management cycle outweigh the perceived benefits of increased stability and predictability.*	General agreement
	The duration of measures is secondary to ensuring that the measures themselves are favorable or at least acceptable to clients.	Broad agreement among for-hire participants
	If For-Hire Resiliency is pursued, clearly defined triggers for reverting to a two-year cycle would be needed.	Broad agreement
Specialized For-Hire Approaches (Alts. 1E and 2B-3)	*The tiered permitting strategy (Alternative 2B-3) is a preferable specialized for-hire approach compared to the LOA Program (Alternative 1E).*	General agreement
	Either approach should include eligibility criteria that ensure that such approaches are only available to more active for-hire vessels.	Broad agreement
	Neither specialized approach should restrict legitimately interested new participants.	Broad agreement
Federal For-Hire Permitting and State For-Hire Permitting and Reporting (Alts. 2A, 2B-1, 2B-2, 2C, and 3)	*Opposition to implementing a federal for-hire permit moratorium (2B-1) or limited entry system (2B-2)*	Broad agreement
	Required participation in the For-Hire Survey (2C)	Broad agreement
	Reinstate a "Did Not Fish" (DNF) for-hire report requirement	Broad agreement
	Opposition to implementing state-level for-hire limited entry programs (3B)	General agreement; some private anglers suggested that limited entry could be helpful from a client safety perspective
	The Commission should further explore strategies to strengthen/standardize requirements for for-hire permits.	Broad agreement
	State-level for-hire reporting requirements should be further pursued.	Broad agreement

8.0 Next Steps

Outcomes from the Recreational Sector Separation Stakeholder Workshop will be discussed at the November 2026 joint meeting of the Council and Commission's Policy Board, which will direct the FMAT/PDT to further refine draft Amendment alternatives. The Council/Policy Board then plans to approve a draft range of alternatives in January 2027, which will be used as the basis for a Public Hearing Document to circulate in Spring 2027. The Council and Commission anticipate taking final action on this Amendment in August 2027. Full details of the anticipated timeline can be found in Figure 3.

One for-hire participant asked whether it would be possible to organize a follow-up meeting with the same group of workshop participants to provide additional guidance on draft alternatives as they are further developed. GARFO and Council staff noted that while such a meeting could be possible (likely via webinar), it would need to be discussed with Council and Commission leadership and the decision to do so would have to be made by Council and Policy Board members, as it would likely delay the Amendment timeline. They also noted that many workshop attendees sit on relevant Advisory Panels which are scheduled to meet in summer 2027 to provide further input on alternatives.

September 2026	Stakeholder workshop to further develop draft alternatives
November 12, 2026	Council/Policy Board meet to review workshop report and direct FMAT/PDT to refine alternatives (Commission's Annual Meeting) https://asmfc.org/events/2026-annual-meeting/
January 2027	Council/Policy Board approve range of alternatives for public hearings
Winter 2027	FMAT/PDT develops draft public hearing document/draft amendment
Spring 2027	Council/Policy Board approve public hearing document/draft amendment for public comment
Spring/Summer 2027	Public hearings and comment period
Summer 2027	AP meeting; FMAT/PDT meetings to provide recommendations on final action
August 2027	**Final action**
Fall 2027	Staff develop and submit required documentation to NOAA Fisheries
TBD	Effective date of management changes (*implementation timeline depends on final alternatives adopted*)

Figure 3. Tentative timeline for the Recreational Sector Separation Amendment.

9.0 Conclusion

The Recreational Sector Separation Stakeholder Workshop provided an opportunity for diverse recreational fishing interests to engage in constructive dialogue regarding the potential benefits, challenges, and implementation considerations associated with the draft Amendment alternatives. Although participants expressed differing perspectives on

specific alternatives, recurring themes included the importance of maintaining viable for-hire fisheries, considering the needs and interests of private anglers, improving accountability and reporting, and avoiding unintended barriers to for-hire participation.

The workshop generated a range of suggestions for refining existing alternatives, exploring additional approaches, and conducting analyses to better understand the potential implications of the draft Amendment alternatives. These findings provide a foundation for continued consideration of the Amendment by the Council, Commission, and FMAT/PDT. As the Amendment moves forward, continued stakeholder engagement and evaluation of the tradeoffs associated with different management approaches will be important for developing alternatives that appropriately balance the needs of all recreational fishing modes while meeting conservation and management objectives.

APPENDIX I. WORKSHOP ATTENDEES

Workshop Participants

Workshop participants were selected via application. A Google Form application was developed by the Workshop Planning Team that included questions regarding applicant primary role/affiliation, region, species of interest, fishing experience, management familiarity/engagement, and rationale for workshop interest. The application was distributed via the Council's and Commission's communications outlets in June 2026. A total of 59 applications were received, which were reviewed by the FMAT/PDT in July before forwarding recommended participants to the Council and Policy Board members for final approval. The 22 selected applicants were notified via email on July 28, 2026.

Name	Primary Role	Affiliation (if applicable)
Capt. Rick Bellavance	Charter Boat	F/V Priority Too
Marc Berger	Charter Boat	Lucky Strike Charters
Raymond Jarvis	Charter Boat	Salt of the Earth Sportfishing
Jill Maganza-Ruiz	Charter Boat	November Rain Charters
Christopher Mozitis	Charter Boat	Wee Cat Charters
Michael Pierdinock	Charter Boat	Stellwagen Bank Charter Boat Assoc.
Walter Richard Wasdin Jr	Charter Boat	Reel Blessed Sportfishing
William Howard Bogan Jr	Headboat	Vessel "Jamaica"
Victor M. Bunting	Headboat	Ocean Princess Inc.
Mark DeJong	Headboat	Celtic Quest Fleet
Harry D. Parsons II	Headboat	Fisherman's Wharf
Michael Pirri	Headboat	Flying Connie Charters
Kyle White	Headboat	Rudee Tours
Nick Cicero	Supporting Business	Folsom Corporation
Greg Cudnik	Supporting Business	Fisherman's Headquarters
Michael Waine	Advocate	American Sportfishing Association
Peter R. Belasco	Private Angler (Shore)	
Allan C. Butler	Private Angler (Boat)	
Paul Gerard Caruso	Private Angler (Boat)	
Robert J. Lorenz	Private Angler (Boat)	
Lenny Rudow	Private Angler (Boat)	FishTalk Magazine
Austin Thurlow	Private Angler (Boat)	

Workshop Planning Team

Kiley Dancy	Mid-Atlantic Fishery Management Council (MAFMC)
Hannah Hart	MAFMC
Tracey Bauer	Atlantic States Marine Fisheries Commission (ASMFC)
Chelsea Tuohy	ASMFC
Savannah Lewis	NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO)
Willy Goldsmith	Pelagic Strategies (Facilitator)

Other In-Person Attendees

Matt Ayer	Massachusetts Division of Marine Fisheries (MA DMF) (Sector Separation Amendment FMAT/PDT Member)
Joe Cimino	New Jersey Department of Environmental Protection (MAFMC Chair)
Travis Ford	GARFO
Martin Gary	New York State Department of Environmental Conservation (NY DEC)
Dan McKiernan	MA DMF (ASMFC Chair)
Paul Risi	MAFMC Member
Rachel Sysak	NY DEC (Sector Separation Amendment FMAT/PDT Member)
Geoff White	Atlantic Coastal Cooperative Statistics Program

Webinar Attendees

Julia Beaty	Jessica Daher	Jesse Hornstein	John Maniscalco
Anna Beckwith	Cynthia F	Greg Hueth	Nichola Meserve
Joseph Beneventine	Corrin Flora	Raymond Kane	Jose Montanez
Hayden Berry	Tony Friedrich	Carrie Kennedy	Muffley, Brandon
Sue Bertoline	Jim Gilmore	Toni Kerns	Adam Nowalsky
Kurt Blanchard	Melanie Griffin	John Lake	Matt Rigdon
Jeff Brust	Jake Hardy	Michael Luisi	Jason Seman
Mario Campo	Brendan Harrison	Bradlie M	Jenny Smith
			Kelly Whitmore

APPENDIX II. WORKSHOP AGENDA

Recreational Sector Separation Stakeholder Workshop
September 23-24, 2026

Sheraton Baltimore Washington Airport Hotel
1100 Old Elkridge Landing Road
Linthicum Heights, MD, 21090

Listen-Only Webinar:

- Click here to join the webinar. (If prompted, enter Meeting Number: 2334 139 8905; Password: sectorseparation). After you connect, you will have the option to choose whether to use your phone or computer microphone and speakers for audio.
- For phone only access: 1-415-655-0001; Access code: 2334 139 8905.

Note: This webinar will be broadcast in listen-only mode and will not include breakout discussions.

AGENDA
(Times are Eastern Time and approximate)

DAY 1: Wednesday, September 23		
Time	**Title**	**Presenter**
9:30 – 10:00	**Arrival and Coffee**	
10:00 – 10:10	**Welcome and Opening Remarks**	Joe Cimino, MAFMC Chair Dan McKiernan, ASMFC Chair
10:10 – 10:20	**Workshop Overview**	Willy Goldsmith, Pelagic Strategies
10:20 – 10:45	**Attendee Introductions**	
10:45 – 11:15	**Overview: Recreational Sector Separation Amendment**	Kiley Dancy, MAFMC staff
11:15 – 11:25: BREAK		
11:25 – 12:15	**Session 1: Mode Management**	Chelsea Tuohy, ASMFC staff
12:15 – 1:15: LUNCH		

1:15 – 1:40	**Session 2: For-Hire Resiliency**	Chelsea Tuohy, ASMFC staff Savannah Lewis, NOAA Fisheries staff
1:40 – 2:30	**Breakout Session: For-Hire Resiliency**	
2:30 – 2:45: BREAK		
2:45 – 3:10	**Breakout Session Report-Out and Discussion**	
3:10 – 3:35	**Session 3: Specialized For-Hire Approaches**	Hannah Hart, MAFMC staff Kiley Dancy, MAFMC staff
3:35 – 4:25	**Breakout Session: Specialized For-Hire Approaches**	
4:25 – 4:50	**Breakout Session Report-Out and Discussion**	
4:50 – 5:00	**Wrap Up and Preview of Day 2**	Willy Goldsmith, Pelagic Strategies
DAY 2: Thursday, September 24		
8:30 – 8:45	**Day 2 Welcome, Recap, and Agenda**	Willy Goldsmith, Pelagic Strategies
8:45 – 10:00	**Session 4: Federal For-Hire Permitting and State Permitting and Reporting**	Tracey Bauer, ASMFC staff
10:00 – 10:15: BREAK		
10:15 – 11:00	**New Ideas Session: What Is Missing?**	
11:00 – 11:45	**Workshop Synthesis and Priorities for Further Development**	
11:45 – 12:00	**Discussion of Next Steps**	MAFMC/ASMFC staff
12:00: ADJOURN		

APPENDIX III. ABBREVIATIONS USED IN THIS DOCUMENT

Recreational Sector Separation Stakeholder Workshop

September 23-24, 2026 | Baltimore, MD

List of Acronyms/Key Terms*

ACL	Annual Catch Limit: The level of catch (harvest plus dead discards) for a stock for each sector (commercial and recreational) intended to ensure that overfishing does not occur.
ASMFC (or Commission)	Atlantic States Marine Fisheries Commission: Coordinates state management of bluefish, scup, summer flounder, and black sea bass in state waters.
CE	Conservation Equivalency: A process specific to summer flounder and black sea bass that allows for setting state- or region-specific recreational measures instead of coastwide measures. Under conservation equivalency, federal waters measures are waived and anglers are subject to the measures of the state to which they return.
EFP	Exempted Fishing Permit: A temporary specialized federal permit issued by NOAA Fisheries that authorizes vessels to conduct fishing activities otherwise prohibited by regulations; primarily for scientific research, data collection, and innovative technology testing.
FMAT/PDT	Fishery Management Action Team/Plan Development Team: Technical team responsible for developing and refining draft Amendment alternatives and analysis, based on direction from the Council and Policy Board.
FMP	Fishery Management Plan
GARFO	NOAA Fisheries Greater Atlantic Regional Fisheries Office: Approves and implements federal management measures.
Limited Access	A management approach that restricts the number of participants in a fishery (for example, for-hire permits).
LOA	Letter of Authorization: Document issued by NOAA Fisheries that grants a vessel the ability to conduct activities that would otherwise be prohibited. LOA programs are incorporated into the Federal regulations and remain in place until modified via subsequent action.
MAFMC (or Council)	Mid-Atlantic Fishery Management Council: Manages bluefish, scup, summer flounder, and black sea bass in federal waters.

Measures	Recreational bag, size, and season limits
Mode Management	Establishing separate measures such as size limits, bags limits, and/or seasons for different components of the recreational fishery (such as different measures for private anglers versus for-hire vessels) while continuing to manage the recreational fishery under a single shared Recreational Harvest Limit.
Policy Board	ASMFC Interstate Fisheries Management Program Policy Board
RDM	Recreation Demand Model: A statistical model developed for summer flounder, black sea bass, and scup that combines information about angler behavior/preferences and fish population estimates to predict the effect of alternative management strategies on coastwide recreational harvest, releases, angler welfare, and fishing effort. Results are used to determine the amount of change in harvest needed, and set recreational bag and size limits and seasons expected to achieve the change required.
RHL	Recreational Harvest Limit: The total amount of fish that can be harvested annually by the recreational sector across all modes.
RMS	Recreational Measures Setting Process: The approach for setting recreational management measures for bluefish, scup, summer flounder, and black sea bass finalized through the 2025 Recreational Measures Setting Process Framework.
VTR	Vessel Trip Report. Federally permitted for-hire vessels must submit electronic VTRs within 48 hours of trip completion. State level requirements vary.

*Some of these definitions are specific to their use in the context of the Recreational Sector Separation Amendment.

From:	Craig and Verni
To:	Tina Berger
Subject:	[New] [External] FW: Sector separation amendment - comment filed with ASMFC, documents attached
Date:	Friday, October 16, 2026 5:41:59 PM
Attachments:	FINDINGS MEMORANDUM.pdf BSB-SSA-2026-01_Sector_Separation_Comment.pdf

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From: Craig and Verni <craiga60@comcast.net>
Sent: Wednesday, October 14, 2026 4:16 PM
To: 'Dancy, Kiley' <kdancy@mafmc.org>; 'Hart, Hannah' <hhart@mafmc.org>
Cc: 'Beaty, Julia M.' <jbeaty@mafmc.org>
Subject: Sector separation amendment — comment filed with ASMFC, documents attached

Kiley, Hannah,

Julia copied you as the staff leads on the Recreational Sector Separation and Data Collection Amendment. I am filing a public comment on it through the ASMFC form for the 19 October briefing-materials deadline, and sending you the documents directly because the form takes no attachment and the comment relies on five tables.

The comment makes one arithmetic point and takes no position on whether the modes should be managed separately. Sector separation is a disaggregation of catch accounting; disaggregation reduces the number of fish behind each estimate; and across 315 New Jersey annual MRIP estimates covering four species and three modes, the precision of an estimate tracks its size rather than the mode it came from. Estimates below 100,000 fish fail the Program's own standard half the time, estimates above two million never do, and cutting a single annual series into its waves — same fish, same anglers, same years, only the cell size changed — roughly doubles the percent standard error. Neither mode is reliably better measured than the other; scup fails in both before this amendment disaggregates anything further.

What it asks for is a minimum-precision precondition: that the amendment state, for each mode-level action it contemplates, what estimate precision is required to support that action and at what level of aggregation precision will

be assessed.

Two attachments:

— BSB-SSA-2026-01, the comment, Issue 1, seven pages.
— Findings memorandum, Issue 2, five pages, carrying the vessel trip report analysis behind Table 5 with its qualifications.

The eighteen MRIP queries behind every figure are organized and I will send them to anyone who wants to check the arithmetic.

Nothing here needs a reply. I am a private recreational fisherman writing in an individual capacity, and these documents are my own work, reviewed or endorsed by nobody. If anything in them is wrong I would rather be told than have it stand.

Craig A. McIlrath
Marlton, New Jersey
856-905-1711
Craiga60@comcast.net

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

BSB-SSA-2026-01

Estimate Precision as a Function of Cell Size: Comment on the Recreational Sector Separation and Data Collection Amendment

Submitted to	**Mid-Atlantic Fishery Management Council and Atlantic States Marine Fisheries Commission — Recreational Sector Separation and Data Collection Amendment (summer flounder, scup, black sea bass and bluefish)**
Copy to	New Jersey Division of Fish and Wildlife, Bureau of Marine Fisheries
From	Craig A. McIlrath, Marlton, New Jersey — private recreational fisherman, submitting in an individual capacity
Scope	Catch-accounting precision only. This comment takes no position on whether for-hire and private modes should be managed separately.
Date	Issue 1, 19 October 2026
Contact	blandmail@comcast.net

1. What this comment does and does not say

This comment does not oppose managing for-hire recreational fisheries separately from other recreational modes, and it takes no position on the merits of separation. It does not assert any mode is measured worse than another, and Section 3 reports evidence no mode is.

It makes one arithmetic point. Sector separation is a disaggregation of catch accounting. Disaggregation reduces the number of fish behind each estimate, and in these data the precision of an estimate is governed by that number. Where an amendment attaches an accountability measure, an in-season closure, or a mode-specific regulation to a cell too small to support it, the outcome is decided by sampling noise rather than by the fishery. What Section 7 requests is a minimum-precision precondition, not a veto.

Source for every figure below: MRIP Query Tool, catch and effort time series, calendar years 1998 through 2025, retrieved September and October 2026, current calibrated vintage. Eighteen queries were run, covering four species, three fishing modes, harvest and released-alive catch, annual and by-wave summaries, and a state-by-state breakout. The Program publishes with each estimate a percent standard error and its own verdict on whether the estimate meets the MRIP standard, recorded as yes, caution, or no. The verdict counts below are the Program's, not this commenter's.

2. Precision is governed by the size of the estimate, not by the mode

Twelve New Jersey annual series were examined, covering four species, three fishing modes and both harvest and released-alive catch. Across the 315 annual estimates in those series the percent standard error falls as the number of fish behind the estimate rises. An ordinary least squares fit against the base-ten logarithm of the estimate gives a

slope of 16.1 percentage points of error removed per tenfold increase in fish, a correlation of −0.676 and an R-squared of 0.457.

Two of those figures need plain language. A correlation runs between −1 and +1. The value of −0.676 says the two quantities move in opposite directions — as the number of fish behind an estimate rises, the percent standard error falls — and says the relationship is a consistent one rather than a loose tendency; −1 would mean it held without a single exception and 0 would mean no relationship at all. The R-squared of 0.457 says how much of the variation in precision is accounted for by cell size by itself: about 46 percent. The other 54 percent is everything else — which species, which mode, which year, and chance. Cell size is therefore the largest single influence on whether an estimate meets the Program's standard, and it is not the only one. Tables 2 and 4 both show cases which run against the general pattern, and they are pointed out where they occur.

Table 1. Percent standard error by size of estimate, New Jersey annual MRIP estimates, 1998 to 2025, pooled across twelve series (four species; private, for-hire and shore modes; harvest and released-alive catch). Estimate size in numbers of fish; percent standard error in percent; failing share as a percentage of the estimates in that band.

Size of estimate (fish)	Estimates (count)	Median PSE (%)	Failing MRIP standard (%)
Under 100,000	66	50.3	50.0
100,000 to 500,000	91	29.1	13.2
500,000 to 2,000,000	108	22.9	2.8
Over 2,000,000	50	13.4	0.0

The relationship is monotone across all four bands. Below 100,000 fish, half the estimates fail the Program's own standard. Above two million, none do.

One qualification is owed and is stated here rather than left to be found. Percent standard error is a relative measure, so part of this relationship is arithmetic rather than a finding about survey design. Section 4 therefore reports the same effect in a form which does not depend on it, by holding species and mode fixed and changing only the level of aggregation.

3. Neither mode is consistently better measured

It would be convenient for a private recreational fisherman to argue the private mode is measured worse and should therefore be shielded. The data do not support that argument and this comment does not make it. Across the four species in the amendment, on annual released-alive estimates, neither mode is reliably the better measured.

Table 2. Released-alive (Type B2) annual estimate precision by species and mode, New Jersey, 1998 to 2025 (percent standard error in percent; verdict shares as a percentage of the annual estimates in that series). Source: MRIP Query Tool.

Species	Mode	Median PSE (%)	Meets standard (%)	Fails standard (%)
Black sea bass	Private and rental	20.0	92.9	0.0
Black sea bass	All for-hire	18.9	85.7	0.0
Summer flounder	Private and rental	11.8	100.0	0.0
Summer flounder	All for-hire	17.4	85.7	0.0
Scup	Private and rental	52.5	0.0	51.9
Scup	All for-hire	49.8	14.3	46.4
Bluefish	Private and rental	22.0	92.9	0.0
Bluefish	All for-hire	39.2	28.6	32.1

Three results in that table bear on how this amendment should be framed. For black sea bass the two modes are equivalent, at 20.0 against 18.9 percent median error, and neither mode fails the standard in any year of the series. Table 4 below covers 2016 through 2025 for the same species and shows the same thing a second way: across that decade no New Jersey estimate in either mode fails. For bluefish the asymmetry runs toward the for-hire mode, which fails in 32.1 percent of years while the private mode fails in none. And for scup both modes fail, the private mode in 51.9 percent of years and the for-hire mode in 46.4 percent.

Scup is the warning this amendment should take. The failure there is not a property of either mode. It is a property of how few scup each mode releases in New Jersey, and it is already present before this amendment disaggregates anything further.

4. Disaggregation is the mechanism

The clean demonstration holds species, state, mode and type of catch fixed and changes only the level of aggregation — the same black sea bass released by the same anglers in the same years, reported once per year and then once per two-month wave.

Table 3. Effect of aggregation level on estimate precision, New Jersey black sea bass released-alive (Type B2), 1998 to 2025 (percent standard error in percent; failing share as a percentage of the estimates at that aggregation level). Source: MRIP Query Tool.

Mode	Annual median PSE (%)	Annual failing (%)	By-wave median PSE (%)	By-wave failing (%)
Private and rental	20.0	0.0	37.0	30.1
All for-hire	18.9	0.0	35.0	26.9

MRIP divides the year into six two-month waves. Cutting one annual series into its waves roughly doubles the percent standard error and sends between a quarter and a third of the resulting estimates below the threshold the Program sets for usability. Not every wave carries an estimate. Wave 1, January and February, carries none in either New Jersey mode in any of the twenty-eight years, so neither series is ever split more than five ways: the private and rental series carries four or five wave estimates in most years and as few as two, the for-hire series five in most years and never fewer than three. That works against the point made here rather than for it: fewer cells means larger cells, so a series split across all six waves would show a larger penalty than the

one reported in Table 3. No fishing changed, and no sampling changed. Only the size of the cell changed.

The Program states the remedy on every page of output it produces: "MRIP does not support the use of estimates with a percent standard error above 50 and in those instances recommends considering higher levels of aggregation (e.g., across states, geographic regions, or fishing modes)."

Aggregation across fishing modes is the Program's prescribed response to an imprecise estimate. This amendment proposes disaggregation by fishing mode. That is not a reason to abandon the amendment and the commenter does not argue it is. It is a reason the amendment should state which estimates it will rely on, at what level of aggregation, and what precision it requires of them.

5. The same effect across states, and how it compounds

Disaggregating black sea bass releases by state shows the cell-size relationship directly, and shows it governs both modes alike.

Table 4. Black sea bass released-alive (Type B2) annual estimate precision by state and mode, 2016 to 2025, ordered by the number of fish behind the estimate rather than by mode (estimate in numbers of fish, median across years; percent standard error in percent; failing share as a percentage of that state's annual estimates). States with fewer than ten usable annual estimates are shown with the count. Source: MRIP Query Tool.

State	Mode	Median estimate (fish)	Median PSE (%)	Failing (%)
New York	Private and rental	5,451,174	14.7	0.0
New Jersey	Private and rental	5,363,568	15.1	0.0
Rhode Island	Private and rental	2,211,306	15.7	0.0
Massachusetts	Private and rental	1,773,255	18.5	0.0
New York	All for-hire	792,520	13.7	0.0
New Jersey	All for-hire	776,600	16.7	0.0
Delaware	Private and rental	618,380	24.3	0.0
Maryland	Private and rental	400,959	30.4	10.0
Massachusetts	All for-hire	161,795	22.0	0.0
Delaware	All for-hire	24,669	27.1	10.0
New Hampshire (5 years)	Private and rental	7,348	97.5	100.0
Maine (1 year)	Private and rental	1,404	94.6	100.0
Maine (1 year)	All for-hire	548	61.3	100.0
New Hampshire (2 years)	All for-hire	8	95.9	100.0

The table is ordered by the number of fish rather than by mode, and read that way the modes interleave. The four largest cells all carry a median error under 19 percent and none of them fails; the four smallest all exceed 60 percent and all of them fail. New Jersey private boats and New Jersey for-hire vessels differ by a factor of seven in releases and by 1.6 points in median error, because both cells are large. Maine and New Hampshire fail in both modes, because both cells are small. The ordering is not strict — New York for-hire vessels, on 793,000 fish, are measured as precisely as New York private boats on 5.45 million — which is the scatter Section 2 reports as the 54 percent

of variation cell size does not account for. What the table does not show anywhere is a mode which is reliably better or worse measured than the other.

The exposure this amendment creates is the product of its disaggregations rather than any one of them. Catch is already accounted by species and by state. Adding mode multiplies the number of cells again, and any further split by wave or sub-period multiplies it once more. Table 1 gives the consequence: a cell holding fewer than 100,000 fish fails the Program's standard half the time.

6. Releases, the shore mode, and why the minimum size matters here

Every quantity in Sections 2 through 5 is an estimate of fish nobody counted. Released fish are not landed, measured or inspected at an access point. And at current minimum sizes releases are most of the catch.

Table 5. Discard rate in the New Jersey for-hire black sea bass fishery by minimum size in force, May and June, 1998 to 2025 (minimum size in inches; years as a count; discard rate as discards divided by total fish handled, in percent). Source: federal vessel trip report census, CAMS database; see the accompanying findings memorandum.

Minimum size (in)	Years (n)	Period	Discard rate (%)
10.0	3	1998–2000	23.2
11.0	1	2001	37.4
11.5	1	2002	46.1
12.0	6	2003–2008	51.2
12.5	16	2009–2021, 2023–2025	63.7
13.0	1	2022	52.6

At a 12.5-inch minimum roughly 64 percent of the fish handled are released; at a 10-inch minimum the figure was 23 percent. The minimum size therefore determines what share of a mode's catch exists only as an estimate. A lower minimum size moves catch out of the estimated column and into the counted column, which improves the accuracy of mode-level accounting independently of any biological argument about the stock. The commenter asks the amendment to recognize minimum size as an instrument affecting accounting precision and not solely as a conservation control.

The shore mode shows what a small cell looks like at the limit. For New Jersey black sea bass, shore-mode released-alive estimates carry a median percent standard error of 39.0 and fail the standard in 10.7 percent of years. Shore-mode harvest is worse: the Program returns a usable estimate in only 8 of the 28 years, with a median percent standard error of 88.9, and every one of those 8 estimates fails its standard. If the amendment groups the shore mode with private boats, or treats it as a mode of its own, it should say which of those estimates it believes can carry a management consequence.

Effort, by contrast, is well measured in both modes. New Jersey angler-trip estimates by wave carry a median percent standard error of 14.2 for private and rental boats and 10.1 for the for-hire modes, with essentially no failures. The difficulty is not in counting trips. It is in estimating what was caught and released on them.

7. What is requested

1. That the amendment state, for each mode-level action it contemplates — accountability measure, in-season closure, or mode-specific regulation — the minimum estimate precision required to support that action, and the level of aggregation at which precision will be assessed.

2. That the amendment not create an accounting cell to which it then assigns a consequence the cell cannot support. Table 1 offers a usable rule of thumb: below roughly 100,000 fish, half of these estimates fail the Program's own standard.

3. That where a cell's estimates do not meet the MRIP standard, the amendment state how it reconciles mode-level accounting with the Program's own recommendation to aggregate across fishing modes in exactly that circumstance.

4. That the amendment report the percent standard error of released-alive (Type B2) estimates by mode, by species and by state for all four species it covers, since releases rather than harvest are the dominant accounting quantity at current minimum sizes.

5. That minimum size be treated as an instrument affecting accounting precision, for the reason given in Section 6.

6. That the amendment state what it intends to do about scup and about the shore mode, where the estimates already fail before any disaggregation this amendment would add.

8. What this comment does not claim

1. Part of the relationship in Table 1 is arithmetic, because percent standard error is a relative measure. Table 3 is the evidence which does not depend on that, and it is the narrower and more reliable result.

2. Percent standard error measures sampling variance alone. It does not capture bias, coverage error or non-response, and an estimate can be precise and still be wrong. Nothing here should be read as a claim any estimate is correct.

3. One state supplies Sections 2, 3 and 6. Section 5 covers the North and Mid-Atlantic by state for one species. The commenter has not tested the relationship for the other three species outside New Jersey, and request 4 asks the Council to.

4. A mode split is not necessarily adverse to private anglers, and this comment does not assert it is. Measures suited to a fishery which does not run on charter economics could serve private anglers well. The concern here is confined to the accounting on which mode-level actions would rest.

5. No claim is made about stock status and none is required. The northern black sea bass stock is neither overfished nor experiencing overfishing.

Questions are welcome in writing and will be answered in writing. The eighteen MRIP queries and the analysis behind every figure in this comment are organized and will be supplied on request.

Craig A. McIlrath · Marlton, New Jersey · blandmail@comcast.net

FINDINGS MEMORANDUM

New Jersey For-Hire Vessel Trip Reports, Black Sea Bass

May and June, 1998–2025

Craig A. McIlrath · Marlton, New Jersey · blandmail@comcast.net

Data: CAMS database, compiled by S. M. Turner, NOAA Fisheries, retrieved 15 September 2026

Summary

Three findings, in descending order of weight.

1. Averaged by the minimum in force, the discard rate rises at every step from a 10-inch to a 12.5-inch minimum, and the relationship survives control for year — the size coefficient strengthens rather than weakens when year is added. Each additional inch is associated with roughly 15 to 26 percentage points of discard rate depending on specification. The rise holds for the averages rather than for every year, and the one 13-inch season falls below the 12.5-inch average; Section 2 sets this out. The coefficient is stable; the share of variance it explains is not, and Section 3 sets out why.
2. The bag limit does not bind and never has. Across four bag levels at a constant 12.5-inch minimum, mean retention per angler never approached the limit, and the bag coefficient is near zero once minimum size is in the model. A bag reduction is therefore empirically inert as a control on harvest in this fishery.
3. Anglers per trip is flat across the full series — mean 19.1, with no trend. Vessel-trips are therefore a valid effort proxy, and the per-open-day comparisons are not confounded by changes in vessel size or party composition.

Finding 2 rules out a bag reduction as a harvest control here. Findings 1 and 3 bear on the size-limit relationship and on the effort denominator.

1. Data and coverage

The series covers all months, 1998 through 2025, for federally permitted recreational vessels landing black sea bass in New Jersey. Nineteen month-year cells are marked confidential and cannot be released; none falls in May or June, so the analysis below uses a complete record with no imputation.

Open days are taken from Annex A and count calendar days within May and June only. Minimum size and bag limit are likewise from Annex A, primary-sourced for every year from 2011 forward.

2. The size-limit relationship

Table 1. New Jersey for-hire black sea bass, May and June, by year. Minimum size in inches as New Jersey defines the length; bag limit in fish per angler per day; open days in calendar days; trips in vessel-trips; anglers per trip in anglers; anglers in persons; retention in fish per angler; attainment as retention divided by bag limit; discard rate as discarded fish divided by total fish handled.

Year	Min size	Bag	Open days	Trips	Anglers/trip	Anglers	Kept/angler	Attainment	Discard rate
1998	10.0	none	61	776	19.2	14,871	4.62	—	19.8%
1999	10.0	none	61	714	21.4	15,248	6.71	—	21.1%
2000	10.0	none	61	785	20.1	15,770	10.31	—	28.6%
2001	11.0	25	52	823	18.8	15,436	7.41	29.6%	37.4%
2002	11.5	25	61	975	22.4	21,887	9.70	38.8%	46.1%
2003	12.0	25	61	947	19.7	18,684	11.04	44.2%	45.4%
2004	12.0	25	61	871	19.0	16,551	5.50	22.0%	52.6%
2005	12.0	25	61	681	18.0	12,266	4.15	16.6%	49.6%
2006	12.0	25	61	710	17.5	12,435	3.08	12.3%	44.3%
2007	12.0	25	61	823	17.4	14,304	3.79	15.2%	53.6%
2008	12.0	25	61	833	16.7	13,940	3.79	15.1%	61.6%
2009	12.5	25	61	786	16.6	13,057	3.02	12.1%	79.0%
2010	12.5	25	40	794	17.7	14,048	2.80	11.2%	67.9%
2011	12.5	25	39†	534	18.6	9,924	1.43	5.7%	77.3%
2012	12.5	25	43	737	18.8	13,859	3.91	15.6%	64.9%
2013	12.5	20	43	720	20.0	14,371	2.91	14.6%	64.4%
2014	12.5	15	43	618	18.2	11,268	2.11	14.1%	60.1%
2015	12.5	15	35	614	17.9	10,995	3.00	20.0%	65.4%
2016	12.5	10	28	472	19.5	9,221	2.97	29.7%	72.5%
2017	12.5	10	24	519	18.3	9,475	3.78	37.8%	70.9%
2018	12.5	10	39	721	19.7	14,203	2.99	29.9%	67.6%
2019	12.5	10	39	861	20.9	17,991	4.16	41.6%	62.2%
2020	12.5	10	39	871	17.9	15,589	5.55	55.5%	55.8%
2021	12.5	10	39	954	20.7	19,785	5.32	53.2%	46.0%
2022	13.0	10	34	879	18.7	16,402	5.51	55.0%	52.6%
2023	12.5	10	34	1,014	20.1	20,358	5.62	56.2%	53.5%
2024	12.5	10	34	940	20.6	19,331	4.25	42.5%	54.5%
2025	12.5	10	34	979	21.1	20,642	6.18	61.8%	57.7%

† 2011 open days carry an unresolved conflict between two New Jersey publications, 39 days on the Attention Anglers flyer or 27 days on the May 2011 Digest. See Annex A, Section A.2. No figure outside this row depends on it.

Table 2. Retention and discard rate grouped by minimum size in force. Minimum size in inches; retention in fish per angler; discard rate as a share of total fish handled; bag limit in fish per angler per day.

Min size (in)	Years (n)	Period	Kept/angler	Discard rate	Bag limits in force
10.0	3	1998–2000	7.21	23.2%	none in force
11.0	1	2001	7.41	37.4%	25
11.5	1	2002	9.70	46.1%	25
12.0	6	2003–2008	5.22	51.2%	25
12.5	16	2009–2021, 2023–2025	3.75	63.7%	25, 20, 15, 10
13.0	1	2022	5.50	52.6%	10

Averaged by minimum size, the discard rate rises at every step from 10 inches to 12.5 inches: 23.2 percent, 37.4, 46.1, 51.2, 63.7. It does not rise year by year. Annual values overlap between adjacent levels: 2002 at 11.5 inches (46.1 percent) sits above 2003 and 2006 at 12 inches (45.4 and 44.3 percent) and above 2021 at 12.5 inches (46.0 percent). The 2022 season at 13 inches breaks the pattern at 52.6 percent, below the 12.5-inch average. It is a single year, and the 12.5-inch group spans sixteen years with a wide internal range, 46.0 to 79.0 percent.

Table 3. Bag limit steps at a constant 12.5-inch minimum, 2009–2021. Bag limit in fish per angler per day; retention in fish per angler; attainment as retention divided by bag limit; discard rate as a share of total fish handled.

Bag limit	Years (n)	Period	Kept/angler	Attainment	Discard rate
25	4	2009–2012	2.79	11.2%	72.3%
20	1	2013	2.91	14.6%	64.4%
15	2	2014–2015	2.56	17.0%	62.8%
10	6	2016–2021	4.13	41.3%	62.5%

3. Separating size limit from time

Minimum size rose monotonically through the first half of the series, so minimum size and year are correlated at 0.78. If the apparent size-limit effect were really a time trend — rising abundance, changing fleet behavior — controlling for year would absorb it.

It does not. Adding year raises the minimum-size coefficient from +0.155 to +0.194 and gives year a small negative sign. Year alone explains less than half as much variance as minimum size alone. Adding bag limit changes nothing: its coefficient is +0.005 and the size coefficient stays above +0.2.

Table 4. Linear models of May–June discard rate. Coefficients in discard-rate proportion per unit; minimum size in inches; year in years since 1998; bag limit in fish per angler per day; n in years. No bag limit was in force 1998–2000, so those three years are dropped from any model containing bag rather than assigned a value, and the size-only and size-plus-year models are reported both with and without them.

Model	Min size	Year	Bag limit	R^2	n (years)
Minimum size only, all years	+0.155	—	—	0.702	28
Minimum size only, excl. 1998–2000	+0.158	—	—	0.357	25
Year only, all years	—	+0.0101	—	0.299	28
Minimum size + year, all years	+0.194	−0.0051	—	0.732	28
Minimum size + year, excl. 1998–2000	+0.261	−0.0074	—	0.457	25
Minimum size + bag, excl. 1998–2000	+0.216	—	+0.0054	0.441	25

Within the constant 12.5-inch period the discard rate falls about 1.3 percentage points a year, from 79.0 percent in 2009 to the mid-50s recently, while retention per angler rises about 0.2 fish a year. Something other than the size limit moves the discard rate substantially inside a fixed regulatory regime — most plausibly availability. That variation is real and should be acknowledged, but it runs against the size-limit effect rather than explaining it away.

How much rests on three years

The design is unbalanced and the imbalance matters. Sixteen of the twenty-eight years sit at a 12.5-inch minimum, six at 12.0, and only three fall below 11 inches. Those three — 1998, 1999 and 2000 — carry the entire low end of the size range, and they are also the first three years of the series, the period the compiler flags as likely under-reported for discards.

Excluding them, the size-only model falls from R^2 0.702 to 0.357, and size plus year from 0.732 to 0.457. The coefficient itself barely moves: leave-one-out over the full series shifts it by at most 0.01, and dropping the three years moves it from +0.155 to +0.158. The direction and magnitude of the relationship are therefore robust, while the share of variance explained is not. Any statement that minimum size accounts for seventy percent of the variation is true only with those three years included and should not be made without saying so.

The practical consequence is that the strongest available test is not a better regression on this series. It is the 2026 reductions, where several states moved their minimums within a single year while the rest of the fishery held, and where Delaware's half-inch cut from 13.0 to 12.5 inches falls inside the range this relationship was fitted on.

4. What the bag-limit result means

A bag reduction does not control harvest in this fishery

A reduction in the bag limit is a common instrument for offsetting harvest, on the reasoning that anglers who fill a smaller bag sooner take fewer fish. The data do not support that reasoning here. At a 25-fish bag the average angler kept 2.79 fish, eleven percent of the limit. At a 10-fish bag the average angler kept 4.13 fish. Retention shows no ordered response to the ceiling across the four steps — it is lowest at

the 15-fish bag and highest at the 10-fish bag — which is the pattern expected when the limit is not the operative constraint and something else, most plausibly availability, is moving retention instead.

A limit almost no one reaches cannot be tightened to reduce harvest. Attainment at the 10-fish bag reaches 62 percent in the best recent year, so a cut would bite on the upper tail of trips only. Monthly aggregates cannot show that distribution, and the tail may matter more than the mean — but the mean rules out the bag limit as a general control on harvest.

Two cautions on reading the results together

First, harvest is managed against landed weight, while the discard-rate relationship in Section 2 describes what share of encountered fish are legal. These are different quantities, and a change in one does not translate directly into a change in the other.

Second, anglers are demonstrably not keeping every legal fish — retention runs at three to six fish per angler against a ten-fish limit. A rise in the legal share of encountered fish therefore does not translate one-for-one into harvest.

5. The effort denominator and period comparisons

Vessel-trips are a valid effort measure for this series. Mean 19.1 anglers per vessel-trip, ordinary least squares slope +0.019 per year, 1998–2004 mean 20.08 against 2019–2025 mean 19.99. Vessel-trips track angler effort across the full series and no correction is needed.

Computed on the open-day counts in Annex A, the two recent periods compare as follows. For 2012–2018 against 2019–2025: trips per open day 17.54 against 25.86, anglers per open day 332 against 518, retention per angler 3.10 against 5.23, discard rate 66.5 percent against 54.6 percent. Excluding 2022 and comparing 2016–2018 against 2019–2021 plus 2023–2025 gives 18.99 against 25.86 trips per open day and 70.3 percent against 55.0 percent discard rate.

RHODE ISLAND
SALTWATER
ANGLERS
Association

P.O. Box 1467, Coventry, Rhode Island 02816 401-826-2121 www.RISAA.org

September 4, 2026

Mid-Atlantic Fishery Management Council and
Atlantic States Marine Fisheries Commission
c/o Kiley Dancy
via email: kdancy@mafmc.org

RE: RISAA Opposition to Sector Separation

Dear Kiley,

The Rhode Island Saltwater Anglers Association (RISAA) represents over 7,500 recreational anglers primarily in RI, MA and CT. Our members include mostly private anglers, but also many charter boat operators in this region. We understand that there is a Workshop on Sector Separation that will be held September 23 & 24, but due to other commitments no one from our organization is able to attend. We are submitting this comment letter prior to the meeting so that our thoughts on the matter may be known to Workshop organizers and participants. We would also like this letter to be included as part of the official comments on this issue.

RISAA has long opposed sector separation due in large part to a fairness issue. Why should anglers be allowed more favorable regulations on one boat rather than another just because they paid to be on that boat? That seems to give a business an unfair advantage over the private angler, sometimes fishing at the same location and in the same manner. This does nothing to help rebuild fish stocks or improve fishing for the general angling public. It simply takes fishing opportunities away from the general fishing public and gives more opportunities to those who pay a business to go fishing on a charter or head boat. The for-hire sector is pushing for this now to grab more fish for their businesses.

RISAA has also opposed sector separation because it weakens both representation of the recreational fishing community and it weakens the data available to estimate the recreational catch. Representation is weakened because many of the individuals who are active in State and Regional fishery management boards representing recreational fishing are employees or owners of party and charter businesses. Private anglers typically have jobs outside the fishing industry and cannot afford the time it takes to be involved in these management boards. If sector separation is advanced how will managers recruit people to represent the largest sector of the recreational fishing public – the private angler? Regarding data quality, it is clear that current methods to estimate recreational catch have significant shortcomings. The major revision of catch estimates recently announced by NOAA because of another change in the fishing effort survey (FES) further indicate the inaccuracy in current methods. Removal of party and charter catch estimates from the recreational data will only increase the percent standard error (PSE) in the catch estimates for private recreational anglers. This will only serve to further reduce allowable catch for the majority of recreational anglers.

The recent NOAA announcement of FES revisions significantly lowered private shore and boat catch estimates but left for-hire estimates unchanged. These changes and how they would affect any possible sector separation are not fully understood and RISAA is concerned that any attempts at sector separation will use these changes to divide the recreational fishing allocation in a way that favors the for-hire sector over private anglers. It is bad enough that recreational anglers are constantly competing with commercial fishermen for allocation of quota. Please don't make matters worse for the general fishing public by adding sector separation to the complex quota allocation mess.

In recent years State regulators have allowed some size and bag limits to be different for the for-hire boats largely because of the argument that their catch is such a small fraction of the recreational catch that more favorable regulations for them would not significantly increase the total recreational catch. These new FES estimates now show that the for-hire catch has been a higher percentage of the recreational catch. We doubt if that will now result in reconsideration of those "special" regulations for for-hire vessels.

The bottom line is that the sector separation effort does nothing to protect the fish, improve our fish stocks, or improve our understanding of how many fish are harvested by recreational fishing efforts. It simply creates another battlefield where groups will fight each other for a bigger piece of the very limited fish resources. Please register our opposition to this effort.

If you have any questions regarding our stance on this issue or if you would like to contact us we have given contact information below.

Sincerely,

Scott A. Travers

Scott Travers
Executive Director
Rhode Island Saltwater Anglers Association
401-826-2121
Travers@risaa.org

Rich Hittinger

Rich Hittinger
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Sector Separation Green

Comments and Reactions from Paul Risi Following Sector Separation Workshop

-Using the phrase Mode Management will go a long way to both clarify the intent and ease tension and misunderstanding amongst the public.

-Clarifying the “party boat/charter boat” confusion. These terms have regional variation. Most industry members consider charter boats to be “six packs,” or uninspected vessels that carry six or less passengers by CG mandate. Party boats are considered to be the inspected, or multi-passenger vessels that carry a current Certificate of Inspection for small passenger vessels issued and maintained by CG Sector inspection offices. From a business process aspect, a charter trip is when a vessel is booked by a single group of people, whereas a party boat trip is a trip that sails at a scheduled time with clients that either walk on or make reservations, but are single persons or smaller groups that are a portion of the total number of clients for that trip.

I recommend committing to using the terms inspected and uninspected for the two groups, as those are the proper legal terms to describe them and will eliminate any confusion.

-Moratorium and Limited Entry. It is clear that nobody wants a moratorium on permits, although ere is significant merit in it. However, that is another conversation. As for limited entry, I was disturbed by the significant opposition to the idea, even though everyone wants to prevent casual charterers and private boats from getting into the mode just to have better regs. My impression of limited entry is that it limits who can enter the mode and get a permit. If the intent of the limited entry is to only allow valid for hire operators into the system, then that serves the purpose.

-Vetting current and future participants is a great challenge. State permitting and regs (current and future) don't and probably never will be sufficient and appropriate. Without the Policy Board setting a minimum set of standards for historical and future participants, it would result in an unfair system that punished operators in states with proper and robust permitting and reporting requirements while allowing those in states with weak requirements to enter more easily, including unqualified operators. Although it is my opinion that the states have the potential to vet participants better (Each knows their operators better and most can legislate more specific requirements), it has become fairly clear that some states are restricted by legislation from adequately regulating entry, and others simply will not.

-The most practical licensing method would be through the federal permit, most probably with a two-or-three-tiered system.

-A federal three tiered system structure. Tier One- Full participation in for-hire regs and fixed in the program. Tier Two- Participating in the regs in a probationary status, with special extra conditions for vetting. Violations of the probationary process result in disqualification. Tier Three- A status-quo version of the current for-hire permit.

-One qualification that I feel is very simple and can be used in the federal permit is automatic entry for inspected vessels. Inspected vessels require thousands of dollars in up-front safety equipment and crew training, Vessels must be built to or meet exacting standards. $300 annual inspection fees, annual safety inspections and drills, and out-of-water internal and external structural inspections (Drydock). They also are required to maintain and show a current random drug screening program for all crew members. The Certificate of Documentation is a federally issued document, issued every year, and easily verified.

-Vetting uninspected vessels is the challenge, both for current operator entry and future entry.

-For operators with federal permits or states with VTRs, we can easily establish qualifications as discussed at the

workshop. Say 25-50 VTRs annually, 70-130 over a three-year period, or 25-50 VTRs annually or three years in a five-year period.

-Vetting for operators in states without reporting requirements fairly and properly would probably require a unique set of standards or processes. As the Service is restricted in what processes they can apply due to regulation and staff burden, it is feasible for the Policy Board to put forth a suite of standards and processes that can be used to vet entrants into the original Tier 1 group. Although some states cannot institute a permit, and some will not, it may be feasible that they can establish a review board or other one-time process that considers operators based on a suite of qualifying standards.

-Possible vetting standards-

-In consideration of standards for original permits, it is important to keep in mind that we are focused on permitting vessels that have actually been active in the industry before the concept of sector separation or mode management came to be, and also operators that are genuinely interested in entering the industry and not reg shopping.

--Possible standards that states may be able to implement as a screening process as opposed to a regulatory process are:

-Liability insurance. Although it is not certain proof of business, it does raise the financial burden.

-Drug Screening. It is mandatory for all passenger carrying vessels (inspected and uninspected), many uninspected vessels are not enrolled in a program because there is not the same annual review associated with inspected vessels. Requiring one or more years of documented random drug screening after the control date is a viable, strong screen.

-Income. Proof of a percentage (15%) or minimum income ($15,000) from for-hire or commercial fishing.

-Log books. Logbooks with dates sailed, passenger count and other references to carrying passengers. As this is an unofficial, unformatted set of data, it should require a heavier burden of proof, such as fifty percent more than vessels with VTRs, and/or several years at a higher trip rate.

-Crew Payroll. An operator that can show proof of business by producing payroll showing deckhand salary covering a similar number of trips as log books or maybe VTRs.

-State Certified Review Boards. This can be controversial, but the potential familiarity that a state has with their industry can develop a group of state staff and/or industry leaders that can review and attest to the validity of an operator's involvement in the industry per standards set.

-Historical advertisements and fishing reports. Although not ideal, historical ads and fishing reports from industry periodicals and local newspapers can be a strong validation of historical participation.

-Memberships. This standard can be dubious if not approached properly, but membership in various validated charter associations or cooperatives can support eligibility.

-Equity. Actual for-hire operators should be included in the Tier 1. However, less traditional vetting processes (Those that are not based on federal or state permits and VTRs) should not be less effective than the primary standard; annually renewed permits and requisite VTRs. It should not be easier to qualify for Tier 1 in a state with no permit or reporting requirements than it is in a state with clear permitting and reporting requirements.

-A strong method to include undocumented historical participants and also allow for controlled entry of new participants would be a high-level reporting system, such as a call-in call-out requirement. This status should also carry the requirement for private trips made by participating vessels. This gives enforcement positive evidence to work from during a boarding, and increases VTRs from the private sect. or.This burden may serve to deter casual reg shoppers. A further restriction should be added that failing to follow the

procedure (missing a report or being boarded and not having called in) results in immediate expulsion from the program, and possibly a one to three year ban on re-entry.

-Latent Permits. Assuming that federal permits will be the standard for the action, standards of reporting similar to the vetting process may be used to eliminate latent permits. Requiring 100 VTRs from the control date through 2/11/2027, with at least 20 trips during the period between 2/11/25-2/11/26 should validate the vast majority of legitimate operators to qualify for Tier 1.

-LOA. An LOA is a smart introduction into the process. Rather than setting an amendment only to find it will need another amendment process to perfect or stabilize, the LOA process will provide great insight to the proper mechanisms to effectively institute the process. I feel that the workshop attendees vilified the LOA based on esoteric exposures and hearsay.

-Removal of scup and bluefish. Bluefish and scup are already subject to mode management through an ad hoc process. Scup is working fine as it stands. Bluefish are cyclic in abundance that is historically recognized. Including bluefish in the process introduces several issues. First, as it

seems we are moving into a period of higher biomass, mode management may prove to be significant effort in a new process that will soon become irrelevant. Second, bluefish is a separate FMP. Third, it is evident that at least a few states are strongly opposed to mode management mainly because bluefish is included. It would be tragic to see the process never even be tested because it failed due to bluefish being included.

-Shore Mode. I feel strongly that the shore mode should have a management consideration, although the fundamental reasons are very different. Kayaks, canoes, and personal watercraft should not be included in the shore mode. I know of kayak fishermen that travel further offshore that I do in my 18' skiff.

Dancy, Kiley

From: Christopher Dos Santos <dexhandsupplycompany@gmail.com>
Sent: Monday, September 28, 2026 10:27 AM
To: Dancy, Kiley
Cc: tbauer@asmfc.org
Subject: Sea Owl input following sector-separation workshop: fishing power, access and workable reporting

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from dexhandsupplycompany@gmail.com. Learn why this is important

Dear Ms. Dancy and Ms. Bauer,

Please share this input from Sea Owl Fishing Charters, New Jersey, with the Recreational Sector Separation Amendment team and the Council and Commission bodies developing the alternatives following the September 23–24 workshop.

My position is that management of fluke, black sea bass, scup and bluefish must account for how fishing actually works today. GPS, detailed bathymetry, advanced sonar, position-holding equipment and shared coordinates can increase the pressure placed on fish and individual pieces of bottom. Separating charter boats from private anglers will not solve that problem unless the analysis measures changes in effective fishing power within both groups.

Please explain how revised recreational survey estimates and their uncertainty will be used alongside for-hire trip reports. Compare the sectors using appropriate data, and do not treat the number of trips as a complete measure of fishing pressure.

For charter operators, assess alternatives against predictable, biologically defensible seasons and rules that can be communicated to customers before bookings are made. Evaluate the seasonal business impacts of fluke and sea bass transitions and proposed future changes to scup and bluefish measures.

Any new permit, Letter of Authorization or limited-entry system needs a clear justification, fair treatment of established working operators, transparent eligibility and appeals, and an analysis of effects on future access. Reporting should capture useful data with minimal duplication, including a practical workflow where offshore connectivity is poor.

Please confirm receipt and explain how this input will reach the amendment team and decision-makers.

My book, Stolen Sea: How Our Secrets Became Subscriptions, explains the fishing-technology and access issues behind my position: https://www.amazon.com/dp/B0H49ZZ7QH

Captain Chris Dos Santos Junior
Sea Owl Fishing Charters

P.S. If you don’t read the book and solve the actual problems in the ocean, none of this matters.

Recreational Angler Partnership Improvement Directive (RAPID) Initiative

ISFMP Policy Board
Thursday November 12, 2026
8:00 – 11:00 a.m.

Background:
In April 2026, NOAA Fisheries introduced RAPID as a core component of its updated National Saltwater Recreational Fisheries Policy. RAPID is designed to modernize the way saltwater recreational fishing data is collected and managed by transforming the existing Marine Recreational Information Program (MRIP).

The RAPID initiative is a process to re-confirm agency partnerships, and co-design future recreational fisheries data collection among the states, commissions, councils, and NOAA. Eight regional workshops are being planned collaboratively with representatives across state-federal agencies. Please see attached RAPID Factsheet and Tentative workshop schedules.

Tentative Dates	**Region (states)**	**City**
January 5-7, 2027	Mid-Atlantic (NY-NC)	Philadelphia, PA
January 11-13, 2027	South Atlantic (NC-FL)	Charleston, SC
January 20-22, 2027	New England (ME-NY)	Boston, MA
February 2-4, 2027	Pacific (WA-CA)	TBD
February 8-9, 2027	Caribbean (PR-USVI)	TBD
March 1-3, 2027	Gulf (FL-TX)	New Orleans, LA
TBD	North Pacific (AK)	TBD
TBD	West Pacific Islands	TBD

What You Need to Know



RAPID: The Recreational Angler Partnership Improvement Directive

RAPID is a **collaborative process** to remodel recreational fisheries data collection. Together, we will assess needs and determine what improvements would support a modernized and adaptive partnership framework. The goal is to support the refinement of existing recreational data programs, while creating opportunities for new approaches, to better support fisheries management needs. RAPID action planning workshops, beginning in late 2026, will activate perspectives from states, regions, NOAA, and the fishing community. The outcome will be a regionally flexible yet cohesive system that improves fisheries management, builds trust and confidence in fisheries data, and strengthens recreational fisheries partnerships across the country. Your participation is vital to this initiative.

RAPID Goal

Improve recreational fishing data collection through state-regional-federal partnership.

Workshop Objectives

1. **Enhance Data for Management:** Identify strategies to strengthen the quality and quantity of recreational fisheries data.
2. **Modernize Data Standards:** Refine data quality, transparency, and access standards to inform an updated data enterprise.
3. **Co-develop regional action plans:** Create data collection and governance plans that reflect regional and state priorities and capabilities while contributing to a national framework.

At least one additional **national angler workshop** will verify key regional takeaways and help inform the action plans.

The RAPID Process

8 Regional Workshop Planning Teams



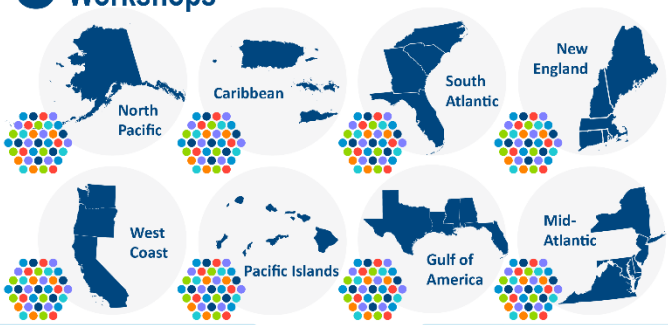
Fisheries Perspectives

Sample - does not represent all planning teams

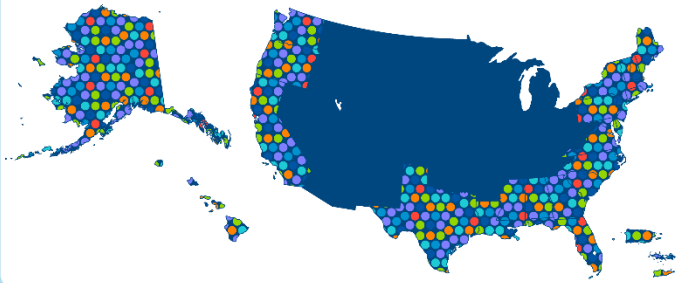
- RAPID Steering Committee
- Fishery Management Council
- Marine Fisheries Commission
- State Marine Resource Department
- NOAA Fisheries Science Center
- NOAA Fisheries Regional Office
- Fishing Community
- NOAA Fisheries Science and Technology

8 Regional Workshops

Planning teams identify workshop participants



1 Regionally Flexible Data Collection Framework



Steering Committee

Gregg Bray *– GSMFC*
Alex DiJohnson *– ASMFC*
Dr. Nancy Leonard *– PSMFC*
Dr. Luiz Barbieri *– FL FWRI*
Dr. Jon Hare *– NOAA Fisheries*
Dr. Evan Howell *– NOAA Fisheries*
Tim Sartwell *– NOAA Fisheries*
Anna Mehlhorn *– NOAA Fisheries*

RAPID Timeline

April 2026 *– National steering committee is established*

July 2026 *– Keystone Policy Center is selected to facilitate workshops*

September 2026 *– Keystone works with regional planning teams to coordinate workshop logistics*

December 2026 - March 2027 *– Hold RAPID regional workshops*

Spring 2027 *– Prepare action plans based on workshop takeaways*

Summer 2027 - onward *– Partners announce the agreed-upon framework and execute action plans*

NOAA FISHERIES

Photo Credit: Chesapeake Bay Program

RAPID: Frequently Asked Questions

Meaningful change takes time, and we aim to build a durable program with our partners. RAPID is the *process* of defining a modernized and partnership-driven recreational fishing data enterprise.

The RAPID partnership model: What is the RAPID process going to provide?

RAPID is pursuing a regionally flexible yet nationally cohesive approach to marine recreational fisheries data collection. This process supports the collaboration necessary for consistent quality of recreational catch and effort estimates, data precision, accuracy, usability, and credibility. The revised partnership will promote true co-ownership of our data collection systems to better meet state and federal data needs. Partners will share in the design and implementation of a data system that allows for greater tailoring to regional needs while maintaining nationally cohesive elements.

What will happen to MRIP and state surveys during and after the transition?

The outcome of RAPID may introduce new recreational fishing survey methods. For any new surveys, existing surveys will be used as a "bridge," so there will be no abrupt management changes. This way, federal and state management can preserve scientific robustness and continue without disruption.

How will this partnership be different from MRIP?

This initiative will rely more heavily on state and regional partnerships during framework design and implementation phases. NOAA will provide the statistical expertise and technical support to ensure data systems are valid and useful for management. We want to empower our partners to develop and use systems that fit their needs and ensure fishery management standards can still be achieved.

Will states have to do their own independent data collection for recreational fisheries?

No, RAPID does not mean federal support for recreational data collection is expiring. We will work together to identify the resources to ensure data are scientifically robust and meet management needs at different scales—state, regional, and federal—while clarifying roles and responsibilities.

Does RAPID have any predetermined outcomes?

RAPID is open-ended by design. The process will rely on partnership to recommend improvements to current recreational fisheries data collection systems, and we do anticipate updates to these systems. However, regardless of the nature or scope of these updates, RAPID is an opportunity to strengthen partner relationships and foster a more constructive dialogue surrounding recreational fisheries data.

How will the new executive order impact RAPID, and how are the two intertwined?

Although RAPID was not explicitly mentioned in the EO, the shared intent is to produce better recreational fishing data. The RAPID process supports EO implementation as it is currently designed, and we do not anticipate major changes to the approach. Inputs on the EO directives will be welcome during the RAPID regional workshops.

Is Funding Available for RAPID Workshop Participants?

The goal of RAPID is to have the necessary experts participate in the regional workshops. If travel support is needed, please reach out to a member of the steering committee.

How long is the transition expected to take?

The RAPID process is expected to be completed by summer 2027, at which point the implementation of regional action plans will begin.

RAPID Contacts:
Tim Sartwell (Tim.Sartwell@noaa.gov)
Anna Mehlhorn (Anna.Mehlhorn@noaa.gov)
RAPID Webpage

Atlantic States Marine Fisheries Commission

Summer Flounder, Scup, and Black Sea Bass Management Board

November 12, 2026
11:30 a.m. – 1:15 p.m.

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1.	Welcome/Call to Order (*J. Maniscalco*)	11:30 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from February 2026	11:30 a.m.
3.	Public Comment	11:35 a.m.
4.	Approve Draft Addendum XXXVII on Scup Commercial Management for Public Comment (*C. Tuohy*) **Action**	11:45 a.m.
5.	Review Black Sea Bass State-by-State Commercial Quota Allocation Performance *(T. Bauer*) **Possible Action**	12:15 p.m.
6.	Other Business/Adjourn	1:15 p.m.

The meeting will be held at Hotel Viking (One Bellevue Avenue, Newport, RI; 401.847.330) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Summer Flounder, Scup, and Black Sea Bass Management Board
November 12, 2026
11:30 a.m. – 1:15 p.m.

Chair: John Maniscalco (NY) Assumed Chairmanship: 12/25	Technical Committee Chair: Rachel Sysak (NY)	Law Enforcement Committee Representative: Scott (NJ)
Vice Chair: Shanna Madsen (CT)	Advisory Panel Chair: Vacant	Previous Board Meeting: August 12, 2026 (Joint with Mid-Atlantic Fishery Management Council)
Voting Members: NH, MA, RI, CT, NY, NJ, DE, MD, PRFC, VA, NC, NMFS, USFWS (13 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from March 2026

3. Public Comment – At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Consider Approving Draft Addendum XXXVII on Scup Commercial Management for Public Comment (11:45 a.m.-12:15 p.m.) Action

Background

- In August 2026, the Mid-Atlantic Fishery Management Council (Council) approved Framework 20 for final action. The Framework was submitted to the National Marine Fisheries Service (NMFS) on September 20, 2026, for review and implementation.
- Framework 20, once approved by NMFS, would allow changes to the commercial Winter I trip limit to be implemented based on projected commercial scup landings and would waive repayment requirements for quota period overages if the annual commercial scup quota is not exceeded in the same year.
- Draft Addendum XXXVII is intended to complement Framework 20 and considers changes to the repayment requirements for quota period overages. The Commission's FMP already allows for changes in the trip limit based on projected landings (**Briefing Materials**).

Presentations

- Draft Addendum XXXVII Overview by C. Tuohy

Board Actions for Consideration

- Approve Draft Addendum XXXVII on scup commercial management for public comment.

5. Review Black Sea Bass State-By-State Commercial Quota Allocation Performance (12:15 p.m.-1:15 p.m.) Possible Action

Background

- Addendum XXXIII was initiated to address significant disparities between some states' allocations and current resource availability by modifying the state-by-state black sea bass commercial quota allocations. The addendum was approved by the Summer Flounder, Scup, and Black Sea Bass Management Board (Board) in 2021, and implemented in 2022.
- The Addendum states the Board should routinely review the state-by-state commercial quotas, not to exceed 5 years between reviews. Reviewing commercial quotas does not mean a new management document is needed; management documents should only be initiated if the Board determines one is warranted.
- To assist with the Board's review of the black sea bass state-by-state commercial quotas, Commission staff have compiled information on state-by-state quota performance (2015-2025), which are summarized in a memorandum to the Board (**Briefing Materials**).

Presentations

- Black Sea Bass State-By-State Commercial Quota Allocation Performance Overview by T. Bauer

Possible Board Actions for Consideration

- Consider initiating an addendum to modify state-by-state black sea bass commercial quota allocations

6. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

SUMMER FLOUNDER, SCUP, and BLACK SEA BASS MANAGEMENT BOARD

WEBINAR

March 5, 2026

These minutes are draft and subject to approval by the Summer Flounder, Scup, and BSB Management Board. The Board will review the minutes during its next meeting.

TABLE OF CONTENT

Call to Order 1

Approval of Agenda 1

Public Comment 1

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- Review Proposed Regional Measures 2
- Consider Final Approval of Proposed Regional Measures 5

Adjournment 12

INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).

2. **Main Motion**
   Move to approve regional option combinations D, I, J, L, M, N, O, P, Q, R, and T, as identified in Table 5 of the staff memo (Page 6). Motion by Nichola Meserve; second by Jason McNamee. Motion to substitute.

   Motion to Substitute
   Move to substitute to approve all regional options except A and G (Page 8). Motion by Adam Nowalski; second by Dave Sikorski. Motion fails for lack of majority (Roll Call: In Favor – MD, NH, NY, NJ, DE; Opposed – RI, VA, MA, NC, CT; Abstentions – NOAA) (Page 10).

   Main Motion
   Move to approve regional option combinations D, I, J, L, M, N, O, P, Q, R, and T, as identified in Table 5 of the staff memo. Motion passes (Roll Call: In Favor – RI, NH, VA, MA, NC, NY, CT; Opposed – MD, NJ, DE; Abstention – NOAA) (Page 11).

3. **E-mail Vote: Move to approve regional option combination S as identified in Table 5 of the staff memo.** Motion made by Nichola Meserve; seconded by Jason McNamee. Motion passes (Roll Call: In Favor – RI, NH, VA, MA, NC, NY, CT; Opposed – MD, NJ, DE; Abstentions – NOAA).

4. **Move to adjourn** by consent (Page 12).

ATTENDANCE

Board Members

Renee Zobel, NH (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Nichola Meserve, MA, proxy for D. McKiernan (AA)
Raymond Kane, MA (GA)
Jason McNamee, RI (AA)
David Borden, RI (GA)
Matthew Gates, CT (AA)
Bill Hyatt, CT (GA)
John Maniscalco, NY, proxy for M. Gary (AA)
Emerson Hasbrouck, NY (GA)
Joe Cimino, NJ (AA)
Adam Nowalsky, NJ, proxy for Sen. Gopal (LA)
John Clark, DE (AA)
Roy Miller, DE (GA)
Michael Luisi, MD, proxy for K. Charbonneau (AA)
David Sikorski, MD, proxy for Del. Stein (LA)
Joe Grist, VA (Acting AA)
Chris Batsavage, NC, proxy for K. Rawls (AA)
Savannah Lewis, NMFS

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Brain Scott, Law Enforcement Committee Rep.

Staff

Bob Beal
Toni Kerns
Tina Berger
Caitlin Starks
Jeff Kipp
Tracey Bauer
Katie Drew
Samara Nehemiah
Chelsea Tuohy

The Summer Flounder, Scup, and Black Sea Bass Management Board of the Atlantic States Marine Fisheries Commission convened via webinar; Thursday, March 5, 2026, and was called to order at 1:00 p.m. by Chair John Maniscalco.

CALL TO ORDER

CHAIR JOHN MANISCALCO: Good afternoon, everyone. Welcome to the Atlantic States Marine Fisheries Commission Summer Flounder, Scup, and Black Sea Bass Management Board today on March 5, 2025. My name is John Maniscalco; I am an Administrative Proxy for New York.

We have Commission FMP Coordinators Tracey Bauer and Chelsea Tuohy, as well as Toni Kerns to help us get through today's agenda, and I believe we have an hour and a half to do so.

APPROVAL OF AGENDA

CHAIR MANISCALCO: We do have a draft agenda and I'll look for a hand to see if there are any additions or modifications that Board members would like to make to today's agenda. Not seeing any; we'll consider the agenda approved by consent.

PUBLIC COMMENT

CHAIR MANISCALCO: Up next is public comment. This is an opportunity for members of the public to comment on items that are not on the agenda. At this time if there is any public online that would like to comment, please raise your hand on the webinar. I'm not seeing any hands.

CONSIDER FINAL APPROVAL OF PROPOSED BLACK SEA BASS RECREATIONAL MEASURES FOR THE 2026-2027 FISHING YEARS

CHAIR MANISCALCO: We will move on to the main purpose of today's meeting, which is Consider Final Approval of Proposed Black Sea Bass Recreational Measures for the 2026-2027 Fishing Years. This is a final action and I believe we're going to start with a Review of the Proposed Regional Measures by Tracey Bauer.

MS. TRACEY BAUER: For today's presentation I am going to start off with a little bit of background, how we got here. Then I'll move into reviewing the Black Sea Bass Proposed Regional and State Measures and the Coastwide Liberalizations that result from all the different combinations of those measures.

Then the Board action for consideration today is to consider the approval of the 2026-2027 recreational measure options for black sea bass. First, background. Back in December 2025 at the Joint Board and Council meeting, the Board and Council agreed on 20% liberalization for black sea bass.

Summer flounder and scup the Council and Board agreed to remain status quo for 2026-2027, and also at that meeting the Board agreed to meet again in early February to discuss the distribution of the liberalization, based on direction from one of the black sea bass's addenda, Addendum XXXII. Addendum XXXII was approved back in 2018, it had established a 3-region framework for setting recreational measures for black sea bass with the northern region, which is Massachusetts through New York, New Jersey is its own separate region, and then the southern region, which is Delaware through North Carolina north of Cape Hatteras. This addendum has some guidelines for how to set recreational measures for black sea bass, including some direction for states to develop measures to meet the coastwide target in a manner that aims to reduce intraregional and interregional disparities where possible.

On this slide I have the status quo management measures for each region, with size limits ranging from 16 to 16.5 in the northern region, and this is status quo currently what the management measures are. Size limit of 12.5 inches in New Jersey and 13 inches in the southern region and then possession limit range between 2 and 7 fish in the north, 1 and 15 fish in New Jersey and 15 fish in the northern region, and the seasons themselves are all highly variable.

When the Board met again, it was on February 5, 2026, the motion as planned at their December meeting to discuss the distribution of that liberalization and the guidance in Addendum XXXII, to reduce the intra and inter regional disparities where possible.

After much deliberation the Board approved a distribution of the 20% coastwide liberalization, where the southern region would get a liberalization of 16.5%. The northern region would not be able to exceed 27%, and the New Jersey region would receive the remaining liberalization from the northern and southern region.

For this year's methodology, to be able to determine how all the different combinations of the regulations and what regulations are meeting what percentage liberalization we used the Recreation Demand Model, which with that information we calculated the median percent liberalization.

The process this year was a little bit different from previous years, in that this year we actually calculate the median coastwide liberalization for all the combinations of measures from the three regions. In the past we could only calculate the estimated percent change for a few different sets of example measures, so we didn't know the coastwide percent change until the very end of the recreational measure setting process in late spring.

REVIEW PROPOSED REGIONAL MEASURES

MS. TRACEY BAUER: But now we know at this meeting what combinations of measures are actually meeting our liberalization target. Now this is into the proposed 2026-2027 recreational measures for black sea bass starting with the northern region. The northern region submitted one action with specific sets of measures for each state that overall achieve an estimated 26.9% liberalization.

As a reminder, the Board motion has said the northern region cannot exceed 27% liberalization, so each state lowered their size limit by half an inch for both modes or just private and shore for Rhode Island, since their for-hire fishery was already at 16 inches. Then changes were also made to the possession limits and season for some of the states, and all of which the specific details on what has changed you can refer to the staff memo.

The southern region submitted two options, one of which achieves an estimated 13.3% liberalization and the other achieved an estimated 15.6% liberalization. One action lowers the size limit by half an inch for all four states and opens the season a few weeks earlier. The other option only increases the size limit in Delaware and Maryland, but Virginia and North Carolina would have a much earlier season start date, April 1 instead of May 15. New Jersey submitted 10 options, as the state was allowed to utilize all of the remaining liberalization.

We weren't sure how much would be available, and the options they submitted achieved an estimated liberalization between 16.1% and 17.8%. For other options they provided some combination of inter deposit it from 1 to 2 in the summer and then the season within the spring, summer or fall.

They tried out a lot of different combinations, basically, to see what would hit the overall 20% coastwide liberalization of 20%. I have the New Jersey options on these two different slides, and again you can look at the memo to see the differences between each and the results in percent liberalization achieved by each.

Once all of the states submitted all of their options we were able to go back and calculate the coastwide liberalization for every single combination of all of these different options. This came out to 20 total combinations possible that could be achieved by mixing and matching all of the different options.

The coastwide liberalization was rounded to the nearest whole number, just like the allowed liberalization in the motion, which we had some

discussions with GARFO about, and rounding to the nearest whole number recognizes the estimated liberalizations may not be precise after several decimal places.

Two combinations, A and D equaled a 21% liberalization, which I have in red there on the slide. These two options are both cases where the southern region option, the SR2 is combined with either NJ2 or NJ5. If the southern region selects SR3, the other two New Jersey combinations NJ2 and NJ5 come into C and H it would actually equal 20%.

It's only in some cases with these two New Jersey options when a certain southern region option is selected that we hit the 21%. If a different southern region option is selected then we are still at 20. That concludes all of the different options and the resulting coastwide liberalization from all of those options.

In terms of next steps, today again, the Board action for consideration is final approval of the proposed Black Sea Bass Recreational Measure Options for 2026-2027. The states will have a deadline of April 1 to inform Commission staff of their final selection of measures that they wish to implement.

We as Commission staff are aiming for providing the Commission's letter to GARFO with all the final measures by April 15, and then the states will implement their selected black sea bass measures this spring. With that, that is the end of my presentation and I'm happy to take any questions.

CHAIR MANISCALCO: Thanks for the presentation, Tracey. Are there any questions from the Board? Nichola.

MS. NICHOLA MESERVE: Regarding the table that has all the combinations together and the coastwide percent liberalizations shown. The decision that was made to round to the nearest whole number, was that a Technical Committee decision, and was it made at a time in the process that it could apply to each of the regions? For example, I believe the answer is no here. Did the northern region understand that they could aim for 27.2 or 27.3 percent?

MS. BAUER: I'll just jump in here. Nichola, thank you for your question. Rounding, I do not believe was discussed by the TC, it was something with discussions with staff when we were talking about how to present the information. It's more of a more recent decision.

MS. TONI KERNS: Nichola, we just did it for the final product, based off of these principals around what happens when we're finished with the model, like combining all of the regional options together.

MS. MESERVE: As a follow up, might I ask for the table to be shown without that rounding, to get a sense?

MS. KERNS: Certainly can. Tracey, did you have a backup?

MS. BAUER: Yes, there we go.

MS. MESERVE: Okay, thank you, I'm probably going to reference this later in some comments. Thank you for having it available.

CHAIR MANISCALCO: Next hand I see is Adam Nowalsky.

MR. ADAM NOWALSKY: My question here is regarding the Recreation Demand Model's treating of North Carolina harvest. My understanding is that it does not presently parse out the harvest north and south of north of Cape Hatteras. Our management area is the harvest north of Cape Hatteras.

I believe the last three years of MRIP harvest south of Cape Hatteras has varied between, in the neighborhood of a low couple hundred thousand fish averaging about 219,000 pounds of fish. Has there been any conversation about deducting for that number, because I believe that if we backed out that approximately 219,000 pounds of fish, it

would actually bring all of these percentages under 20%. Could you talk a little bit about conversations that have been had about backing out that text south of Cape Hatteras that the RDM is presently including?

MS. BAUER: Yes, thanks, Adam. That was something that the TC did discuss. Where we ended that conversation of what the TC concluded was not to deduct that harvest out, because it is still in the model that harvest south of Cape Hatteras in North Carolina. But to use it as sort of like to be risk averse by including it, basically.

CHAIR MANISCALCO: Next hand is David Sikorski.

MR. DAVID SIKORSKI: I'm wondering about the decimal points here, and trying to think about this from a risk perspective. Having the decimal points is fine, but not having them seems fine to me as well. I'm thinking about kind of our resolution here, how it zoomed in early, thinking back to December when we discussed anywhere from 0 to, I think 39% liberalization.

We ended up in the middle. Is there a way to describe this kind of for the public and the Board to think about this on a scale level and how it relates to risk, and then can we measure that? Is it even something we should really be considering those small decimal points? That is where my head is right now. I think it's a question/comment, but I think there are questions in there. What do the decimal points mean here? What a big picture risk?

CHAIR MANISCALCO: David, is that a question for staff or for other Board members?

MR. SIKORSKI: I think staff, I'm thinking the technical folk, but I'm happy to hear from anyone, because I just want to kind of wrap my head around it in that frame of thinking.

MS. BAUER: It's a good question, and it's one I think currently, at least on the staff perspective we're viewing it as that the RDM is great, but we are unsure that it really has the level of precision out to like 2.11 or whatever. Multiple decimal places we're not sure if the precision is there, and that is sort of where we landed, at least in our discussions.

In past years we would say like a reduction of 20.7. Our reduction liberalization table is a whole number, so we thought you know, there is some uncertainty in the data so we go with just rounding to the nearest whole number and say that these numbers are 20%, essentially. Not consider those decimal places other than you know using it to round to the nearest whole number.

MR. SIKORSKI: Thank you, I appreciate that. There was a lot of heartburn with the decimal points here in Maryland with their favorite fish the striped bass. It's really helpful and thank you.

CHAIR MANISCALCO: Joe Cimino.

MR. JOE CIMINO: I appreciate a chance to follow up to David's question, because I think what New Jersey was trying to show with their supplemental memo, and I think what it boiled down to is about a half a percentage in this, the difference between one of our options it says 20.5 and one that is right at 20 is about 12,000 pounds for half a percentage. Some of these are even fractions in that. We're talking about 2/10 of a percentage.

Even at half a percent we're talking about 20,000 pounds. As we mentioned, the North Carolina harvest that is in there that shouldn't be is closer to 200,000 pounds, so about 10 times what these percentages over are looking at. That's the worst offenders here, so that is what we were trying to show with those tables and the scale of the fractions of a percent. Thank you.

CHAIR MANISCALCO: Any other Board members want to comment on rounding and decimal points? Not seeing any other hands.

CONSIDER FINAL APPROVAL OF PROPOSED REGIONAL MEASURES

CHAIR MANISCALCO: I'll just offer my own perspective. I mean rounding is a convention that is used commonplace. I don't think we'll find ourselves in any trouble rounding to the nearest whole number. While I recognizes New Jersey's assertion that half a percent is maybe 12,000 pounds and really, you're right. That is a relatively small amount I think, going beyond the 20% that we agreed to in December would put all the states totals in some danger of rejection from NOAA. That would cause quite a bit of chaos. Matt Gates.

MR. MATTHEW GATES: Thanks for the presentation today. To offer a slightly different perspective. For some of the smaller states 12,000 pounds is a significant amount of fish. If we were looking at this earlier on in the process with what we do, that could have made the difference between for a state like Connecticut possibly going even smaller on minimum size or something, which is a probably significant impact. I think there is some significant impact to even small decimal point changes.

CHAIR MANISCALCO: Jason McNamee:

DR. JASON McNAMEE: I'll just quickly work off what Matt just offered. I'll offer the perspective of the northern region. We had four states trying to come to consensus on you know something to put forward. We encountered the same thing where we were getting variations that were slightly over the amount that we were trying to achieve. We held ourselves to kind of sticking to the letter of the law there, and it was meaningful.

You know it could have meant extra time in Massachusetts or smaller size in Connecticut, or more fish in the bag in Rhode Island. We all kind of compromised. I don't dispute anything anybody said about rounding, and these discussions are always kind of hilarious in hindsight, how nuanced we get with this stuff. I don't disagree with the 12,000 pounds and whether that is biologically meaningful. It's really not the point. We in the northern region kind of went into the process with hard threshold and stuck to that, so that is kind of the perspective that I'm approaching this.

CHAIR MANISCALCO: I'm not seeing any, oh Nichola Meserve.

MS. MESERVE: I was just going to offer that I have a motion when you feel like the discussion has resolved.

CHAIR MANISCALCO: Okay, noted. I do see a hand from Mike Luisi.

MR. MICHAEL LUISI: I appreciate the comment that you made, and I wonder if NOAA is online maybe to comment. You know coming into this meeting I was sitting here thinking about the efforts that we've all made to do one of the hardest liberalizations, I think, that we've ever had to do with black sea bass in recent years.

We all made a solid attempt to try to maintain the level of liberalization that we walked out of the meeting with in December, or I guess that was when we decided on the 20%. You know New Jersey was the one state that didn't have a number to shoot for, they had a written number. I don't even know if the range that was presented today was available to New Jersey while they were preparing theirs. That would be something that maybe Joe or Adam could help me understand. But if we were faced with this table and we were sitting at the table talking about how much we would liberalize, if we did it backwards. I would easily be convinced that we could achieve a 21% liberalization and then everybody's options would be okay, and I don't see there being a whole lot of risk in that.

I do, my level of concern raised, John, when you mentioned that if we were to submit a series of regulatory actions by the states that exceeded that 20% that we could all be in jeopardy based on what

NOAAs decision would be, whether that is I guess conservationally equivalent. That concerns me.

I don't know if there is anymore information that we can hear from the Service on, on where they stand with this rounding. I was inclined to support the options as they were presented and not take any of them out today. I'm getting a sense that that is the direction we're going, but it would be helpful to hear from the Service if they are able to comment.

CHAIR MANISCALCO: Savannah Lewis, I see your hand up.

MS. SAVANNAH LEWIS: Just to comment on this briefly. This is largely a discussion for the Board and for the states themselves. But overall, the way we look at it is that the motion in December was move to adopt conservation equivalency with a 20% liberalization from status quo measures.

You know the motion wasn't 21% nor was it really vague in terms of what the increase is. Our standard of review is what this Board decides, so we will review what the Commission will send us in a letter and the documentation that they provide to support that decision, that all states have achieved the requirement in the motion that was passed by both this body and the Council. That is kind of the insight I can provide. I hope that that is helpful.

CHIAR MANISCALCO: Thanks, Savannah. Okay, so we're about 30 minutes in. Mike Wain, your hand has been up for a while, is this a question regarding the presentation?

MR. MIKE WAIN: Yes.

CHAIR MANISCALCO: Okay, we'll allow one question from the public on the presentation.

MR. MIKE WAIN: Thank you for the opportunity, Mr. Chairman. Mike Wain with the American Sportfishing Association. I'm wondering if staff has a slide that shows what the RHL is compared to what the expected harvest is under the RDM runs that occurred to create this table.

MS. BAUER: Hi, Mike, good question. I do not have any real harvest estimates in this presentation, mainly because we were calculating the percent liberalization a little differently than what we have in the past this year. We were calculating everything. The RDM puts out 100 draws of information, and before that we were taking a median of the estimated harvest from those hundred draws. We had some conversations with the RDM team and the Decision Support Tool was outputting information a certain way, so we this year are calculating everything at the draw level, not just the harvest but also the percent liberalization. For each individual draw we are calculating the percent liberalization, comparing coastwide harvest for status quo and the proposed regulations in that individual draw.

Then we take the median of every single of a 100% liberalization we're taking the median. These coastwide percent liberalizations are median numbers based on all the median calculations and so it is not really a one-to-one ratio between this and the harvest. There is a little bit of a disconnect there.

But this, as you recall from the RDM team was a more specifically accurate way of calculating the coastwide percent liberalization. That is the way we move forward this year. Sorry, I do not have those numbers.

CHAIR MANISCALCO: Thanks, Tracey, are there any more questions for Tracey on her presentation? Not seeing any hands, Nichola, you mentioned you had a motion.

MS. MESERVE: I will get it up on the board and then hope to provide rationale if I get a second to it. I would **move to approve regional option configurations D, I, J, L, M, N, O, P, Q, R and T as identified in Table 5 of the staff memo.**

CHAIR MANISCALCO: I see a hand from Jason McNamee, is that a second?

DR. McNAMEE: Yes, Mr. Chair.

CHAIR MANISCALCO: Nichola, please justify your motion. Yes.

MS. KERNS: Nichola, just because you can't circle on the fly. I think these are all of the ones that fall less than the 20% or less, correct?

MS. MESERVE: That is correct, anything that shows here as 20.0% or less are those corresponding letters. I'm making this motion, not because I think that there is a significant difference between 20.0 and 20.1 % or that there is a risk to the resource of overfishing from approving the full range of options, but because it is consistent with my understanding of what the assignment was given to the regions in the Board's prior motion.

It seemed to me that from the comment from GARFO that they had a similar understanding. As Jason McNamee pointed out, the northern region worked really hard to get to an option that was 27% and no more. That was difficult because we were dealing with some equity issues in the region and went through a pretty funky series of calls to get to that.

I'm sure that had we thought that 27.4% was allowed for our region, we would have submitted a different option. That would have had a couple more days here or there, and while those might sound like inconsequential differences, if you look at the range of options submitted by New Jersey, like the actual measures. What you see is that there are multiple versions of essentially the same option that only differ by a day. They are essentially asking for that leeway that the northern region said we didn't have, and that we had to stick specifically to 27%. I believe that it's my perception that in removing some of these options, as this motion does, it still leaves New Jersey with the three or four basic options that it seems they want to be able to take out to public comment and consider the options that look at 2 fish instead of 1 fish in that summer period or an option that reopens the closures or gets to 10 fish for a longer time period in the spring.

I don't see that removing a couple of these options that are over that line that we drew is a significant hindrance to anyone here. Lastly, I don't see that the argument about the North Carolina south of Hatteras data being really relevant to this part of it, as those estimates were included in both the status quo runs and the alternative runs here. I think it is a little bit of misleading to be talking about any type of 4% coastwide overestimation from those estimates being included.

I guess, you know I said lastly, but while I have the microphone, I would just like to acknowledge the cooperation and collaboration that the northern region states used when developing our option, and it makes a lot of significant progress towards better regional alignment. I just wanted to thank Rhode Island, Connecticut and New York for the process that we undertook. Thank you.

CHAIR MANISCALCO: Jason, did you want to add anything?

DR. McNAMEE: Nicola hit every single point that I've got on the notebook there, so I won't retread that ground. But maybe I actually appreciated here last comment there. We had a really good process, you know a lot of good iteration between the states, you know frank discussions but collegial discussions. It was a good process, so my appreciation to the other northern region states as well.

CHAIR MANISCALCO: David, I see your hand is up.

MR. SIKORSKI: I just wanted to speak in opposition to this motion. I think removing all the options makes sense. We talked about the risk today and that is the most important, I think. Given the size of the biomass of this fishery, I think there is some wiggle room. This Board, if I heard NOAA correctly can make its own decisions today. Our hands are

not tied by what we did in December and what we did in the previous meeting.

We can talk about this an make this decision to say that there is really a negligible difference between any of the options because of this decimal point component and in the imprecision of all of this. We know that. We know it exists in all our fisheries. I think it's unfortunate that we'll have to spend time debating this over this back and forth. Because if the northern states had been the region that received the uncertainty like New Jersey ended up with after our last meeting.

I would be sitting here using the same exact logic asking, is it a risk and if it's not a risk to the biomass biologically, let's just move on and accept the fact that things get lost in the margins, because guess what, our margins are really, really wide here. I think this is a key example of where the public really kind of just gets like, oh my gosh, this is exhausting, because frankly, it's exhausting. I totally understands where everybody is coming from, and that's why if the shoe was on the other foot and if the north didn't really know what they were trying to get and came back with something else, I would have given them wiggle room there too, because it's only fair. You know the biomass can take it and I think we need one less point of conflict across all of our lives. Frankly, I don't support this. I'm not prepared to make a motion, but I hope somebody does, I would gladly second it.

CHAIR MANISCALCO: I'm going to go to Matt Gates next and then Adam Nowalsky.

MR. GATES: I think I'll speak in support of the motion. I understand the tough position we put New Jersey in, by having them sort of get the scraps after the other states figured out what they needed. They didn't know exactly what they were shooting for. I think it was appropriate for them to put forward a whole bunch of options with small degrees of variation, because they don't really know how things are going to work out with the RDM and the percent that they get.

But now that we know that some of those options came out over 20%, I think it's appropriate to eliminate those options now. It still leaves them with a bunch of options that they can go out to public with that have different management outcomes. I think I can end up supporting this.

CHAIR MANISCALCO: Adam.

MR. NOWALSKY: I am prepared to substitute and I'll speak to it if I can get a second. I **move to substitute to approve all regional options except A and G.**

CHAIR MANISCALCO: David Sikorski, is that a second?

MR. SIKORSKI: Yes, Sir.

CHAIR MANISCALCO: Adam, would you like to speak to it?

MR. NOWALSKY: Yes, thank you very much. I think Mr. Sikorski's comments about approving all of these, in particular in light of the North Carolina harvest is a reasonable way forward. However, I am going to choose a middle ground here deferring to the Technical Committee's position on leaving the harvest in and that the status quo was calculated with it in originally.

I can understand the case that we do have to draw a line somewhere. However, what I'm concerned with the original motion is that it basically sets a precedent that says we can't round decimal points that equate to a couple thousand pounds of fish, which I think is just ludicrous. The motion back in December did not say up to it said a 20% liberalization. Staff clearly found that they could make the case for the rounding that has taken place here.

I'm highly confident that if we went back in time and looked, we would find similar cases of rounding would be allowed. While I understand the original

motion's makers comments and concerns about, well if we're going to round why couldn't we do 27.1, 2 or 3 in the northern region. My response to that is at the joint meeting last month we explicitly set the northern region at up to 27%. That is what was included there at that time. I think that by going forward with this motion that I'm comfortable with, it still gives New Jersey flexibility to potentially implement Options 2 and 5 if the southern region goes ahead and chooses 3, we would be in contact with the southern region to try to get a sense. Our states, Marine Fishery's Council will meet later this month.

I am confident that we can still go ahead and get our option in by April 1. Our state would not choose Option 2 or 5 until we knew whether or not it would conflict with the southern region. We certainly don't want to put this entire plan at risk. I think this is a reasonable way forward at this time, and I hope the Board can support this motion. Thank you very much.

CHAIR MANISCALCO: Thanks, Adam. David, would you like to add anything?

MR. SIKORSKI: No, I think Adam's comments and my previous comments speak for themselves, thank you.

CHAIR MANISCALCO: Is there any further discussion from the Board on this motion? Nichola, I see your hand.

MS. MESERVE: I just wanted to respond to one part of Mr. Nowalsky's comments, and that the motion previously approved set the northern region at no more than 27%. By the same logic, the southern region was explicitly given 16.5% in that motion. If that is a compelling rationale for anyone then we should also be only assigning, we should be assigning 16.5 to the southern region and leaving whatever is left from that number. I'll second the comment that it's strange how much harder it is to liberalize than to reduce.

CHAIR MANISCALCO: Joe.

MR. CIMINO: I disagree with a lot of what Nichola said, but I agree that we can't say exactly what that North Carolina harvest included means. But originally the Technical Committee came to the Board and said it's a buffer. Now they're saying its more risk averse. They obviously think that it would change these percentages if it was left out.

Again, what we are arguing for in this motion isn't to move above the line that we all set, it is simply to say that we're not 100% sure where that line is, and we believe that this option still would if the data was run correctly, get us there.

CHAIR MANISCALCO: Okay, anymore discussion from the Board? I'm not seeing any hands, so I'm wondering if there is anyone from the public who would like to speak on this motion before we call a vote. Stephen, I see your hand, Stephen Machalaba.

MS. KERNS: Still showing that you are muted on your end. Maybe John go to the next.

CHAIR MANISCALCO: Yes, we'll go over to Mike Wain and we'll come back to you and give it another try. Mike Wain, please.

MR. WAIN: Thank you, Mr. Chairman. Mike Wain with the American Sportfishing Association. I just want to take a step back from that and remind the Board that through the Recreational Reform Initiative, specifically the Harvest Control Rule, and then the Rec Measure Setting Process that implemented the percent change approach.

The whole intent of that action was to try to acknowledge that there is significant imprecision in the catch data, and chasing decimal point levels of precision is a fool's errand. Yet here we are, doing exactly the same thing and fighting over decimal places later in the process. It just seems very inconsistent with the entire intent of this action, which is the recreational catch data are not precise enough to drive these types of calculations.

There is no statistical difference between any of those options. I'm not sure why staff was unable to answer the question I asked previously, because I was simply asking what is the target that this increase would equate to relative to the RHL? Is there a distance between that? Is there a buffer? I believe the answer to that question is yes, considering we were previously considering increases all the way up to 39%.

The 20% is already a conservative target. The level of precision that is being debated right now is eroding the credibility of this process. I think it's silly that we continue to do this. I would recommend that the Board, really sit down after this decision and this spec setting and think more specifically about that so we don't end up in this place again. Thank you.

CHAIR MANISCALCO: All right, Steve, I've going to try you again. Try to unmute yourself, please. Okay, Stephen, apologies. Maybe we could work offline at sometime in the future and figure that out for you. Okay, anything further from the Board before we take a vote? Can I see hands if anyone needs to caucus? I'm not seeing any hands, so I'm assuming that no caucus is necessary. Toni, would you mind handling the vote?

MS. KERNS: Not at all. **All in favor raise your hand. I'm just going to give it a second to let everyone's hands go up. I have Maryland, New Hampshire, and this is to the substitute motion, I didn't say that, I apologize. New York, New Jersey, Delaware. New Hampshire took their hand down; Renee are you not in favor of the substitute?**

MS. RENEE ZOBEL: Toni, we are in favor of the substitute.

MS. KERNS: Okay, just making sure, thank you. I'm going to put your hands down for you. Those that are against the substitute motion. I have Rhode Island, Virginia, Massachusetts, North Carolina and Connecticut. Going to put the hands down. Any null votes? Any abstentions; NOAA Fisheries. Tracey, am I right on the count is 5, 5, 0, 1?

MS. BAUER: That's what I got.

MS. KERNS: Mr. Chair, that would be the motion would not carry for lack of majority.

CHAIR MANISCALCO: Thank you, Toni, so back to the original motion then. Any further discussion on this motion? Not seeing any hands, I am going to request a minute for caucus. Toni, is there a timer set you could show on the presentation?

MS. KERNS: I started one on my cell phone. I'll let you know when a minute is up and if you need more time that is fine. It's been a minute, let me know if you need another minute.

CHAIR MANISCALCO: Okay, looking for any hands that feel they need additional time. Not seeing any. **All who support the motion, please raise your hand.**

MS. KERNS: I have Rhode Island, New Hampshire, Virginia, Massachusetts, North Carolina, New York and Connecticut.

CHAIR MANISCALCO: Okay, putting your hands down now. All opposed, please raise your hand.

MS. KERNS: I have Maryland, New Jersey and Delaware.

CHAIR MANISCALCO: Okay, hands down, null votes. Not seeing any, and abstentions.

MS. KERNS: NOAA Fisheries abstains. John, I do have one question for Tracey and Nichola, and I apologize that I did not ask this beforehand, I meant to. I think Option F shows at 20.0 in the table. I think it should be included, but I might have misread it or missed saw my lines not lining up. Am I wrong?

MS. BAUER: I am doublechecking right now.

CHAIR MANISCALCO: I have it as 20.04.

MS. KERNS: Okay, thank you.

CHAIR MANISCALCO: Tracey, I don't know if you want to confirm that.

MS. BAUER: Yes, that sounds right.

MS. KERNS: Okay, thanks, sorry about that.

CHAIR MANISCALCO: I believe the motion passed.

MS. BAUER: Yes, it did. I **got 7 to 3 with 1 abstention**. Toni, is that what you?

MS. KERNS: I did not do the count, so you just read them there. Thanks, Chelsea.

CHAIR MANISCALCO: **Motion passes** and I believe that concludes the business on this particular item. I will just look to the Board to see if anyone has anything final to say. Jay McNamee, I see your hand.

DR. McNAMEE: I just wanted to offer two things so that we don't loose track of them, and I think they are a request for a task to the Technical Committee. The first is, if folks remember back to the, I think it was at the joint meeting where we had a long, tortured discussion on the uncertainty bounds and which size of uncertainty bounds we should be using.

In the end I think our motion sort of detached itself from that discussion, which was fine. But I think that is something that will come up again, and so it would be good to be out ahead of that. I am hoping, at least starting with the Technical Committee to kind of look into some way to optimize what the confidence limits should be, so that is one thing.

I think there is enough in that previous discussion to kind of provide a little more guidance than I just did now. Then the other thing, which is our task for the Technical Committee is, I have developed a little calculation to figure out and compare when the region is getting closer or further apart by way of regulations across the different states.

I think it's fairly straightforward, but I would love for the Technical Committee to take a look at that and vet it as a tool. It probably has some application beyond black sea bass, maybe not a ton of application, but I think it would be worthwhile for them to vet that.

The other aspect is there is a couple of bells and whistles within there where you can upweight certain components and down weight them and things like that. That could use some additional vetting and guidance, so I'm hoping we could put those two things in front of the Technical Committee, so that we're prepared with some information for them next go at this.

CHAIR MANISCALCO: Thank you, Jay. Tracey and Chelsea, is that clear enough for the tasking for the TC for you to move forward on?

MS. CHELSEA TUOHY: Yes, I think so. Thank you.

CHAIR MANISCALCO: Thanks. Matt Gates, I see your hand. Matt, I don't hear anything, your hand appears to be down.

MR. GATES: Yes, that's because I pressed the wrong button, sorry about that. I just wanted to comment on a process we used this time. We used the RDM sort of in this regional context. I thought it was productive to work with the other states in generating options. But I feel like it sort of left out the public comment period portion of it.

We could only really generate one option for the northern region, and you couldn't come up with state-specific options because each state's actions influenced the percent liberalization in the different states. I think maybe if we just think about that when we do this process again in the future, how we can get a little bit more public participation in the process. Thanks.

MS. KERNS: John, can I speak to that?

CHAIR MANISCALCO: Of course, Toni.

MS. KERNS: Matt, we can try to explore ways to do that. What we have been relying on is for the states to utilize your administrative processes to get as much public input as you can on possibilities. The timeline is so tight in between all of when we make these decisions. For us to hold public hearings or something like that is virtually impossible.

We are happy to try to explore options with you all. It is not that we are trying to exclude the public from these decisions, it's just that we have been relying on the state process, in order to glean what your regional or state folks are looking for. We don't have the information soon enough, like Tracey was still working and running the numbers up until last week. It is very tight timelines for this process.

MR. GATES: Yes, I agree, the state timelines are tight even in the state processes it's tough. Hopefully there is enough brainpower in the group here to just come up with a little bit better system.

ADJOURNMENT

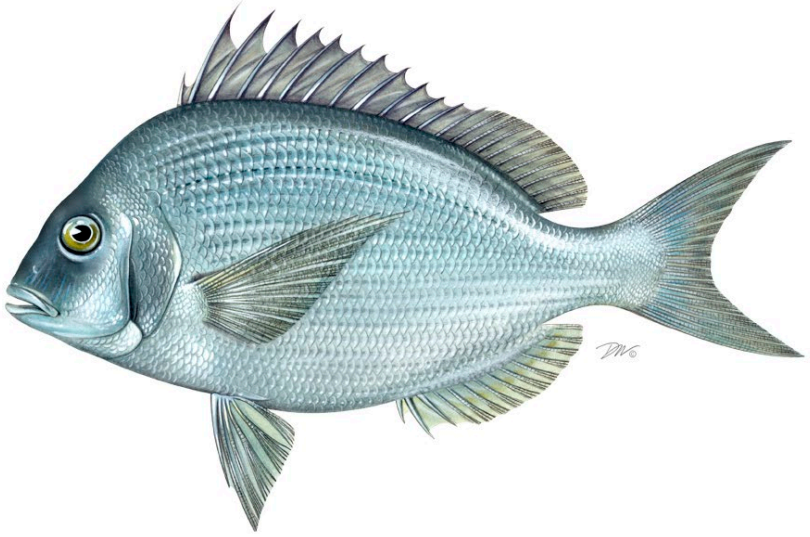
CHAIR MANISCALCO: Thanks for that. Is there any other business to come before the Board before we adjourn? I'm not seeing anything, so I think we're done here today. I want to thank of course all my Commission staff that worked to get this meeting together. Thank you.

(Whereupon the meeting adjourned at 2:00 p.m. on Thursday, March 5, 2026)

Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM XXXVII TO THE SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS FISHERY MANAGEMENT PLAN FOR BOARD REVIEW

Scup Commercial Quota Management



November 2026

This draft document was developed for Board review and discussion at the Commission's 2026 Annual Meeting. This document is not intended to solicit public comment as part of the Commission/State formal public input process. However, comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in the document.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Draft Document for Board Review. Not for Public Comment.

Atlantic States Marine Fisheries Commission Seeks Your Input on Scup Commercial Management

In August 2026, the Atlantic States Marine Fisheries Commission's (Commission) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) initiated this Draft Addendum to complement Framework 20, approved by the Mid-Atlantic Fishery Management Council (Council) for final action at the same meeting. Draft Addendum XXXVII considers whether quota period overage paybacks for the commercial scup fishery should be waived in years when the annual quota is not exceeded. This document provides background on commercial scup management and presents options for addressing quota period overage paybacks for public review and comment. The addendum development process and proposed timeline are summarized in the figure below.

Commission's Process and Timeline

Date	Action
Summer-Fall 2026	Draft Addendum Developed for Board Review
November 2026	Board to Review and Approve Draft Addendum for Public Comment – ***Current Step***
November-December 2026	Public Comment Period
January 2027	Board Reviews, Selects Management Options, and Final Approval

Public comment may be submitted via public hearings or through written comments and will be accepted until **Month Day, 2026 at 11:59 p.m.** If you have any questions or would like to submit a comment, please use the contact information below.

Submit Comments to:

Mail: Chelsea Tuohy, FMP Coordinator
Atlantic States Marine Fisheries Commission
1050 North Highland Street, Suite 200 A-N
Arlington, VA 22201

Email: comments@asmfc.org
(Subject: Draft Addendum XXXVII)

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1.0 Introduction

The Atlantic States Marine Fisheries Commission (ASMFC or Commission) coordinates the management of summer flounder, scup, and black sea bass fisheries in state waters (0–3 miles) and the Mid-Atlantic Fishery Management Council (MAFMC or Council) and NOAA Fisheries coordinate management in federal waters (3–200 miles). The management unit for scup includes U.S. waters from Cape Hatteras, North Carolina, north to the Canadian border. This Draft Addendum considers changes only to the commercial fishery for scup.

On August 12, 2026, the Council approved Framework 20, which includes changes to commercial scup Winter I trip limit requirements and landings-based accountability measures. The changes are intended to increase management flexibility during the Winter I quota period and, when practicable, preserve harvest opportunities across all three quota periods: Winter I, Summer, and Winter II.

In 2026, unusually rapid landings, combined with data and management challenges, resulted in early closure of the Winter I period and a 23% overage of the period's quota. Under existing regulations and provisions of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP), the overage must be deducted from the 2027 Winter I quota. Fishery participants have raised concerns that requiring repayment of the overage could impose an unnecessary economic burden on industry without a corresponding conservation benefit to the scup stock if the 2026 annual commercial scup quota is not exceeded.

To address these challenges, Framework 20, once approved by the National Marine Fisheries Service (NMFS), would allow changes to the Winter I trip limit to be implemented based on projected commercial scup landings, rather than requiring NMFS to wait for actual landings data. It would also provide the NMFS Regional Administrator (RA) with discretionary authority to forgo a trip limit reduction if the reduction is expected to prevent full harvest of the Winter I quota. Together, these changes are intended to support timely trip limit reductions when needed to prevent overages, while avoiding unnecessary restrictions when the risk of exceeding the Winter I quota is low.

Framework 20 would also waive repayment requirements for quota period overages if the annual commercial scup quota is not exceeded in the same year. This provision is intended to preserve harvest opportunities across quota periods while maintaining the annual quota as a constraint on overall commercial harvest. The Council has submitted Framework 20 to NMFS for review and implementation. This Draft Addendum is intended to complement the Council's framework action and considers changes to the repayment requirements for quota period overages. The Commission's FMP already allows for changes in the trip limit based on projected landings.

2.0 Overview

2.1 Statement of Problem

Under current management provisions, commercial scup quota period overages must be repaid through deductions from the corresponding quota period in the following year, even when the annual commercial scup quota is not exceeded. These payback requirements may unnecessarily constrain harvest opportunities and disrupt the fishery when quota period overages do not result in an annual quota overage. Draft Addendum XXXVII considers modifications to the quota period overage payback provision to provide greater management flexibility while maintaining constraints on overall annual commercial harvest so as not to pose a risk to the health of the scup stock.

2.2 Background

The scup commercial quota period system was established in 1996 through Addendum I to Amendment 8 to the Summer Flounder, Scup, and Black Sea Bass FMP. The system was developed in response to concerns that the seasonal nature of the fishery and differences in vessel size could result in uneven access to the annual commercial quota. To address these concerns, the Commission and Council established three quota periods, each allocated a percentage of the total commercial quota: Winter I (January-April, 45.11%), Summer (May-October, 38.95%), and Winter II (November-December, 15.94%). Addendum XXIX to the FMP, adopted in 2017, moved October from the Summer period to the Winter II period. During the two winter periods, coastwide quotas and possession limits apply, while the Summer period quota is allocated to each state. The Winter I possession limit initially allows higher landings and is reduced once a specified percentage of the quota has been landed. This tiered system is intended to distribute landings throughout the period and reduce the risk of quota overages.

The commercial scup quota monitoring system, overseen by NOAA Fisheries' Greater Atlantic Regional Fisheries Office (GARFO), includes in-season management measures during the winter quota periods. The specific possession limits and rollover provisions are not prescribed in the FMP or federal regulations; instead, regulations provide for these measures to be established through the annual specifications process. Under current measures, the Winter I possession limit begins at 50,000 pounds and is reduced to 1,000 pounds once 80% of the Winter I quota has been landed. The NMFS RA monitors landings to determine when the threshold has been reached. Winter II begins with a 12,000-pound possession limit, which may increase if unused Winter I quota is rolled over.

Scup management measures have generally been effective in constraining commercial scup landings to the annual commercial quota and seasonal quota allocations at both the state and federal levels. From 2015 through 2025, commercial landings did not exceed the annual commercial quota, with the exception of 2017 and 2023 when the commercial annual catch limit (ACL) was exceeded due to higher-than-expected dead discards. Seasonal quota allocations were also generally not exceeded during this period. In 2026, however, the Winter I quota was exceeded (Tables 1 and 2).

Table 1. Coastwide commercial scup landings, dead discards, and catch (millions of pounds) compared to the annual quota and commercial ACL, 2015-2026. Note: 2026 data are preliminary. Landings data pulled from the CAMS database on May 19, 2026.

Year	Commercial Landings[a]	Commercial Quota	Quota Underage/Overage	Commercial Dead Discards	Commercial Catch	ACL	ACL Overage/Underage
2015	17.05	21.23	-20%	3.79	20.84	26.35	-21%
2016	15.78	20.47	-23%	6.12	21.90	24.26	-10%
2017	15.52	18.38	-16%	10.43	25.95	22.15	+17%
2018	13.39	23.98	-44%	7.26	20.65	30.53	-32%
2019	13.81	23.98	-42%	6.13	19.94	28.42	-30%
2020	13.70	22.23	-38%	5.81	19.51	27.90	-30%
2021	13.16	20.50	-36%	4.18	17.34	27.15	-36%
2022	12.17	20.38	-40%	5.14	17.31	25.05	-31%
2023	13.02	14.01	-7%	7.09	20.11	19.29	+4%
2024	14.48	21.15	-32%	8.87	23.35	28.48	-18%
2025	14.27	19.54	-27%	5.09	19.36	26.85	-28%
2026*	10.28	17.70	-42%	1.25	11.53	27.36	-58%
2027	-	15.57	-	-	-	24.06	-

[a] Commercial landings for 2015-2026 and dead discards from 2020-2026 are based on CAMS data. Commercial dead discards for 2015-2019 are from the 2025 Management Track Assessment.

Table 2. Coastwide commercial scup landings (millions of pounds) compared to the Winter I, Summer, and Winter II quota period allocations, 2021-2026. Revised quotas reflect rollover of unused quota from Winter I to Winter II within a given year. Note: 2026 data are preliminary. Data provided by GARFO staff, CAMS database accessed on May 12, 2026.

Year	Quota Period	Commercial Landings	Quota Allocation	Revised Period Quota	Quota Overage/ Underage
2021	Winter I	5.85	9.25	-	-37%
	Summer	4.84	7.99	-	-39%
	Winter II	2.47	3.27	6.68	-63%
2022	Winter I	5.00	9.19	-	-46%
	Summer	4.56	7.94	-	-43%
	Winter II	2.60	3.25	7.47	-65%
2023	Winter I	5.79	6.32	-	-8%
	Summer	4.46	5.46	-	-18%
	Winter II	2.77	2.23	3.04	-9%
2024	Winter I	7.86	9.54	-	-18%
	Summer	4.39	8.24	-	-47%
	Winter II	2.23	3.37	5.07	-56%
2025	Winter I	7.79	8.81	-	-12%
	Summer	4.28	7.61	-	-44%
	Winter II	2.20	3.11	4.16	-47%
2026*	Winter I	9.78	7.98	-	**+23%**
	Summer	-	6.89	-	-
	Winter II	-	2.82	-	-

Preliminary data as of May 2026 indicate commercial scup landings exceeded the 2026 Winter I quota by approximately 23% (Table 2). Under the existing management system, the Winter I possession limit should have been reduced once landings reached 80% of the quota to constrain harvest and preserve fishing opportunities throughout the remainder of the period. However, unusually rapid landings and an increased frequency of late dealer reports exacerbated the typical delay in confirming that the threshold had been reached. By the time

available data indicated the threshold had been reached, projections showed the full quota would be harvested before a trip limit reduction could be implemented. As a result, the fishery was closed on March 16, 2026, rather than a trip limit reduction (91 FR 12511). Industry members have suggested the increased fishing effort during the 2026 Winter I period may have been a result of increased demand and processing capacity in the frozen seafood market, as well as limited harvest opportunities in other fisheries, including mackerel, squid, and butterfish.

Under the commercial scup management provisions in the FMP and federal regulations, quota period overages must be deducted from the corresponding quota period in a subsequent year. For Winter I and Summer, the regulations specify overages are deducted from the appropriate quota period in the following year, based on landings through September 30 of the current year (50 CFR 648.123(a)(2)(ii)). For Winter II, overages are deducted from the subsequent year's Winter II quota, with the deduction based on landings through June 30 of the following year (50 CFR 648.123(a)(2)(iii)).

Preliminary data indicate the 2026 Winter I quota was exceeded by approximately 1.8 million pounds. Under the current payback provisions, this overage would reduce the expected 2027 Winter I quota from 7.02 million pounds to approximately 5.22 million pounds, subject to confirmation of the final landings and quota figures. Stakeholders have expressed concern that, if the 2026 annual commercial scup quota is not exceeded, requiring repayment of the Winter I overage could impose additional economic hardship on industry and reduce harvest opportunities in 2027 without providing a corresponding conservation benefit to the scup stock. Therefore, this Draft Addendum considers waiving period overages repayments in years where the annual commercial fishery quota is not exceeded.

2.3 Status of the Stock

The most recent scup management track stock assessment was completed in June 2025, using data through 2024 (NEFSC 2025). The assessment approach is a statistical catch-at-age model incorporating a broad array of fishery and survey data. Results from the 2025 assessment indicated the stock was not overfished, with biomass 322% of the biomass target, and overfishing was not occurring in 2024 (Figure 1). Fishing mortality was 56% of the overfishing threshold proxy.

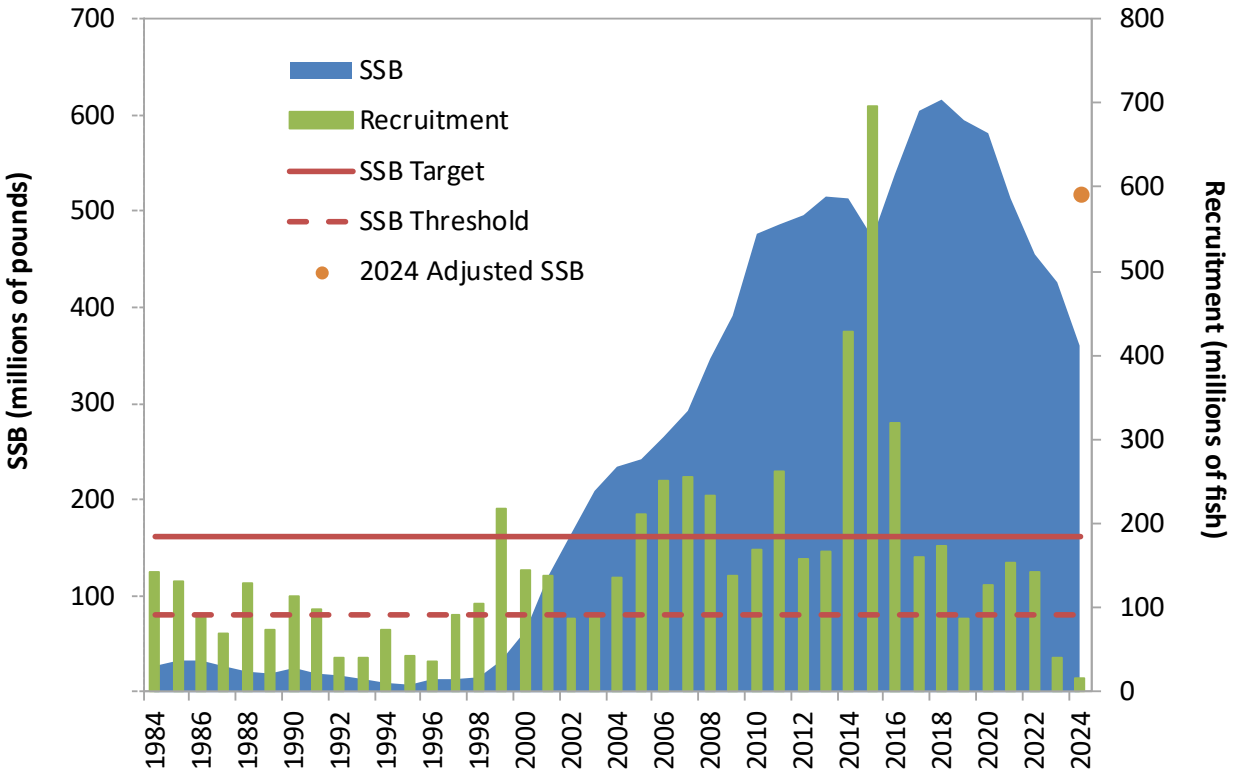


Figure 1. Scup spawning stock biomass and recruitment. 2025 spawning stock biomass was adjusted for a retrospective pattern with both the unadjusted and adjusted values shown above. The adjusted value was used in management. Source: 2025 Scup Management Track Assessment Report, Northeast Fisheries Science Center.

2.4 Status of the Fishery

Note: Since the draft addendum considers management of the commercial fisheries for scup, the following information focuses on commercial fisheries only. For information on the recreational fisheries, see the Review of the Scup FMP for the 2025 Fishing Year (ASMFC 2026).

Commercial scup landings experienced a general declining trend from a peak of 21.73 million pounds in 1981 to the time series low of 2.66 million pounds in 2000, according to data pulled from the ACCSP Data Warehouse. Since 2001, commercial landings increased nearly every year to about 17.87 million pounds in 2013. Commercial landings have declined slightly since, subsiding to 14.27 million pounds in 2025, accounting for about 73% of the commercial quota.

As described above, as of May 2026, preliminary data show the 2026 Winter I quota was exceeded by 23% (Table 2). The number of high-volume scup trips (i.e., trips landing at least 30,000 pounds of scup) during 2021-2025 increased gradually from 36 to 97 trips annually (3-8% of total trips). During those same years, trips reaching the 50,000-pound possession limit remained rare, ranging from 4 to 19 trips annually (<1-1% of total trips). In 2026, 160 trips each landed at least 30,000 pounds, representing an increase of 151% relative to the 2021-2025

average (64 trips). Trips reaching the 50,000-pound limit increased sharply, rising by 542% compared to the 2021-2024 average (8 trips, MAFMC 2026).

Viewed alongside the landings trajectory shown by GARFO's quota monitoring system, this pattern suggests Winter I landings were concentrated at higher trip thresholds in 2026 than in recent years, driving a rapid pace of landings which resulted in earlier attainment of the 80% threshold and the full Winter I quota (and associated closure). As discussed in Section 2.2, industry has shared that heightened fishing effort during the 2026 Winter I period may be attributed to increased demand and processing capacity in the frozen market and limited harvest opportunities in other fisheries.

3.0 Proposed Management Options

The Commission is considering changes to the payback provision for the commercial scup period quotas. The Council has already taken final action on Framework 20 to address payback requirements for quota period overages. The Council is bound by the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including requirements for ACLs, accountability measures (AMs), and prevention of overfishing. NOAA Fisheries, which has final approval authority for Council management documents, will not approve measures inconsistent with the MSA. NOAA Fisheries provides guidance throughout development of Council actions to ensure the preferred options selected for implementation are consistent with the MSA and other applicable laws.

When the Board takes final action on the addendum, they may select any measure within the range of options that went out for public comment.

3.1 Commercial Quota Period Management

Option A. Status quo commercial quota period payback provision

Under this option, no changes would be made to the commercial scup quota period overage payback requirements. This option would not allow Winter I, Summer, or Winter II landings overage repayments to be forgiven based on annual commercial quota performance.

Option B. Forgive quota period overages in years where the annual commercial quota is not exceeded

This option would allow landings overages for the Winter I, Summer, and Winter II quota periods to be forgiven if the annual commercial scup quota was not exceeded during the same year. The following language from Addendum I would be modified to read as follows where bold text represents additions to the current language:

"**If the annual commercial scup quota is exceeded,** any landings in excess of the quota that occurred during the winter periods would be subtracted from the following year's quota for that period. For example, if the **annual quota was exceeded and the Winter I** quota was

exceeded by 30,000 pounds in **2026**, 30,000 pounds would be subtracted from the quota for that period in **2027**. **If the annual quota is not exceeded, quota period overages would be forgiven…**During the second period, when the state-by-state system is in effect, all scup landed for sale in a state would be applied against the state's annual commercial quota regardless of where the scup were harvested. **If the annual commercial scup quota is exceeded,** any overages of the commercial quota landed in a state would be deducted from that state's annual quota for the following year. **If the annual commercial scup quota is not exceeded, state overages in the Summer period would be forgiven.** Vessel's with moratorium permits could not land scup in any state that had not been allocated a commercial quota."

Note from the Plan Development Team (PDT) **-** *It is possible that if Option B is chosen, in-season adjustments may occur. The rationale and an example of notification timing of this change is as follows:*

Under Option B, GARFO would determine whether the annual quota had been exceeded before requiring any landings overage paybacks by quota period. This presents a potential timing challenge because commercial catch information from a given year is typically finalized the following fall (e.g., final 2026 catch would be available in fall 2027). As a result, the Winter I and Summer periods would likely end before GARFO could confirm whether paybacks in those periods were necessary.

GARFO would aim to set the period-specific quotas with the best available data while mitigating negative impacts on the industry from changing quotas. In years when proposed specifications are published, they are typically publicly available during the Winter II period (i.e., early to mid-fall). Neither final data nor accurate projections for the Winter II and total annual landings are available at that time. However, data on the Winter I and Summer landings are reasonably accurate. Based on this data, the proposed rule could announce the total Winter I and Summer landings overages, which would represent the maximum overage repayments for those quota periods.

The final specifications are typically published later within the Winter II period (i.e., late fall to early winter). While final Winter II and annual landings are still not available, more accurate projections can be made at that time. If projections indicate the annual landings are expected to be below the annual quota, the paybacks would be waived. If projections indicate an annual quota overage is expected, the projected overage amount would be deducted proportionally from the periods in which the quotas were exceeded.

Near-final Winter II and annual landings data are typically available in the spring of the following year. This landings data can generally be used to determine the overall underage or overage of the annual scup quota. If available data indicate the final rule overestimated the paybacks due (i.e., the final rule deducted more quota than necessary), the period-specific quotas may be adjusted upward through an in-season action during the Winter I or Summer quota periods. If data indicate the final rule underestimated paybacks (i.e., the final rule did not deduct enough to repay the overage), any additional overage repayment would be taken out of the following year's specifications to avoid disruptions to state management and business

plans, as state agencies and members of industry rely on accurate quota information to set state regulations and business plans.

In November or early December each year, the Commission sends a memorandum to states outlining the quota period allocations and state-specific summer quota allocations. The timeline for quota notification outlined above may alter the way states are notified about Summer period state quotas. If GARFO makes no modifications to the quota period allocations between the proposed and final specifications rule (i.e., no paybacks are required or paybacks are equal to those outlined in the proposed rule), no action in addition to the typical process will be needed by the Commission or the states. However, if the quota period allocations are adjusted between the proposed and final specifications rules and/or quotas are adjusted upward through an in-season action during the Winter I or Summer quota periods (i.e., paybacks are adjusted), the Commission would send an updated memorandum to the states outlining the updated quota period allocations and resulting Summer period state-specific quotas. Following this memorandum, states would be required to adjust their regulations accordingly. Note, if changes are made between the proposed and final specifications rules or through in-season adjustments, paybacks would only be reduced (i.e., state changes would be adjusting quota period allocations and state-specific Summer period quotas upwards only, if needed).

4.0 Compliance

Draft Addendum XXXVII does not implement any changes to current compliance requirements.

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MEMORANDUM

TO: **Summer Flounder, Scup, and Black Sea Bass Board**

FROM: **Tracey Bauer, Fishery Management Plan Coordinator**

DATE: **October 26, 2026**

SUBJECT: **Review of Black Sea Bass Commercial State-by-State Quota Allocation Performance**

Black sea bass commercial state-by-state quota allocations were originally implemented in 2003 through Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan, and extended indefinitely through Addendum XIX (2007). The state-by-state allocations were loosely based on historical landings from 1980-2001, allocating 67% of the coastwide commercial quota among the states of New Jersey through North Carolina (north of Cape Hatteras), and 33% among the states of New York through Maine (Table 1). These state commercial allocations were in place between 2003-2021. Also of note, Addenda XII and XIX (2004 and 2007, respectively) allowed for the transfer of black sea bass commercial quota among states, and Addendum XX (2009) established the process for state-to-state quota transfers.

However, the black sea bass stock (north of Cape Hatteras) distribution has changed since the state-by-state allocations were originally implemented in 2003, as biomass north of New Jersey has significantly increased. In some cases, expansion of the black sea bass stock into areas with historically minimal fishing effort created significant disparities between some state's allocations and current abundance and resource availability.

Addendum XXXIII (2021) was meant to address this issue by modifying the allocations of the coastwide black sea bass commercial quota among states. New baseline allocations were established through this Addendum, which increased Connecticut's quota allocation from 1% to 3% and New York's quota allocation from 7% to 8% (Table 1). The Addendum also established that 75% of the coastwide quota would be distributed using these new baseline allocations, and the remaining 25% of the quota will first be allocated regionally based on the regional biomass proportions from the most recent stock assessment (see Table 2), after which the regional quotas will be distributed to the states within each region in proportion to their baseline allocations. Maine and New Hampshire were two exceptions to this, as they each received 1% of the northern region quota. More information on how the quota allocations are currently calculated can be found in Addendum XXXIII.

Lastly, Addendum XXXIII also stated state-by-state commercial quotas will be reviewed by the Commission in a timely manner, not to exceed 5 years between reviews. Review of commercial quotas does not mean a new management document is needed; management documents should only be initiated if the Summer Flounder, Scup, and Black Sea Bass Management Board (Board) determines one is warranted.

To assist with the Board's review of the black sea bass state-by-state commercial quotas, this memo provides a summary of available information on state-by-state quota performance (2015-2025). Utilization of each state's respective state-by-state quota allocation will be discussed without consideration of transfers that occurred, unless otherwise noted. State-specific commercial regulations for black sea bass in Fishing Year 2025 are also provided in Appendix 1.

Utilization Summary

Generally, lower quotas appear to correspond with higher utilization. From 2015-2019, the annual coastwide commercial quota ranged between 2.21 million pounds and 4.12 million pounds (Table 3), averaging approximately 3.21 million pounds. During this same period, total coastwide commercial quota utilization ranged between 94% to 101% (Table 3).

In contrast, the lowest percent utilization of the coastwide quota occurred in 2020 and 2021 (75% and 74%, respectively), which corresponded with a substantial increase in the quota to 5.58 million pounds in 2020 and 6.09 million pounds in 2021 (Tables 3 & 4). In 2023, when the commercial quota declined to 4.8 million pounds, coastwide utilization rose to 94%. However, in 2022, 2024 and 2025, when the coastwide quota was greater than or equal to 6 million pounds, the utilization fell again to 80%, 84%, and 81%, respectively.

At the state level, outside of Maine and New Hampshire, North Carolina and Virginia had the lowest utilization of their assigned quota (before transfers), particularly following the increase of the coastwide quota in 2020 (Tables 3 & 4; Figures 1 & 2). Between 2020-2025, disregarding transfers in any given year, North Carolina utilized an average 30% of its annual quota, and Virginia utilized an average of 51% of its annual quota.

In contrast, the northern states (New Jersey through Massachusetts) consistently had the highest quota utilization, ranging between 90% and 177% across the available time series (Table 3; Figures 1 & 2). Connecticut harvested the highest percentage of their assigned state-by-state annual quota (not considering any quota transfers that occurred) between 2015-2025, with an average percent utilization of 125% (Table 3). New York and Massachusetts utilized an average of 108% and 104% of their quota, respectively, followed by New Jersey and Rhode Island, which utilized an average of 100% and 99% of their quota, respectively.

Summary of Transfers

Of the 76 quota transfers approved between 2015 and 2025, 45 quota transfers occurred for reasons other than safe harbor (Table 5; Appendix 2). Reasons provided in available quota transfer request letters included to maintain an active fishery in that respective year, prevent mid-season closures, and prevent overages. Between 2015 and 2025, Maine and New Hampshire each donated a portion of their quota 7 out of the 11 years to one or more states for reasons other than safe harbor, with donations ranging between 15,000 pounds and 29,000 pounds (or between 72% to 100% of their allocated quota; Table 6). North Carolina donated a portion of their quota to one or more states in 4 of the 11 years, with donations ranging between 90,000 and 345,000 pounds (or between 23% to 83% of their quota). Virginia donated quota twice, and Massachusetts and Delaware each donated quota once during this same period.

Between 2015 and 2025, Massachusetts, Rhode Island, Connecticut, New York, and New Jersey all requested and received quota transfers for reasons other than safe harbor (Table 7). Rhode Island and Connecticut each received quota transfers in 7 of the 11 years. Total annual quota amounts transferred to Rhode Island ranged between 4,300 pounds in 2023 to 50,000 pounds in 2025. Total annual quota amounts transferred to Connecticut ranged between 15,000 pounds in 2025 to 84,000 pounds in 2023. New York received the highest single-year quota amount in the 2015-2025 time period, 125,000 pounds in both 2024 and 2025.

Table 8 provides a “revised” percent utilization by state, taking all quota transfers into account, illustrating the impact of quota transfers on individual state quota utilization.

Next Steps

Addendum XXXIII states a review of the black sea bass state-by-state quota allocations does not necessitate a new management document; management documents should only be initiated if the Board determines one is warranted. As a result, the Board may choose to keep the state-by-state commercial allocations status quo, and so no action would be needed by the Board. However, if the Board determines changes to the state-by-state commercial allocations are needed, the Board may choose to initiate an addendum.

Tables

Table 1. The baseline allocation by state, as implemented in Addendum XXXIII, compared to the historical allocation percentages.

	Historical Allocation	Change in Allocation	New Baseline Allocation
ME	0.5%	-0.25%	0.25%
NH	0.5%	-0.25%	0.25%
MA	13.0%	-0.38%	12.62%
RI	11.0%	-0.32%	10.68%
CT	1.0%	2.00%	3.00%
NY	7.0%	1.00%	8.00%
NJ	20.0%	-0.58%	19.42%
DE	5.0%	0.00%	5.00%
MD	11.0%	-0.32%	10.68%
VA	20.0%	-0.58%	19.41%
NC	11.0%	-0.32%	10.68%

Table 2. Comparison of state-by-state quota allocations, historically (2003-2021) and post-Addendum XXXIII (2022-2026). The regional biomass distribution (the northern region in red and southern region in light blue) as estimated by the most recent black sea bass management track stock assessment was used as part of quota allocation calculations post-Addendum XXXIII (2022-2026).

		2022		2023		2024		2025		2026	
State	Historical (2003-2021) Allocation	Regional Biomass Distribution (2021 Assessment)	Final 2022 Allocation	Regional Biomass Distribution (2021 Assessment)	Final 2023 Allocation	Regional Biomass Distribution (2021 Assessment)	Final 2024 Allocation	Regional Biomass Distribution (2024 Assessment)	Final 2025 Allocation	Regional Biomass Distribution (2025 Assessment)	Final 2026 Allocation
ME	0.5%	85%	0.40%	85%	0.40%	85%	0.40%	52%	0.32%	52%	0.32%
NH	0.5%		0.40%		0.40%		0.40%		0.32%		0.32%
MA	13.0%		15.44%		15.44%		15.44%		13.12%		13.12%
RI	11.0%		13.06%		13.06%		13.06%		11.10%		11.10%
CT	1.0%		3.67%		3.67%		3.67%		3.12%		3.12%
NY	7.0%		9.79%		9.79%		9.79%		8.32%		8.32%
NJ - N	20.0%		19.81%		19.81%		19.81%		19.47%		19.47%
NJ - S		15%		15%		15%		48%		48%	
DE	5.0%		4.09%		4.09%		4.09%		4.83%		4.83%
MD	11.0%		8.73%		8.73%		8.73%		10.32%		10.32%
VA	20.0%		15.88%		15.88%		15.88%		18.76%		18.76%
NC	11.0%		8.73%		8.73%		8.73%		10.32%		10.32%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 3. Percent utilization (not considering any transfers) by state and year, 2015-2025. Red boxes denote when less than 50% of a state's quota for that year was utilized. Yellow boxes denote when greater than 50% but less than 90% of quota was utilized. Overall percent utilization by year, as well as the total landings (pounds) and the quota (pounds) by state. Addendum XXXIII was implemented beginning in 2022.

State	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ME	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
NH	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MA	121%	101%	101%	105%	116%	100%	96%	92%	110%	102%	106%
RI	98%	99%	101%	97%	103%	90%	99%	98%	101%	104%	104%
CT	111%	108%	106%	108%	177%	153%	150%	116%	145%	92%	109%
NY	98%	98%	105%	111%	120%	106%	103%	102%	120%	112%	118%
NJ	106%	97%	109%	99%	102%	96%	91%	95%	109%	98%	91%
DE	101%	72%	57%	98%	98%	66%	85%	91%	97%	130%	91%
MD	97%	91%	90%	97%	95%	65%	72%	68%	85%	63%	70%
VA	95%	102%	87%	86%	92%	47%	40%	51%	76%	44%	46%
NC	99%	76%	86%	82%	72%	35%	30%	19%	15%	37%	42%
Overall Utilization	101%	94%	94%	95%	99%	75%	74%	80%	94%	84%	81%
Landings (lbs)	2,242,277	2,534,988	3,878,957	3,336,459	3,473,882	4,173,160	4,498,156	5,146,594	4,491,389	5,059,650	4,857,201
Quota (lbs)	2,212,923	2,702,867	4,120,400	3,520,000	3,520,000	5,580,000	6,090,000	6,470,000	4,800,000	6,000,000	6,000,000

Table 4. Utilization of quota in pounds (not considering any transfers) by year and state between 2015-2025. Green (negative) values denote the amount of underage in pounds of that state's quota, positive values denote overages in pounds. Overall percent utilization by year is also provided, as well as the total landings (pounds) and the quota (pounds) by state. Addendum XXXIII was implemented beginning in 2022.

State	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ME	-11,065	-13,514	-20,602	-17,600	-17,600	-27,900	-30,450	-25,880	-19,199	-24,000	-19,050
NH	-11,065	-13,514	-20,602	-17,600	-17,599	-27,897	-30,450	-25,880	-19,200	-24,000	-19,050
MA	60,140	2,658	6,280	23,546	73,170	-2,972	-29,866	-82,874	72,031	20,068	44,478
RI	-4,775	-2,972	4,887	-12,563	10,702	-60,051	-9,867	-20,879	7,178	32,001	26,754
CT	2,462	2,207	2,616	2,712	27,061	29,813	30,298	38,279	78,981	-17,112	16,089
NY	-3,496	-4,672	13,051	27,714	49,933	24,417	12,820	14,830	91,935	73,340	92,120
NJ	25,663	-14,926	74,585	-3,870	15,544	-39,407	-105,553	-58,258	88,349	-20,189	-104,830
DE	862	-38,349	-88,568	-3,820	-3,262	-96,185	-45,425	-22,559	-6,306	74,540	-24,749
MD	-7,239	-25,803	-43,650	-13,209	-17,693	-216,597	-187,617	-179,196	-64,271	-191,631	-182,709
VA	-20,252	12,918	-105,054	-97,634	-58,183	-594,108	-726,399	-505,021	-180,880	-531,971	-612,664
NC	-1,884	-71,910	-64,386	-71,217	-108,192	-395,953	-469,335	-455,967	-357,228	-331,398	-359,188
Overall Utilization	101%	94%	94%	95%	99%	75%	74%	80%	94%	84%	81%
Landings (lbs)	2,242,277	2,534,988	3,878,957	3,336,459	3,473,882	4,173,160	4,498,156	5,146,594	4,491,389	5,059,650	4,857,201
Quota (lbs)	2,212,923	2,702,867	4,120,400	3,520,000	3,520,000	5,580,000	6,090,000	6,470,000	4,800,000	6,000,000	6,000,000

Table 5. Number of quota transfers by year, broken down by those which were safe harbor transfers and those which were requested for any reason other than as a safe harbor transfer.

Reason for Transfer	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Safe harbor	2	4	6	3	6	2	1	1	4	2	0	31
Non-safe harbor transfers	0	0	2	0	6	4	5	6	9	8	5	45
Total	**2**	**4**	**8**	**3**	**12**	**6**	**6**	**7**	**13**	**10**	**5**	**76**

Table 6. Amount of quota in pounds donated by state and year, excluding safe harbor transfers, between 2015-2025. Rhode Island, Connecticut, New York, New Jersey, and Maryland did not donate any quota during this period.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ME			-18,100		-17,599	-20,000	-29,000	-23,000	-19,100	-20,000	
NH					-16,000	-25,000	-25,000	-25,000	-19,200	-23,000	-15,000
MA								-50,000			
RI											
CT											
NY											
NJ											
DE			-50,000								
MD											
VA					-10,000					-10,000	
NC					-90,000				-345,000	-100,000	-225,000
Total	0	0	-68,100	0	-133,599	-45,000	-54,000	-98,000	-383,300	-153,000	-240,000

Table 7. Amount of quota in pounds received by state and year, excluding safe harbor transfers, between 2015-2025. Maine, New Hampshire, Delaware, Maryland, Virginia, and North Carolina did not receive any donated quota during this period.

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ME											
NH											
MA					75,000	15,000			75,000		50,000
RI			18,100		8,800		7,000	25,000	29,300	28,000	50,000
CT					24,799	30,000	47,000	73,000	84,000	25,000	15,000
NY					15,000				75,000	125,000	125,000
NJ			50,000		10,000				120,000		
DE											
MD											
VA											
NC											
Total	0	0	68,100	0	133,599	45,000	54,000	98,000	383,300	153,000	240,000

Table 8. Percent utilization factoring in all quota transfers by state and year, 2015-2025. Red boxes denote when less than 50% of a state's quota for that year was utilized. Yellow boxes denote when greater than 50% but less than 90% of quota was utilized. Addendum XXXIII was implemented beginning in 2022.

State	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
ME	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
NH	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
MA	121%	101%	101%	105%	100%	97%	96%	97%	100%	102%	99%
RI	98%	99%	95%	97%	98%	90%	97%	95%	100%	100%	97%
CT	111%	108%	106%	108%	104%	100%	85%	89%	98%	88%	101%
NY	98%	98%	104%	110%	113%	106%	103%	102%	99%	96%	95%
NJ	106%	95%	103%	99%	101%	96%	91%	95%	96%	98%	91%
DE	101%	72%	75%	98%	98%	66%	85%	91%	97%	130%	91%
MD	97%	96%	90%	97%	96%	65%	72%	68%	93%	63%	70%
VA	95%	102%	88%	86%	93%	47%	40%	51%	73%	45%	46%
NC**	99%	76%	86%	82%	97%	36%	30%	19%	86%	46%	66%

Figures

Figure 1. Percent utilization of quota by year (2015-2025) for each state, not considering quota transfers. North Carolina is North of Cape Hatteras.

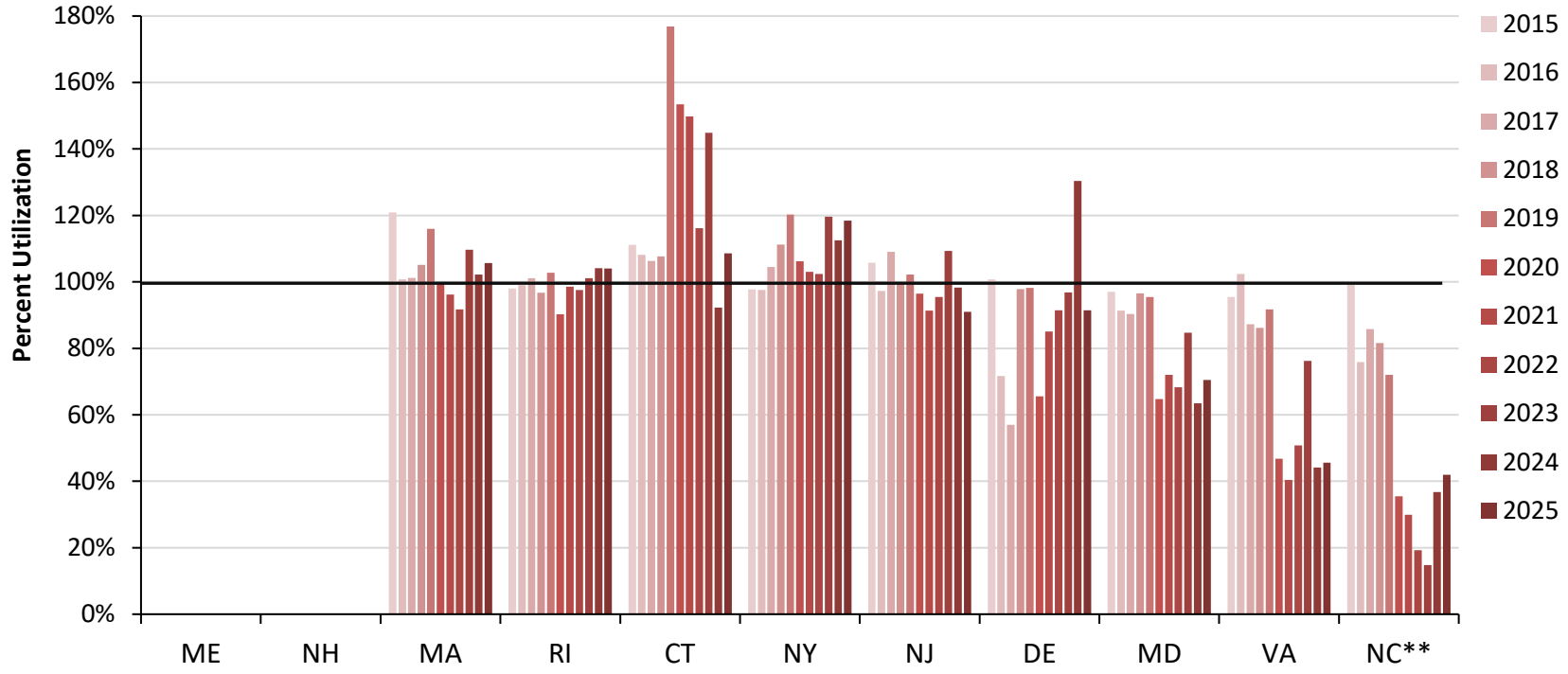
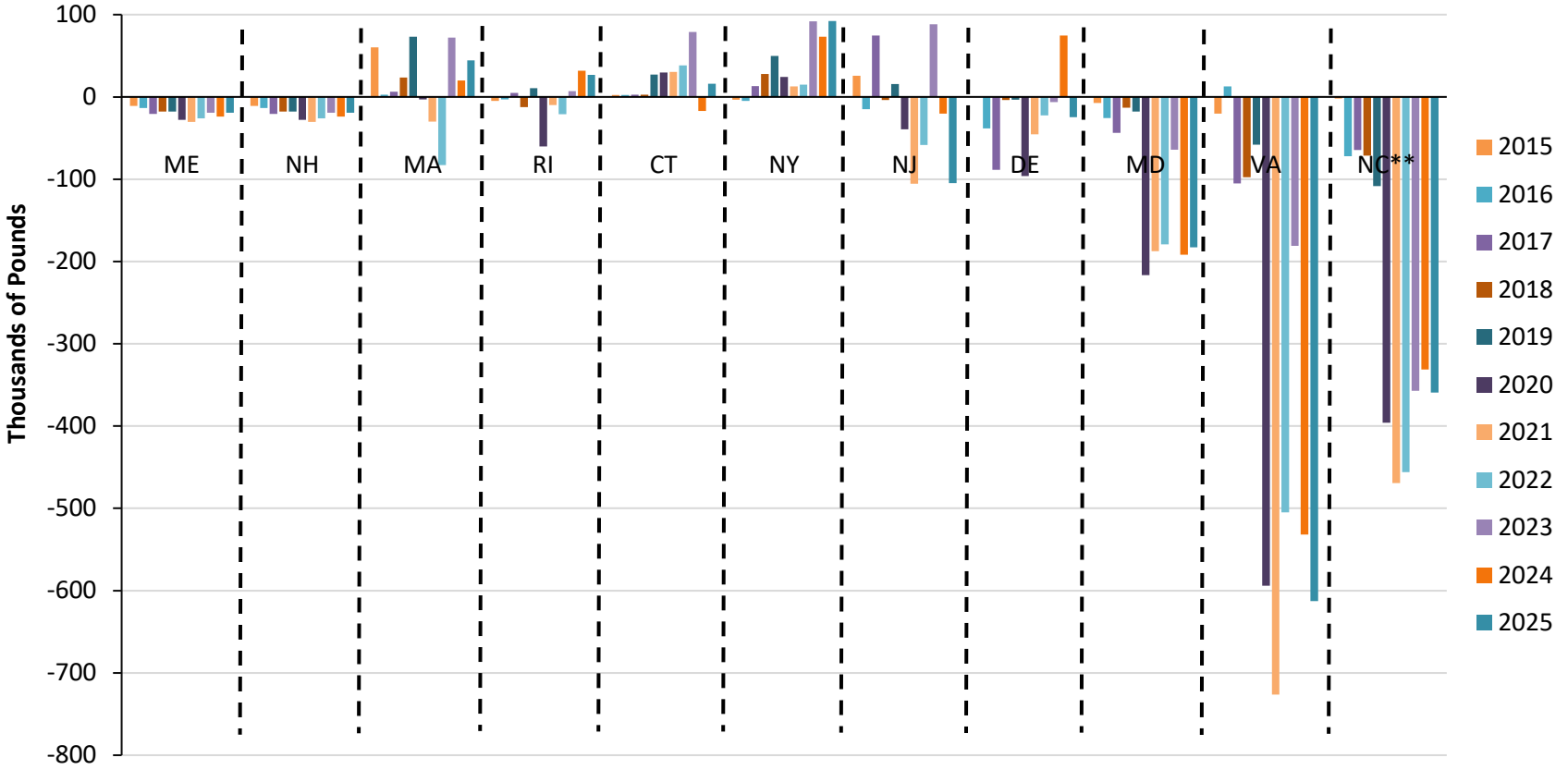


Figure 2. Overages (positive values) and underages (negative values) in thousands of pounds by year (2015-2025) for each state, not considering quota transfers. North Carolina is North of Cape Hatteras.



<u>Appendix 1</u>: Black sea bass commercial fishing regulations by state (ME-NC north of Cape Hatteras) in 2025, as reported in the compliance reports for Fishing Year 2025.

Maine

- 13-inch minimum size
- 50 lbs/day possession limit

New Hampshire

- 11-inch minimum size
- No possession limit

Massachusetts

- 12-inch minimum size

Fishery	Season	Open Days	Trip Limit
Winter – All Gears	Jan 1 – Mar 31	Sun – Sat	100 lbs
Weir	Apr 1 – Quota	Sun – Sat	No limit (24,000 lbs quota)
Trawl	Apr 23 – Quota	Sun – Sat	100 lbs
Fish Pot	Jul 1 – Sep 14/Quota	Sun – Thu	500 lbs
Fish Pot	Sep 15 – Quota[2]	Sun – Sat	600 lbs if ≥ 15% quota remains; otherwise 500 lb[1]
Hooks / Other	Jul 1 – Sep 14/Quota	Sun – Thu	250 lbs
Hooks / Other	Sep 15 – Quota[2]	Sun – Sat	300 lbs if ≥ 15% quota remains; otherwise 250 lb[1]

[1] In 2025, limits increased to 600 lbs for pot fishers and 300 lbs for hook/other fishers on September 15 because >15% of the quota remained.

[2] In 2025, the quota closure was effective October 21.

Rhode Island

- 11-inch minimum size

Season	Allocation	Possession limit
Jan 1 - Apr 30	15% of the quota	500 lbs per person and per vessel per week
May 1 - Jun 30	30% of the quota	100 lbs per person and per vessel per day
Jul 1 - Aug 15	22% of the quota	100 lbs per person and per vessel per day
Aug 16 - Sept 15	10% of the quota	100 lbs per person and per vessel per day
Sept 16 - Oct 15	10% of the quota	100 lbs per person and per vessel per day
Oct 16 - Dec 31	13% of the quota	100 lbs person and per vessel per day

Connecticut

- 11-inch minimum size

Effective Date	Trip limit
1/1/2025	1,250 lbs bi-weekly, 60 lbs by lobster pot
5/1/2025	225 lbs, 60 lbs by lobster pot
7/13/2025	300 lbs, 60 lbs by lobster pot
8/24/2025	500 lbs, 60 lbs by lobster pot
10/12/2025	1,500 lbs, 60 lbs by lobster pot
11/16/2025	3,000 lbs, 60 lbs by lobster pot
12/7/2025	5,000 lbs, 60 lbs by lobster pot

New York

- 11-inch minimum size

Period	Dates	% Distribution	Trip limits (lbs)
1	Jan 1 – Apr 30	10%	130 daily / 800 bi-weekly
2	May 15 – Jun 30	40%	180 daily
3	Jul 1 – Aug 31	25%	180 daily
4	Sep 1 – Oct 31	20%	180 daily
5	Nov 1 – Dec 31	5%	180 daily

New Jersey

- 11-inch minimum size

Period	Season	% Distribution	2025 Weekly Trip Limits	2025 Trip Limit Mods
1	Jan 1- Feb 28	21.96%	500 lbs x4 or 1,000 lbs x2 or 2,000 lbs x1	
2	Mar 1- Apr 30	20.9%	500 lbs x4 or 1,000 lbs x2 or 2,000 lbs x1	
3	May 1- Jun 30	16.53%	1,000 lbs x6 or 2,000 lbs x3 or 3,000 lbs x2	
4	Jul 1- Aug 31	9.1%	1,000 lbs x6 or 2,000 lbs x3	
5	Sept 1- Oct 31	13.53%	1,000 lbs x6 or 2,000 lbs x3 or 3,000 lbs x2	
6	Nov 1- Dec 31	17.97%	750 lbs x4 or 1,500 lbs x2 or 3,000 lbs x1	1,500 lbs x4 or 2,000 lbs x3 or 3,000 lbs x2

Delaware

- 11-inch minimum size
- Managed using individual fishing quotas
    - 96% of quota allocated to the black sea bass pot fishery and 4% allocated to the commercial hook-and-line fishery

    - Black sea bass landing permit holders assigned an equal share of the allocation for their particular fishery
    - Individual shares of pot fishery are transferable to other participants, with a maximum of 1 transfer per year per person allowed

Maryland

- 11-inch minimum size
- Managed using individual fishing quotas
    - Quota reallocated equitably among black sea bass landing permit holders based on proportion of the total black sea bass harvest allocated to the permit holder in the previous year
    - Permit holders may annually transfer up to 100% of their individual quota to another permittee; however, no individual can hold more than 20% of total fishery allocation
- Without a black sea bass landing permit, may not catch, possess, or land more than 50 lbs/day

Virginia

- 11-inch minimum size
- Commercial black sea bass bycatch fishery allocated 40,000 lbs of annual quota each calendar year
- Remaining quota managed using individual fishing quotas
    - A black sea bass directed fishery permit holder's ITQ=their percentage of the total landings of black sea bass in Virginia from July 1, 1997-December 31, 2001, multiplied by the commercial black sea bass directed fishery quota for the current calendar year
    - Transfers of a permit holder's ITQ allowed, any transfer must be greater than 200 lbs. No permit holder may hold more than 20% of the annual directed fishery quota.

North Carolina

- 11-inch minimum size
- 2025 harvest limits by fishery and season:
    - Trawl fishery:
        - 7,500 lbs per trip: January 1 to April 25
        - 5,000 lbs per trip: April 26 to October 31
        - 7,000 lbs per trip: November 1 to December 31
    - Fish pot and hook and line fisheries:
        - 3,000 lbs per trip: January 1 to December 4
        - 4,500 lbs per trip: December 5 to December 31
    - All other fisheries:
        - 100 lbs per trip: January 1 to December 31

<u>Appendix 2</u>: Complete list of quota transfers between 2015-2025. Reasons provided in quota transfer request letters, if a transfer was not for safe harbor, included to maintain an active fishery in that respective year, prevent mid-season closures, and prevent overages.

Quota Year	Date Approved	State From	State To	Amount (lbs)	Other
2015	2/4/2015	NC	NJ	342	safe harbor
2015	2/13/2015	NC	VA	167	safe harbor
2016	2/5/2016	NC	RI	238	safe harbor
2016	2/5/2016	NC	VA	1,540	safe harbor
2016	2/26/2016	MD	NJ	14,005	safe harbor
2016	3/8/2016	NC	NJ	45	safe harbor
2017	2/3/2017	NC	VA	115	safe harbor
2017	8/11/2017	NJ	NY	927	safe harbor
2017	9/26/2017	NJ	RI	1,239	safe harbor
2017	11/9/2017	VA	RI	9,335	safe harbor
2017	12/7/2017	ME	RI	18,100	
2017	12/22/2017	VA	MA	330	safe harbor
2017	12/22/2017	DE	NJ	50,000	
2017	1/3/2018	NC	VA	14,797	safe harbor
2018	2/27/2018	NC	MA	45	safe harbor
2018	10/16/2018	NC	NY	2,272	safe harbor
2018	1/7/2019	NC	VA	1,115	safe harbor
2019	5/8/2019	NC	VA	6,512	safe harbor
2019	8/22/2019	NH	CT	16,000	
2019	9/5/2019	ME	RI	8,800	
2019	9/5/2019	ME	CT	8,799	
2019	9/20/2019	NC	RI	7,094	safe harbor
2019	10/8/2019	NC	VA	297	safe harbor
2019	10/24/2019	NC	NY	15,000	
2019	10/25/2019	MD	NJ	1,870	safe harbor
2019	12/12/2019	VA	NC	7,030	safe harbor
2019	12/18/2019	NC	VA	2,971	safe harbor
2019	1/14/2020	VA	NJ	10,000	
2019	1/27/2020	NC	MA	75,000	
2020	2/11/2020	NC	VA	839	safe harbor
2020	6/2/2020	NC	MA	3,165	safe harbor
2020	6/29/2020	ME	CT	15,000	
2020	6/30/2020	NH	CT	15,000	
2020	11/2/2020	NH	MA	10,000	
2020	11/3/2020	ME	MA	5,000	
2021	5/10/2021	NH	CT	15,000	
2021	5/10/2021	ME	CT	15,000	
2021	8/1/2021	ME	CT	7,000	

Quota Year	Date Approved	State From	State To	Amount (lbs)	Other
2021	8/18/2021	ME	RI	7,000	
2021	9/21/2021	NH	CT	10,000	
2021	11/8/2021	VA	RI	790	safe harbor
2022	5/9/2022	ME	CT	15,000	
2022	5/11/2022	NH	CT	15,000	
2022	8/5/2022	NC	VA	5,000	safe harbor
2022	11/16/2022	MA	CT	25,000	
2022	11/16/2022	MA	RI	25,000	
2022	12/15/2022	NH	CT	10,000	
2022	12/15/2022	ME	CT	8,000	
2023	2/15/2023	VA	NJ	8,607	safe harbor
2023	5/15/2023	MD	VA	37,985	safe harbor
2023	6/14/2023	ME	CT	10,000	
2023	6/14/2023	NH	CT	16,000	
2023	6/26/2023	NC	RI	1,720	safe harbor
2023	7/26/2023	ME	CT	8,000	
2023	7/26/2023	NC	CT	50,000	
2023	7/31/2023	NC	NY	25,000	
2023	11/7/2023	ME	RI	1,100	
2023	11/7/2023	NH	RI	3,200	
2023	11/28/2023	NC	NY	50,000	
2023	12/5/2023	NC	VA	522	safe harbor
2023	12/8/2023	NC	NJ	120,000	
2023	1/11/2024	NC	NY	25,000	
2023	1/17/2024	NC	MA	75,000	
2024	3/14/2024	NH	CT	15,000	
2024	3/14/2024	ME	CT	10,000	
2024	5/14/2024	NC	NJ	3,920	safe harbor
2024	8/29/2024	NC	RI	29	safe harbor
2024	9/9/2024	NC	NY	100,000	
2024	11/8/2024	ME	RI	10,000	
2024	11/12/2024	NH	RI	8,000	
2024	11/12/2024	VA	RI	10,000	
2025	5/14/2025	NH	CT	15,000	
2025	5/16/2025	NC	MA	50,000	
2025	5/16/2025	NC	RI	50,000	
2025	5/16/2025	NC	NY	50,000	
2025	12/5/2025	NC	NY	75,000	