Atlantic States Marine Fisheries Commission

Sciaenids Management Board

May 6, 2025
10:15 – 11:45 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. Haymans)*	10:15 a.m.
2.	Board Consent • Approval of Agenda • Approval of Proceedings from February 2025	10:15 a.m.
3.	Public Comment	10:20 a.m.
4.	Red Drum Technical Committee Report (*E. Simpson*) **Possible Action** • Recommendations on Benchmark Stock Assessment Follow-up Tasks	10:30 a.m.
5.	Progress Update on Atlantic Croaker Benchmark Stock Assessment (*J. Kipp*)	11:40 a.m.
6.	Other Business/Adjourn	11:45 a.m.

The meeting will be held at The Westin Crystal City (1800 Richmond Highway, Arlington, VA; 703.486.1111) and via webinar; click here for details.

Sustainable and Cooperative Management of Atlantic Coastal Fisheries

MEETING OVERVIEW

Sciaenids Management Board
May 6, 2025
10:15 a.m. – 11:45 a.m.

Chair: Doug Haymans (GA) Assumed Chairmanship: 02/24	Technical Committee Chairs: Black Drum: Harry Rickabaugh (MD) Atlantic Croaker: Margaret Finch (SC) Red Drum: Ethan Simpson (VA) Spot: Harry Rickabaugh (MD)	Law Enforcement Committee Representative: Col. Matthew Rogers (VA)
Vice Chair: Ben Dyer (SC)	Advisory Panel Chair: Craig Freeman (VA)	Previous Board Meeting: February 4, 2025
Voting Members: NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS (10 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from February 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. Red Drum Technical Committee Report (10:30-11:40 a.m.) Possible Action

Background

- The Red Drum Benchmark Stock Assessment and Peer Review Report was approved for management use by the Scianeids Management Board (Board) in October 2024. The benchmark stock assessment indicated the southern stock is overfished and experiencing overfishing, while the northern stock not overfished and not experiencing overfishing.
- To evaluate potential paths forward for red drum management, the Board tasked the Red Drum Technical Committee (TC) with 1) calculating the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ as well as the projected timeline to reach the threshold and target SSBs under each F scenario; 2) clarifying interpretation of the "Moderate Action" outcome from the traffic light analysis and developing methods for estimating bag and slot size limit regulation change impacts on the northern stock.
- The Red Drum TC prepared a memo addressing the Board's tasks (**Briefing Materials**).

Presentations

- Presentation of Red Drum Technical Committee Report by E. Simpson

Board actions for consideration at this meeting

- Consider initiating an addendum for red drum

5. Progress Update on Atlantic Croaker Benchmark Stock Assessment (11:40-11:45 a.m.)
Background • Work on the Atlantic croaker benchmark stock assessment was initiated in early 2023. A Data Workshop was held virtually May 15-18, 2023. An Assessment Workshop was held virtually September 11-14, 2023. A sub-group of the Stock Assessment Subcommittee met biweekly in 2024 to discuss Atlantic croaker modeling progress.
Presentations • Stock assessment update by J. Kipp

6. Other Business/Adjourn

Sciaenids Management Board

Activity level: High

Committee Overlap Score: Moderate (American Eel TC, Cobia TC, Horseshoe Crab TC, Weakfish TC)

Committee Task List

- Atlantic Croaker and Spot SAS – Conduct Atlantic Croaker and Spot Benchmark Assessments
- Black Drum TC – Update indicators
- Atlantic Croaker TC – Gather data and assist with Atlantic Croaker Benchmark Assessment; Conduct Traffic Light Analysis
- Spot TC – Gather data and assist with Spot Benchmark Assessment; Conduct Traffic Light Analysis
- Atlantic Croaker TC/PRT – July 1: Compliance Reports Due
- Red Drum TC/PRT – July 1: Compliance Reports Due
- Black Drum TC/PRT – August 1: Compliance Reports Due
- Spotted Seatrout PRT – September 1: Compliance Reports Due
- Spot TC/PRT – November 1: Compliance Reports Due

TC Members:

Atlantic Croaker: Margaret Finch (SC, Chair), Tracey Bauer (ASMFC), Stacy VanMorter (NJ), Devon Scott (DE), Harry Rickabaugh (MD), Ingrid Braun (PRFC), Catherine Wilhelm (VA), Willow Patten (NC), Dawn Franco (GA), Halie OFarrell (FL)

Black Drum: Harry Rickabaugh (MD, Chair), Jeff Kipp (ASMFC), Tracey Bauer (ASMFC), Jennifer Pyle (NJ), Jordan Zimmerman (DE), Ethan Simpson (VA), Chris Stewart (NC), Chris McDonough (SC), Ryan Harrell (GA), Rebecca Scott (FL)

Red Drum: Ethan Simpson (VA, Chair), Jeff Kipp (ASMFC), Tracey Bauer (ASMFC), Samara Nehemiah (ASMFC), Alissa Wilson (NJ), Matthew Jargowsky (MD), Cara Kowalchyk (NC, Vice-Chair), Joey Ballenger (SC), Chris Kalinowsky (GA), Sarah Burnsed (FL)

***Spot*:** Harry Rickabaugh (MD, Chair), Jeff Kipp (ASMFC), Tracey Bauer (ASMFC), Samara Nehemiah (ASMFC), Stacy VanMorter (NJ), Devon Scott (DE), Ingrid Braun (PRFC), Catherine Wilhelm (VA), Willow Patten (NC), Michelle Willis (SC), Britney Hall (GA), Halie OFarrell (FL)

Plan Review Team Members:

Atlantic Croaker: Harry Rickabaugh (MD), Ingrid Braun (PRFC), Ethan Simpson (VA), Willow Patten (NC), Chris McDonough (SC), Tracey Bauer (ASMFC)

Black Drum: Jordan Zimmerman (DE), Chris Stewart (NC), Chris McDonough (SC), Tracey Bauer (ASMFC)

Red Drum: Matthew Jargowsky (MD), Ethan Simpson (VA), Cara Kowalchyk (NC), Joey Ballenger (SC), Matt Kenworthy (FL), Tracey Bauer (ASMFC)

Spot**:** Harry Rickabaugh (MD), Ethan Simpson (VA), Chris McDonough (SC), Dawn Franco (GA), Tracey Bauer (ASMFC)

Spotted Seatrout**:** Tracey Bauer (ASMFC), Lucas Pensinger (NC), Brad Floyd (SC), Chris Kalinowsky (GA)

SAS Members:

Red Drum: Joey Ballenger (SC, Chair), Jeff Kipp (ASMFC), Tracey Bauer (ASMFC), Angela Giuliano (MD), CJ Schlick (SC), Jared Flowers (GA), Chris Swanson (FL), Ethan Simpson (VA)

Atlantic Croaker and Spot: Jeff Kipp (ASMFC), Tracey Bauer (ASMFC), Samara Nehemiah (ASMFC), Harry Rickabaugh (MD), Brooke Lowman (VA), Trey Mace (MD), Margaret Finch (SC), CJ Schlick (SC)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

SCIAENIDS MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
Hybrid Meeting

February 4, 2025

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

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ATTENDANCE

Board Members

Joe Cimino, NJ (AA)
Jeff Kaelin, NJ (GA)
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 Lynn Fegley (AA)
Russ Dize, MD (GA)
Pat Geer, VA, proxy for Jamie Green (AA)
Chris Batsavage, NC, proxy for Kathy Rawls (AA)
Ben Dyar, SC, proxy for Blaik Keppler (AA)
Malcolm Rhodes, SC (GA)
Mel Bell, SC, proxy for Sen. Cromer (LA)
Doug Haymans, GA (AA)
Spud Woodward, GA (GA)
Marina Owens, FL, proxy for J. McCawley (AA)
Gary Jennings, FL (GA)
Ron Owens, PRFC
Frank Helies, NMFS

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

Ex-Officio Members

Ethan Simpson, Red Drum TC Chair
Joey Ballenger, Red Drum SAS Chair
Col. Matthew Rogers, LEC Representative

Staff

Bob Beal
Tina Berger
Tracey Bauer
Toni Kerns
Madeline Musante
Jeff Kipp

The Sciaenids 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, February 4, 2025, and was called to order at 1:30 p.m. by Chair Doug Haymans.

CALL TO ORDER

CHAIR DOUG HAYMANS: I will call to order the February meeting of the Sciaenids Management Board.

APPROVAL OF AGENDA

CHAIR HAYMANS: First of all, we need to take a look at the agenda. Hopefully, you have had a chance to review the agenda. Are there any additions? Seeing none; we'll approve the agenda by consent.

APPROVAL OF PROCEEDINGS

CHAIR HAYMANS: Secondly, we have two sets of proceedings. We had a webinar on October 3, followed by the annual meeting of October 24. Hopefully you've had a chance to read those word for word, and are there any changes to the proceedings? Seeing none; we'll consider those approved by consent.

PUBLIC COMMENT

CHAIR HAYMANS: It is now time for public comment on items not included on the agenda. Is there anyone in that beautiful audience back there that wants to comment? Seeing none.

UPDATE ON BOARD TASKS TO RED DRUM TECHNICAL COMMITTEE

CHAIR HAYMANS: We will continue to move forward, and that gets us to Jeff. Jeff is going to update us on the Technical Committee's reports and actions, and that is as of this past Friday. Let's sit up, pay attention, and listen to Jeff.

MR. JEFF J. KIPP: Just as a refresher, this is the Board Task up on the screen, and some additional guidance sought during the Commission's Annual Meeting back in October of last year. That original task included in the Board motion was, produce the static spawning potential ratio for a range of slot limits between 14 and 27 inches, associated with bag limits ranging from 0 to 5 fish per person, for the southern region and/or South Carolina, Georgia or Florida individually.

There was also some additional guidance requested verbally on the northern stock that included interpretation of the yellow traffic light results, and to determine if there are methods for providing estimates of bag and slot limit regulation change impacts on the northern stock, despite not having a Stock Synthesis model to provide projections.

On the TC's first call to address these tasks, the TC determined that the southern stock task could not be addressed in a reasonable timeframe without a narrower set of management options to consider. If you think back to that task that you showed, a combination of potential size limit changes across 13 inches of spread between minimum and maximum sizes, and six different bag limits resulted in potentially thousands of regulation combinations. The way the task read is that we would go through and determine what catch reductions each of those combinations would produce, and then we would have to run those projected catches through the stock assessment model, to estimate what those catches resulted in spawning potential ratio.

We did talk at the TC about identifying a small set of management options that each state was interested in considering. But the TC indicated that that set of management options could not be brought forth, particularly not knowing how they would impact SPR first. It was a little bit circular in this discussion.

It was also not clear from the motion if the management target identified in the FMP, which is SPR 40% was the goal or alternate SPR levels were acceptable to the Board or the target of the Board. In consultation with the TC, the Board revised the tasking. This came from the Administrative Commissioners from the southern stock states via e-mail.

The task was revised to determine the stock wide catch reduction necessary to achieve the management target of $SPR_{40\%}$, and regulation changes that will achieve the necessary catch reduction. It is sort of the reverse of how the task read initially from the Board. Here we're doing projections of the assessment model, determining the catch reductions needed to achieve the target SPR, and then going to catch reduction analyses with the potential management changes, to determine which of those meets that catch reduction needed.

The TC has met several times since the Board meeting in October. The TC met on November 7 of last year for their initial meeting to address the Board tasks. That is where they developed their request for Board guidance on the tasking, and it was also determined that from that point, despite not having guidance from the Board at that point, we could start working on catch reduction analyses and how those would be developed in the tools to support those.

We did form a working group to develop those methods and tools. That working group met twice, shortly after in November of last year, and then again, this past January to flesh out those methods and review the tools that were developed to apply those methods. Then the TC as a whole met again just this past Friday.

As part of that call, they reviewed catch reduction methods and tools proposed by the working group. They reviewed southern stock projections and discussed guidance on the northern stock items.

Just the details of these catch reduction analyses. The idea here is that the status quo catch that was observed at the end of the assessment time series will be adjusted according to a set of proposed bag, vessel and/or size limit changes.

You'll see that vessel limit is added there, although it was not captured in the original Board motion. But in discussions with the Technical Committee, we became aware that Florida had already implemented vessel limit changes since the assessment, and also some of the other states expressed some interest in considering vessel limits. That was added to these analyses as a potential management tool that might be changed.

Those catch adjustments that are made to the status quo catch will account for dead discards, due to shifting of harvest under a new, for example, a new bag limit to those fish now being released, and then an 8 percent discard mortality is applied to those new releases, which is consistent with the discard mortality used in the stock assessment.

Then at the end of the analysis the adjusted catch is compared to the status quo catch, to determine reduction in dead catch. That is going to be total removals including harvest and dead discards that result from the proposed regulations being put forth. The catch reduction analyses will use the MRIP data from 2018 through the 2021 fishing years as the status quo catch.

The Technical Committee decided on this because there were consistent management measures across states during those years, and so there are no impacts on changing regulations to the catch within those four years at the end of the assessment time period. The analyses are set up to account for additional documented mortality.

What I mean by additional documented mortality is both some observed noncompliance, where it appears in the MRIP data that anglers intercepted fish outside of the regulations on the books, but that could also include things like reported dead discards. When anglers go out, they get interviewed on their catch, and if they threw back a fish due to regulations and saw that it was dead, they could report that as a dead fish, and that technically gets counted as a harvest in the MRIP data. We're using this term "additional documented mortality" to capture both of those types of situations.

The TC reviewed and approved the methods and tools put forth by the working group, and will now

apply these to their data under the proposed regulation changes they are not interested in considering for their state.

One part that came up in these catch reduction analyses the TC debated for a while was the assumption of constant effort. That is a typical assumption in these catch reduction analyses, but the Technical Committee was concerned that there is pretty strong information that effort has been changing.

They did recommend putting forward some sensitivity analyses at the end of this process in the report that the TC puts together, and the intention of those would be to inform the Board of risk due to increasing efforts, and these three figures here just show the observed directed trips, that is trips that anglers indicated red drum are either the primary or the secondary target of that trip by states.

Sort of open circles projected through that observed timeseries in the solid line with circles, is just a linear extrapolation of that effort. The table below shows the change in effort projected into the future years relative to the effort observed in the 2018 to 2021 fishing years, and the percent increase for each of those states.

This is sort of the idea of the data that we would be using for the sensitivities, to give the Board some information on how these catch reduction analyses could shake out, if in fact effort continues to change. But I think the Technical Committee also provides the caveat here that although there are some pretty clean relationships looking into the past, effort is notoriously difficult to predict into the future, because of various factor that could impact that.

Then moving on from the catch reduction analyses to the projections. We'll use the stock synthesis assessment model that we used in the benchmark stock assessment, and we'll project the stock forward from the terminal year. The stock is projected until equilibrium catches are reached, and I'll show what that looks like on upcoming slides. Then we would compare the catch at the end of the projection period under the status quo F or the F at the end of the assessment time series, to the projected catch under an $F_{40\%}$ F level to determine the stock wide catch reduction needed to achieve that $F_{40\%}$ fishing mortality level.

That $F_{40\%}$, it's just the fishing mortality reference point that is associated with the $SPR_{40\%}$, the management target identified in the FMP. There ae a couple specifications for these projections needed. The first is recruitment, how are we going to specify recruitment into the future projection years?

The way this is done in the model is you take an average over a specified year range. The Technical Committee decided to use the full model time series that is used for management advice, which would be 1981 to 2021. The 2022 model estimates, they were made by the model. There were some partial 2022 data, but those 2022 model estimates were not recommended for status estimates.

On the right you can see the model estimated recruitment across the assessment time series in the open circles, and the black dash line shows the time series average from 1981 to 2021, which ultimately is very similar to the average recruitment from the terminal status years of 2019 through 2021, which is that short red dash line at the end of the time series.

The other specification needed is a fishing mortality level. There are two projections that are done here to get us the estimated catch reduction needed. The first projection is we're going to project the stock forward under the status quo F levels. Those status quo F levels are the average F estimated at the end of the assessment during the years we used for stock status, which is 2019 through 2021, and is a value of 0.526.

Then we do a second projection where we project the stock forward under a $F_{40\%}$ fishing mortality level, so that target fishing mortality level, and that

F level is the model estimated $F_{40\%}$ reference point of 0.301. The first figure at the top on the right shows those F levels that are used in the projection years to project the stock forward.

The orange is that status quo F, and then the black is the projection using the $F_{40\%}$ F level. That F has been partitioned amongst fleets in the model. The model includes three fleets, one for each of the three southern stock states. The F is partitioned amongst those fleets according to the relative F amongst those fleets in the terminal years of the assessment from 2019 to 2021.

That is what is shown in the lower right figure with the dashed line at the end of the time series for each state showing that relative F level that is used to project the Fs forward. Of note here, there were Florida regulation changes that occurred in September of 2022. These are not accounted for in the time series used for stock status determination. They kicked in immediately after the assessment time series used for management advice, which ends in August of 2022. The idea here is that Florida would get credit for those regulation changes that occurred after the assessment model time series by applying these catch reduction analyses to show what catch reduction they've already put in place with their regulation changes that occurred after the assessment.

This next slide shows some of the projected quantities. This is a 15-year projection, and up on the top right is the projected total removals from the stock across all three fleets. Again, this uses a constant F level in all of these years, and projects the stock forward under the two different fishing mortality levels.

You can see that there is an initial bump due to a large recruitment estimated in the model at the very end of the time series. As soon as that large year class works its way through the vulnerable part of the population, you can see that catch starting to settle in on an equilibrium. Ultimately, what we're using for the estimated catch reduction needed to get the stock back to an $F_{40\%}$ target fishing mortality level are the two data points at the end of the time series.

We're just comparing that higher catch under the status quo F to a catch produced under the lower F, according to the $F_{40\%}$ reference point. That is what gives us our catch reduction percentage down in that last bullet of 28.7%. That is the reduction you see from those two points to get from the status quo F to the $F_{40\%}$ level.

Below the catch plot is the full time series of spawning stock biomass estimates relative to the spawning stock biomass at 40%. The dashed line would show any time that spawning stock biomass is at its target level. You can see the response in the different projection scenarios, with the black being that lower reduced $F_{40\%}$ target level, where the spawning stock biomass begins to increase into the projection period, whereas, under the status quo F, that F continues to decline.

Those are the projections and then the catch reduction analyses that we've put together so far. For next steps here, the southern stock Technical Committee members will use the catch reduction analyses to determine proposed regulations that meet that specified percent reduction. The TC will meet again to review those proposed regulations from the Southern Stock TC members, and to finalize guidance on those northern stock items being sought from the Board.

Then a final report will be provided in meeting materials for the May Board meeting coming up in May. Maybe for discussion purposes here today, as the Technical Committee has been working through this, there have been a couple of points that have come up and have been debated a bit at the Technical Committee.

The first, and this would be helpful to have guidance on these items, so that the Technical Committee can complete their analyses and know what to package together into a final report for you all to see in May. The TC does recommend that that

additional documented mortality be accounted for in the catch reduction analyses. Again, this is going to be truly noncompliant fish that have been observed, and then also could potentially be observed dead discards to come through in the MRIP data. We're just curious if the Board does agree with that, or if they feel that this additional documented mortality should not be included in these catch reduction analyses, and we should do them as though compliance will be perfect into the future.

The TC recommends sensitivity analysis on changing effort on catch reductions, going back to the slide I showed earlier. Just to give the Board some information on risk, and how these catch reduction analyses could shake out if effort does in fact increase. Whereas for these sorts of baseline catch reduction analyses, the underlying assumption is that effort is constant. The Technical Committee is curious if this is something the Board would like to see in that final report.

Then sort of how to break up the percent reductions needed for the southern stock states. The TC would like to know if all states should aim for even catch reductions equal to that stock wide reduction estimated, or if they should collaborate to reach that stock wide reduction, so more of a collaborative process among the three states where that percentage could vary across the three states, but ultimately, at the end of the day, all three states collectively get to that reduction needed. That is what I have for an update, I can take any questions.

CHAIR HAYMANS: Mr. Batsavage.

MR. CHRIS BATSAVAGE: Thank you for the presentation, Jeff. A couple questions for the Board feedback questions you posted. I listened to the TC meeting for a little bit last week, I had to jump off. But I was wondering for kind of the size limit change analysis to get reductions, did the TC talk at all about just a very fast growth rate of red drum at that size, especially the lower end of the slot. At least in the northern zone they could grow up to an inch a month during times of year, and how that could offset any expected reductions that would be calculated, and after that I have an unrelated question, thanks.

MR. KIPP: The Technical Committee did not specifically talk about growth rates. I think the underlying assumption of those size limit change analyses that we put together are that essentially angler behavior doesn't change. They are going out, they are targeting the same sizes.

They are fishing at the same time of year, and so that those growth rates that are being experienced by the population that was caught in the 2020, 2021 years would be comparable to what they would catch into the future. That seasonality type of aspect would be the same or consistent, so those are the assumptions under that size limit change analyses.

MR. BATSAVAGE: In your presentation where you showed the projections for F of 40%, and recovering the stock, it looked like under the $F_{40\%}$ that the projections kind of just fall short of hitting the target biomass. Is it safe to assume that if the goal of the Board was to rebuild the spawning stock, we would need to come up with like an estimate of F rebuild, which would be a lower fishing mortality to meet that spawning stock biomass target, and therefore probably be a higher reduction, if I understand that correctly.

MR. KIPP: There would be the different level, potentially. If you wanted to use the same timeframe as what we have up here, 15 years, or it could be a longer timeframe at this current F level that is showing here, and it would just be a longer period for that SSB to hit that SSB target.

CHAIR HAYMANS: Ben.

MR. BEN DYAR: Can we go back one slide, just so I can ask a question. Documented mortality and talking about the noncompliance fish. You mentioned in a previous slide that we are going to

kind of look at maybe looking at a different way to phrase that or a different name. In this request, are we specifically talking about noncompliance fish or are we talking about both, the observed and the noncompliance as well?

MR. KIPP: We're talking about both here and it's a little tricky to partition those out. You could dive into the MRIP data further, and basically what MRIP reports are two types of harvest. There is A, which is available for the interviewer to actually see and confirm that it was harvested, and then there is B1, which are reported by the angler as dead. That could be anything from filleted at sea to observed dead, thrown back, they know it's dead, so they are not going to say that it was released alive.

You could partition the data out into what was actually brought back and landed and reported harvested, versus those B1s that are just reported dead. But it is kind of hard to further differentiate those, because there is not necessarily disposition reported with those. It could be all of them were filleted at sea, it could be some of them were and some of them were reported dead discards, or all were dead discards, and we don't know exactly how that would shake out.

It's a little tricky to partition all of that out. But what we're talking about here would be inclusive of both those B1 fish that were reported as dead, and then also true noncompliance, where there is information that suggests that maybe a number of fish well below the size limit were landed, and that is like a true noncompliance issue. It would be inclusive of both of those issues.

MR. DYAR: Thank you, I appreciate that. Follow up. I mean not to go down a rabbit hole. I don't know about, I'm not quite clear on Georgia or Florida, but I know in South Carolina they can't be filleted at sea. I don't know if that helps or not, or makes things more difficult. But I appreciate that. That was my secondary question is how difficult would it be, understanding it is how they are reported is the issue with how difficult it would be to separate those two.

CHAIR HAYMANS: I think we have Marina online. Marina, you are unmuted.

MS. MARINA OWENS: I wanted to say thank you to Jeff for putting this together. This was great, thank you so much. I wanted to ask, has noncompliance ever been used for other species when assessing catch reductions?

MR. KIPP: Yes, so I can offer one example and that is striped bass. For striped bass, you know going back into time different catch reduction analyses applied for striped bass have accounted for this sort of noncompliance issue. There are some nuances for striped bass where they have like bonus programs that some states or areas are allowed to retain fish that are sort of outside of the size limits that are more widely applied to the coast. In their noncompliance analyses it captures that, but also truly noncompliant fish, which there is some indication in other areas where there is true noncompliance. That is one example where another species accounts for noncompliance on the technical side of thing in these catch reduction analyses that then go to the Board.

MS. OWENS: Okay, thank you, that makes sense. Just wanting to make the comment about Florida's concerns with including noncompliance. You know we feel we should address noncompliance through enforcement and education, as opposed to potentially penalizing those anglers that do follow the rules. But I appreciate you answering my question, thank you.

CHAIR HAYMANS: Kipp, I also had concerns over the perceived recorded increase in effort. I mean that 33 percent increase, and that is the most recent three years that you used compared to the long term, right? That was how you achieved the increase.

MR. KIPP: That was the 2018 through 2021 years that we're using for the catch reduction analyses.

The average effort over that period compared to the extrapolated effort following that trend out into future years. That was compared to what we would get from expanding that relationship out to 2025 through 2028, taking the average over those years and comparing those.

CHAIR HAYMANS: Yes, and though I have no doubt that effort is increasing in the state of Georgia, I do know that two of those years were COVID years where effort went through the roof in Georgia, because hey, we stayed open and people were buying boats and going fishing, right. I'm a little hesitant to use increased effort based on those three years, because it does look pretty high. Ben.

MR. DYAR: In that same vein on effort that Doug is mentioning, is there any account for, because the timeframe for the projection's occurrence was 2018 to '22, is that correct, '21. With the MRIP noting some concerns with the FES projections, which started in 2018, if we were to extend that timeline of effort, I don't know if we were to see that increase during that same timeframe. Given those concerns, not to say that it's not important to utilize for use if trying to show some concerning trends or being cautious, but just wanted to throw it out there. I didn't know if that was something that was brought up within the TC and those discussions, and that would be a point of some concern.

MR. KIPP: Yes, so particularly the FES issue with MRIP was not really brought up amongst the TC and discussed. I think there was some comments from the Technical Committee that the relationship that we saw going back into earlier years, holding and looking relatively clean, gave them confidence that those effort data were capturing real changes that were happening.

I would just add that I think the Technical Committee's perspective here is that they would just put forward the impacts of the catch reduction analyses as sort of like a sensitivity and upper bound on what impact that could have to catch reductions, but that the catch reductions under a constant F or assumption would be sort of the baseline that they would recommend. I just wanted to add that comment.

MR. DYAR: Thank you very much, that has helped me.

CHAIR HAYMANS: Marina, your hand is still up. Do you have continued input, questions?

MS. OWENS: No, sorry, just a lingering hand.

CHAIR HAYMANS: Just trying to understand the next step. My TC member has already provided me with a use of the tool, right, 28.7 percent reduction, here is the possible creel, vessel, size. Are we expecting each of the three states TC members, if what I heard you say, the TC members will provide those reductions, those needs to you, and that will be a recommendation from the TC?

MR. KIPP: Yes, so they will report back to the Technical Committee, and ultimately the Technical Committee would include in their report a recommendation of, we believe these sets of management options from this state meet the necessary percent reduction or they do not, and this is what we think they need.

I think that would be the product provided from the TC, and we have not talked about specific stuff like what number of combinations we would be looking for from each TC member, whether it's one, a set of four. We have not gone into those details. But ultimately would be a report back of, these are the proposed regulation changes, these are the percent reduction in catch that they would achieve, and this compares to what is needed from the projections.

CHAIR HAYMANS: Forgive me for my lack of understanding of it. If that then comes back as a recommendation from the TC, then I as the state manager who has that TC representative working for him, has to go back, if I so choose, go back and refute or argue against whatever that

recommendation may be, if it's set for conservation equivalency purposes, if it refutes in any way the tool that was provided for them. Does that make sense?

The TC has developed a tool that our TC member can go back and develop these options. Well, here are a few options that he's got. I as the manager, may not want to use those, so that I've got to come back at this group with an equivalency request, as opposed to being able to do it on the front end. Am I missing it?

MS. TRACEY BAUER: Jeff, you can correct me if I'm wrong here, but I believe you can work with your TC member to propose options that Georgia is comfortable with, so the TC member does not have to operate in a vacuum.

CHAIR HAYMANS: Spud and then Chris.

MR. SPUD WOODWARD: If the TC generates the analyses that tell us what state-specific reductions need to be made to reach the target, 28%, how would we take those and combine them back together to address this third bullet here, if we wanted to collaborate to reach the reduction on a stock wide basis? They won't be additive. I mean it's not like, well, if Florida accounted for 50% of the 28%, then that means that South Carolina and Georgia have to come up with the remaining 50% or the 28%. How would we use those numbers to do what I think we will be doing is that third bullet? I think that is what we'll agree on, so how will the information they provide us allow us to do that?

MR. KIPP: I think we could look at magnitude of these catches. We could add those together across states, and determine if it hits that 28.7 percent, even though each state might have something that is different than 28.7 percent. We can take those catches that generated their percentage at their state level, and add those catches up on both the status quo level and then on the adjusted level, and calculate a coastwide reduction percentage, to see if it matches that.

For example, you know if the states got together, the three states got together, and they were all comfortable with the set of regulations within their own state that achieve different percentages than that 28.7 percent. But when you add up those catches across states and look at them compared to those status quo catches before those regulation changes. If it hits that 28.7% that would be on target collectively across the stock.

CHAIR HAYMANS: Spud, continue?

MR. WOODWARD: Basically, it's kind of like a weighting process, to make sure that they are weighted appropriately, that the reductions are weighted equally to the contribution to the fishing mortality. Right? Okay.

MR. KIPP: Yes, exactly.

MR. BATSAVAGE: I'm going to provide some Board feedback, Doug, just thinking about the next steps you were discussing. This is probably to Tracey, I think I know the answer, but when we come back here in May with this information. In order to move forward through the FMP, then the Board is going to need to take action to initiate either an addendum or an amendment to actually get this into the plan, am I correct on that?

MS. BAUER: I believe so, yes.

MR. BATSAVAGE: All right, thanks, definitely more steps on the way. Yes, since the Board feedback is keyed up here, I think trying to estimate future effort is problematic. I think for the TC to assume that effort could increase, either through more people fishing or just the existing gear and technology getting even better than it is right now, which is way better than it was 20 years ago, should be probably considered when we ultimately decide what management to make.

But trying to have a linear relationship is really hard, especially for a fish like red drum, where effort is driven by availability, and you get these pulses of

good year classes coming through. Then everyone is a red drum fisherman, and then you go back to normal our below average year classes, and it's really just the diehard drum fishermen fishing.

To the top bullet, regarding a documenting undersized, oversized fish, and the reductions are accounted for. Yes, I fully support that, Jeff, you mentioned that has been done for striped bass. I know it's been done for summer flounder. It's, regardless of how much enforcement and education and outreach you may have, you are always going to have undersized or oversized fish, and some people are nice enough to let the MRIP folks measure them, so we can document it. We make a lot of enforcement cases on oversized and undersize and over the bag limit fish. I think it's the cleanest way to do this, and make sure we meet the management goals through these reductions is to account for it at this level.

CHAIR HAYMANS: Before you, Spud, I do know that there was concern, at least from my APAIS person, right. We're measuring fish in fork length, and there may be some estimation there or some calculation errors there, as well as and they also measure in millimeters, when we get to the upper end.

In other words, when I look at 13-inch fish in Georgia, I'm like 7% of our harvest was from illegal fish in a 13-inch bin. But there is concern from our APAIS member that that may not be necessarily the case. It may be that rounding error. I'm a little cautious to necessarily use all. To that point, Chris.

MR. BATSAVAGE: Yes, to that point. That is a good point, Doug. I listened to that part. But thinking about, since there is a slot, we have a lot of fish that are measured in fork length through our APAIS sampling, right at 27 inches, which total length is going to put it at 28 plus, which is oversized, so you kind of get that uncertainty with fork length total length on both ends, which basically shows you are getting fish that are harvested outside of the slot limit.

CHAIR HAYMANS: Spud.

MR. WOODWARD: Yes, just to follow up on that theme. We've been grappling with this. I mean we measure in millimeters and manage in inches, you know, and it just creates this ongoing predicament of how to deal with the uncertainty that that creates. Then the thing about this that also troubles me is the self-reported dead discards, and the fact that they are not validated, they are self-reported.

You're counting on a fisherman to give you an accurate determination of the status of that fish, when it may have gone in the water and been temporarily stunned, but it was perfectly fine later on. But you're just kind of categorically counting those as dead fish. You also are not getting length measurements on them.

How do you assign them to a size and age category? It layers another level of uncertainty for a species where we've always struggled with a high degree of uncertainty. Unlike striped bass, where at least you're getting some harvest of larger fish. You know we're crossing these fish off at juvenile ages.

I don't know that I just totally oppose that, but it gives me great concern when you see those estimates generated by a very low number of intercepts. All it takes is the typical thing we see with MRIP, with one intercept, boom, it blows up and you have a disproportionate impact on mortality.

CHAIR HAYMANS: Marina, I've got you coming up, just hold one second. Kipp, looking at reported dead discards versus calculated dead discards, versus the mortality rate, you use the mortality rate against everything that was just released. Did you look at which was greater?

MR. KIPP: Well, we don't have like a fraction of those reported discards that die and don't die, so it's either an angler will report and say, I threw a

fish back, it was dead, so it should be counted as harvest. Those are those B1s, and then we have those B2s, which we have the total number that anglers said, these were all released alive. Then we used some rate from published literature or other sources to say, we think after this fish swims away from the boat, this number of them are going to die.

We don't have sort of that comparison to make from those B1 fish. We don't know what the starting number of fish that they would be releasing, and then what proportion of those that die to compare to that assumed rate.

CHAIR HAYMANS: Because to Spud's point, not necessarily knowing whether the fish lived or died, it just floated away. It would seem to me that if you applied the 8% accepted mortality rate across the board to releases, you would get a lower total number of dead discards. But backwards way of thinking, maybe.

MR. KIPP: I could add to it. You know there is something that the TC could do. The TC could further dive into these data, and determine what proportion of the harvested fish were reported as B1s as opposed to Type A fish, that were seen at the dock as confirmed harvest. I don't have those numbers off the top of my head.

That is something that we could dig into, just to provide the Board more information as to how many of these fish may be accounted for through this B1 sector, this reported dead for some reason. I heard the comment that, you know you can't fillet them at sea. I don't know the full list of dispositions that might make up.

But I don't know if that is the only other disposition is, if it's a B1 and it's a red drum, does that mean that it was discarded dead, or is there some other reason that accounts for that B1. I would have to look into those details further. But that is something we can provide, is that how many of those B1 fish are in these datasets, to have some better confidence about what of those were reported harvest and what of those were actually seen as harvested fish.

CHAIR HAYMANS: Marina.

MS. OWENS: Yes, I just again wanted to reiterate the concerns with the uncertainty with MRIP estimates. As Jeff mentioned, Florida has recently made management changes to address stock concerns, so we have had the benefit of ground truthing these catch reductions. The model, as you mentioned, estimates a 16.8% reduction or 14% with noncompliance.

With our regulation changes that went into effect, the data two years post regulation changes Florida has actually realized a 21.6% catch reduction. This kind of makes it seem like the model is already conservative enough, without adding the noncompliance, and we feel that the noncompliance is overly conservative compared to what reality is actually showing, and what we've actually seen in our trends.

MR. KIPP: Yes, thanks for that. I would just add the comment that yes, Florida is in a unique situation, as opposed to the other states, because they do have these observed catches post assessment model. There is two years of data. I would just note that there are other factors going into those realized catches.

There are things like variability and year class strength that are going to lead to different catches, whereas these catch reduction analyses basically are assuming sort of a constant recruitment, to generate what those catch reductions would be. That is one distinction to keep in mind with the sort of realized data, and with these catch reduction sort of simulations that are done.

CHAIR HAYMANS: I know that 28.7% number caused a lot of consternation in the southeast corner this past Friday through the weekend. There had been some discussion about additional request for the TC. Is anybody interested in discussing that? Marina or Ben? If not, Marina, you have your hand up still?

MS. OWENS: Yes, I would like to make a motion if now is the time for that. Again, I want to thank ASMFC staff for putting this together, and Jeff, everything was very well done, thank you so much.

But I would like to make a **motion to direct the TC to calculate the catch reduction needed for the southern stock to fish at an F of 30%, 35%, and 40%, just to see what those differences would be, and as well as the projected timeline to reach the threshold and target SPRs associated with each of those F scenarios. We would also like to not incorporate effort trends or incorporate noncompliance.** As I've reiterated a couple times with that as well.

CHAIR HAYMANS: Okay, so I think we captured that, Marina. Do you see it there on your screen? Can you verify that that is what you're asking for?

MS. OWENS: Yes, I can see it. Yes, that looks good, thank you.

CHAIR HAYMANS: Before I ask for a second, Kipp, you wanted to get some clarification.

MR. KIPP: Yes, I just wanted to clarify some of the language here. It reads that we're looking for the timeline to reach the threshold and target SPRs. I just wanted to clarify that in these projections, when we set an F level and project the stock under a specified F level, we are setting the SPRs. When we set that F at that $F_{40\%}$ F level, we are setting the stock to be fished at a level that gives us SPRs of 40%, that target level.

I think what this shows, maybe what the intention here is, to identify the timeline to reach the threshold and target SSBs, like what I showed on that figure a little bit earlier. You see that response when you project the stock forward under a constant F, you see what the response in that SSB is, and how it either approaches or moves away from the target SSB level. I just wanted to clarify and make sure that that was the intent.

CHAIR HAYMANS: Marina.

MS. OWENS: Yes, that sounds good, you interpreted that good.

CHAIR HAYMANS: Okay, we have a motion, is there a second? Spud. Any additional discussion on the motion? Ben.

MR. DYAR: I actually would like to make an **amendment to this motion**.

CHAIR HAYMANS: Go ahead.

MR. DYAR: The motion can read as follows. For the first sentence, I don't know if I need to read the whole thing again, I think it's keyed up well. I'll read it. **Direct the TC to calculate the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$, as well as the projected timeline to reach the threshold and target SSB under each F scenario. These analysis should not incorporate effort trends and should include the F calculations of noncompliance fish, as well as calculations excluding noncompliance fish.**

CHAIR HAYMANS: You basically, we're going to not include effort, but do look at it both with noncompliance and compliance.

MR. DYAR: That is correct.

CHAIR HAYMANS: We'll look at Kipp as he's reading it, to see if it makes sense to you.

MR. KIPP: Yes, the only thing I would look for clarification on here is where it says should include in the F calculations. I think that is intended to read something like, should include in, I think you could leave it as just should include in calculations noncompliance fish, because we're calculating catch reductions and not Fs.

CHAIR HAYMANS: Are you good with that, Ben, I see a shaking of the head, **so remove the F.**

MR. DYAR: Yes, that's fine, I apologize. When you have 30 or 35, yes thank you, I appreciate that.

CHAIR HAYMANS: Okay, does everybody understand the amended? Is there a second? Chris Batsavage, thank you. Any additional discussion on the amendment? Marina, does that cause you any concern as the maker of the main motion, before I ask for a vote on the amended?

MS. OWENS: No, we're good with that amendment. That sounds good, thank you.

CHAIR HAYMANS: Okay, Ben, go ahead.

MR. DYAR: I did have a question, and Jeff, you brought it up, about potentially diving into looking at the differences between A and B1s. Would that need to be included in some way, or is that kind of verbally? Again, I don't know what that amounts to or the task there.

MR. KIPP: Yes, I think verbally, since it's on the record, we can take that back to the TC, and that would be enough.

CHAIR HAYMANS: All right, any other discussion on the amendment to the motion: Seeing none**; all those in favor, is there any opposition? Seeing none; we will consider the amended motion the main motion,** and I'm going to piece it together now.

It should read, **Direct the TC to calculate the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$, as well as the projected timeline to reach the threshold and target SSBs under each F scenario. These analyses should include in calculations noncompliance fish, as well as calculations excluding noncompliance fish.**

Is there any additional discussion? Is there any opposition? Seeing none; the motion carries. Kipp, is there anything else that we should expect, or will we hear from the TC before we get to May?

MR. KIPP: Nothing else from the TC to the Board, I don't think at this point. I think we're good on guidance. I think there will probably be at least two full Technical Committee calls between now and May, so just an FYI on that. But I think we're good right now.

CHAIR HAYMANS: I'll ask sort of a procedural question. That back corner, we pretty much chat on a regular basis, right. We talk between the states a good bit. I assume that there is not a formal Commission process that we need to go through, in order for us to talk about what are those options, we work amongst ourselves to come up with the solution.

It's not a full process, right? Bob is shaking his head no, so I take that as good. Anything else on the TC report? Jeff, I can't appreciate enough what you've all done at this point. I was hoping we'd have it full by February, then we heard May. But now you've come back with an awful lot by February, so I appreciate that very much.

ELECT VICE-CHAIR

CHAIR HAYMANS: All right, Item Number 5, we need a Vice-Chair. Do I see a motion from Mr. Woodward?

MR. WOODWARD: Yes sir, Mr. Chairman, **it is my honor to nominate Ben Dyar from the Palmetto State as Vice-Chair.**

CHAIR HAYMANS: Excellent, is there a second? Oh, Mr. Cimino, thank you very much, sir, appreciate that. Is there any opposition? Well, is there any discussion on this? **Is there any opposition? Seeing none; congratulations, Mr. Dyar**.

ADJOURNMENT

Mr. Executive Director, thank you very much for getting us moved up. I think we used the hour and giving back 15 minutes extra, so I appreciate it. Is

there any other business? We are adjourned, thank you.

(Whereupon the meeting adjourned at 2:24 p.m. on Tuesday, February 4, 2025)

Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: **Sciaenids Management Board**

FROM: **Red Drum Technical Committee and Stock Assessment Subcommittee**

DATE: **April 21, 2025**

SUBJECT: **Red Drum TC/SAS Report on Board Tasks as Follow-up to 2024 Benchmark Assessment**

Summary

Task 1: Calculate the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ as well as the projected timeline to reach the threshold and target spawning stock biomasses (SSB) under each fishing mortality (F) scenario.

- The TC/SAS conducted projections of the Stock Synthesis (SS) assessment model to calculate the stockwide catch reductions necessary to reduce *F* from the average of the final three years of the stock assessment (2019-2021) to lower levels requested by the Board ($F_{30\%}$, $F_{35\%}$, and $F_{40\%}$).
- The TC/SAS also developed a methodology to estimate catch reductions achieved by changes to slot size limits, bag limits, and/or vessel limits with two different assumptions about angler compliance with regulations. This catch reduction analysis was applied to Florida data to estimate reductions already achieved from regulation changes following the stock assessment.
- Projections indicate the requested *F* scenarios of $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ would require stockwide catch reductions of 14.4%, 21.4%, and 28.1% from catches under the 2019-2021 average *F* level, respectively. *SSB* was only projected to reach the target in the $F_{40\%}$ scenario with a timeline of 32 years. *SSB* was projected to reach the threshold in the reduced *F* scenarios ranging from 23 years in the $F_{30\%}$ scenario to 5 years in the $F_{40\%}$ scenario. *SSB* was projected to remain below the target and threshold with 2019-2021 average *F*.
- Under a perfect compliance assumption, Florida's catch reduction from regulation changes following the stock assessment was estimated to be 16.8%. Incorporating additional mortality from potential noncompliance, the estimated average catch reduction was 14.9% (range of 12.8% to 15.2%). These catch reductions would result in a stockwide catch reduction of 9.3% and 8.3%, respectively, if other southern stock states were to maintain their current regulations.

Task 2: Discuss how to interpret the TLA result of "Moderate Action", as well as methods for estimating regulation change impacts for the northern stock.

- The TC/SAS concluded an investment by the northern stock states to improve the quantity and quality of their monitoring efforts, adherence to status-quo regulations, and a Traffic Light Analysis (TLA) update between assessments would all constitute "Moderate Action". The TC/SAS do not recommend specific regulatory changes in response to a "Moderate Action" result.
- The TC/SAS recommend using the same bag, vessel, and slot size catch reduction methods as those developed for the southern stock if the Board wishes to estimate catch reductions of regulatory changes for the northern stock. However, if estimated stockwide catch reductions associated with specified *F* scenarios are desired, a method to estimate these reductions would also need to be identified given that the TLA is a qualitative tool and does not have the same projection functionality as the SS model used for the southern stock.

Background

The 2024 Red Drum Benchmark Stock Assessment and Peer Review Report (ASMFC 2024) were presented to the Sciaenids Management Board (Board) at the 2024 ASMFC Annual Meeting and subsequently approved by the Board for management use. The assessment indicated the southern stock (South Carolina through the east coast of Florida) is overfished and experiencing overfishing, while the northern stock (New Jersey through North Carolina) is not overfished and not experiencing overfishing.

Stock status for the southern stock was determined using a Stock Synthesis model (SS; Methot et al. 2023), which estimates fishing mortality (*F*), annual spawning potential ratio (*SPR*), and spawning stock biomass (*SSB*). Reference points previously established in Amendment 2 to the Red Drum Interstate Fishery Management Plan (FMP) include $F_{30\%}$ and $SPR_{30\%}$ as overfishing thresholds and $F_{40\%}$ and $SPR_{40\%}$ as fishing mortality targets (ASMFC 2002). *SSB* reference points had not previously been defined for red drum but were recommended during the 2024 benchmark assessment as the *SSB* produced when fishing at the overfishing threshold (i.e., $SSB_{30\%}$, *SSB* threshold) and the fishing mortality target ($SSB_{40\%}$, *SSB* target). Stock status determinations are based on terminal three-year (2019-2021) averages of *F, SPR,* and *SSB* relative to these reference points. Terminal age-2 *F* (0.526) was above the *F* threshold (0.396) and *F* target (0.301), while *SPR* (0.207) was below the *SPR* threshold (0.300) and *SPR* target (0.400). In addition, the stock is below the *SSB* target (13,250 mt) and *SSB* threshold (9,917 mt) with a terminal *SSB* of 8,737 mt. These stock status determinations need to be addressed through regulatory changes to return the stock to a favorable stock status.

The appropriateness of the *SPR* reference points for red drum has been evaluated by the Red Drum Technical Committee (TC) and Stock Assessment Subcommittee (SAS) in the past. In May 2016, the Red Drum TC/SAS was tasked, in part, by the Board to "investigate whether the current biological reference point for overfishing ($SPR_{30\%}$ threshold) is appropriate given the species' long life history." After a literature review, the TC and SAS concluded that spawning

potential ratios, including the current threshold (30%) and target (40%), are appropriate metrics for red drum management. Reference points were evaluated again according to a term of reference of the 2024 stock assessment and peer review and the SPR reference points were again endorsed for red drum by the TC, SAS, and Peer Review Panel.

The northern stock uses a Traffic Light Analysis (TLA) to determine stock status with reference points established in the 2024 Red Drum Benchmark Stock Assessment. Reference points consist of specified color proportion thresholds and number of years. Red drum adult abundance (via fishery-independent surveys) and fishery performance (calculated as fishery harvest divided by abundance of slot-sized fish) metrics were used to determine overfished and overfishing stock status, respectively.

Annual metric color results (proportions of green, yellow, and red) from the TLA are tabulated across consecutive years, including the year of interest and a number of preceding years. The number of proceeding years is dependent on the metric and stock being evaluated. These tabulated metric summaries are colored according to the most favorable annual metric result across the years being summarized and are used to assess stock status. For example, fishery performance is tabulated over 7 years in the northern stock and, if the TLA proportion red in all seven individual years exceeds the color threshold set for this metric, the tabulated metric summary for the final year is red. If the TLA proportion red does not exceed the color threshold in at least one of the 7 years but the proportion yellow does, the tabulated metric summary for the final year is yellow. Lastly, if neither the proportion red or yellow for any of the 7 annual metric results exceeds the color threshold, the tabulated metric summary is green. To maintain consistency between the TLA stock status determinations and the SS stock status determinations, the TLA identified an overfished or overfishing status if tabulated metric summaries for any of the last three years of the assessment were red. As with the SPR reference points used with SS model results, the TLA reference points were endorsed as proxies for red drum by the TC, SAS, and Peer Review Panel.

The northern stock's TLA tabulated metric summaries for the fishery performance and adult abundance metrics were yellow and green, respectively, for each of the last three years of the assessment (i.e., 2019, 2020, or 2021). However, the TLA also showed increased occurrence of yellow and red annual metrics in recent years for adult abundance and fishery performance, indicating the northern red drum stock may be experiencing unfavorable trends for both metrics that may need correction with regulatory changes if they continue into the future. Additionally, yellow TLA tabulated metric summaries were assigned the terminology "Moderate Action" in the stock assessment report, but details on the meaning of this terminology were not provided.

Following approval of the 2024 Red Drum Benchmark Stock Assessment and Peer Review Report for management use, the Board tasked the Red Drum TC and SAS to conduct several analyses related to the southern and northern red drum stocks to assist with determining next steps.

1. Calculate the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ as well as the projected timeline to reach the threshold and target *SSBs* under each *F* scenario. These analyses should not incorporate effort trends and should include alternative analyses with and without noncompliance assumptions.[1]
2. Discuss how to interpret the TLA result of "Moderate Action", as well as methods for estimating regulation change impacts for the northern stock.

The Red Drum TC/SAS met to discuss these tasks on November 6, 2024, January 31, 2025, and March 6, 2025. A Catch Reduction Sub-Group of the TC/SAS met on November 20, 2024 and January 13, 2025 to develop the methodology for calculating the catch reductions.

As a reminder, throughout this memo, "year" refers to a fishing year of September 1 of calendar year "y" through August 31 of calendar year "y+1".

Task 1: *Calculate the catch reduction needed for the southern stock to fish at $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ as well as the projected timeline to reach the threshold and target SSBs under each F scenario. These analyses should not incorporate effort trends and should include alternative analyses with and without noncompliance assumptions.*

Projection Methodology

A series of stock projections were conducted for the southern stock to address the Board's first task. The SS forecast feature was used for projections. This is the internal projection feature of the modeling platform used in the benchmark stock assessment and uses population dynamics equations consistent with those used to estimate stock status. Projections use specified forecast fishing mortality levels and recruitment to project the stock in the terminal year of the assessment forward for a user-specified number of years. Here, some initial testing was done to determine the forecast period necessary for spawning stock biomass to reach equilibrium in all projection scenarios, which found that 40 years was sufficient. All projections used the same recruitment specifications which are the recruitment levels expected from the model stock-recruitment relationship given the spawning stock biomass level at the time of spawning. Due to uncertainty about this relationship and lack of data to estimate it, this relationship essentially simplifies to a constant average recruitment level expected across spawning stock biomass levels, except for when the spawning stock biomass has crashed to very low levels near zero which does not occur in the assessment or projection time series.

[1] The initial motion by the Sciaenids Management Board (Board) at their October 2024 meeting read: "Motion to request the Stock Assessment Subcommittee/Technical Committee to produce the static spawning potential ratio for a range of slot size limits (between 14" and 27") associated with bag limits ranging from 0 to 5 fish per person for: (a) the southern region and/or (b) SC, GA, FL individually." However, after some initial discussion, the TC/SAS determined this analysis would not be possible. At the February 2025 Board meeting, a second motion was passed, as seen here. Further discussion with the southern states Administrative Commissioners provided clarification that this motion was intended to replace the October 2024 motion.

The goals of projections were to (1) determine stockwide catch reductions necessary to reduce fishing mortality from the average of the final three years of the stock assessment time series (2019-2021) when the stock was declared to be experiencing overfishing to lower levels requested by the Board ($F_{30\%}$, $F_{35\%}$, and $F_{40\%}$) and (2) determine the number of years under these lower levels of fishing mortality necessary to reach spawning stock biomass reference points within 0.5%[2]. Catch was calculated as total fishery removals from all fleets including harvest and dead discards (8% of live releases calculated using the same discard mortality rate used in the stock assessment). First, a baseline projection was completed projecting the population under the 2019-2021 average fishing mortality used for stock status determination (Table 1, Figure 1) to determine equilibrium catch levels expected under status quo fishing mortality. Fishing mortality was partitioned among the three state-specific fleets in the model according to average estimated contributions during the final three years of the assessment. Secondly, a projection was completed with the population projected under each lower fishing mortality scenario requested by the Board. Fishing mortality was partitioned among fleets in each of these projection scenarios as it was in the baseline projection. The final step was to compare the catch from the baseline projection to catch under each lower fishing mortality scenario projection in the final year of the forecast to determine the precent reduction in catch needed to move fishing mortality from the 2019-2021 average to the lower specified level using the following equation:

$$Percent\ reduction = \frac{\overline{2019\ through\ 2021\ F}\ Catch_{y40} - Lower\ F\ Scenario\ Catch_{y40}}{\overline{2019\ through\ 2021\ F}\ Catch_{y40}}\ x\ 100$$

Florida made regulatory changes immediately following the stock assessment time series (September 2022), so the impacts of these changes are not accounted for in the stock assessment or projections. These changes are expected to have changed selectivity estimated in the stock assessment, so impacts of these regulations were estimated through bag and vessel limit catch reduction analyses instead (see the next section). Additionally, these projections do not explicitly make any assumptions about effort change or compliance with regulations. Rather, they just provide expected equilibrium catch levels under specified fishing mortality levels that can be compared across scenarios to determine relative catch changes. Impacts of effort changes and/or non-compliance with regulations are evaluated with bag, vessel, and size limit catch reduction analyses.

Projection Results

Catches vary in the first few years of the projections (Figure 2) due to varying year class strengths in the stock during the terminal years of the assessment, including a well above average 2022-year class. This above average year class leads to an initial increase in catches. As

[2] The tolerance of 0.5% for spawning stock biomass rebuilding calculations is due to the asymptotic nature of projections. For example, projecting the stock at $F_{30\%}$ would project the spawning stock biomass to approach an asymptote equal to the $SSB_{30\%}$ threshold, but never actually meet or exceed this asymptote. If specified rebuilding timeframes and/or years to meet or exceed that exact reference point level is desired, fishing mortality levels necessary to achieve these specifications can be determined during next steps.

this year class ages out of the slot and migrates offshore, subsequent average recruitment levels lead to catches and spawning stock biomass hitting equilibriums (Figure 3). Once catches have reached equilibrium levels, projections indicate the requested fishing mortality levels of $F_{30\%}$, $F_{35\%}$, and $F_{40\%}$ would require catch reductions of 14.4%, 21.4%, and 28.1% from catches under the 2019-2021 average fishing mortality levels, respectively (Table 1). Spawning stock biomass reaches threshold levels more quickly under lower fishing mortality levels, ranging from 23 years under $F_{30\%}$ to 5 years under $F_{40\%}$ (Table 1). The population is not projected to reach the spawning stock biomass target under the two higher fishing mortality scenarios (i.e., $F_{30\%}$ and $F_{35\%}$), as it reaches an equilibrium at spawning stock biomass levels associated with the specified fishing mortality level (e.g., $SSB_{30\%}$ when fished at $F_{30\%}$). Spawning stock biomass is projected to reach the target after 32 years of fishing at the $F_{40\%}$ level. Spawning stock biomass is projected to decline further from the terminal year estimate and remain well below the target and threshold levels under long-term equilibrium conditions if the 2019-2021 average fishing mortality is maintained. It is important to note that if reduced spawning potential (i.e., spawning stock biomass consistently lower than the threshold) leads to lower-than-average recruitment estimated during the stock assessment time series, declines in spawning stock biomass would be more pronounced.

Only a single projection was done for each scenario to understand reductions and rebuilding timeframes under average, equilibrium conditions. Additional projections can be done with an iterative approach to provide information on risk and uncertainty, if desired, during next steps. Objectives for such risk and uncertainty information from the Board would assist the TC with determining the most appropriate changes to the projection methodology to provide this information.

Catch Reduction Analysis Methodology

Each of the *F* scenarios examined in projections ($F_{30\%}$, $F_{35\%}$, and $F_{40\%}$) require a reduction in catch to reduce the 2019-2021 average *F* levels from the end of the stock assessment. To estimate the expected catch reduction from specific regulation changes, the TC developed tools to evaluate the impacts of state-specific changes to slot limits, bag limits, or vessel limits. However, these tools are limited to evaluating catch reductions within what was allowable under the regulations during the terminal year of the assessment. Therefore, these tools cannot be used to evaluate how catch may change if a bag, vessel, or slot limit is liberalized from what the regulations allowed during the assessment terminal year because there is no catch data to inform the analyses under less restrictive regulations.

The catch reduction analysis tool for bag and vessel limit changes uses Marine Recreational Information Program (MRIP) data from the most recent four-year period where regulations were consistent within each state in the southern stock assessment region (September 2018 through August 2022). Using those data, the tool reduces the number of red drum harvested per trip by an individual or party if it is greater than the bag or vessel limit being analyzed. The reduction in number of fish harvested would then be added to the total amount of released fish. The number of dead discards attributed to a bag and vessel limit is then calculated using the 8% dead discard rate used in the 2024 benchmark stock assessment. The number of dead

discards and harvested fish with and without the regulation changes are compared to estimate the catch reduction achieved under a specific bag or vessel limit change.

Similarly, the catch reduction tool used to assess the impact of slot limit changes uses the same data range (September 2018 through August 2022). However, only the MRIP Access Point Angler Intercept Survey (APAIS) data could be used for this analysis because it contains length measurements. This analysis uses the length frequencies of harvested red drum to estimate how much catch could be reduced by narrowing the existing slot limit. To create the one-inch length bins, the MRIP data is converted from fork length (FL) to total length (TL) using conversion from the stock assessment and then rounded down to the nearest inch. Then the slot limit can be changed to estimate the number of harvested fish that would be reduced, and that reduced harvest is added to the number of released fish, with the number of dead discards calculated as described for the bag and vessel limit analysis. When both slot limit changes and bag or vessel limit changes are examined, the total estimated catch reduction is calculated using the following equation:

$$Percent\ reduction = A + B + A * B,$$

where A is the percent reduction estimated with the bag and vessel limit catch reduction tool and B is the percent reduction estimated with the slot size catch reduction tool.

This calculation adjusts the individual reductions so as not to double count reductions when both regulation change types are implemented on the same population (Chen and Rao 2007).

Since each state has different regulations, the catch reduction tools are set up to estimate impacts of state-specific potential regulation changes. The catch reduction tools are further refined into three regions for Florida for a more accurate catch reduction estimate, as the state has divided its east coast into three management regions with different regulations since September 2022. Florida regulations include reduced bag and vessel limit for its Northeast region (FL_NE), catch-and-release only in the Indian River Lagoon region (FL_IRL), and a reduced vessel limit in the Southeast region (FL_SE).

When states put forward proposals with their respective calculated catch reductions, the total catch reduction expected to be achieved can be estimated. This would be done by summing the reduced total catch for each state and dividing the sum by the total catch before reductions. Therefore, the total catch reduction for the southern stock would be more heavily influenced by regulations in states with greater removals. If one state does not achieve a proportional catch reduction equivalent to the overall stockwide reduction required, the remaining states would have to take proportionally larger reductions to achieve the overall stockwide reduction necessary.

The catch reduction tools make several assumptions. These methods assume constant effort. Based on data from the MRIP Fishing Effort Survey (FES), in recent years the number of angler trips in South Carolina and Georgia has trended upward while the number of angler trips in Florida has generally declined since a peak in 2018 (Figure 4). Additionally, the projection does

not account for changes in angler behavior in response to regulation changes. It assumes the catch rates recorded in the MRIP samples from September 2018 through August 2022 are representative of what will be observed in the future. It is also important to consider that the time period being used for this catch reduction analysis includes years where angler behavior may have been influenced by COVID and COVID-era restrictions/behavioral changes. Some states reported higher-than-expected fishing effort during COVID, though the effort in these years is not outside the observed range during the time series (2000-2023; Figure 4). Due to the uncertainty with projecting future changes in effort and the ongoing issue of MRIP FES overestimating effort, the Board directed the TC to use constant effort for analyses.

The TC was also directed to consider noncompliance when estimating potential catch reductions from different regulation changes. For the purposes of bag/vessel limit catch reduction analyses, the TC considers noncompliance to mean trips where the combination of observed harvest and unavailable harvest for a trip was either greater than the vessel limit or greater than the maximum possible bag limit for a single angler or a group of anglers if on a vessel. For size limit catch reduction analyses, the TC considers noncompliance to mean when red drum length measurements converted from FL in mm (measurement from MRIP) to TL and rounded down to the nearest inch (measurement used for management) were outside the slot limit. Using these definitions, data were flagged and used to calculate a noncompliance rate. The TC further evaluated catch data to provide additional context on this issue given the uncertainty as to whether all catch flagged is truly noncompliant.

For the catch reduction analysis tools, the analyses use the number of red drum harvested, which is a combination of observed harvest and unavailable harvest. “Observed harvest” is when the MRIP APAIS sampler is able to visually confirm that a fish was harvested, while “unavailable harvest” is based on what the angler tells the MRIP APAIS sampler and falls under a variety of disposition categories. The disposition categories that could be included in “unavailable harvest” include when red drum are released dead, those cut up for bait (although this is illegal for red drum in some cases), and those harvested but that are not visually confirmed by the MRIP APAIS sampler (e.g., buried at the bottom of a cooler and anglers decline inspection). Because of the various dispositions included in “unavailable harvest,” especially the released dead category, there could be instances where the analyses used in the tool indicate a trip harvested more than the bag or vessel limit, but, in reality, the “harvest” was fish lost to depredation or a dead discard from another cause.

Disposition information is not included in the publicly available MRIP data from NOAA Fisheries, so staff from states within the southern stock range reached out to their MRIP samplers to assess the disposition categories. Each state analyzed the disposition categories and determined that the dead discard disposition code was rarely reported. Percentage of red drum harvest reported as released dead is provided for South Carolina, Georgia, and Florida in Tables 2, 3, and 4 respectively, and range from 0-5% of harvest, with only four of eighteen time periods evaluated with positive percentages.

For red drum recorded as being outside the slot size limit, the uncertainty about noncompliance comes from length measurements near the minimum and maximum size limits. Although red drum slot limits are set and enforced using TL by inch, MRIP APAIS samplers measure red drum using FL by mm. To assess noncompliance with slot limits, the MRIP APAIS FL samples were converted to TL using the length-length conversions from the 2024 red drum benchmark assessment and compared to the slot limit within the region in which it was caught. Although red drum tails are not heavily forked, every length-length conversion has some associated error, thus, red drum lengths converted from mm FL to inches TL that are just below or just above the slot limit may not truly represent angler noncompliance with slot limits. This difference between original measurement and conversion to enforcement measurement complicates estimation of this uncertainty, but converted length composition data available for size limit catch reduction analyses are reported in Table 5 to provide context on this issue.

The Board also requested that the TC show the impact of including noncompliance in the catch reduction estimates. Noncompliance rates were calculated for MRIP trip data within each state for each regulation (bag limit, vessel limit, slot limit), but the impact of incorporating noncompliance into the catch reduction analyses will change based on the regulations being considered by each state.

Catch Reduction Analysis on Florida's Current Regulations

Though states have not yet put forward any potential regulation packages to be analyzed for catch reductions in response to the stock assessment findings, we can test these tools on Florida because they are in the unique situation of already having implemented more restrictive regulations in 2022 immediately following the assessment time series. Further, the impact of those changes was not incorporated into the model projections for estimating catch reductions required to achieve a specific *F* scenario. As an example, Florida's new red drum regulations can be input into the catch reduction analysis tools to estimate the catch reduction achieved, and how incorporating noncompliance influences the catch reduction estimation for Florida. This would also provide insight into the potential catch reduction already achieved for the southern red drum stock from Florida's regulation changes.

To better visualize the impact of including additional documented mortality from potential noncompliance trips, the estimated catch reduction achieved from Florida's recent regulation changes was calculated under different scenarios. Under a perfect compliance assumption, Florida's catch reduction was estimated to be 16.8% (Table 6). For context, this would result in an overall catch reduction of 9.3% for the southern stock if all other states were to maintain their current regulations and be insufficient to meet the reductions necessary for the Board-requested *F* scenarios. Different draws of non-compliance data, over 1,000 iterations, were then used to estimate a minimum, maximum, and mean noncompliance rate. Providing a range around the catch reduction estimates with noncompliance helps to account for the rarity of noncompliant trips and the uncertainty of how noncompliance rates will change following regulation changes. Incorporating additional mortality from potential noncompliance, the estimated catch reduction range for Florida was 12.8% to 15.2% with an average catch reduction of 14.9% (Table 7). This average catch reduction would result in an overall catch

reduction of 8.3% for the southern stock if all other states were to maintain their current regulations and would also be insufficient to meet the reductions necessary for the Board-requested *F* scenarios. Incorporating additional documented mortality into catch reduction analyses has been done for striped bass and provides a more conservative catch reduction estimate than assuming 100% compliance.

Although the catch reduction achieved by Florida's regulations can be estimated using the tools developed by the TC, some of the reduction in catch has already been realized since the regulations were implemented over two years ago. Comparing the average annual MRIP catch data from September 2022 through August 2024 (preliminary data since January 2024) to the average annual catch from September 2018 through August 2021, catch from the east coast of Florida has actually declined by 21.6%. However, this only uses two years of MRIP data, and more years of data would be needed to account for potential inter-annual variation in year class strength.

Task 2: *Discuss how to interpret the TLA result of "Moderate Action", as well as methods for estimating regulation change impacts for the northern stock.*

The TLA, used for the northern stock as the primary status determination methodology, established that the northern stock is neither experiencing overfishing nor is the stock overfished. Overfishing is defined by fishery performance, the threshold for which is a red tabulated metric summary in any one of the last three terminal years. In the case of the northern stock, the TLA has shown yellow tabulated metric summaries for all three of the previous three years, suggesting levels of "Moderate Action" from management as described in the stock assessment report. However, the report did not describe how to interpret the "Moderate Action" determination.

The TC and SAS recommend managers continue to monitor these trends and do not relax existing management measures for the northern stock. The TC and SAS conclude that this constitutes "Moderate Action" in this scenario and do not recommend specific regulatory changes for the northern stock at this time. However, fishery performance has been showing increasing proportions of red in annual metric results since the mid-2000s. Specifically, five of the seven terminal years for which data are available had red exceeding the color threshold (2016-2022), while from 2003-2015 only one year (2011) resulted in red exceeding the color threshold and three years (2003-2005) had green results. This trend points to increased fishing effort across the northern stock, consistently approaching threshold values. To monitor this trend moving forward, the TC and SAS recommend updating the TLA for both stocks between assessments. It is important to note that such an update would not trigger a new overfishing determination for the northern stock considering determinations of the terminal years of the assessment report and the seven-year period to trigger fisheries performance. However, such an update could benefit managers as they navigate managing this fishery and prepare for future assessments.

Per the TLA reference points, an overfished status is only triggered when the tabulated metric summary for adult abundance is red in any one of three previous years. The northern stock was

not determined to be overfished as none of the three previous years were red ("Elevated Action"). However, similar to fishery performance, recent annual metrics of adult abundance have been trending towards yellow and red designations. Specifically, from 2019 to 2022 two years had yellow exceeding the color threshold and the terminal year (2022) had red exceeding the color threshold. This contrasts with the period from 2012 to 2018 in which six years had green results and only one had yellow exceeding the color threshold. Considering the long-lived nature of this species, the indications of decreasing adult abundance substantiate the recommendation to more closely monitor the population and to not relax existing protections for the adult or sub-adult populations in the northern stock. Future assessments would greatly benefit from the development of abundance indices, most notably from the northern edge of the stock, including Virginia northward. An investment by the northern states to improve the quantity and quality of their red drum monitoring efforts, adherence to current status-quo protection measures, and a TLA update between assessments would all constitute "moderate action" on the part of managers and partner states.

To assist with continued monitoring efforts of the northern stock, the TC and SAS developed additional TLA scenarios for tabulated metric summaries during the benchmark stock assessment that represent concerning conditions managers would likely need to address via regulatory changes. Note, none of these scenarios were observed as of the most recent stock assessment and instead represent potential warning signs to be monitored in future TLA updates.

1. If fishery performance is yellow in any of the past three years and recruitment is red for five consecutive years (a generation of the vulnerable population), there has been consistent below average recruitment and increasing catch and/or decreasing sub-adult abundance.
2. If both fishery performance and adult abundance in any of the past three years are yellow, the stock is experiencing increasing catch and/or decreasing sub-adult abundance which is leading to declines in adult abundance.
3. If recruitment is red for five consecutive years and adult abundance is yellow in any of the past three years, there has been consistent below average recruitment representing concern for the future of the adult abundance.

Although the SS method was the primary method of stock status determination for the southern stock, the TLA for the southern stock did display an increased quantity of red results compared to the northern stock. This agreement between the two methods gives the TC and SAS confidence in utilizing the TLA for current and future stock determinations for the northern stock in the absence of formal integrated assessment models. Further, scenarios 2 and 3 above were both observed for the southern stock, adding further evidence of agreement between SS and TLA methods. These triggers offer the opportunity to utilize these cautionary scenarios to inform management decisions, as intended.

As a complementary analysis to the TLA, the Skate Method was used and included in the stock assessment for the northern stock. This method identified an extended period of overfishing

utilizing a North Carolina index and regional catch data. This methodology indicated *F* values have been steadily increasing since the beginning of the time series (2005), exceeding the overfishing threshold associated with this method since 2015. To prevent this designation, a relative decrease in catch on the order of 23% would have been needed in North Carolina since approximately 2015. The Skate Method represents a more risk-averse approach to management due to its shorter integration period (3 years) vs. the longer integration period needed for the TLA (7 years for fishery performance and 10 years for adult abundance), which is why it exceeded its threshold sooner than the TLA. This analysis also suggests recent increasing trends in *F* in the northern stock.

If the Board wishes to estimate the impacts of regulatory changes for the northern stock, the TC recommends using the same bag, vessel, and slot size catch reduction methods as those described above for the southern stock. Consistent with its recommendation that specific regulatory changes are not necessary for the northern stock at this time, the TC did not conduct any catch reduction analyses for the northern stock. If estimated stockwide catch reductions associated with specified *F* scenarios are desired in the future, a method to estimate these reductions would also need to be identified given that the TLA is a qualitative tool and does not have the same projection functionality as the SS model used for the southern stock.

References

ASMFC. 2002. Amendment 2 to the Interstate Fishery Management Plan for Red Drum; Fishery Management Report No. 38 of the Atlantic States Marine Fisheries Commission. ASMFC.

ASMFC. 2024. Red Drum Benchmark Stock Assessment and Peer Review Report. Atlantic States Marine Fisheries Commission, Stock Assessment Report, 457 p.

Chen, H. and A. R. Rao. 2007. When two plus two is not equal to four: errors in processing multiple percentage changes. *Journal of Consumer Research*, 34.

Methot, R.D., C.R. Wetzel, I.G. Taylor, K.L. Doering, and K.F. Johnson. 2023. Stock Synthesis User Manual Version 3.30.21. NOAA Fisheries, Seattle, WA.

Tables

Table 1. Red drum southern stock projection scenario results. Age-2 fishing mortalities are reported here with fishing mortality for other ages determined according to model-estimated fleet selectivities.

Scenario	Projected Age-2 Fishing Mortality	Catch Reduction Needed from 2019-2021 Average F Catch	Years to SSB Threshold (9,917 mt)	Years to SSB Target (13,250 mt)
$F_{40\%}$	0.301	28.1%	5	32
$F_{35\%}$	0.345	21.4%	6	NA
$F_{30\%}$	0.396	14.4%	23	NA
2019-2021 Average *F*	0.526	NA	NA	NA

Table 2. Percentages of reported dead fish in South Carolina MRIP intercept data by disposition.

Time Period	Type A Fish (i.e., Claim)	Type B1 Fish (i.e., Harvest)	
	Observed Harvest	Reported Harvest	Reported Released Dead
2018 (Sep-Dec)	89%	11%	0%
2019 (Mar-Aug)	92%	8%	0%
2019 (Sept-Dec)	92%	8%	0%
2020 (Mar-Aug)	93%	7%	0%
2020 (Sept-Dec)	88%	12%	0%
2021 (Mar-Aug)	88%	12%	0%
2021 (Sept-Dec)	83%	16%	1%
2022 (March-Aug)	72%	18%	0%

Table 3. Percentages of reported dead fish in Georgia MRIP intercept data by disposition.

Time Period	Type A Fish (i.e., Claim)	Type B1 Fish (i.e., Harvest)	
	Observed Harvest	Reported Harvest	Reported Released Dead
2018 (Sep-Dec)	87%	13%	0%
2019	85%	11%	5%
2020	84%	16%	0%
2021	92%	8%	0%
2022 (March-Aug)	96%	4%	0%

Table 4. Percentages of reported dead fish in Florida MRIP intercept data by disposition.

Time Period	Type A Fish (i.e., Claim)	Type B1 Fish (i.e. Harvest)	
	Observed Harvest	Reported Harvest	Reported Released Dead
2018 (Sep-Dec)	83.7%	16.3%	0.0%
2019	92.7%	6.7%	0.6%
2020	95.6%	4.4%	0.0%
2021	93.7%	5.8%	0.5%
2022 (March-Aug)	94.6%	5.4%	0.0%

Table 5. Percentage of red drum harvest-at-size from 2018-2021 MRIP data available for catch reduction analyses. Grey shaded cells show catch treated as compliant with slot size limits in place during these years.

Total Length (inches)	SC	GA	NE FL	IRL FL	SE FL
10		0.2%			
11		0.0%			
12	0.1%	0.2%			
13	0.2%	1.7%			
14	0.5%	13.5%	7.9%		
15	12.6%	20.3%			
16	20.5%	18.6%			
17	14.1%	14.1%	2.6%	10.5%	
18	9.6%	9.0%	9.4%	7.1%	
19	11.3%	7.0%	6.9%	3.5%	
20	11.3%	4.3%	5.4%	2.2%	
21	5.5%	5.9%	18.0%	21.5%	
22	7.7%	2.0%	10.9%	8.1%	
23	3.9%	1.8%	9.5%	9.4%	
24	0.7%	0.8%	8.9%	18.1%	
25	1.4%	0.2%	5.7%	8.5%	No Data
26	0.0%		4.9%	7.6%	
27			7.7%	3.1%	
28	0.2%	0.2%	2.1%	0.5%	
29			0.1%		
30					
31	0.4%				
32					
33					
34					
35					
36					
37					
38	0.1%				
39		0.1%			
40	0.1%				

Table 6. Catch reductions estimated for regulation changes that occurred following the stock assessment assuming perfect compliance with regulations.

Jurisdiction	2022 Regulation Changes	Removals		Reduction
		With 2018-2021 Regulations	With Current Regulations	
South Carolina	None	1,651,574	1,651,574	0.0%
Georgia	None	1,709,947	1,709,947	0.0%
Florida		4,207,205	3,499,687	16.8%
Northeast	*Reduced vessel and bag limits*	*3,479,763*	*3,129,735*	*10.1%*
Indian River Lagoon	*Catch-and-release only*	*725,409*	*367,919*	*49.3%*
Southeast	*Reduced vessel limit*	*2,033*	*2,033*	*0.0%**
Southern Stock	N/A	7,568,726	6,861,208	9.3%

**All removals from the Southeast Florida management region from 2018-2021 were due to discard mortality of released fish, hence no reduction to removals from regulation changes designed to reduce harvest.*

Table 7. Catch reductions estimated for regulation changes that occurred following the stock assessment assuming noncompliance with regulations based on rates observed from 2018-2021. Ranges on reductions are reported for 1,000 analysis iterations due to the random selection process for noncompliance rate calculations used in the analysis.

Jurisdiction	Removals				Reduction		
	With 2018-2021 Regulations	With Current Regulations					
		Minimum	Mean	Maximum	Minimum**	Mean	Maximum**
South Carolina	1,651,574	1,651,574	1,651,574	1,651,574	0.0%	0.0%	0.0%
Georgia	1,709,947	1,709,947	1,709,947	1,709,947	0.0%	0.0%	0.0%
Florida	4,207,205	3,566,826	3,581,553	3,668,650	12.8%	14.9%	15.2%
Northeast	*3,479,763*	*3,170,789*	*3,178,253*	*3,237,547*	*7.0%*	*8.7%*	*8.9%*
Indian River Lagoon	*725,409*	*394,005*	*401,267*	*429,070*	*40.9%*	*44.7%*	*45.7%*
Southeast	*2,033*	*2,033*	*2,033*	*2,033*	*0.0%**	*0.0%**	*0.0%**
Southern Stock	7,568,726	6,928,348	6,943,074	7,030,171	7.1%	8.3%	8.5%

All removals from the Southeast Florida management region from 2018-2021 were due to discard mortality of released fish, hence no reduction to removals from regulation changes designed to reduce harvest. Minimum reductions are calculated with the maximum removals across iterations, while the maximum reductions are calculated with the minimum removals across iterations.*

Figures

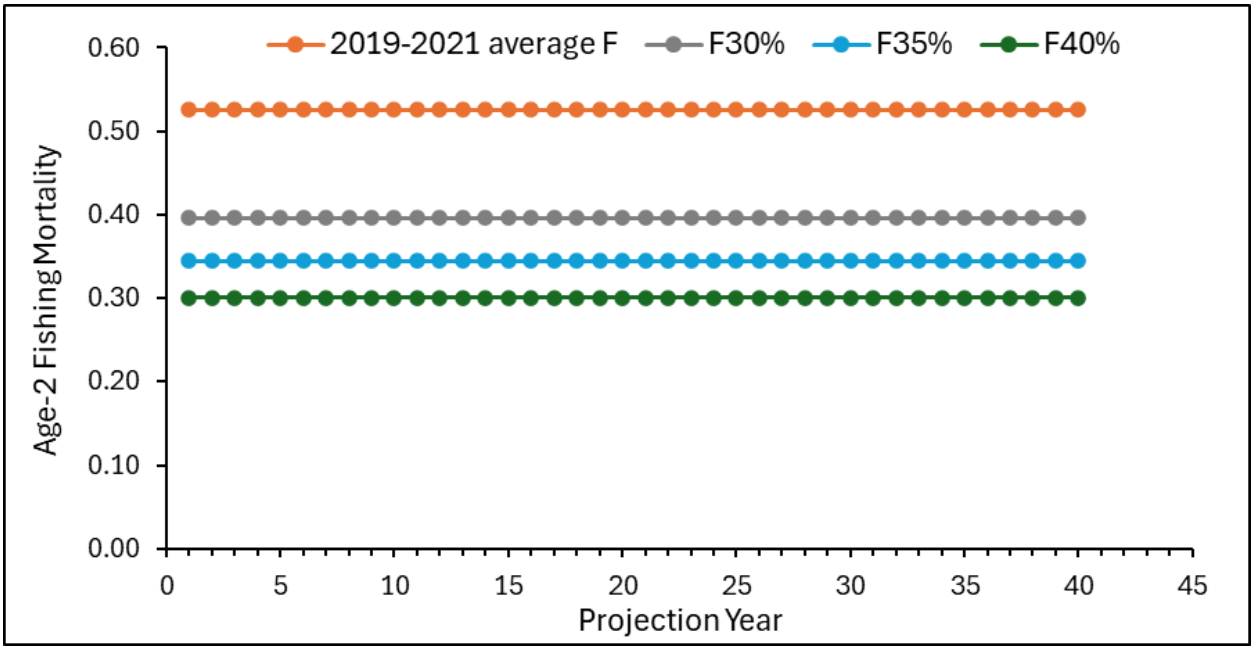

Figure 1. Red drum southern stock projection scenario fishing mortality for age-2 fish.

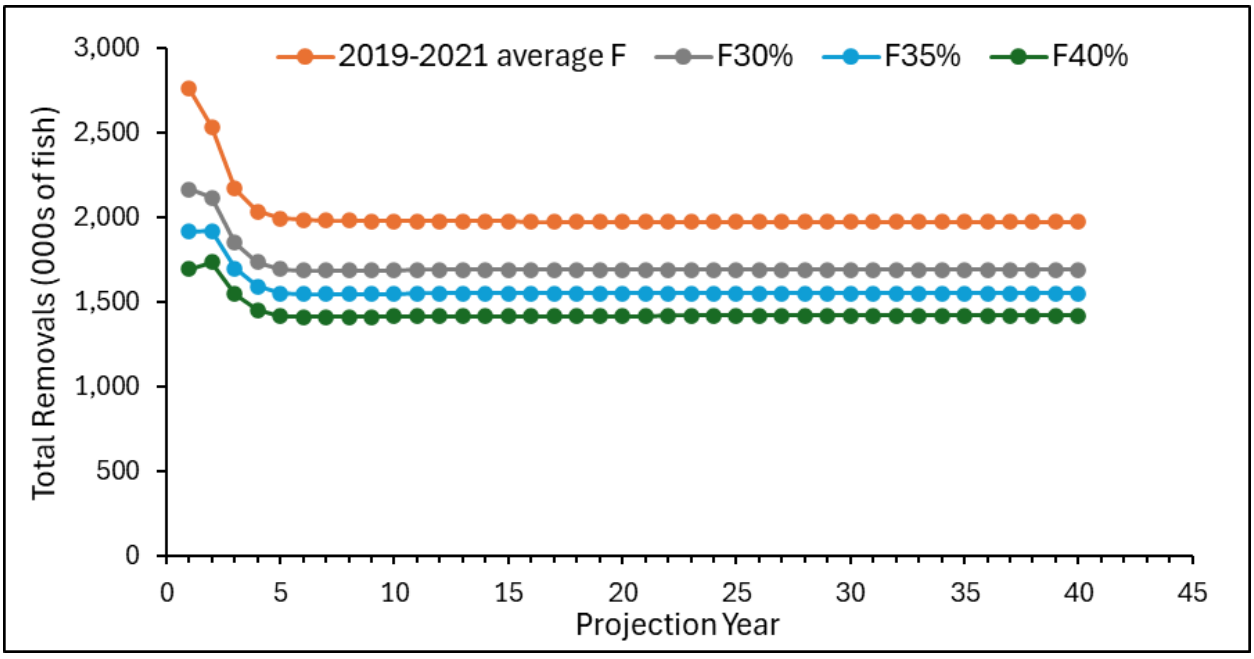

Figure 2. Red drum southern stock projection scenario total removals (harvest and dead discards).

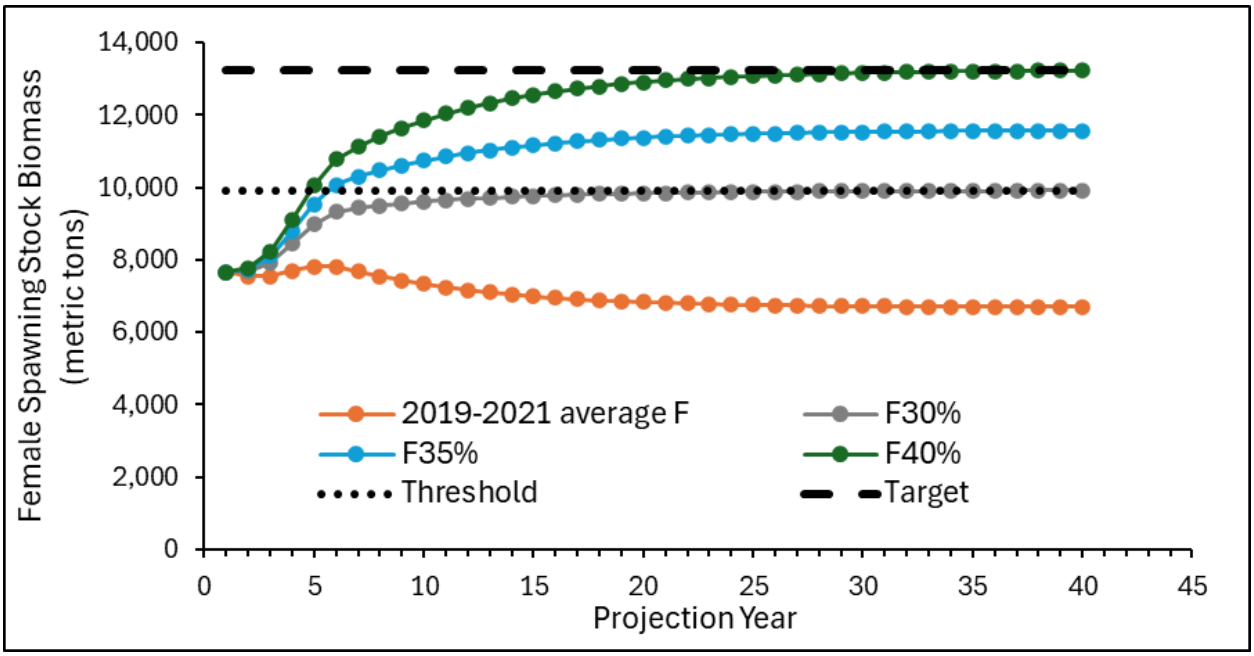

Figure 3. Red drum southern stock projection scenario female spawning stock biomass.

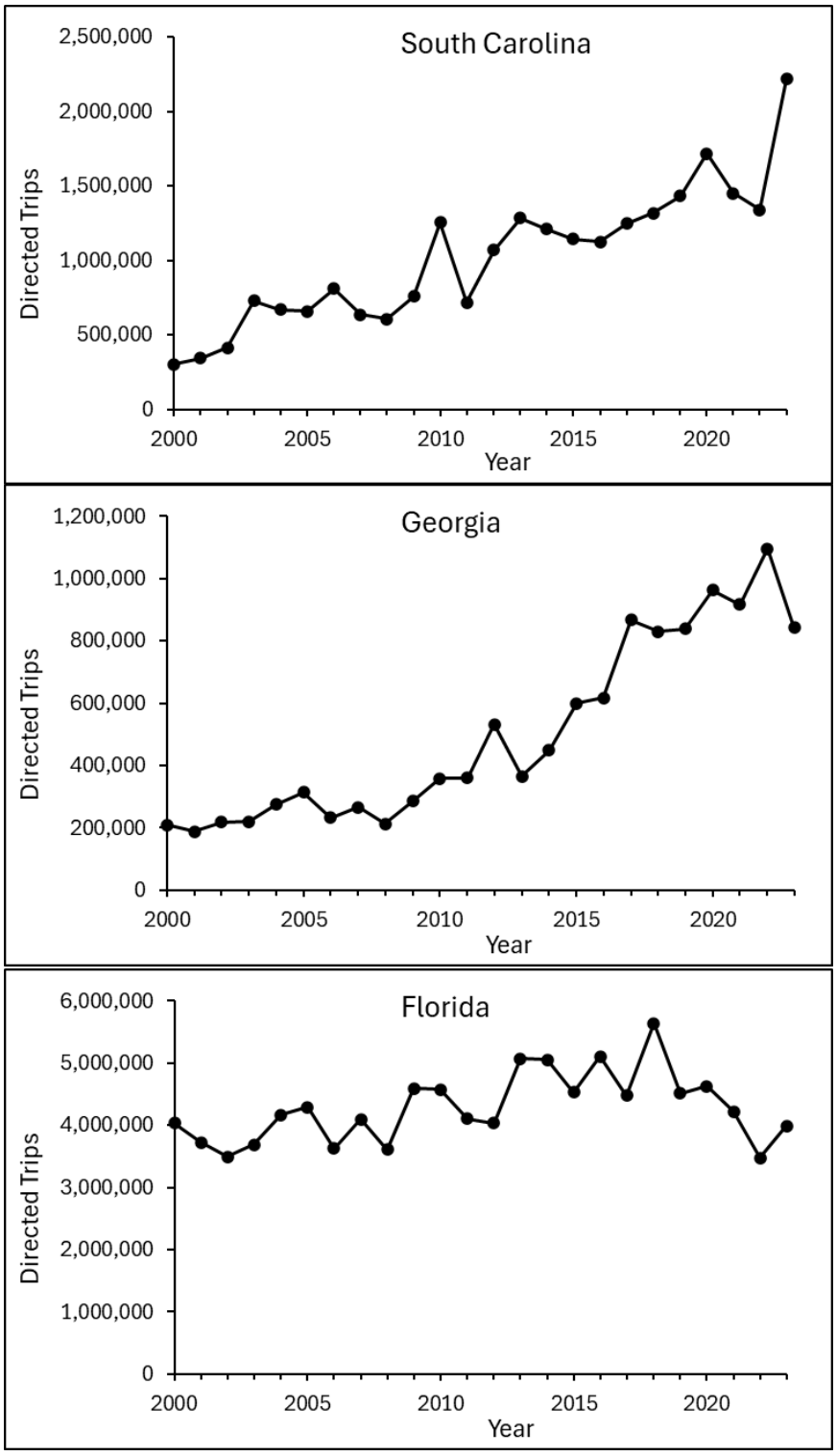

Figure 4. Recreational fishing trips directed at red drum in southern stock states. Directed is defined as red drum reported by the angler(s) as primary or secondary target species of the fishing trip. 2023 data are preliminary.

From: ASMFC
To: Comments
Subject: [External] New public comment for 2025 Spring Meeting
Date: Thursday, April 17, 2025 9:41:54 AM

2025 Spring Meeting

Action Title

2025 Spring Meeting

Action URL

https://asmfc.org/events/2025-spring-meeting/

Name

Mark McGarity

Email

markmg22@yahoo.com

State

Georgia

Comment

As a Savannah resident with over 30 years of inshore angling experience, a founding member of GeorgiaRedfish.com (org that initiated gamefish status push in 2013) and a member of Georgia DNR's Marine Fishery Advisory Council, I've witnessed a dramatic and alarming decline in our Red Drum fishery since about 2010. This is confirmed by the 2024 ASMFC assessment (overfished, overfishing, declining recruitment) and the overwhelming public support for regulatory change (75% of 1,300+ comments) during CRD's public comment period in 2022.

In my opinion, the state's proposed changes from 2022 are insufficient to save this already collapsing fishery. That proposal, according to GA DNR's own numbers would only result in an 11% reduction in harvest which doesn't match the scale needed to rebuild the stocks. GA now has a fishery comprised primarily of old offshore bulls and their 1-2 year old slot size offspring, very little in between. Our coastal flats used to teem with massive schools of over slot fish from Savannah to Cumberland. For the most part, all those fish vanished from our flats about 15 years ago. If we don't act now, and act aggressively there won't be enough young fish surviving the slot to replace our disappearing bulls.

Suggestions have been made that FL and SC may have reduced their take enough recently, so perhaps GA doesn't need to make any changes. This is a concerning argument to say the least, but in line with GA's 30+ year history of inaction. We are completely out of line with the other southern stock states. It's time we stop undermining their responsible efforts and start doing our part.

Given our fishery's current downward trajectory, Georgia's exploding coastal population/fishing pressure and red drum's slow growth rate, a reasonable change would be: (2) Fish limit, 18-25 slot, (4) vessel limit and no captains take. Personally I would like to see a (1) fish limit but compromise is important, hence (2) larger fish, which will yield more meat than (5) 14 inch fish that are currently allowed by GA regs.

Thank you for all of your efforts and attention to this long overdue issue. There are many people in GA that have hoped this day would eventually come, so please take strong and decisive action.

Have a great day.

From: ASMFC
To: Comments
Subject: [External] New public comment for 2025 Spring Meeting
Date: Thursday, April 17, 2025 11:18:05 AM

2025 Spring Meeting

Action Title
2025 Spring Meeting
Action URL
https://asmfc.org/events/2025-spring-meeting/
Name
Matt Amman
Email
mattamman28@gmail.com
State
Georgia
Comment
Reduce the kill limits to 2 fish per person between 18-27”. Same length limits as FL. Stop these clowns from killing our reds.

From: ASMFC
To: Comments
Subject: [External] New public comment for 2025 Spring Meeting
Date: Thursday, April 17, 2025 11:14:06 AM

2025 Spring Meeting

Action Title
2025 Spring Meeting
Action URL
https://asmfc.org/events/2025-spring-meeting/
Name
Brent Goodman
Email
Brentgoodman@coastalsashanddoor.com
State
Georgia
Comment
The red drum fishery in the greater Savannah area is at an all time high in regards to fishing pressure. While some anglers practicing catch and release on slot reds - most do not. 5 red drum per person is a ridiculous per day, per angler harvest amount. The harvest should be more in line with FL which for the most part is 1 fish per day per angler. Vessel max should be 3. Slot size should be 14-18”… fish greater than 18” typically the meat quality starts to decrease. I have fished Savannah since the 80’s… and it is obvious the red drum population takes a hit year after year. It’s sad it has taken this long to finally address, but I hope it is addressed soon and with much lower harvest amounts. Thank you for considering my input on the matter.

From: ASMFC
To: Comments
Subject: [External] New public comment for 2025 Spring Meeting
Date: Thursday, April 17, 2025 10:48:29 AM

2025 Spring Meeting

Action Title
2025 Spring Meeting
Action URL
https://asmfc.org/events/2025-spring-meeting/
Name
Ben Austin
Email
banjoaustin@gmail.com
State
Georgia
Comment
Please save the Georgia Redfish Population! Please reduce the limit to 1 fish a day per person and 2 per boat w/a slot of 18-24" and Charter Captains cannot keep fish in addition to their anglers: "no captains take". This would better align GA w/SC and FL regulations and give the population a chance to recover.

From: ASMFC
To: Comments
Subject: [External] New public comment for 2025 Spring Meeting
Date: Thursday, April 17, 2025 11:22:49 AM

2025 Spring Meeting

Action Title
2025 Spring Meeting
Action URL
https://asmfc.org/events/2025-spring-meeting/
Name
Simon Belcher
Email
simonbelcher1325@gmail.com
State
Georgia
Comment
All limits need to be cut. Penalties increased for violation. Circle hook use only for bait fishing. Redfish limit set at 1 per person 2 per boat. We can clearly see that when harvest limits are set and moratoriums are in place fisheries bounce back stronger. Migratory fish limits need to be looked at as well….moratorium on cobia