## **Atlantic States Marine Fisheries Commission**

## **ISFMP Policy Board**

August 6, 2014 10:00 a.m. – 12:15 p.m. Alexandria, Virginia

## **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 (L. Daniel)			
2.	<ul> <li>Board Consent (L. Daniel)</li> <li>Approval of Agenda</li> <li>Approval of Proceedings from May 2014</li> </ul>	10:00 a.m.		
3.	Public Comment	10:05 a.m.		
4.	Review of Stock Rebuilding Performance (T. Kerns)	10:15 a.m.		
5.	Review and Consider Comments on NOAA Fisheries Special Management Zones Proposed Rule ( <i>T. Kerns</i> ) <b>Action</b>	10:45 a.m.		
6.	<ul> <li>Stock Assessment Updates</li> <li>Atlantic Menhaden (G. Nesslage)</li> <li>Tautog (K. Drew)</li> <li>Sturgeon (K. Drew/J. Kipp)</li> </ul>	11:00 a.m.		
7.	River Herring Technical Expert Working Group Progress Report (M. Hawk)	11:35 a.m.		
8.	Discussion of Collaboration with Great Lakes Fisheries Commission on American Eel Management	11:45 p.m.		
9.	Atlantic Coastal Fish Habitat Partnership Report (P. Campfield)	11:55 p.m.		
10. Other Business				
11	11. Adjourn 12:15 p.n			

#### MEETING OVERVIEW

ISFMP Policy Board Meeting Wednesday, May 14, 2014 10:00 a.m.- 12:15 p.m. Alexandria, Virginia

Chair: Louis Daniel (NC)	Vice Chair: Doug Grout (NH)	Previous Board Meeting:			
Assumed Chairmanship: 10/13	-	May 14, 2014			
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, SC, GA,					
FL, NMFS, USFWS (19 votes)					

#### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 14, 2014
- **3. Public Comment** At the beginning of the meeting public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

## 4. Review of Stock Rebuilding Performance (10:15–10:45 a.m.)

#### **Background**

- As part of the ASMFC 2014-2018 Strategic Planning process, the Commission agreed to conduct more frequent reviews of stock status and rebuilding progress.
- The ASMFC 2014 Annual Plan tasks the Policy Board with conducting a review of stock rebuilding performance.

#### **Presentations**

• A presentation will be given on the stock rebuilding performance for each species that is managed by the Commission by T. Kerns (**Briefing CD**)

#### Board actions for consideration at this meeting

- The Policy Board will need to determine if the rebuilding performance for each species is consistent with the Commission Vision and Goals.
- If the performance is not consistent with Vision and Goals, what action should be taken.

# 5. Review and Consider Comments on NOAA Fisheries Special Management Zones Proposed Rule (10:45-11:00 a.m.)

#### **Background**

 NOAA Fisheries has released a proposed rule to implement SMZs for five artificial reefs in Federal waters off the coast of Delaware. These measures are intended to

- promote the orderly use of the resource, reduce user group conflicts, and maintain the intended socioeconomic benefits of the artificial reefs to the maximum extent practicable (**Briefing Materials**).
- This rulemaking is in response to the recommendations of the Delaware Fish and Wildlife Department (DFW) and the Mid-Atlantic Fishery Management Council (Council) that the SMZs be established. The DFW requested that the Council designate five artificial reef sites, currently permitted by the U.S. Corps of Engineers in the Exclusive Economic Zone, as SMZs under the regulations implementing the Council's Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan.

#### **Presentations**

• T. Kerns will review the SMZ proposed rule

#### Board actions for consideration at this meeting

• Consider sending public comment to NOAA Fisheries on the SMZ proposed rule

#### 6. Stock Assessments Update (11:00-11:35 a.m.)

#### **Background**

- The menhaden benchmark assessment is scheduled for completion in December 2014
- The Tautog TC is considering changes to the regional breakdown of the assessment models that may delay the presentation of the assessment results to the Board until February 2015. A decision about the timing of the peer review will be made in late July.
- The sturgeon benchmark assessment is scheduled for completion in early 2015. Due delays in tagging and genetic data the TC has prepared options for a revised schedule (Supplemental Materials).

#### **Presentations**

• Overview of stock assessment progress for menhaden, tautog and sturgeon by Dr. Nesslage, Dr. Drew, and J. Kipp

#### **Board actions for consideration at this meeting**

• None

# 7. River Herring Technical Expert Working Group Progress Report (11:35 a.m.-11:45 a.m.) Action

#### **Background**

- NOAA Fisheries' and the Commission are collaborating to develop a dynamic conservation plan to help restore river. This includes identifying important conservation efforts, critical data gaps, and monitoring and evaluating progress in achieving the goals through the river herring Technical Expert Working Group (TEWG).
- The river herring TEWG and its sub-groups have had their first meetings.

#### **Presentations**

Overview of River Herring TEWG activities comments by M. Hawk (Briefing Materials)

#### Board actions for consideration at this meeting

None

# 8. Discussion of Collaboration with Great Lakes Fisheries Commission on American Eel Management (11:45-11:55 a.m.)

#### **Background**

- In 2008 and 2009, the Commission was working with the GLFC, Fisheries and Oceans Canada, NOAA Fisheries, Province of Ontario, Province Quebec and the U.S. Fish and Wildlife Service on a Memorandum of Understanding for eel management (**Briefing Materials**)
- The MOU sought to develop a coordinated ecosystem approach to bi-national management of American eel throughout its North American range.

#### **Presentations**

• T. Kerns will present summary of past collaboration and possible future collaboration with GLFC on eel management

#### Board direction for consideration at this meeting

• Consider discussion with the GLFC on possible eel management collaboration

#### 9. Atlantic Coastal Fish Habitat Partnership Report (11:55 a.m.-12:05 p.m.)

#### **Background**

- The ACFHP Steering Committee met on April 29-30, 2014
- Two FY14 fish habitat restoration projects have been selected for funding
- FY15 project funding opportunity will be open this fall.

#### **Presentations**

• P. Campfield (Steering Committee) will report on Partnership activities

#### Board direction for consideration at this meeting

• none

#### 10. Other Business

#### 11. Adjourn

# DRAFT PROCEEDINGS OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION ISFMP POLICY BOARD

Crowne Plaza - Old Town Alexandria, Virginia May 14, 2014

These minutes are draft and subject to approval by the ISFMP Policy Board
The Board will review the minutes during its next meeting

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#### **INDEX OF MOTIONS**

- 1. **Approval of Agenda by Consent** (Page 1).
- 2. **Approval of Proceedings of February 2014 by Consent** (Page 1).
- 3. **Move to approve the Stock Assessment Schedule as presented** (Page 13). Motion by Pat Augustine; second by Bill Adler. Motion carried (Page 13).
- 4. Move to initiate a Cancer Crab FMP, with a focus on Jonah Crab and task the American Lobster Board with the development of the FMP (Page 16). Motion by Steve Train; second by Dave Borden. Motion carried (Page 17).
- 5. Motion to adjourn by Consent (Page 22).

#### ATTENDANCE

#### **Board Members**

Patrick Keliher, ME (AA) Steve Train, ME (GA) Doug Grout, NH (AA)

G. Ritchie White, NH (GA)

Dennis Abbott, NH, proxy for Sen. Watters (LA)

Paul Diodati, MA (AA) Bill Adler, MA (GA) Robert Ballou, RI (AA)

David Borden, RI, proxy for B. McElroy (GA) Rick Bellavance, RI, proxy for Sen. Sosnowski (LA)

David Simpson, CT (AA) Dr. Lance Stewart, CT (GA) James Gilmore, NY (AA) Emerson Hasbrouck, NY (GA)

Pat Augustine, NY, proxy for Sen. Boyle (LA) Brandon Muffley, NJ, proxy for D. Chanda (AA)

Tom Fote, NJ (GA)

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak

(LA)

Loren Lustig, PA (GA)

Leroy Young, PA, proxy for J. Arway (AA) John Clark, DE, proxy for D. Saveikis (AA)

Roy Miller, DE (GA)

Bernie Pankowski, DE, proxy for Sen. Venables (LA)

Tom O'Connell, MD (AA) Bill Goldsborough, MD (GA)

Russell Dize, MD, proxy for Sen. Colburn (LA)

John Bull, VA (AA) Cathy Davenport, VA (GA) Louis Daniel, NC (AA)

Mike Johnson, NC, proxy for Sen. Jenkins (LA)

Robert Boyles, Jr., SC (AA)

Patrick Geer, GA, proxy for Rep. Burns (LA)

Nancy Addison, GA (GA)

Jim Estes, FL, proxy for J. McCawley (AA)

Kelly Denit, NMFS Wilson Laney, USFWS Martin Gary, PRFC

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

#### **Ex-Officio Members**

#### Staff

Bob Beal Toni Kerns Kate Taylor Shanna Madsen

#### Guests

Mike Armstrong, MA DMF Dave Richardson, NEFSC Arnold Leo, E. Hampton, NY

The ISFMP Policy Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crown Plaza Hotel Old Town, Alexandria, Virginia, Wednesday morning, May 14, 2014, and was called to order at 11:15 o'clock a.m. by Chairman Louis B. Daniel, III.

#### **CALL TO ORDER**

CHAIRMAN LOUIS B. DANIEL, III: Welcome to the ISFMP Policy Board. I'm Louis Daniel and Chairman of the Board.

# APPROVAL OF AGENDA APPROVAL OF PROCEEDINGS

CHAIRMAN DANIEL: In front of you, you should have an agenda as well as the proceedings from our February meeting. If you will allow me a little bit of flexibility with the agenda, I do have three additional items under other business, which would be a state declaration of interest, a letter from the Spiny Dogfish Board and an NOAA Update on the Recreational Policy Development.

Is there any other business that I'm unaware of that needs to be added to this agenda? If not, without objection, our agenda and proceedings will stand approved.

#### **PUBLIC COMMENT**

CHAIRMAN DANIEL: Public comment; I don't see anybody rushing to the table; so we'll move on. I will turn it over to Toni to introduce our discusser on the Management and Science Committee Report.

# MANAGEMENT AND SCIENCE COMMITTEE REPORT

#### INVESTIGATION OF CLIMATE-INDUCED SHIFTS IN STOCK DISTRIBUTIONS

MS. TONI KERNS: The board tasked the Management and Science Committee to look at climate change; and then based on their findings of how climate change is effecting commission species, to give us some guidance on allocation decisions and processes. First we're going to have Dave Richardson from NOAA Fisheries here to talk about the science behind climate change and then Mike Armstrong will go into the Management and Science Committee's recommendations on allocation decision-making processes.

DR. DAVID RICHARDSON: My name is David Richardson. I'm from the Narragansett Lab of the Northeast Fisheries Science Center. I'm going to be talking about shifts in the distribution of four species; black sea bass, scup, summer flounder and winter flounder. There are basically two questions we're addressing; what are the patterns of these distribution shifts in these species; and then the second is what factors are driving these distribution shifts.

These are just some pretty simple maps of the distribution of summer flounder during the fall for two different time periods. The first is 1980 to 1989 and second is 2000 to 2008. What you can see in these maps is a pretty clear northward shift in distribution. What you see as the highest abundance now is in the 2008-2008 period is in that Long Island to Massachusetts range; whereas, prior to that it is more the New Jersey to Long Island range. If you also look at the scale of the biomass in the trawl survey; you see a real substantial increase in the biomass. We have two things going on; the general northward shift and then increase in biomass for this particular species.

What we sought to do was to quantify distribution shifts along the shelf. This falls on some work that has been done over the past five or six years, similar analyses. As you can see in the figure, we broke the coast up into along-shelf distance because it does curve; and so it looks like at Kilometer 200 it is somewhere around Chesapeake Bay; and Rhode Island is somewhere around Kilometer 700.

All the analyses we're going to show are from the Northeast Fisheries Science Center Trawl Survey data. We did include the inshore strata; so we go about I think 20 meters; and the analyses are from 1972 to 2008, because there was a shift change from 2008 to 2009. These are just the reported along-shelf center of biomasses for each species during both the spring and the fall.

The top panel is spring and fall summer flounder. You can see I've outlined the one in red in the fall is a statistically significant shift in distribution of about 250 kilometers in the along-shelf distance that summer flounder were found. In the spring you do see a lot of bouncing around from the early nineties to 2008. There was a pretty substantial shift as well; but the long-term trends isn't as noticeable.

The set of panels are winter flounder. There is not really a noticeable shift in winter flounder. This is just the Southern New England/Mid-Atlantic Bight stock of winter flounder. For black sea bass, in the

spring you see a significant shift northward as well. Again, it is in that 200 to 250 kilometer range.

In the fall, during the early period, the population that was sampled on the trawl survey was actually pretty far north; dropped down south again; and then in recent years, in the fall black sea bass has been found further north in the trawl survey. Scup in the spring also you see that northward shift. In the fall it is much clear what is going on. The along-shelf center biomass bounces around, but there is not as clear of a shift northward.

The question is we're seeing these patterns – they have been reported before – what factors are driving these. The first question is, is it because of increasing temperatures; is this due to climate change; or are there other factors? Changes in population abundance is one factor that could be driving them. It is generally thought that populations that increase or are large tend to occupy a larger area and also will tend to shift their distribution; or is it changes in population size structure?

For a lot of these species we see larger individuals at the northern end of the range and smaller individuals at the southern end of the range. As you change fishing pressure, you're changing the ratio of larger individuals to smaller individuals and you can actually induce a shift in the population just by changing the intensity of fishing on the population.

That was the goal of the analyses. I'm just going to show some quick slides on some of the patterns we have seen. These are temperature patterns through time, the same time period. You can see that general increasing temperature in both the spring and the fall. Population abundance; most people are pretty familiar with the trends in a lot of these populations.

This is just a recent summer flounder stock assessment as an example where you can see the real low biomass that the population was at in the late eighties and early nineties and then a real substantial recovery and leveling out in the recent period; so a real increase in biomass for summer flounder.

This is just a series of maps showing the distribution of summer flounder in different size classes; so illustrating that point that larger fish tend to be found further north. If you look in that 20 to 29 centimeter size class, you see most of the fish in the fall are very much in the southern end of the range. You don't really even see many north of New Jersey.

If you go to the 40 to 49 centimeter size class, it is mainly in New Jersey through Massachusetts; and

then that largest size class, the 60 to 69 centimeters, you really don't see many fish south of Hudson Canyon in that largest size class. This follows the basic pattern we see in a lot of species where the larger fish are not necessarily completely overlapping the smaller fish; and larger fish tend to be further north.

As I mentioned before, your proportion of large fish in a population is directly tied to the fishing pressure on that population. This is just another way of looking at that same pattern. It just shows the alongshelf range of different size classes. The summer flounder from the small-sized class in the green; they tend to be at Kilometer 200 up to the larger size classes which tend to have the center of their range somewhere in the Long Island through Rhode Island range.

Again, going on to the proportion of size classes constituting the total abundance, that is what this plot is for different size classes. As I mentioned before, for summer flounder the early nineties/late eighties was the period when the stock biomass was at the lowest level; and the size composition of the stock was very truncated at that time.

As fishing pressure was reduced, the population recovered and the size structure of the population increased such that through most of the 2000's you've had a lot of big fish in the population that you didn't see early in the time period. Some of the other species, just quickly, black sea bass – I know these may be hard to make out – in the spring you see a little less size structure in the distribution; but in the fall you do see that general pattern where larger fish are further north in the fall. It is not as distinct as for summer flounder, the change in the size structure of the population.

For scup, in the spring a similar pattern; larger fish tend to be further north in the spring than smaller fish. In the fall the trawl survey may not do as well or as good of a job sampling scup. I think it catches a lot of smaller fish; and it tends to only catch the smaller fish at the northern end of the range.

We think that may be in part due to the fish moving out into the range of the trawl survey as it is passing in the northern part of the range but not in the southern part. Again, you can see the larger size classes due tend to be further north in the fall for scup. This just brings me to the analyses. I'm just going to touch on this quickly.

We did some statistical analyses to look at what factors we think are actually driving the shifts in the distribution for each of these species during each of these seasons. There are three different terms that we tested. The first is temperature; second is size structure of the population; and the third is abundance.

These were GAM models that the details are in the working paper. I'll just give you main results here. What you see in black is what we found to be the significant terms in terms of what is affecting the distribution – the northward extent of each of these populations. Winter flounder, in the fall there was a significant temperature term; but for winter flounder again we didn't see much of a distribution shift. For summer flounder, what the analyses suggests is that the mean length of the population is really the dominant factor that is underlying that shift northward in summer flounder.

For scup in the spring and black sea bass in the spring, though, it seems like temperature is what is driving the population northward. The scup in the fall and black sea bass in the fall were not analyzed. We didn't feel as confident that the trawl survey on its own was capturing the population as well as it should be. The feeling is that there are a lot of fish inshore of the trawl survey for both of those species during the fall; so we did soaks in the spring.

Just to conclude, distribution shifts and the impacts of climate change can be complicated. This is not just a simple story that waters are warming and fish are moving north. There are other factors at play; but the patterns are pretty evident. You're seeing that northward shift in black sea bass, scup and summer flounder.

Our analyses suggests that for black sea bass and scup temperature is a very important factor; but for summer flounder what is really overwhelming the analyses is that recovery of the population and the increase in size structure. For winter flounder stock we're not seeing a shift. The main points of this is that fishing pressure and climate change are interacting to drive abundance and distribution. In some cases it is hard to partition out each of those factors. That would be it if anybody has questions.

MR. THOMAS FOTE: I was looking at the winter flounder; and I noticed the other three species, the stock size has grown where winter flounder has actually stayed the same and gone down. Did you pick that species because that was one of the ones not following the trend of the other three?

DR. RICHARDSON: I actually was not part of the species' selection; and I don't know if we were asked to do winter flounder or if that was – okay. That was I think chosen by the person who did this analyses. He had done some other interesting work on winter flounder showing that changes in the abundance of winter flounder seemed to actually be tied to temperature.

The stock-recruitment curve has a strong effect of temperature on recruitment in winter flounder; but they don't seem to be shifting distribution as much in response to temperature. Actually this study that Rich did on distribution is a companion to some other work he has done on shifts in recruitment with the climate change and with temperature. I think that is actually why the winter flounder made it into this analyses.

# EVALUATION OF STATE QUOTA ALLOCATIONS

CHAIRMAN DANIEL: Are there any other questions for Dave? If not, we will move into Michael to continue.

DR. MICHAEL ARMSTRONG: As you recall, a little over a year ago this board charged the Management and Science Committee with investigating the potential change for distribution of species with a couple of different changes. One was to define the species that we should investigate further; and we looked into that.

We ended up with summer flounder, black sea bass and scup; and those are species that are quotamanaged by state-by-state quotas and seemed to be in the Mid-Atlantic where a lot of the changes are going on. Also summarize the state of the knowledge of the species change; and there are now dozens of papers that illustrate species changing in response to warming temperatures and such, but none concentrating on these species.

We have been working with David and his cohorts and coming up with all this data now, which is really compelling stuff. Then based on this information that suggests, yes, these things really are occurring, define methods we could possibly use to adjust the state-by-state quotas or other things we could possibly do.

What we decided as an MSC was to survey you folks to see what you would find palatable under different scenarios I guess with the assumption that there may be some that are so unpalatable, why move forward with them? We came up with ideas talking to you

folks, talking to industry and talking among the panel; and we came up with a number of them.

Let me show you the results of the survey. The responses were pretty good with 22 responses and one from every state responding to the survey. The first was status quo and 56 percent would not support that. I'm going to go through these very quickly. What you'll see coming up again and again is neutral, a fair amount of neutral.

Based on some of the comments; we feel that is generally because people didn't have enough information. They read the scheme and said, "Well, I don't know what species it belongs to. I don't know exactly you'd implement it; so I'm going to say I'm neutral on it." We have a lot of neutrals. Status quo is basically most people did not think that is where we should stay.

Most feel that some of the species are shifting and now we have the papers coming out that confirms all this. Also, many people said, like I just said, we need more specific information to evaluate all these schemes a little bit better. I'll get into that a little bit later. The first group of three options we called the cause-and effect scenario.

The first one is if an area has seen an increase in abundance of biomass since the historic allocation, then that area would get a bump-up based on that. Now, again, what number you use to indicate the increase; is it the trawl survey; is it catch-per-unit effort, landings; that is not worked up, but that was one.

The next one is we allocate based on the historic allocation during the base period for that species; some number. We give an example here of 50 percent. That 50 percent could be 70; it could be 90. The remainder we allocate in some scheme based on giving more from that allocation to the states where it is evident that abundance has increased.

The last option was allocate it based on a state's recent fisheries performance on some parameters of catch rates, regulations, things like that. The results of that were – the favorite was Scenario B, which is we take the base period. We allocate it 50 percent, 90 percent, 75 percent and look at some remainder of allocating to the states that it is clear where the evidence – and, again, what parameter we're going to use to measure that is unclear – we allocate a further amount to different states.

Option A was generally unpopular because there doesn't seem to be enough data to support that sort of specificity. Option B was preferred. It seemed to strike a balance or a reasonable approach where you maintain the historic allocation and then some piece we redistribute. Option C was viewed as practical but I'm not sure how we could actually do it. Now, again, keeping in mind, we put it out for commercial and recreational; and as you think through your head the ways we didn't pull them in; it would be completely different between the two fisheries.

The next one was a flexible landing option. The flexible landing options were fishermen harvest – and keep in mind this could commercial or recreational – fishermen harvest in waters where the fish are and those landings count towards the state quota the fishermen are licensed in. That was something industry had put forward.

The other one is fishermen harvest in the waters where the fish are and those landings count towards the state quota the fishermen land the fish in. Now, that is pretty much status quo for commercial but very different for recreational. The results were pretty much everyone hated Option A where you land fish in a state but they count towards the quota of the state you're licensed in. That was not favored. The other one had good support.

The next option was establish a baseline of abundance where the stock is considered recovered. This would be based on like striped bass; in '95 it was declared recovered. The remaining stock growth after that would be reallocated based on some scheme. This is similar to the 50/50 allocation, the base historic allocation, but it would be based on the stock assessment in a period where we say it was restored. Very good support on that; 68 percent.

Many respondents thought this was a good approach to consider. People favored the fact that it keeps the historic reference but allows for expansion of the stock. We need to be cautious because some of these are only a short-lived surplus. Then there was the option to establish a coast-wide quota for part of the year and state-by-state allocation for other parts, like we do it for the scup commercial. Mixed support; that was one where most people were neutral; meaning to me that means you didn't have enough information, which species and how you would implement that.

Then, of course, the option of just do away with state-by-state allocations; most people were negative towards this option. States like to manage at the state level; and most people wanted to remain that way. Those were the scenarios; and, again, there may be others. Given possible future stock shifts, how frequently should we reallocate? If we go down the road of reallocating; how frequently should we do it?

The majority thought five years; every five years was a reasonable approach with a number of people also preferring three years; so in the short term rather than in the long term was the opinion of most of the people who responded to the survey. The summary of the different options; we then asked – the next graphic showed we asked you which reallocation options, of all the ones we just talked about, would you support for the individual species of black sea bass, summer flounder and scup?

The results indicate that the cause-and-effect Scenario B, which is allocate portion by the base and then reallocate another portion based on the most recent abundance indices, some indicator – that was the favorite for all species. The second favorite was Option 4, which is what we termed the surplus production, which established the baseline where the stock is considered recovered; and above and beyond that is reallocated based on a measure of the shifting abundance. Those were the two preferred options; looking at the surplus distribution, which is the stock is declared recovered and reallocate above and beyond that. It is based on stock status.

The cons is it will not address issues with a stock that is expanding; that is, is expanding but not increasing in abundance, where it is simply redistributing in terms of temperature, but we haven't had a great increase in abundance. It could be based on a boomand-bust scenario. Stocks experience a boom, states receive surplus; when things go back down, those states will lose that surplus.

In some cases they could still have those fish in their waters because they redistributed by temperature, but we're regulating on abundance. We could have that sort of thing going on. For the historic/current combination, it is not tied to the stock assessment. It is flexible. It will address changes, expansions in the range. The con is if we are reallocating we need long datasets that are up to date; and we need to figure out how to switch from the Bigelow into the NEAMAP Surveys and all that.

The historic/current combination was preferred option in the Management and Science Committee. It was one of the preferred options of you folks; and this was the one we selected would probably be the

best to implement. I will let you read these. These are the basic ideas on how to start thinking about this. There may be other options and certainly combining things, doing one for the recreational and one for the commercial. The big thing is robust datasets are critical for making all of these. We as the Management and Science Committee do not have the data. Dave and his cohorts managed to do all what they did from a scientific point of view; but we're now at the point it needs to be implemented for species and we can't do that.

We think you're at the point where we should start coming up with hard examples so that you can look at them. It is very hard to think about this in a defuse, theoretical concept without starting to pull out examples. How we do that; we think this needs to be kicked down to the technical committees at this point; so this board needs to decide do we move forth with this.

Do we have an overarching universal policy that all boards should be thinking about? It is clear we might not need them for all boards right now. I mean it is clear to me that probably black sea bass, that the evidence suggests very strongly that temperature is the driver and they have clearly reallocated.

We need to kick them down to the technical committees and let them start and see what they can pull together for real data. I think you can read it. That is our recommendation is we're at the point now we think there is enough evidence that suggests it is all happening and your decision is how you want to apply it and how you want to get the boards to do it and which boards you want to charge the technical committees. We think we're at the point where the technical committees have to start bringing you real examples and everyone can see how palatable it is and what the reality is when you start reallocating. I'll leave it at that.

CHAIRMAN DANIEL: Are there questions for Mike? Bob.

MR. ROBERT BALLOU: I'm trying to reconcile Dave's presentation and Mike's. Dave's seemed to be – not seemed – it was quite apparent that it spoke to the specificity with regard to shifts in three species, three of the four that were examined. Mike, your presentation was much more generic, it seemed. It didn't seem to relate solely to the species that we have good information on now that might warrant follow-up. Can you just speak to whether you're suggesting that, for example, technical committees look across the board at species; and if so, we have

enough of a basis to look at those or are we really only focusing on scup, black sea bass and summer flounder at this point; or should be? Thank you.

DR. ARMSTRONG: Well, that is a difficult question. I would say it is up to this board – two choices. One is coming up with an allocation scheme that you pass down to all the boards and say if there is evidence to suggest the species you're working is doing some sort of range shift, use this allocation, the Policy Board believes this is the best one.

The other option is to specifically assign certain boards. We didn't explore other species; but what we hear is, well, these are the ones that are quotamanaged on a state-by-state basis. Right now other species are moving, but it is fairly irrelevant to the management because we manage on a broad scale. Does that answer your question? I think the decision is really yours.

From my point of view, it is the Black Sea Bass, Scup, Fluke Board that you probably want to charge and have them charge their technical committee. The question is it is clear black sea bass is redistributing by temperature, but fluke is redistributing because the stock has recovered. Philosophically do you redistribute for one because it is temperature and not the other because it is simply a success story.

MR. JAMES J. GILMORE, JR.: I had a question and a comment. Mike, you just made the comment that I think we'd probably start with the Summer Flounder, Scup, Black Sea Bass Board because obviously those are the ones that are changing; so if we're going to look at different options, that would probably be a good way to start.

Considering we have no idea what is going to happen with regional management, we should probably start doing that sooner than later; so when we get to the fall again, we have some more options. The question I had was just on that 50/50 approach would seem to have good support; and if I got it right, so it was 50 percent would be based upon the historic allocation and then 50 percent would be based upon biomass.

The biomass, I guess I don't how you get at that 50 percent because the allocation based upon historic stuff was done state by state; and then the biomass is more spread out, say, from – you know, if you a larger part of the biomass from Jersey to, say, Massachusetts, so how would you dice that up since you don't have state-by-state biomass?

DR. ARMSTRONG: My thoughts on that is throw it to the technical committee. Again, 50/50, we just pulled that out of the air. It might be 70/30. But under this 50/50; so we take the quota; 50 percent we allocate everyone's state proportions that they've always gotten. The rest of the 50, through some mechanism we'd designate 80 percent is now north of New Jersey; 20 percent, south. So that remaining 50 percent, we take 80 percent of that and distribute it to the northern states and only 20 south. There will be winners and losers under all these scenarios.

MR. ROY MILLER: Mike, the recommendations of the Management and Science Committee are not, per se, in our briefing report like you just presented them. I, for one, am having trouble reading them. You say they're before you, go ahead and read them, but can you help us out and tell us what they say. Thank you.

DR. ARMSTRONG: The recommendation I guess – the true recommendation is we think the historic/current allocation, the 50/50 strawman, is the simplest. It maintains some historic perspective and doesn't rely on stock status; so we preferred that. That is the recommendation. These ones here, we list caveats and things that we need to think about. Do you want me to read those?

Well, these are basic ideas on how to start to thinking about reallocating catches. Based on the survey, there is interest among the states in looking further at options. In-depth work will be needed to establish specific reallocation schemes and determine the most appropriate datasets to use.

The 50/50 in the historic/current combination, current/historic combination option is adjustable and not a final recommendation; and the percentages should be species-specific. Historic allocations are accomplished using the available landings' information and landings are in weight. Generally commercial landings are given in terms of gutted pounds and recreational landings are usually in whole pounds. When considering reallocation options it would be useful to work in either gutted or whole weight with agreed-upon conversion factors. They're mostly just data caveats at this point.

MR. G. RITCHIE WHITE: I think the recommendation of the Summer Flounder, Scup, Black Sea Bass Board is a great place to start because you certainly have the two different scenarios to deal with. You have two new states on the Black Sea Bass Board. I'm getting calls from commercial fishermen saying, hey, when are we going to have a shot at these. Pat said Maine has experienced the

same thing. These are issues that we're going to have to deal with, so I think that would be a great place to start and have the technical committee for those species start to work on this and see what they can come up with.

MR. FOTE: I can see black sea bass more evident on this because of its temperature change. If I'm looking at this right, the numbers of fish in the south might be greater than they are in the north except the bigger fish are in the north. So when it comes to the biomass; do we want to make a decision that Virginia, North Carolina and Maryland become the nursery areas that supply the north with big fish.

That is what I look at the reallocation; it is a difficult decision to make. It is a lot more complicated than black sea bass. If we have the smaller fish in the south, their catch would go up dramatically because that's where the small fish are available and in greater numbers of the big fish up north; it I'm looking at this time – or the same amount of numbers because there are a lot of small fish down there.

That makes it a little more difficult than black sea bass. One of the things we proposed I guess about 15 years ago, because we thought by this time we'd be 40 million pounds of the summer flounder quota, that we basically would take those increases in the summer flounder quota and basically use that to distribute it to the states where abundance has been showing up differently and not take it away from the states that historically had a catch. But because of the way the SSC has been handling summer flounder, black sea bass and scup, we have not have been able to do that because even though they're recovered, we're still fishing as they're overfished stocks. It really complicates the whole matter.

DR. ARMSTRONG: To that point, one of the difficulties of the surplus where we declare a stock recovered is generally that is at Bmsy and there will be no further growth from Bmsy. The intent is to stay at Bmsy. In some species, having declared it, there is nothing greater than that to reallocate. That is why we preferred the arbitrary pick some percentage of the stock allocated historically and then the growth above that reallocating.

MR. FOTE: But we made an arbitrary decision. You know, we started out with 320 million pounds of spawning stock biomass on summer flounder and reduced it down. But we also, from the last stock assessment, said that summer flounder recruitment is not based on spawning stock biomass. As a matter of fact some of the years you had the greatest spawning

stock biomass, the recruitment has been worse. So how are we managing for the good of the stock or for the availability of the stock; and that is where the problem arises.

MR. DAVID SIMPSON: This is probably more a question for Dave. All the work based on the federal trawl survey is great; and I would love to be able to do the same thing further inshore; and I wonder your thoughts of being able to combine the various state trawl survey indices through some standardization methods, e-scores or something, to see how these patterns may play out over time nearshore, which is more relevant to at least summer flounder recreational fisheries.

DR. RICHARDSON: It certainly is something we have talked about. I don't know if we've agreed upon a way to combine all the different trawl surveys that may take place at different times of the year in some cases and certainly are using different gears. It is something that I think Rich, who did the analyses, is certainly thinking about and is aware of; but we haven't made progress on that currently.

We've also done some analyses to try and quantify, you know, looking at these other trawl surveys, what proportion of the stock is inshore. The biggest one that pops out is scup. A real high proportion of the stock is definitely inshore of our trawl survey if you just compare NEAMAP catch rates to the Bigelow catch rates. We know there is a real substantial issue in the fall. In the spring it is obviously not much of an issue.

MR. DAVID V.D. BORDEN: Mr. Chairman, I think this is a very useful exercise; and I agree with Jim Gilmore's suggestion to start with those three species. I guess I would caution that I look at this more as an exercise at this point. I think we need to follow up on Mike's suggestions and actually develop some realistic scenarios using a couple of species. I think black sea bass would be a candidate species.

The reason I add that caution is I think there is a lot of other factors that are going to come into play with any kind of reallocation decision. I just remind everybody that the industry has developed a whole series of fishing practices during the last 20 or 30 years that are based on these quota allocations.

Significant portions of the Massachusetts, Rhode Island and New England Fleet have summer flounder licenses, Virginia, and spends significant amounts of time steaming up and down the coast selling their product in another state; and the same thing with North Carolina fishermen coming up north seasonally to participate in other fisheries. Reallocating the quota may be a good idea if we just look at it from a static perspective, but it is going to affect particular individuals more than fishermen in general. I think it is important to just be cautious about this.

MR. ROBERT H. BOYLES, JR.: Mike, nice job. I know this was tough and I appreciate the work of the committee on this. I just wanted to just offer a comment. We spent a lot of time talking about allocation in my time on the South Atlantic Council. Mike, I just wanted to give credence to the idea of this 50 percent plus 50 percent; this idea that you look at historical averages.

Where the South Atlantic Council ended up for a number of years was look at a long-term average and that constituted half of the allocation history. But the other half for the allocation, landings' history was based on a more recent timeframe, more recent analysis of where the catch was made; and this was primarily sector-specific and not geographically specific.

To the degree that any reallocation scheme – and I use that word deliberately – reallocation scheme was perceived as being equitable; that one seemed to get some traction in the South Atlantic Council. I'd just like to offer you my encouragement and thanks for you guys looking at this very, very difficult issue. Thank you.

CHAIRMAN DANIEL: A little summary time, I think, but first a couple of comments. Some of the things that strike me as being concerning in some regards is shifting the fishery and providing more allocation to the areas where the larger fish are and harvesting the larger fish. Is that a good idea? I don't know for the spawning stock biomass; is that a good plan?

Dave Borden made my point in terms of shifting the allocation in a mobile commercial fleet. That raises some real serious red flags. In the recreational fishery I can understand; and we need to look at the landings' information to see if these shifts in distribution are affecting the landings from the recreational fishery.

Obviously, if the fish no long occur in North Carolina waters, for example, then the recreational fishermen may not have any access to them and those fish could be redistributed to the areas where they are. As you pointed out, Dave, North Carolina's vessels and

Massachusetts vessels, Virginia's vessels travel up and down the beach; and it doesn't matter where the fish are, they can still catch the fish. As long as they can catch the fish and harvest the fish, why would you want to reallocate?

I think what I heard around the table and what I'd like to propose is that we do start with – I'd like the individual species boards to come up with how to handle these as opposed to this board; because I think there needs to be a lot of discussion at the Summer Flounder, Black Sea Bass, Scup Board, if that's the first one we want to do, looking at is the 50/50, is that reasonable percentage?

Should it be different? I think there is a lot of information that can be generated from an individual species board that we may not be able to generate here. Then start looking at some of these issues and impacts. It does seem — you know, speaking obviously from a biased perspective with summer flounder as an example, we've had great success.

I think I heard success story said three times; and now one of the dominant players in the fishery that has contributed to that significant success could lose out as a result of the shift – if it is the age and size structure shift that we're talking about. I think there is a lot there to think about. I don't think anybody is rushing in to do something right away. Is there any objection to this board asking the Black Sea Bass, Scup, Flounder Board to start again to take a look at these allocation issues and the implications? Does that seem like a reasonable approach? Doug.

MR. DOUGLAS E. GROUT: Not an objection; I think that is a good first step in this and particularly having them come up with a range of alternatives as far as reallocation options here; because 50/50 may look very different than 20/80 or 80/20. I think it would be very informative to the board and to this whole Policy Board to see how that shakes out.

The other thing that I am going to ask my black sea bass board members is are the federal permits limited access? That also brings up an issue for particularly Maine and New Hampshire that would be potentially new board members here; that you could have a quota reallocation, but how many people in our state have a black sea bass permit, so we may not be able to do it.

That is another high-level issue that maybe it is good to have the Black Sea Bass, Scup and Summer Flounder Board look at first; but I think we might want to have them report to us how they worked out these issues and what issues they're looking at. It may be something that the Policy Board is going to want to be looking at on a broader range of things, because a lot of these are federal permits and there is a lot of different species where we may need to have to deal with this. We may want to have some kind of – in the long run some kind of general overarching policy on these things as to how deal with this. That's my only suggestion is that the Policy Board still be kept appraised of everything that is going on.

CHAIRMAN DANIEL: Without objection; that's how we'll proceed. Bob.

MR. BALLOU: Mr. Chairman, I support the recommendation; it is a good one. Just a quick procedural question I think to Toni; I just need to be reminded are state allocations the sole prerogative of the commission or is I a joint prerogative of the commission and the Mid-Atlantic Council?

MS. TONI KERNS: Bob, it depends on which species you are referencing. Summer flounder is a joint allocation; black sea bass is solely by the state; and scup is solely by the state for the summer state quotas; but then the period allocations are jointly done through the council and the commission.

MR. BALLOU: So given that the Mid is moving forward with their Summer Flounder FMP Amendment Process, it seems very important to me that we coordinate with them early and often on this issue. Thank you.

MS. KERNS: Just so the Policy Board knows, both Kirby and I are on FMAT for the council's summer flounder amendment; and at the joint meeting in August we would bring up whether or not the commission wants to initiate with the council on that amendment so we would have two concurrent amendments going at the same time. Then we can get the board to give us direction for input to the FMAT.

MR. BRANDON MUFFLEY: When the board does look at this, I think there are still some biological and science issues that the technical committee should still evaluate when they look at this and not just the 50/50 options. I think you touched upon and so did Dave that – I know when I was on Management and Science, when I was there we started to look at this and we were looking at some of the other – we wanted to look at some of the other surveys and what they may be showing and not just relying this all on the NMFS Bottom Trawl Survey as you talked about the implications of shifting the fisheries to these

larger fish. I think there are some biological considerations that the technical committee needs to evaluate and not just allocation scenarios when they do talk about this.

CHAIRMAN DANIEL: Yes, that would be my hope, that the flounder board would actually push this down to the technical committee for all those types of discussions and analyses. Last word, Tom.

MR. FOTE: Yes, on the black sea bass I was looking at the northern, but we have a southern black sea bass population; and I'm wondering if that is showing the same temperature movement. Is anybody looking at any work on that? I know it is a different management and there has been a lot of difficulty in the South Atlantic on how to manage black sea bass down there. If we're looking at a temperature shift; are they starting to move north so are they going to be taking from areas there to fill in areas above or are they a completely different species and have a different temperature range?

#### OTHER BUSINESS

CHAIRMAN DANIEL: That would be information that could gleaned from probably the MARMAP Survey, I would think, but I don't know that any of that work has been done. We certainly would welcome any and all black sea bass from the South Atlantic to move to North Carolina. All right, good discussion, thank you. I'm going to move around a little bit on the agenda and turn it over to Toni to take care of a few of these other items that we can knock out here in about five minutes.

MS. KERNS: In February I asked all of the states to look at the declaration of interests for the species boards and make changes. Today we just need to make changes to either add or remove states from the boards. I'm just looking for agreement that these changes are being made today. For spiny dogfish, Florida, Georgia and South Carolina asked to be removed; horseshoe crab, to take New Hampshire off and add the Potomac River Fisheries Commission; black sea bass is to add Maine; lobster, to remove Virginia and North Carolina; and coastal sharks to remove New Hampshire. Are there any other changes that were not given to me that need to be done?

MR. PATRICK AUGUSTINE: It looks like it is pretty clear. If there are not any other additions, would you need a motion, Mr. Chairman?

CHAIRMAN DANIEL: We don't need a motion; just an agreement that there are no others to add. Everybody is cool, happy, satisfied? Okay; have you got another one you can do real quick?

MS. KERNS: For the Cancer Crab, if we initiate a Cancer Crab FMP, then we'll make those changes, just in case anybody is wondering about those. Secondly, the Spiny Dogfish Board asked for the Policy Board to consider writing a letter to NOAA Fisheries on the comments for Amendment 3. Mark Gibson is our Spiny Dogfish Chair; is that good, Mark? It is agreeing to do the changes in the allocation from seasonal to periods, I believe – I'm doing this all from memory – and to have the RSA as well to do the year-to-year rollover of specifications; and it would put their plan more in line with the Commission's Spiny Dogfish Plan.

CHAIRMAN DANIEL: Concurrence is good. Do you concur, Pat?

MR. AUGUSTINE: If I do, we're all set.

CHAIRMAN DANIEL: Okay, any objection to writing that letter? Okay, Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Where we are is the legislators and governors appointees have a lunch meeting in this room. If folks could come back around 1:15, we will restart the Policy Board for a while, Louis, and see how far you want to take that. As I mentioned earlier, a number of folks have traveled in for the MRIP Workshop that is scheduled for two o'clock. We may not want to push that too far, but we'll just see how far we can go and push it to maybe 2:30 or something. If there are things that need to roll over to the Policy Board tomorrow, we can check where we are toward the end at that time, if that sounds okay with everybody.

CHAIRMAN DANIEL: Is everybody comfortable with that approach? All right, we'll see you after lunch.

(Whereupon, the meeting was recessed at 12:15 o'clock p.m., May 14, 2014.)

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#### WEDNESDAY AFTERNOON SESSION

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The ISFMP Policy Board of the Atlantic States Marine Fisheries Commission reconvened in the Presidential Ballroom of the Crown Plaza Hotel Old Town, Alexandria, Virginia, Wednesday afternoon, May 14, 2014, and was called to order at 1:35 o'clock p.m. by Chairman Louis B. Daniel, III.

#### AMERICAN LOBSTER STOCK ASSESSMENT UPDATE

CHAIRMAN DANIEL: We're back in order. We're not on line, but we're going to hold off on the Cancer Crab discussion and see if we can't get on line. We'll let Genny go through the stock assessment stuff real quick.

DR. GENEVIEVE M. NESSLAGE: I'd like to start by pointing out some proposed changes that the ASC and MSC have suggested to the Policy Board to the stock assessment schedule; the first being American lobster. I'd like to highlight that we are going to be delaying the assessment. There were some problems identified with the landings' data that needed to be corrected.

That pushed us off by about three to four months. We anticipate completion of the stock assessment sometime around the end of the year; and we hope to have a peer-reviewed document next spring meeting. In the meantime the Lobster Board members should know that we are going to be providing a model-free indicator update to you at the August board meeting; so that should hopefully provide an interim picture of what the stock is doing before we have the final model outputs.

Some of the other highlights are the black sea bass assessment discussion occurred at the NRCC meeting recently. The NRCC agreed to move forward with a new plan for a benchmark stock assessment. The data preparation work would begin this fall. The idea would be that we would have a new assessment that would be peer reviewed some time in 2016 at the latest. The results of that assessment, if it passed peer review, would then be available for use of specification-setting in 2017; for the 2017 specification-setting, I should say, to be explicit.

The one thing that you'll notice on the schedule is that we have ASMFC highlighted as the review venue for that assessment. That is not set in stone, but it is an option that the NRCC and the council and the commission might hold in their back pocket just in case the assessment is done earlier or faster or slower we can get it in and get it done in time for the 2017 specification-setting is the idea.

# ASSESSMENT SCIENCE COMMITTEE REPORT

DR. GENEVIEVE M. NESSLAGE: Moving along, horseshoe crab, the ASC and the Horseshoe Crab Technical Committee recommended that the benchmark stock assessment for this species be put on hold until procedures regarding the use of confidential biomedical data be put in place. As you all are well aware, any analyses done that would include fishery-dependent data could not be shared with a peer review panel, the board or members of the public and therefore the technical committee and the ASC are concerned that any work done on that would essentially be wasted.

They could in the meantime, however, update all the fishery-independent indices; and they can do that on a regularly scheduled stock assessment plan. The Multispecies VPA is also changed up a little bit here. The ASC considered the timing of this and suggested that we wait until the menhaden benchmark assessment is peer reviewed in December.

The MS-VPA and several other models and plans for ecological reference point development will be – at least their preliminary results and plan will be reviewed at that peer review in December; the idea being that we don't know how that is all going to fall out. We may need something sooner. We may need more time from all the development.

There may be new models that we will want to consider either in supplement to the MS-VPA or in place of it; and so the ASC would like to reconsider when ecological reference points in the MS-VPA would be peer reviewed after hearing the preliminary peer review results in December. Northern shrimp did not pass the most recent peer review, so the stock assessment subcommittee recommends a new benchmark be done on a faster timescale than originally planned. They would like to do it within the next three years, which would place it in 2017. This would allow time for more model development but also get it done so that it can be used more quickly than originally planned.

Spot was also reviewed by the ASC and they recommend that a new benchmark assessment be conducted for the species, but that it be done in tandem with Atlantic Croaker; the idea being here that the same people, the same datasets, the same

type of models would all be considered and we could more efficiently go through this process if we do both species at once. Croaker is on the schedule for 2016; and we suggested that spot be placed on the schedule at the same time as croaker. Are there any questions about suggested changes to the stock assessment schedule?

## (Whereupon, Vice-Chairman Grout assumed the Chair.)

MR. AUGUSTINE: A quick question; we've been coming up with the same issue and problem with horseshoe crabs for several years now without being able to get the data we need to determine what the status of the stock is. Unless we can change the way we operate to get that data, it just seems to me – and I would love to take a draconian move; and when we get back to it again, I would love to cut their quotas drastically so they will support us by giving off the information we need. Whether it is collective or not, we cannot make an assessment. We've taken all the draconian measures because of red knots and shorebirds and everything else.

Commercial is cut back; recreational is cut back. We are in dire straits in New York. Our stock is on a sharp decline. I think Jim could verify that. It hasn't gone up since the other states have cut back in their quota. In the meantime, because we have one sector that is extremely valuable to the world – it is valuable to me; it saved my life – the reality still remains that we have not been able to get the data we need to make a correct assessment.

I'm not sure what other draconian measures we can take other than cutting off their supply. I'm willing to hear someone else's idea; but to go away from this meeting without taking some action, either writing letters to them, sending them a form that they will confidentially submit to us, that the data they supply will be all put together as opposed to separating it out so they're identified as to what they're processing; I just think we have to do that.

Otherwise, we're going to be at this meeting another year from now. Their harvest rate continues to go up exponentially, and yet we have no control over what they take. Again, on the other hand, we're caught. It is a Catch-22 because of a product that is essential for the world. Whatever we can do, Mr. Chairman, I wish we would take some action on that. Thank you.

MS. KERNS: Pat, it is not that the biomedical companies aren't willing to supply us with their data. They are willing to supply it to us, but then we

cannot report it back to the Horseshoe Crab Board because of the way we want to split it out into the regional assessments without disclosing the confidentiality.

You would be able to come back and detail how much is coming from a single biomedical company with how we would present the results to the Horseshoe Crab Board. It is not they're unwilling to provide it to us. It is that we then presenting it back to you would be disclosing the confidentiality.

DR. NESSLAGE: Yes, just one thing to add to what Toni has said; the Horseshoe Crab Technical Committee is concerned about conducting the coast-wide assessment now as well because they would like to add the biomedical mortality to that. Again, as Toni indicated, any analyses that we would conduct, the results we couldn't show because you could simply subtract — you could look back at the old assessments and subtract the numbers and figure out how much they're — or you theoretically could.

MR. AUGUSINE: So if we could do it on a coast-wide basis; would you have to marry their numbers back to the region? Now, think about it, you just said if we did it on a coast-wide basis; do we have to marry their data back to the region that the horseshoe crabs come from? That it appears to me would be better than what we have right now. Right now we really can't rely on what we have; so we've got to move forward somehow. How do we get out of this dilemma?

MS. KERNS: I would have to get back to you, Pat, because I was not a part of the discussions of the coast-wide assessment. There are more than three companies; so I would on a coast-wide assessment it would be okay to add the biomedical information, but there may be something going on there that I'm unaware of and so I would have to report back to the Policy Board on that.

MR. AUGUSTINE: Could you report back to us collectively, please? That would be most helpful to see where we may go for the next step. We're in a dilemma right now; we're in a canal and we're not out of it. We have no further information. We sit here wallowing because we can't come up with a good assessment.

I think it is absolutely essential to move forward with this. All the states have committed to do what was right, to reduce their quota harvest and everything else. Now I think we've got to get the other piece of the information and bring it to the table so we can complete our assessment. Thank you.

MR. WHITE: Could we ask the individual industry if they would be willing to waiver all issues and release the amount they're harvesting individually, if they would allow us to do that?

MS. KERNS: We have had those discussion with them; and they have not been in favor of doing that because then it puts them potentially at a disadvantage with their competitor companies of how much of the – and I'm going to say it wrong – the product that they make from the blood, how much capacity or ability they have to make that product; and so therefore they don't want to have that information disclosed to their competitors.

MR. DENNIS ABBOTT: Genny, I recall reading an article recently in the local papers of a study done of the University of New Hampshire regarding horseshoe crab mortality in the biomedical industry; saying that the mortality is much greater than previously thought. Have you seen that article or aware of it?

DR. NESSLAGE: I have not; I'm sorry. I can look into that if you'd like and we can –

MR. ABBOTT: I'll also see if I can find it someplace.

MS. MARIN HAWK: Are you referring to the article done by the University of New Hampshire; that study?

MR. ABBOTT: Yes.

MS. HAWK: The technical committee actually reviewed that article. The research indicated that after bleeding, female horseshoe crabs have a low responding rate. The technical committee reviewed that article and found that the conditions that they used to do the research didn't follow the best management practices. The technical committee acknowledged that the study does show that; but because they didn't follow the BMPs, they were hesitant to really endorse that study.

MR. BALLOU: Mr. Chairman, I'm not sure if this is for Genny or Toni; but the delay in the black sea bass assessment for new model development, does that relate to the issues that we were concerned about and conveyed in our letter the scientific uncertainties? Have they come to terms with those issues and does that relate to the delay? Thank you.

MS. KERNS: It does relate to the delay and the amount of time that we think it is going to take to get a viable model up for peer review that could inform specifications. We tried to set us up with a timeframe where we believe we can produce something to inform specifications for 2017; and if we can get it out there sooner, then we most certainly will aim to do so.

MR. BALLOU: So is the bad news perhaps that there is a delay; but the good news that the new model might perhaps finally get us out of the Tier 4 status?

MS. KERNS: That is our hope.

MR. GROUT: As I understand it, we have to approve the stock assessment schedule here. Pat.

MR. AUGUSTINE: I move that the board approve the stock assessment schedule as presented.

MR. GROUT: Bill Adler seconds. Is there any discussion on this? Any opposition to approving the stock assessment schedule? **Seeing none**; thank you, Genny.

(Whereupon, Chairman Daniel assumed the Chair.)

# INITIATING CANCER CRAB FISHERY MANAGEMENT PLAN

CHAIRMAN DANIEL: Do you want to do the Cancer Crab?

MS. KERNS: I'm going to report out for the Fishery Improvement Project. Jen Liven couldn't be here from GMRI so I said that I would give her presentation. As you know, the board has been discussing the Cancer Crab Fishery and whether or not we would like to move forward with initiating a Cancer Crab FMP based on the work that the Fishery Improvement Project has been doing.

For those of you that are unfamiliar with the Fishery Improvement Project, it is a group of stakeholders typically including retailers, processors, producers and fishermen that come together to try to solve a problem within a specific fishery or to improve a certain aspect of that fishery that requires attention. The focus of their work plans are the environmental integrity and the long-term sustainability of those fisheries.

The Jonah Crab Fishery Improvement Project Working Group includes several members listed up on the screen. They came from all different types of backgrounds. The workgroup has been going on since 2012 to better understand the Jonah Crab Fishery, the threats to its sustainability and the actions that can be taken to have long-term sustainability of the resource.

The efforts that they have done to date; they have worked off of the Marine Stewardship Council's pre-assessment and their criteria that they use. The work plan outlines activities and a timeline for completion and recommendations that were put together for the commission. I should note that in your briefing materials you had two documents. One is the recommendations to the commission and then a second was an extensive overview of the Jonah Crab Fishery.

Jonah Crab has long been considered a bycatch in the lobster fishery while there are still some individual fishermen that direct on Jonah Crab. In recent years there has been increased targeting pressure on the crabs; and likely due to a fast-growing market and demand, it could compromise the long-term health of the fishery. The Jonah Crab Resource is unregulated in federal waters and for the most part in most state waters.

Most of the landings do come from federal waters in Area 3. Landings and effort have been increasing rapidly and in an unregulated manner. Since 2002 landings have increased six-fold; and in 2013 we're just close to 11 million pounds. The landings in 2013 came from Massachusetts at 7.5 million, Rhode Island at 3.2 million, Maine as just about a half a million, New Jersey at 68,000, Maryland a 22,000 and New York just over a thousand pounds.

In the past there have been landings as far south as Virginia. There are no minimum size regulations for Jonah Crab. There are some size limits that are based on blue crab and lobster in the states of New Jersey, New York, Connecticut and Maryland. There are no regulations to protect the spawning stock biomass or regulations on prohibiting female harvest.

There are a couple of states that do have harvest limits, including New York, Maine and Maryland. The fishery's value has increased substantially in the past several years with this increase in landings. In 2000 it was about \$1.5 million and in 2012 it was worth about \$8.1 million in ex-vessel value.

There is a concern from the Fishery Improvement Project that if there are no regulations put in place and the fish start to decline, that there could be a loss of the market and then the ex-vessel price would likely drop if we don't put any regulations in place. There is also a concern with an expanded crab fishery that could threaten the management program that we've put together for the lobster plan to reduce traps in both the Southern New England waters as well as Georges Bank and Gulf of Maine.

It also has concerns about with an increased number of traps in the water, we would have more interactions with right whales. The Conservation Alliance for Seafood Solutions is a collaborative of 18 organizations that advise companies on seafood sustainability and develop guidelines for the Fishery Improvement Projects in order to encourage buyers to support fisheries that are working to address environmental issues even when the fishery doesn't necessarily meet a sustainability criteria.

There are several supermarkets and other major buyers that may stop purchasing a Jonah Crab product unless it can prove that it is managed sustainably. Therefore, there is concern amongst some of the industry members that if no regulations get put in place, that they will stop being purchased and then the fishermen will lose their market; so this market then would be compromised in the long-term sustainability of the fishery.

The FIP recommended to incorporate a Jonah Crab FMP into the Lobster Management Board. It would tie the harvest of Jonah Crab to a lobster license and trap-tagging requirements as it is currently done in Massachusetts, New Hampshire and Maine; and for states that do not have a lobster license, to require a license and trap tags for the harvest of Jonah Crab.

It also recommends requiring a five-inch minimum carapace with an enforcement for a certain amount of tolerance due to the nature of the prosecution of the fishery as well as require full reporting of Cancer Crabs by species to better understand the fishery and establish baseline data. Lastly, they recommend to prohibit the harvest of female Jonah Crabs.

They recommended this as an emergency action that the commission could take prior to adopting an FMP if we did go forward with initiating one, because they feel as though this is an important aspect to the plan because they are concerned about the stock. If there are any questions, I do want to note that both David Borden and Steve Train served on this Fishery Improvement Project, if you didn't notice on the list, so they also could add additional information to the board.

CHAIRMAN DANIEL: We'll take some questions for Toni. Ritchie.

MR. WHITE: Toni, do we have any sense of the breakdown of harvest? It seems like the overwhelming majority is federal waters; but do we have any sense of what percentage federal to state. Then I have a follow-up comment, Mr. Chairman.

MS. KERNS: I don't believe that we have that listed, but, David, do you have more specific answer?

MR. BORDEN: To Ritchie's point, that information is not part of the information that came forward. We don't have an exact breakdown, but I think it is pretty safe to say that the majority of the harvest is coming from federal waters, particularly in Southern New England where most of the fishery is located anywhere from 20 to 50 miles off the coast, 60 miles off the coast.

MR. WHITE: Why is it put to the commission to manage a resource that the overwhelming majority is in federal waters? Why isn't this something the Service is starting this process? I understand the landings come to us, but there are a lot of species where all the landings come to us and we have nothing to do with them, like bluefin tuna.

CHAIRMAN DANIEL: That's a good question. I remember when we requested – I think there was a joint plan or stock assessment or something for weakfish and there just wasn't the time at the Service level. I don't know if the Service wants to address that question or not. If it is coupled with the lobster fishery, that may make sense because then you'd have the feds involved in your lobster fishery. Bill Adler.

MR. WILLIAM A. ADLER: First of all, we do have a catch of crab in state waters as well. It is nothing like the offshore fleet, but we do have that. I thought Toni said there weren't any rules in Massachusetts. We do have a closed season January to a certain month for the taking of edible crabs. We do have that in the state statutes. I think it is in one of these pages on these charts, anyway. We do have that.

MR. ADAM NOWALSKY: The document in the briefing materials indicate some of the confusion that occurs between the Jonah Crab and the Rock Crab. What you suggested in the presentation here was full reporting of all Cancer species, which would include the Rock Crab at that point.

The Rock Crab is predominantly a species in state waters and is not typically found as far offshore or is not harvested in the numbers that the Jonah Crab is. What would you propose is that full reporting; what would it fall under; and how would it affect that Rock Crab that is a fairly significant bait crab in some of our fisheries?

MS. KERNS: Adam, one of the reasons why the commission had recommended a full Cancer Crab as well as the FIP FMP is because of the confusion in the data and the uncertainty in some of the landings if you would try to parse them out; and so that's why we want full reporting and an understanding of the difference between the two species. The problem comes where the common name for Jonah Crab is Rock Crab and the common name for Rock Crab is Sand Crab.

That is why the data has some uncertainty to it. For right now what the FIP had recommended was we have full reporting for everything so that we can have a better clarity on that data, but the measures focus on Jonah Crab at first until we have a better understanding of what the landings look like for the Rock Crab. I would turn to Steve and David to make sure that I have accurately stated what the FIP said.

MR. STEPHEN R. TRAIN: I want to clear up some of the questions as to why it is here. We have other species that we co-manage with the feds. We have shrimp that is primarily harvested in federal waters. The participants in the fishery – and we had a lot of them at the meetings we've had – actually requested, because they are primarily lobster fishermen and this is a secondary harvest or secondary species, to have the same management. To keep everything simple, they actually were hoping we could tie it together much like the states of Maine, New Hampshire and Massachusetts already do with their lobster license.

MR. BORDEN: Mr. Chairman, I'll just follow up on Steve's point – and this gets to the question that Ritchie related to us – is 99 percent of the crabs currently are landed by individuals with lobster licenses. When this issue came up for the FIP process, it made no sense to start out with a completely separate FMP.

The point was that since that large a percent were harvested by the individuals with either state or federal lobster licenses, we thought it would be appropriate to direct these recommendations to the commission since the commission is the lead agency on lobsters. It is just logical. I'm just trying to answer Ritchie's point on that.

If I might just for a couple of minutes, Mr. Chairman, I'd like to make a couple of other points. So that you don't get into a lot of additional questions, maybe I can answer some of these for everyone's edification. This is very much an open process. It was a very unusual process where the supermarkets basically paid in conjunction with the processing industry to develop the guidelines for a sustainability plan.

At least my history with history management issues, I've never been part of a process where the supermarkets were coming in and basically working with an institution like the Gulf of Maine Research Institute and basically saying we want to ensure that this is a sustainable product going ahead.

The other point I would make is that historically Jonah Crab were a bycatch. Now it is becoming very much a targeted fishery particularly in Massachusetts and in Rhode Island. There are some landings in Massachusetts these days where individual vessels land 50,000 pounds of Jonah Crabs where it is seventy-five cents a pound.

The value of the landings at certain times of the year far exceeds the landings from the lobster resource, which was the targeted fishery. If you haven't had a chance to go through the documentation, which I think is very extensive, it pulls together all of the known information on crabs. If you just look at the executive summary in the document, it summarizes the problems that we're trying to avoid.

In other words, we're trying to be proactive and deal with these problems up front. I think it is kind of critical in my own view to get ahead of these issues and not allow a separate crab fishery to develop in federal waters that ends up triggering all kinds of protected species issues, which it surely will.

I think this is a good opportunity where the FIP Process has developed a lot of the information that the commission would need to start the process. I think the important point here is that this is just the start of the process. If the Policy Board were to agree and forward this recommendation to the Lobster Board; it would start the process. There wouldn't be a predetermined outcome.

The board could look at the recommendations that the FIP formulated. I think what Toni and Bob did was, when they develop this year's budget, they actually budgeted funding to do that, which I think was in hindsight an excellent thing for the staff to do. That would just start the process. The staff would take all this documentation and basically prepare a

scoping document and that would start the process. I totally support this and I hope the Policy Board endorses the recommendation. Steve Train has a motion for you, Mr. Chairman.

CHAIRMAN DANIEL: Let me go to Dave Simpson first.

MR. SIMPSON: I just wondered with the fall-off of lobster and the idea that this would be best coupled, you know, lobster/crab managed fishery, whether the traps – I know they catch a lot of Jonahs in lobster traps, but would they be designed differently if the focus became Jonahs; the dimensions of the trap, the vents – well, especially the escape vent, the funnels – how much would they start to look different from a lobster trap?

CHAIRMAN DANIEL: Can you answer that and then you can move right on into whatever you've got.

MR. TRAIN: Currently without regulations on the crab fishery, they can do almost anything; but if it is concurrent regulation with the lobster fishery, which is what most of the guys are working under, they've still got to have the legal lobster vent and they've still got to maintain the trap limit as required by law. Without regulation in that fishery, a lot of what you said could happen.

MR. SIMPSON: And my understanding is that in federal waters if it is capable of catching a lobster, then it is a lobster trap. Is that essentially right and so the vent size requirement would apply and so forth?

MR. TRAIN: Perhaps you'd get a better answer down at the end of the table, but we were told two different things. We were told that applies if you have a lobster license, but it doesn't if you don't.

MR. PETER BURNS: Just to clarify, if someone has a federal lobster permit, they can only fish a lobster trap that meets the specifications that are in the federal regulations. They can't fish anything outside – just like Steve said, they can't fish outside the trap limit or fish a different design than a regular federal lobster trap.

CHAIRMAN DANIEL: Thank you for that clarification. Steve, you've got something you want to present?

MR. TRAIN: I have a motion if you're ready for it. I would like to move to initiate a Cancer Crab Fisheries Management Plan with the focus on

Jonah Crab and task the Lobster Board with development of the FMP.

MR. BORDEN: Second.

CHAIRMAN DANIEL: I've got a motion from Mr. Train and seconded by Mr. Borden. Is there discussion on the motion? Ritchie.

MR. WHITE: Having heard the discussion that clarified my question earlier; I certainly support the motion; but I also wonder if in this time of financial tightness and with us not being able to do stock assessments as fast as we want them, would there be the ability to ask the Service to provide some financial assistance in this effort where we really are managing a federal species and see if we could get some help financially to take this on.

CHAIRMAN DANIEL: I think we can look into that and report back. Pat.

MR. PATRICK C. KELIHER: Dave Borden made a few comments that I'm not sure jive with what is on the board. This is just to move the discussion back to the Lobster Board. The way this reads is the Lobster Board is going to have to now initiate it and move forward with the development of an FMP.

MS. KERNS: The way staff interprets this is that the Policy Board is saying we want to initiate an FMP so we would start to put together a draft PID, but that PID approval process, just like we normally go through, instead of the PID coming to the Policy Board it would go to the Lobster Board. In a sense what we had discussed is that it would likely become the Lobster and Cancer Crab Board coupled together. They both would have their own individual FMPs, but many aspects of those FMPs might be the same in particular with the Cancer Crab FMP. Does that help?

MR. KELIHER: I'm going to support the motion. I think bringing some consistency into place is good at this time. I think it helps us resolve some potential problems with ESA and Marine Mammal Protection Act issues that the states are continually dealing with, especially in New England with lobsters. And just one little last bit of clarity; this has been budgeted for then; that is my understanding?

MS. KERNS: We've put funds in the budget to do some public hearings, yes.

MR. SIMPSON: So if I take Steve's comment and NOAA's comment that if we don't do this, then a

crab fishery can develop independent of the lobster fishery. If they don't have a lobster permit, then sort of by definition they're not fishing a lobster trap but they can go fish for Jonahs. That sounds like it would be really problematic so I think this is a good idea to do. I'll leave it at that.

MR. GROUT: So, per Ritchie's comment about who is going to help with the monitoring here, I will be looking forward to how you get back to us on NOAA's response. I might even suggest either now or at the August meeting that we write a letter saying we are planning on doing this; what financial assistance can you provide to help with monitoring and management of this species that is occurring in federal waters?

MS. KERNS: Doug, we can do that. I have some pre-discussions with Mike Pentony at GARFO. He has indicated that they would like to have a staff member serve on the plan development team as well, so they are already committing some resources to the development of the document with in-kind resources, I guess you would say. We can follow up with a request for additional resources.

MS. KELLY DENIT: This is in addition to what Toni said. I just would point out obviously the FY-15 budget is already out for federal agencies in terms of what we've requested from Congress. Who knows what they'll actually provide, but this is certainly something that we can think about as part of moving forward with the planning for the FY-16 budget if this is something that we can potentially try and discuss through the federal appropriation request process.

MR. BORDEN: Mr. Chairman, I just want to give credit and acknowledge the participation of the National Marine Fisheries Service. They had staff at every single one of these meetings and provided information and analysis, did literature reviews. Peter Burns and his staff have helped with some of the technical and management issues. I totally understand why Doug and Ritchie are pointing out the need for additional funding to support the effort, but I just point out that the National Marine Fisheries Service has been a very willing, eager and successful participant in the process.

CHAIRMAN DANIEL: That's good to hear. Bob.

MR. BALLOU: I strongly support the motion and it is largely because of the strength and quality of the FIP Process and FIP Report. I really think this has been an excellent process and the results are really

compelling and really strong and it provides a very strong basis for us to move forward on; so credit to all those involved.

MR. ABBOTT: Mr. Chairman, just as our federal partners just stated, just last week we went over our budget for the next fiscal year also; and I don't think – I mean, I know we didn't put money in for anything that would involve Cancer Crabs.

CHAIRMAN DANIEL: That was not the budget for next year.

MR. ABBOTT: When I say for next year, the one that we will be working on.

MS. KERNS: The commission has not done its Action Plan for 2015. We've only done our Action Plan for 2014. In the fall we put forward the Action Plan which we will put resources – how we allocate our resources to come back to the Policy Board and the full commission for their approval. If this motion passes, then we would put funds in to continue the development of an FMP. We did reserve a small amount of money to do a few public hearings just in case the Cancer Crab FMP did go forward since we had been discussing it for the past several meetings.

CHAIRMAN DANIEL: Anybody else? Seeing none, I will read the motion: move to initiate a Cancer Crab FMP with the focus on Jonah Crab and task the American Lobster Board with the development of the FMP. Motion by Mr. Train; seconded by Mr. Borden. Is there any objection to the motion? Seeing none; it carries unanimously. Shanna.

# COMMITTEE ON ECONOMICS AND SOCIAL SCIENCE REPORT

MS. SHANNA L. MADSEN: I'm going to go ahead and make this nice and brief so we can move along. Back in October the Committee on Economics and Social Science gave a presentation which listed a number of options as to where and what degree they could provide socio-economic information. The board suggested that CESS actually complete a case study on local species that was a comprehensive socio-economic analysis.

Using our existing data, CESS could provide useful information to the board regarding projected socio-economic impacts of regulations or allocations. CESS could also investigate the impacts on landings, trends, prices, fleet capacity, user conflicts and cooperation as well as social variables. CESS would

also like to give socio-economic impacts on not just what the current status of the fishery is but also how past management actions have affected the fishery.

Along with this, the CESS would provide details of what data or information is currently not being collected for a stock that actually could have importance to future decisions. During the board meeting, there were two species that were suggested to the CESS, and those were lobster and eel. Recently CESS actually received a request from a Menhaden Board member that CESS also investigate various allocation options for menhaden and both the social and economic impacts of those allocations.

Essentially what CESS would like to hear from the board as which species they should begin with. CESS is more than willing to continue doing case studies in the future with other species, but we can only do one species at a time.

Any sort of recommendations that you guys can put forth to us would be great. One of the considerations that we took into account was that we were going to start with eel, but we realized that the addendum is already in progress and we would not be able to make any recommendations to that addendum in a quick timeframe.

MS. KERNS: And as a reminder to the Policy Board, the rationale for why we can only do one species at a time is this avenue of case study costs approximately \$20,000. We have set aside that money in the budget to do one species for this year. We do not have additional funds in order to do more than one at a time. If we want to continue on with these types of studies, then we would need to set aside money for next year, et cetera.

MR. THOMAS O'CONNELL: I'd like to put forth a recommendation if there is support to charge CESS with beginning to explore a framework to consider allocation of menhaden. It is an issue that the Menhaden Board discussed in December of 2012 when we advanced the last amendment. It is an action item in the 2014 plan that we begin to examine allocation issues so that when we have the 2016 assessment we'd be able to also review the last allocation.

My interest is if there is support to have CESS work on beginning to identify a framework that the board could use to examine allocation for menhaden, what some other data needs might be, associated cost and timelines and see if we could pull together the resources to have that information available when we have the 2016 assessment. Thanks.

CHAIRMAN DANIEL: So that's one vote for menhaden. Tom.

MR. FOTE: I'll second that vote. After the last Menhaden Board meeting, we spent an hour and fifteen minutes deciding if Florida could basically use a cast net fishery, and we need to get this straightened out. Let's go and get it straightened out.

CHAIRMAN DANIEL: Are there any other species that anyone would like to put forward for consideration? There was some discussion about – I brought up a point – I can't remember when – about just trying to do something that had broad-based interests and one that I thought of was summer flounder and red drum; but red drum is sort of mostly a southern state.

Summer flounder tends to affect more constituent groups than the others; but I think from some of the discussions that I've heard this week, the menhaden seems to be a reasonable proposal to move forward with, especially with the issues that we're having with the bait fishery at this particular juncture. Certainly, the floor is open for anyone that wants to suggest anything else. John.

MR. JOHN M.R. BULL: I was wondering if I could get a little bit more information on exactly the parameters would be for this look on socio-economic impact.

MS. MADSEN: We don't have anything specific currently. The issue is that we didn't really want to delve into a species without being positive that is the direction that the board wanted to go. What we can do is once we have established a species, we can definitely come back to the board with a game plan, a timeline, exactly what we think that we can pull and give to you. I just didn't want to set the committee off on one thing and then kind of turn them over to something else.

MR. PATRICK A. CAMPFIELD: I just wanted ask for some clarification in terms of the timing. Mr. O'Connell had asked for something in parallel with the 2016 menhaden assessment. I wanted to see if we wanted to wait that long or for the 2014 assessment.

CHAIRMAN DANIEL: Have you got some comments on that, Tom?

MR. O'CONNELL: Yes; I just think that the committee is going to require some time to begin to identify what sorts of criteria may be worthy of this board to consider in looking at allocation changes, if there is a change. They have to come back to the board with some of those ideas and get further guidance from us, look at what the timeframes and cost would be. I just think that is going to take probably – it is going to probably take the time that is probably going to parallel and getting information out of that 2016 assessment. I think we have to hear back from them, but I think it is going to take some time to pull together.

CHAIRMAN DANIEL: Asking staff; could we have a summary of the approach and what you can give us by the next meeting?

MS. MADSEN: Yes; I think that should be possible. I already have a call scheduled for the end of May so that we can start to lay out some of those things.

CHAIRMAN DANIEL: Is that the desire of the board? Is there any objection to that approach? Seeing none; that is so ordered. I've asked to go ahead and get through the action items. It should take about ten or fifteen minutes; and then we'll regroup with the MRIP discussion. Genny.

#### CONSIDER COMMENTS ON NOAA FISHERIES STOCK ASSESSMENT PRIORITIZATION

DR. NESSLAGE: The Stock Assessment Prioritization Agenda Item; the National Marine Fisheries Service has drafted a prioritization protocol for ranking stock assessments that would be conducted and reviewed each year. The idea behind this was that all of the fish stocks would be assigned scores or weighed in a weighting scheme based on several factors, including fishery importance, ecosystem importance, stock status, their biology and the assessment history. Once all that scoring was done, then there is a set of algorithms that they have developed that would then produce a draft schedule for each council.

The goal of this is to provide a somewhat more objective and transparent framework for setting the stock assessment priorities each year. Spearheading this effort was Dr. Rick Methot. He was kind enough to present to the Assessment Science Committee and science staff on the draft process and answer some of our questions.

They have solicited feedback from the public and the commission would like to provide some questions, comments and concerns. If you look in the supplemental materials, there is a letter that has been drafted by staff summarizing the Assessment Science Committee and staff's concerns with the process.

I won't go through all the details, but I will highlight a few of the issues that we are probably most concerned with; the first being that we, at least at this moment, are not considered in this process at all. That was a red flag to us largely because some of our most high-profile species like menhaden, lobster and striped bass all involve stock assessment scientists from the NOAA Fisheries Centers and that several of our species are reviewed through the SARC and SEDAR processes, including red drum, menhaden, and croaker.

Also, because of that, if we aren't involved in that prioritization process, we're not sure how we would fit into the decision-making at that point. Even for species that aren't managed or jointly managed with the councils; we do have species that are completely under our own management process to do involve federal staff and federal venues.

We were concerned that if we weren't involved in the prioritization process-setting, that we're not sure where we would fall out in all of that. We highlighted that concern. Also, number two, there is some wording in the document that states that all state- and commission-managed stocks would automatically fall into a second tier for consideration; and we're concerned that our stocks would thus be placed at a lower or low priority for assessments being conducted or reviewed.

The other major concern I think that those who have reviewed this process have is the scoring system. While it is still trying to balance the needs of overfished stocks or stocks that are in poor condition for one reason or another with the needs our well-managed stocks or our stocks that are in good condition, the scoring system still appears to be heavily weighted towards stocks that are in poor condition.

We're concerned that many of our species which may be in good conditions because of frequent good stock assessments may end up suffering as a result. I don't know how much more detail you'd like me to go into at this point, but I'm happy to answer any questions you may have. MR. AUGUSTINE: I read the comment in there about river herring. Have you had direct contact with them about doing something with that and are we going anywhere? As you know, we're having a lot of river passages being opened up and we're seeing a very good increase in those animals going upstream. It just seems to me if that is just ignored or down low in Tier 2; I think sooner or later we've got to get some attention to it. Could you help us on that one?

DR. NESSLAGE: Yes, we have spoken with Dr. Methot and identified the fact that we're not currently updated in their databases that they're using to create this prioritization scheme. One of the problems that we ran into what he is referring to is that river herring has all the different systems' assessments and that didn't really fit into the database that they're using. We brought that to his attention and he is going to work with us to try and figure out a way to get into the system.

MR. GROUT: Mr. Chairman, I had the pleasure of getting a report on this at our New England Council Dr. Methot. My first comment and comment by many of my fellow council members is, boy, this was put together by a stock assessment biologist and not a policy person.

But that being said, I read over the draft letter and I think there are important concerns that I think the commission should move forward in a letter to Dr. Methot to make him aware of these concerns that we have. I'm hoping that we won't lose the Regional Coordinating Council's input into these, too. I think that is very valuable where we have Bob and I think, Toni, you sit on it, too, and trying some to get some of our assessments done, too.

CHAIRMAN DANIEL: Thank you, Doug; I agree. Does anybody have a concern over the content of the letter or sending the letter to Dr. Methot? Is there any objection to that? Seeing none; so ordered. One more item.

#### **OTHER BUSINESS**

MS. DENIT: Just quickly; we wanted to follow up on the 2014 recreational summit that was held here in D.C. back in April that was focused on getting input from constituents on a variety of recreational fishing-related issues. One of the major outcomes of that summit was the agency deciding that it needed to develop a recreational fishing management policy.

I wanted to make sure that this board was aware of that decision and also kind of just quickly run through what that policy development process looks like. As the states are key partners in this, we wanted to make sure and flag this; and also towards the end, I will get to kind of my two requests of the commission.

Just quickly up here on the board you'll see running through kind of from this essentially now until the end of the year. The idea is to start initially with getting broad stakeholder input. Our approach is to have both listening sessions in person as well as sort of a national webinar, use electronic technologies kinds of approaches; taking that input and developing a draft policy; and then from there moving through internal review and clearance and getting the document again back out for an opportunity for folks to review and provide an additional round of comments and then a final policy ideally some time in the winter.

This is kind of hitting on the key points in terms of virtual, which is we will be setting up a website. We heard a number of comments about wanting to get as broad a range as possible of stakeholders to provide input into this policy. One avenue to do that was to create a website where folks would be able to go and provide comments in responses to some trigger questions that we will be putting up there.

As I mentioned, we will also host a national town hall and then also have the MAFAC Recreational Fishing Subgroup have an opportunity to weigh in. We will be hosting a state directors' meeting in September. We see that as a critical place where we will able to get input as part of this. Also an interstate commission's webinar is another avenue. Here you have a list of where we would be planning to hold our listening sessions – they are generally in conjunction with council meetings – as an opportunity to get stakeholders while they're participating in those other meetings.

This brings me to my two requests. The first would be that we would be interested in being able to hold a stakeholder input session as part of the August commission meeting and so seeking feedback from this board and the commission on that concept.

The second idea would be again trying to improve our outreach and reaching as many anglers as we can — would be the interest of board members in providing information on the website access as part of public hearings or other outreach that you all are conducting throughout the summer where we could provide that information to you all and ask that you share that with your stakeholders as you're out and

about this summer. With that, I would happy to answer any questions and look forward to hearing the feedback.

CHAIRMAN DANIEL: Are there any questions for Kelly? Is there any objection to participating with them in August? Dave.

MR. SIMPSON: Kelly, do you have dates for the September state directors' meeting or is it still to be determined?

MS. DENIT: We do; September 8<sup>th</sup> through 10<sup>th</sup> is what we're looking at.

MR. FOTE: Over the years I've attended many of these meetings and this is probably one of the best run with the commission staff, Laura doing a great job of getting the housing arrangements and everything else, and Danielle basically coordinating and NMFS basically doing it. It was one of the bestrun meetings I have been at in a long time and they've done a great job putting it together. I just want to compliment them.

Sometimes you go to these things and you say why am I wasting my time; and I don't think it was wasted time. I was interested in listening to all the Hawaii fishermen and they wanted to talk to me about a saltwater fishing license when I'm out there in December; so that should be an interesting meeting. They're one of the few states with like New Jersey and New York that don't have a saltwater fishing license.

CHAIRMAN DANIEL: I guess folks could get with you if they have constituent groups or meetings that they're going to hold over the summer to try to generate and get that material. You can certainly send me some. I have a lot over the next three months. Anything else?

# HABITAT AND ARTIFICIAL REEF COMMITTEE REPORTS

MS. KERNS: We were going to have a Habitat Committee and Law Enforcement Committee Report; but I'm going to quickly just go through. The Habitat Committee as well as the Artificial Reef Committee met since our last meeting in February. Their committee reports are on the briefing CD. Please look at them; they have been doing some great work.

The Artificial Reef Committee is going to be developing guidelines for marine artificial reef

materials – it will be the third edition – as well as they're going to look into doing a white paper on the long-term economic benefits of artificial reefs. The Habitat Committee will be doing for their habitat management series, Nearshore and Estuarine, Aquaculture, Sciaenid Habitat Source Document as well as a living shoreline guidance document, which will be an update from the first edition. The Habitat Hotline will look at adaptations to climate change.

# LAW ENFORCEMENT COMMITTEE REPORT

The Law Enforcement Committee met yesterday and today. We will send out a report on their meeting to the Policy Board.

#### **OTHER BUSINESS**

CHAIRMAN DANIEL: All right, any other business? Tom.

MR. FOTE: Two interesting issues have come up in the last month in New Jersey, but I think it is affecting along the whole coast. The Army Corps of Engineers, in their usual ultimate wisdom, is looking for places to get beach replenishment sand. The Third District, which is Philadelphia, said we're going to do you a favor and take the Manasquan Ridge and make it a borrow pit and two other lumps on one of our artificial reefs. We're working on that.

The other one is seismic blasting. Keven Walken and a bunch of fishermen do the research on sturgeon; and they're proposing to do this sonic blasting in June and July when all the porpoises, turtles, sturgeon and everything else is out there. We shouldn't be doing it; plus it will chase whatever fish from both the commercial and the recreational sector away from that whole area.

Anybody is not realizing that the noise they generate with this sonic blast is 250,000 decibels when an airplane is 120 – I mean, so we have some resolutions going in from the New Jersey Legislature on that if some people want to see copies of this. The sand mining is one of the concerns because we have problems enough with surf clams and things like that and we don't want to destroy the places where they do if.

You know, it is interesting; in the documents is says these are important fishery areas; and, by the way, we're going to take and mine sands out of them. As far as the seismic blasting, they says, oh – and you'd appreciate this, Louis – they said that they could have

I think it was 620 takes. Now, isn't that nice; would you like 620 marine mammal takes. I mean, this is what they're proposing just for the one operation. And as you're familiar, this is not just going to happen in New Jersey. They're going up and down the whole coast on this. I thought I'd just bring that to your attention and maybe the Habitat Committee could look at it.

#### **ADJOURNMENT**

CHAIRMAN DANIEL: Anything else to come before the ISFMP Policy Board? If not, we will stand adjourned.

(Whereupon, the meeting was adjourned at 2:45 o'clock p.m., May 14, 2014.)

The Commission received the following emailed public comment from 3771 individuals.

#### **Tina Berger**

From: kaleyfrank@yahoo.com

Sent: Wednesday, July 16, 2014 1:08 PM

To: Comments

**Subject:** Thank You!: 300 million more menhaden in the Atlantic Ocean

Dr. Louis B. Daniel III, Chairman Atlantic States Marine Fisheries Commission

#### Chairman Daniel:

Thank you and the Atlantic States Marine Fisheries Commission for responding to the public call for action in December 2012 and passing the first coastwide limit on the catch of Atlantic menhaden. The numbers from the first year of fishing under the new system demonstrate that your amendment is achieving its ambitious conservation objectives.

The coastwide limit on catch was not exceeded, and as a result there are now approximately 300 million more menhaden in the Atlantic Ocean to fulfill their ecological role by feeding other fish, seabirds, and mammals. The new management structure, including enforceable limits and reporting, is now in place in all 15 Atlantic coast states. In addition to managing catch to your target level, you also put in place new and improved biological reference points, which have allowed managers to better determine the health of the menhaden population.

As a result of your historic decision and its implementation by states, the hundreds of millions of menhaden left in the water can serve as forage for everything from tuna and striped bass to ospreys and whales, which in turn will support commercial and recreational fishing businesses and ecotourism. Thank you for creating an effective conservation management system for the largest fishery on the Atlantic coast.

Sincerely,

Kaley Frank Portland Oregon United States



## **Atlantic States Marine Fisheries Commission**

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#### **MEMORANDUM**

July 20, 2014

To: ISFMP Policy Board

From: Toni Kerns, ISFMP Director

**RE:** Annual Performance of the Stock Definitions

Each August the Commission releases the Annual Performance of the Stocks Overview. The overview provides a gauge on how well stocks are performing in comparison to their reference points and the actions boards have taken in the past few years. Commission species are divided into 5 categories: Rebuilt, Rebuilding, Concern, Depleted, and Unknown. The Policy Board tasked staff to refine and define these categories and some of the terms used throughout the document. Staff suggests the following language be added to the overview.

The majority of Commission's Fishery Management Plans (FMPs) specify a reference points for determining when a stock is subject to overfishing or overfished. The Commission uses stock assessments (an analysis of the abundance and of a stock composition) to evaluate the stock relative to its reference points. Benchmark stock assessments use the best information available, including catch data, scientific surveys, and biological and ecological studies, and then are peer reviewed by independent scientists before considering it for management use.

Fishery management seeks to optimize the yield of a fishery in the long term, resulting in a harvest that is economically valuable and biologically sustainable. Management plans set target levels of stock abundance to ensure that the population is large enough to produce an economically valuable harvest, and fishing mortality rate targets to ensure that fish are not removed faster than the population can replace them.

A rebuilt stocks biomass is equal to or above the biomass level established by the FMP to ensure population sustainability. Viable/rebuilding stocks exhibit stable or increasing trends and biomass is approaching the target level established by the FMP to ensure population sustainability.

A stock that is overfished has been reduced to a level of abundance that cannot produce high catches, and may not reproduce as fast as a population that is above its biomass threshold. Stocks can be reduced below their biomass threshold for reasons other than fishing, such as environmental changes, disease, or habitat loss; in that case the population is said to be depleted, rather than overfished. However, the population still cannot sustain economically optimal levels of catch.

A stock that is experiencing overfishing is having fish removed at a rate faster than the population can sustain in the long run, which will lead to declines in the population.

An unknown stock is one that has no accepted stock assessment to estimate the stock status. Stocks of concern are those stocks developing emerging issues, e.g. increased effort, declining landings, or impacts due to environmental conditions.

Rebuilt	Stock biomass is equal to or above the biomass level established by the FMP to ensure population sustainability. A stock is still considered rebuilt if it drops below the target but remains above the threshold.	
Viable/Rebuilding	Viable stocks exhibit stable or increasing trends. Stock biomass is approaching the target level established by the FMP to ensure population sustainability.	
Unknown	There is no accepted stock assessment to estimate the stock status.	
Depleted	Reflects low levels of abundance though it is unclear whether fishing mortality is the primary cause for reduced stock size	
Concern	Those stocks developing emerging issues, e.g. increased effort, declining landings, or impacts due to environmental conditions.	
Overfished	Occurs when stock biomass falls below the threshold established by the FMP, significantly reducing the stock's reproductive capacity to replace fish removed through harvest.	
Overfishing	Occurs when fish are removed from a population at a rate that exceeds the threshold established in the FMP. A stock that is experiencing overfishing is having fish removed at a rate faster than the population can sustain in the long run, which will lead to declines in the population.	
Stable/ Unchanged	Stock biomass has been consistent in recent years.	
Stock assessment update	Incorporates data from the most recent years into a peer-reviewed assessment model to determine current stock status (abundance and overfishing levels)	

## **Atlantic States Marine Fisheries Commission**

## Annual Performance of the Stocks: 2014 Review

## **July 2014**

**Objective:** – Support the ISFMP Policy Board's review of stock rebuilding performance and management board actions and provide direction to management boards for 2015 Action Plan.

- A. Validate status/rate of progress (acceptable/not acceptable)
- B. If not acceptable, identify appropriate corrective action

**Species Groups:** – Species are grouped under five major categories (1) rebuilt; (2) viable/rebuilding; (3) concern; (4) depleted; and (5) unknown. (Proposed Definitions for these categories will be finalized at the August ISFMP Policy Board meeting)

#### Rebuilt:

American Lobster (GOM and GBK)
Atlantic Herring

Atlantic Herring Black Sea Bass

Bluefish Scup

Spanish Mackerel Spiny Dogfish Summer Flounder

## Viable/Rebuilding:

Red Drum

#### Concern:

Atlantic Croaker Atlantic Menhaden Atlantic Striped Bass Coastal Sharks Horseshoe Crab Spotted Seatrout Winter Flounder (GOM)

# **Depleted:** American Eel

American Lobster (SNE)
American Shad
Northern Shrimp
River Herring
Tautog
Weakfish
Winter Flounder (SNE/MA)

#### **Unknown:**

Atlantic Sturgeon Black Drum Spot

#### Status as of 1998

## Rebuilt/Rebuilding:

Atlantic Herring Atlantic Striped Bass Bluefish Black Sea Bass

Spanish Mackerel Summer Flounder

## Concern/Depleted:

American Lobster (SNE)
Atlantic Menhaden
Northern Shrimp
Red Drum
Scup
Spiny Dogfish
Tautog
Weakfish

Winter flounder (SNE/MA and GOM)

#### **Unknown:**

American Eel
Atlantic Croaker
Atlantic Sturgeon
Horseshoe Crab
Shad & River Herring
Spot
Spotted Seatrout

# **Rebuilt Species**

- American Lobster Gulf of Maine and Georges Bank
- Atlantic Herring
- Black Sea Bass
- Bluefish
- Scup
- Spanish Mackerel
- Spiny Dogfish
- Summer Flounder

## **Summary Table of Rebuilt Species**

Species	Biomass % of Target	Assessment Schedule	Caveats/Notes (what actions need to be taken to maintain rebuilt status)
American Lobster (Gulf of Maine)	161% of abundance threshold, no target set (2009 assessment)	Benchmark Assessment - 2015	Record high effort and abundance levels  Area 514: very high exploitation rates and declines in recruitment warrant further restrictions
American Lobster (Georges Bank)	247% of abundance threshold, no target set (2009 assessment)	Benchmark Assessment - 2015	Record high effort and abundance levels Sex ratio skewed toward females (~80% from 2005 to 2007) for unknown reasons. Warrants caution: stock could experience recruitment problems if male numbers remain low
Atlantic Herring	>300% of biomass target (SAW/SARC 54 2012)		Area 1A annual quota fully harvested for last several years, with the exception of 2013. Harvest controls implemented to slow landings (TAC, days-out). Draft Amendment 3 to explore spawning protections.
Black Sea Bass	102% of SSB target (2012 assessment update)	Benchmark Assessment- 2016	The black sea bass model average retrospective pattern suggests that F is underestimated and recruitment and total biomass are overestimated in the terminal year.
Bluefish	84% of SSB target (2014 assessment update)	Annual Assessment Updates; Benchmark Assessment – 2015	Age/length key incomplete necessitating assumptions regarding year class allocation of some important size classes. Addendum I, implemented in 2012, establishes coordinated sampling at the coastwide level to achieve a representative biological sample of the fisheries.
Scup	202% of SSB target (2012 assessment update projection)	Benchmark Assessment - Summer 2015	There is no consistent interval (within the 2010 assessment model) retrospective pattern in F, SSB, or recruitment evident in the scup assessment model.
Spanish Mackerel	SSB <sub>2011</sub> /SSB <sub>MSY</sub> =1.49; SSB <sub>2011</sub> /M <sub>SST</sub> =2.29 (2012 benchmark stock assessment)		Not overfished or experiencing overfishing
Spiny Dogfish	100% of SSB Target (2013 NEFSC update)	Assessment Update - Fall 2014	2008-2013 SSB exceeded target SSB. Increased recruitment in the past four years suggests a 'filling out' of the oscillations in future population projections.

## **Summary Table of Rebuilt Species**

Species	Biomass	Assessment	Caveats/Notes
	% of Target	Schedule	(what actions need to be taken to maintain rebuilt status)
Summer Flounder	82% of SSB target (2013 benchmark stock assessment)	Assessment Update Spring 2016	Historically, the summer flounder stock assessment model has exhibited a retrospective pattern of underestimating fishing mortality and overestimating SSB. For the last several terminal years, however, fishing mortality has been overestimated and SSB underestimated. A recent pattern of retrospective overestimation in recruitment is also evident. Fishing mortality was estimated to be 0.285 in 2012, below the threshold fishing mortality reference point of F <sub>MSY</sub> = 0.309.

# **Viable Species Undergoing Rebuilding**

• Red Drum

## **Summary Table of Viable Species Undergoing Rebuilding**

Species	Biomass	Assessment	Caveats/Notes
	% of Target	Schedule	(what actions need to be taken to continue rebuilding)
Red Drum	Unknown, but age 1-3	Benchmark Assessment	Northern stock component above SPR target; cannot determine similar
	abundance generally	- 2015	result for southern component due to uncertainty. Lack of adequate adult
	increasing (NJ-NC) or		data results in estimates of abundance and exploitation for fish age 1-3 only,
	stable (SC-FL); overfishing		and only the trend is reliable for the southern component. Age 1-3
	not occurring.		exploitation generally increasing in southern region since 1992.

## **Species of Concern**

- Atlantic Croaker
- Atlantic Menhaden
- Atlantic Striped Bass
- Coastal Sharks
- Horseshoe Crab
- Spotted Seatrout
- Winter Flounder Gulf of Maine

## **Atlantic Croaker: Concern**

#### **2010 Stock Assessment Findings**

- Atlantic croaker is not experiencing overfishing. Biomass has been increasing and fishing mortality
  decreasing since the late 1980s. Biomass conclusions are based increasing indices of relative abundance
  and expanding age structure in the catch and indices. The overfished status could not be determined due
  to the high uncertainty in the shrimp trawl discard estimates.
- However, model estimated values of fishing mortality (F), spawning stock biomass (SSB), and biological reference points are too uncertain to be used to determine stock status.

#### **Scientific Advice Based on Assessment Findings**

- The 2010 Review Panel stressed the importance of developing valid estimates of shrimp trawl discards to improve the certainty of future assessment results. The following were also highlighted as areas of need for data and analysis:
  - o Fishery-dependent biological sampling to improve age length key
  - More information on growth rates, age structures, estimates of fecundity, and maturity
  - Fishery-independent size, age, and sex specific relative abundance estimates to monitor long-term changes in abundance.

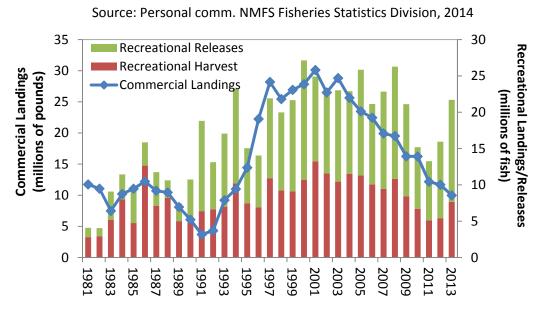
#### **Board Adherence to Scientific Advice**

In August 2013, the TC presented to the Board a draft report utilizing the traffic light approach (TLA) to
monitor the Atlantic croaker fishery. The Board tasked the TC with further developing a management
framework to consider in conjunction with the TLA. Subsequently, the Board initiated Draft Addendum II in
February 2014 and approved the draft addendum for public comment in May 2014, with the TLA and
management framework as an option to replace the current trigger exercises.

#### **Monitoring and Management**

- Annual trigger exercises are specified in Amendment 1 (2005). The trigger exercises stipulate a stock assessment will be triggered if the most recent year's commercial or recreational landings are less than 70% of the previous two years' average landings.
- Management measures are state-by-state, with some states having no managements measures

## **Atlantic Croaker Commercial Landings & Recreational Landings/Releases**



**Rebuilding Trajectory:** 

Timeline of Management Actions: FMP (1987); Amendment 1 (2005); Addendum I (2011)

**Increasing** 

Next Assessment: benchmark stock assessment scheduled for 2016

## **Atlantic Menhaden: Concern**

#### **2012 Assessment Update Findings**

- Based on the terminal year of the assessment (2011), the stock is experiencing overfishing, but it is
  unknown if the stock is overfished. The uncertainty in the overfished determination comes from
  conflicting results of sensitivity runs explored in the 2012 stock assessment update.
- The Technical Committee is currently exploring the uncertainty in the assessment update through an
  investigation of additional datasets and modeling approaches as part of the benchmark stock assessment
  process.

#### **Scientific Advice Based on Assessment Findings**

• In 2010, the Peer Review Panel noted that Atlantic menhaden population abundance had declined steadily and recruitment had been low since the last peak observed in the early 1980s. Fishing at the F threshold reference point in the terminal year (2008) has resulted in approximately 8% of the maximum spawning potential (MSP). Therefore, the Panel recommended alternative reference points be considered that provide greater protection for spawning stock biomass (SSB) or population fecundity relative to the unfished level.

#### **Board Adherence to Scientific Advice**

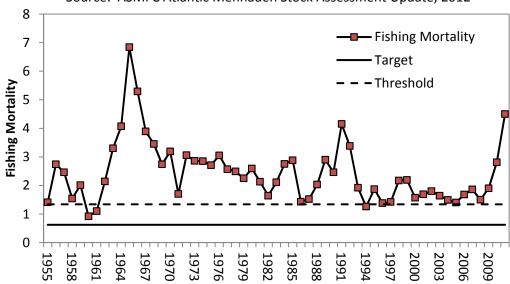
- Addendum V, implemented in 2011, established interim reference points (F15% MSP threshold and a F30% MSP target). Amendment 2 followed in 2012 with SSB reference points based on MSP (SSB 15% threshold and SSB 30% target). The new reference points adopted by the Board aim to increase spawning stock biomass and Atlantic menhaden availability as a forage species. The Board also directed the Multispecies Technical Committee and the Atlantic Menhaden Technical Committee to focus on the development of ecosystem based reference points.
- The Board took action through Amendment 2 to end overfishing by establishing a 170,800 MT total allowable catch beginning in 2013 and continuing until completion of, and Board action on, the next benchmark stock assessment, scheduled for 2014.
- Total 2013 harvest excluding bycatch was 166,077 MT, 2.8% below the coastwide total allowable catch of 170,800 MT established through Amendment 2. Amendment 2 implementation has also improved reporting as well as expanded biological monitoring for the bait fishery.

Next Assessment: 2014 benchmark assessment

Rebuilding Trajectory: Unknown

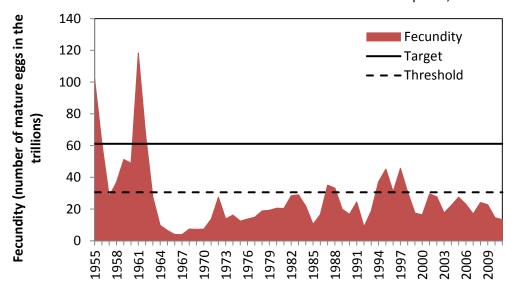
#### Atlantic Menhaden Fishing Mortality (Full F)

Source: ASMFC Atlantic Menhaden Stock Assessment Update, 2012



#### **Atlantic Menhaden Fecundity**

Source: ASMFC Atlantic Menhaden Stock Assessment Update, 2012



Timeline of Management Actions: FMP (1981); FMP Revision (1991); Amendment 1 (2001); Addendum I (2004); Addendum II (2005); Addendum III (2006); Addendum IV (2009); Addendum V (2011); Amendment 2 (2012); Technical Addendum I (2013)

## **Atlantic Striped Bass: Concern**

#### 2013 Benchmark Assessment Findings

- Assessment results show F in the terminal year (2012) was above the new F target, and SSB has been steadily declining below the target since 2006 (F and SSB Figures). This indicates that even though the stock is not overfished and overfishing is not occurring, SSB is approaching its overfished threshold and stock projections show SSB will likely fall below the threshold in the coming years because of poor year classes from 2005-2010 that are moving through fishery.
- The 2011 year class was strong and will mature into the spawning stock in 2016-2017 (recruitment/SSB figure below).

#### **Scientific Advice Based on Assessment Findings**

The 2013 benchmark stock assessment approved by the Board for management use recommended changes to the fishing mortality (F) reference points to be consistent with the spawning stock biomass (SSB) reference points. In order to achieve the proposed F reference points, the Board will need to reduce harvest across all sectors.

#### **Board Adherence to Scientific Advice**

- The Board initiated the development of Draft Addendum IV, based on the results of the 2013 assessment, to consider changes to the F reference points as well as management options to reduce F to a level that is at or below the new F target within one or three years.
- Any changes in management adopted through draft Addendum IV are being considered for implementation in 2015.

Next Assessment: 2018 benchmark assessment, unless the Board requests a stock assessment update

**Atlantic Striped Bass Female SSB & Recuitment** 

#### **Rebuilding Trajectory:** Declining

0

#### Source: ASMFC Atlantic Striped Bass Stock Assessment, 2013 200 200 180 180 Female SSB (in millions of pounds) 160 160 Recruitment (millions of fish) 140 140 120 120 100 100 80 80 60 60 Female SSB 40 40 Female SSB Threshold Female SSB Target 20 20

Timeline of Management Actions: Amendment 1 & 2 (1984); Amendment 3 (1985); Amendment 4 (1990); Amendment 5 (1995); Amendment 6 (2003); Addendum I (2007); Addendum II (2010); Addendum III (2012)

1992

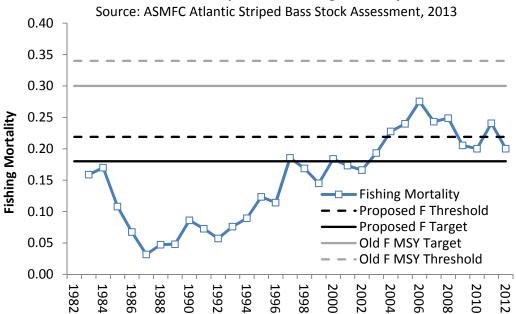
1994

Recruitment

2002 2004 2006

1998

### **Atlantic Striped Bass Fishing Mortality**



<sup>\*</sup> The F estimate for 1982 was considered unrealistic and unreasonable high, and is not shown on this graph.

## **Coastal Sharks: Concern**

#### **Assessment Findings**

Species or Complex	Overfished	Overfishing
Porbeagle	Approaching	Yes
Dusky	Yes	Yes
Large Coastal Sharks	Unknown	Unknown
Blacktip (Atlantic)	Unknown	Unknown
Sandbar	Yes	No
Atl. Sharpnose	No	No
Blacknose	Yes	Yes
Bonnethead	No	No
Finetooth	No	No
Smoothhound Sharks	In progress	In progress

#### **Board Adherence to Scientific Advice**

- Based on TC advice, the Board approved FMP regulations that generally complement regulations in federal
  waters, ensuring F does not exceed F<sub>MSY</sub> or F<sub>REBUILD</sub>, and protecting sandbar shark pupping grounds in state
  waters.
- There is general concern among members of the TC that a 12-to-88 fin-to-carcass ratio may create a loophole because different states retain different fin sets. The Board initiated Draft Addendum V to remove the fin-to-carcass ratio for spiny dogfish, which is consistent with the Shark Conservation Act.

#### **Monitoring and Management Measures**

- May 15 July 15 closed season from NJ-VA to protect pupping females for the following species: silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead.
- Fins to remain attached to the carcass through landing for all species except smooth dogfish. Addendum II allows commercial fishermen to process (remove the fins) smooth dogfish at sea year round but requires a 88-12% carcass to fin ratio for all dressed smooth dogfish carcasses.
- Recreational fishing controlled through possession limits with a 4.5' fork length size limit for all species
  except for Atlantic sharpnose, finetooth, blacknose, and bonnethead which do not have a size limit, and
  6.5' for all hammerhead shark species.
- Recreational anglers can only harvest sharks caught with a handline or rod & reel.

Next Assessment: SEDAR 39 (Smoothhound sharks) 2015

**Rebuilding Trajectory:** Variable by species/complex

#### **Horseshoe Crab: Concern**

#### **Assessment Findings**

- Abundance has increased in the Southeast and Delaware Bay Region (New Jersey through coastal Virginia), and decreased in New York and New England.
- In the Delaware Bay, increasing trends were most evident for juveniles, followed by adult males. A small increase in adult females is now beginning to be observed in the Virginia

#### **Regional Trends in Horseshoe Crab Abundance**

	Time series	
	duration of longest	Conclusion about
Region	dataset	population change
New England	1978 - 2008	Declined
New York	1987 - 2008	Declined
Delaware Bay	1988 - 2008	Increased
Southeast	1993 - 2009	Increased

Tech Benthic Trawl Survey. These patterns are indicative of population recovery, given that horseshoe crab females take longer to mature than males.

- Declines in the New England population were also apparent in the 2004 assessment; however, declines in New York represent a downturn from the 2004 assessment. The Technical Committee believes decreased harvest quotas in Delaware Bay encouraged increased harvest in nearby regions.
- The Technical Committee recommends continued precautionary management to address effects of redirected harvest from Delaware Bay to outlying populations.

#### **Needed Information/Data**

- Coastwide survey or surveys by broader geographical region
- Reference points
- A mechanism to include biomedical landings in regional assessments without compromising data confidentiality

#### **Board Adherence to Scientific Advice:**

 Addendum VII, approved in 2012, implemented the Adaptive Resource Management (ARM) framework, which was used to set annual specifications for horseshoe crabs of Delaware Bay origin. 2013 was the first year the ARM framework was used.

#### **Monitoring and Management Measures**

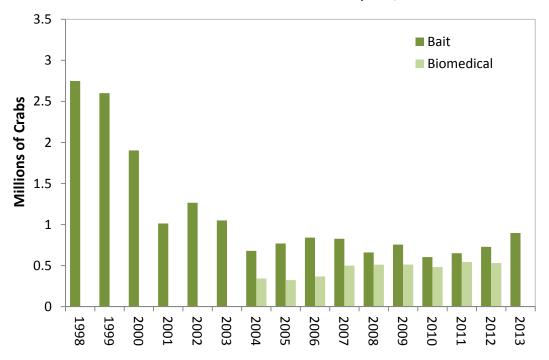
- Precautionary cap on harvest
- Reporting harvest for bait by month, sex, and harvest method (done consistently)
- Reporting biomedical harvest and mortality (inconsistent methods of reporting across states)
- Identify spawning and nursery habitat (completed in most states)
- Addendum VI extended the management measures under Addendum V (Delaware Bay).

Next Assessment: assessment update in 2014

**Rebuilding Trajectory:** Varies by region (see table)

#### **Coastwide Horseshoe Crab Bait Landings & Biomedical Harvest**

Source: ASMFC State Reports, 2013



**Timeline of Management Actions:** FMP (1999); Addendum I (2000); Addendum II (2001); Addendum III (2004); Addendum IV (2006); Addendum V (2008); Addendum VI (2010); Addendum VII (2012)

#### Please note the following details regarding biomedical harvest numbers:

- Data prior to 2004 are not available.
- Crabs harvested solely for biomedical use are returned to the water after bleeding; a 15% mortality rate is estimated for all bled crabs.

## Spotted Seatrout: Concern\*

\*Note that the Florida spotted seatrout stock is estimated to be significantly above the SPR target. No additional management action is needed to protect or rebuild this stock.

#### **Available Information**

- State stock assessments
  - o NC (including VA): SPR = 10% in 2006; goal of 20% SPR
  - SC: SPR just above 20% goal in 1992; non-peer reviewed assessment through 2004 indicated below 20% goal
  - o GA: SPR below 20% goal in 1995
  - o FL: tSPR = 62% northern region, 51% southern regions in 2006; goal of 35% SPR

#### **Needed Information/Data**

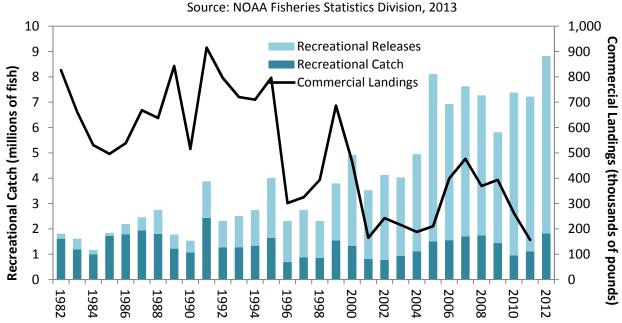
- Recent estimates of SPR from GA and SC
- Assessments would benefit from additional fishery-independent abundance indices, improved discard information, and additional biological sampling of fisheries

#### **Monitoring and Management**

- FMP recommends a 20% SPR goal, 12" minimum size limit with comparable mesh size for directed fisheries, and improved fishery-independent and -dependent monitoring programs
- Omnibus Amendment, approved in 2011, includes recommended measures to protect the spawning stock, as well as a required coastwide minimum size limit of 12"

Next Assessment: No coastwide assessment planned or recommended by PRT

## Spotted Seatrout Recreational Catch & Commercial Landings



**Timeline of Management Actions:** FMP (1985); Amendment 1 (1991); Omnibus Amendment (2011)

## Winter Flounder - GOM: Concern

Overfishing Unknown: (2011 SAW 52)

• The SAW/SARC GOM analytical assessment model was not accepted, BMSY and FMSY are unknown, and consequently the F and SSB targets could not be generated.

#### **Overfishing not Occurring**

 A proxy F Threshold of 0.31 was derived from a length-based yield per recruit analysis. The overfishing status is based on the ratio of 2010 catch to survey based swept area estimate of biomass exceeding 30 cm in length. 2010 F estimated at 0.23.

#### **Board Adherence to Scientific Advice**

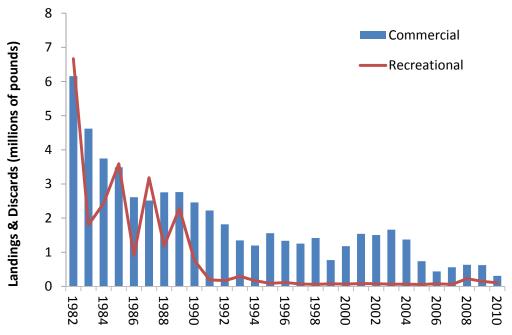
- GARM III estimated an 11% F reduction necessary to achieve F<sub>MSY</sub>
- Addendum I measures, implemented in 2009, estimated to reduce recreational and commercial harvest by 11% and 31% respectively
- In response to the 2011 stock status, NOAA Fisheries increased the 2012 state water sub-component to 272 mt (a 450% increase of 2010's level) based on the overfishing status. Following this federal action, the Commission's Winter Flounder Board approved Addendum II in October 2012 to increase the maximum possession limit for non-federally permitted commercial vessels to 500 pounds.
- In 2014, NMFS maintained the state water sub-component at 272 mt. The Commission's Board also maintained the same management measures as 2013 for the 2014 fishing season.

Next Assessment: Assessment update planned for August 2014

**Rebuilding Trajectory:** Status unknown

#### Winter Flounder Gulf of Maine Landings and Discards

Source: NMFS 52nd Northeast Regional Assessment Workshop, 2011 and Greater Atlantic Regional Fisheries Office, 2014



Amendment 1 (2005): Addendum I (2009): Addendum II (2012): Addendum III (2013)

## **Depleted Species**

- American Eel
- American Lobster Southern New England
- American Shad
- River Herring
- Tautog
- Weakfish
- Winter Flounder Southern New England/Mid-Atlantic

#### **American Eel: Depleted**

**Depleted:** Trend analyses and model results indicate the American eel stock has declined in recent decades and the prevalence of significant downward trends in multiple surveys across the coast is cause for concern (2012 Benchmark Assessment).

**Overfishing Determination:** No overfishing determination can be made at this time.

#### **Assessment Findings**

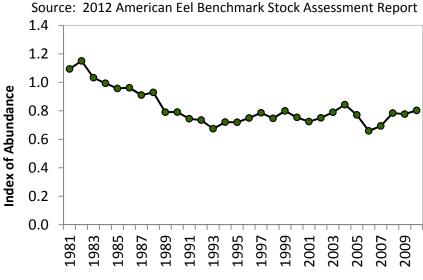
- In recent decades there has been neutral or declining coastwide abundance.
- Decreasing trends in yellow-stage
   American eels were seen in the Hudson
   River and South Atlantic regions
- Although commercial fishery landings and effort in recent times have declined in most regions (with the possible exception of the glass eel fishery), current levels of fishing effort may still be too high given the additional stressors affecting the stock such as habitat loss, passage mortality, and disease as well as potentially shifting oceanographic conditions.
- Management efforts to reduce mortality on American eels in the U.S. are warranted.

#### **Board Adherence to Scientific Advice**

- The Board tasked the TC with Addendum II (2008); Addendum III (2013)
   developing management options based on the assessment results and the recommendations of the peer review panel.
- In August 2012 based on the TC recommendations, the Board initiated the development of Draft Addendum III. Approved in 2013, the Addendum III increased the commercial and recreational minimum size to 9 inches, reduced the recreational bag limit from 50 fish/day/angler to 25 fish/day/angler, prohibited most silver eel fisheries, and places restrictions on the growth of pigmented eel fisheries. As a second phase of reductions, the Board initiated Draft Addendum IV, which will be considered for final approval in August 2014.

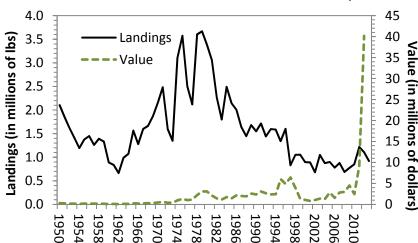
Next Assessment: None scheduled Rebuilding Trajectory: Unknown

# **30-Year Index of Abundance for Yellow-phase American Eels along the Atlantic Coast**



#### **Commercial Landings and Value**

Source: 2012 American Eel Benchmark Stock Assessment Report & Personal comm. NMFS Fisheries Statistics Division, 2014



Timeline of Management Actions: FMP (1999); Addendum I (2006);

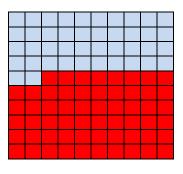
## **American Lobster - SNE: Depleted**

**Depleted:** Abundance at 73% of threshold (25<sup>th</sup> percentile) and 58 % of the target (50<sup>th</sup> percentile) (2009 benchmark assessment)

**Overfishing not Occurring:** Current effective exploitation (0.32) below threshold (0.46) and target (.41)

## **Assessment Findings**

- SNE stock to be in poor condition
- Current abundance is lowest observed since the 1980s even though exploitation rates have declined since 2000
- Recruitment at very low levels throughout SNE between 1998 and 2005



58% of SSB Target

#### **Board Adherence to Scientific Advice**

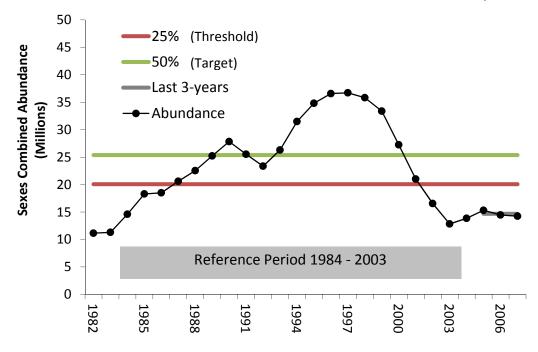
- TC advised to use output controls, Board continues to use input measures
- TC advised to not allow conservation equivalency in LCMA 6, Board approved program
- TC advised 100% trip level harvester reporting; Board adopted 10%
- TC advised 50-75% reductions in SNE LCMAs; Board approved 10% reduction.

Next Assessment: 2015

**Rebuilding Trajectory:** Flat at very low levels; Addendum XI (May 07) established a 15-year rebuilding timeline (ending in 2022) with a provision to end overfishing immediately

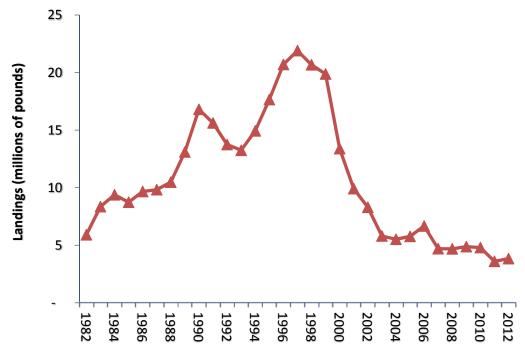
### **Southern New England Lobster Abundance Reference Points**

Source: 2009 American Lobster Benchmark Stock Assessment Report



#### **Preliminary American Lobster Landings for Southern New England**

Source: ACCSP Data Warehouse, 2013



Timeline of Management Actions: Amendment 3 (1997); Addendum I (1999); Addendum II (2001); Addendum II (2002); Addenda IV & V (2004); Addenda VI & VII (2005); Addenda (VIII & IX (2006); Addenda X & XI (2007); Addendum XIII (2008); Addenda XII, XIV & XV (2009); Addendum XVI (2010); Addenda XVII & XVIII (2012); Addenda XIX & XX (2013)

## **American Shad: Depleted**

#### **2007 Assessment Findings**

- 86 river systems assessed; 64% of which have unknown stock status
- Collectively, stocks are at alltime lows and do not appear to be recovering

# Scientific Advice Based on Assessment Findings

- Improved monitoring (fishery independent and dependent) and fish passage
- Management measures based on total mortality (Z), which combines fishing and natural mortality.
- Lower JAI threshold needed to trigger management action
- The next assessment has not been scheduled.

#### **Trends in Stock Status of American Shad Populations**

Trends based on a comparison of 2007 assessment results to 1998 assessment results. Sources: ASMFC American Shad Stock Assessment Reports for 2007 and 1998

State	River	Trend
ME	Saco and Kennebec	Declining
NH	Exeter	Declining
MA	Merrimack	Low, Stable
RI	Pawcatuck	Declining
CT/MA	Connecticut	Stable
NY	Hudson	Declining
NY/PA/NJ/DE	Delaware River and Bay	Low, Stable
PA	Susquehanna	Declining
DC/MD/VA	Potomac	Increasing
MD	Nanticoke	Low
	York	Increasing
VA	James	Declining
	Rappahannock	Stable
22	Santee	Increasing
SC	Edisto	Declining
GA	Altamaha	Declining
FL	St. Johns	Declining

#### **Board Adherence to Scientific Advice**

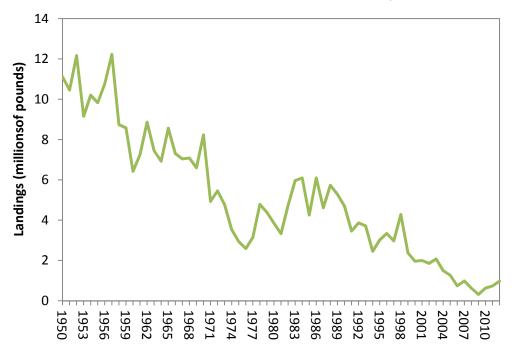
- Management Board approved Amendment 3 in February 2010
- Management actions contained in the Amendment are based on recommendations from the stock assessment.
- Member states/jurisdictions were required to submit sustainable fishery management plans (SFMPs) by August 1, 2012 (for TC review and Board approval). As of January 1, 2013, the Shad and River Herring Management Board approved SFMPs for Massachusetts, Connecticut, the Delaware River, the Potomac River, North Carolina, South Carolina, Georgia, and Florida. States/jurisdictions without approved SFMPs by January 1, 2013 were required to close their American shad fisheries, with the exception of catch and release recreational fisheries.
- By August 1, 2013, states/jurisdictions were required to submit a Habitat Plan, which contains a summary
  of current and historical spawning and nursery habitat; the most significant threats to those habitats; and
  a habitat restoration program to improve, enhance and/or restore habitat quality and quantity. In
  February 2014, the Board approved habitat plans for the majority of states and jurisdictions.

**Next Assessment:** None scheduled.

**Rebuilding Trajectory:** Variable by River System (see accompanying table)

## **American Shad Commercial Landings**

Source: NMFS Fisheries Statistics Division, 2013

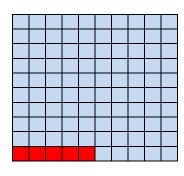


Timeline of Management Actions: FMP (1985); Amendment 1 (1999); Amendment 3 (2010)

## **Northern Shrimp: Depleted**

### **2013 Stock Assessment Update Findings**

- Overfished Current Biomass = 500 MT, which is below both the threshold of 9,000 MT and the limit of 6,000 MT. The Section has not established a biomass target.
- Overfishing is occurring Current F (0.53) is above the limit (0.60), threshold (0.48) and target (0.38).



5% of Reference Period Biomass

#### **Scientific Advice Based on Assessment Findings**

The Technical Committee recommends that the Section continue its efforts to maintain fishing mortality at or below the FMP target value, currently estimated as F<sub>1985-94</sub>=0.36. The NSTC also finds that recent GOM temperature data suggest the need to conserve spawners to compensate for what may be an increasingly unfavorable environment for northern shrimp. Therefore, because N. shrimp are hermaphroditic, protecting younger shrimp is recommended for both economical and biological reasons.

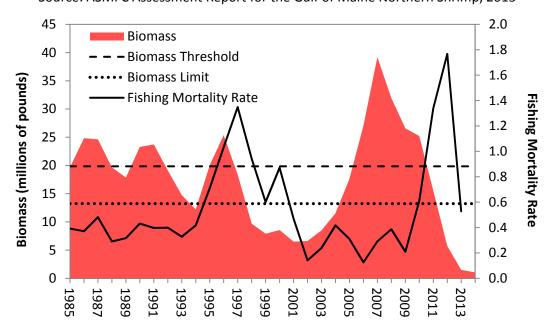
#### **Board Adherence to Scientific Advice**

- The Section chose a TAC based on the F threshold as opposed to the target to offset the economic impacts of a low TAC in 2011.
- The Section closed the Northern shrimp fishery for the 2014 season, adhering to the Technical Committee's recommendation.
- The Section approved an addendum to include several new management tools to slow catch rates of northern shrimp and is exploring a limited entry program to adjust the size of the fishery to the size of the northern shrimp resource through a new amendment.

Next Assessment: 2014 Assessment Update **Rebuilding Trajectory:** Declining

#### Gulf of Maine Northern Shrimp Total Stock Biomass & Fishing Mortality Rate

Source: ASMFC Assessment Report for the Gulf of Maine Northern Shrimp, 2013



Timeline of Management Actions: FMP (1986); Amendment 1 (2004); Amendment 2

(2011): Addendum I (2012)

## **River Herring: Depleted**

**Depleted:** The coastwide meta-complex of river herring stocks on the US Atlantic coast is depleted to near historic lows (2012 Benchmark Assessment).

**Overfishing Determination:** No overfishing determination can be made at this time.

#### **Assessment Findings**

- Of the 52 stocks of alewife and blueback herring for which data were available, 23 were depleted relative to historic levels, one stock was increasing, and the status of 28 stocks could not be determined because the time-series of available data was too short.
- 14 out of 15 river specific YOY indices showed no (7 rivers) or declining (7 rivers) trends.
- Mean length, maximum age and mean length-at-age for both species have declined.
- Recent domestic landings totaled <2 million pounds in any given year.
- Commercial landings by domestic and foreign fleets peaked at 140 million pounds in 1969.
- The "depleted" determination was used instead of "overfished" and "overfishing" because of the many factors have contributed to the declining abundance of river herring including habitat loss, predation, and climate changes

#### **Board Adherence to Scientific Advice**

- In 2009, the Board approved Amendment 2, in response to concern for river herring stocks.
- The Amendment prohibits state waters commercial and recreational fisheries beginning January 1, 2012, unless a state or jurisdiction has a sustainable management plan reviewed by the Technical Committee and approved by the Management Board.
- Amendment 2 required states to implement fisheriesdependent and independent monitoring programs, and contains recommendations to conserve, restore, and protect critical river herring habitat.
- As of January 1, 2012, the Shad and River Herring Management Board approved sustainable fishery management plans for Maine, New Hampshire, New York, North Carolina and South Carolina.

Status of Select Alewife and Blueback Herring
Stocks along the Atlantic Coast

Source: 2012 River Herring Benchmark Stock
Assessment Report

		Status Relative to Historic	
State	River**	Levels /	
		Recent Trends*	
ME	Damariscotta	Depleted <sup>A</sup> , Stable <sup>A</sup>	
IVIL	Union	Increasing <sup>A</sup> , Stable <sup>A</sup>	
	Cocheco	Unknown <sup>A,B</sup> , Stable <sup>A,B</sup>	
	Exeter	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
NH	Lamprey	Depleted <sup>A</sup> , Increasing <sup>A</sup>	
NΠ	Oyster	Depleted <sup>B</sup> , Stable <sup>B</sup>	
	Taylor	Depleted <sup>B</sup> , Decreasing <sup>B</sup>	
	Winnicut	Depleted <sup>A,B</sup> , Unknown <sup>A,B</sup>	
	Mattapoisett	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
MA	Monument	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
IVIA	Parker	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
	Stony Brook	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
	Buckeye	Depleted <sup>A</sup> , Unknown <sup>A</sup>	
RI	Gilbert	Depleted <sup>A</sup> , Decreasing <sup>A</sup>	
	Nonquit	Depleted <sup>A</sup> , Decreasing <sup>A</sup>	
СТ	Connecticut	Depleted <sup>B</sup> , Decreasing <sup>B</sup>	
NY	Hudson	Depleted <sup>A,B</sup> , Stable <sup>A.B</sup>	
MD, DE	Nanticoke	Depleted <sup>A,B</sup> , Decreasing <sup>A,B</sup>	
VA, MD, DC	Potomac	Depleted <sup>A,B</sup> , Unknown <sup>A,B</sup>	
NC	Chowan	Depleted <sup>A,B</sup> , Stable <sup>A.B</sup>	
sc	Santee- Cooper	Depleted <sup>B</sup> , Increasing <sup>B</sup>	

A = Alewife, B = Blueback Herring Status relative to historic levels is pre-1970. Recent trends reflect last ten years of data.

Rebuilding Trajectory: Unknown

**Next Assessment:** None scheduled

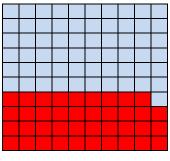
## **Tautog: Depleted**

Overfished: SSB at 39% of target (2011 assessment update)

Overfishing Occurring: Current F (0.31) above target (0.15)

#### **Board Adherence to Scientific Advice**

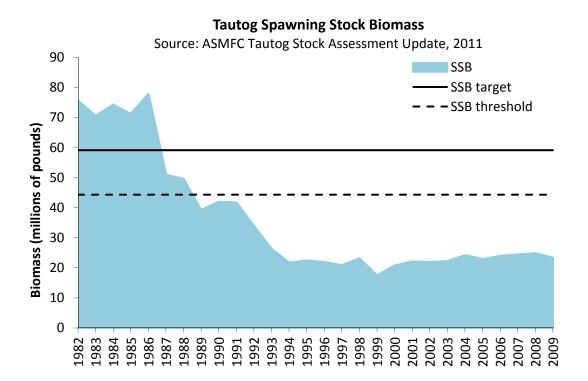
- Technical Committee recommended target F = 0.15 (39% reduction) or lower to rebuild stock
- Addendum VI reduced target F to 0.15 (39% reduction) beginning in 2008
- Technical Committee projects the stock will exceed threshold around 2019 and will not exceed target within 15 years.



39% of SSB Target

Next Assessment: Benchmark assessment and peer review by February 2015

Rebuilding Trajectory: Flat



Timeline of Management Actions: FMP (1996): Addendum I (1997); Addendum II (1999); Addendum III (2002); Addenda IV & V (2007); Addendum VI (2011)

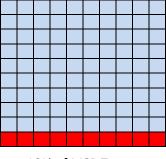
## Weakfish: Depleted

**Depleted:** Spawning potential at 10% of target (2009 benchmark assessment, SARC)

**Overfishing Not Occurring:** Recent fishery removals considered to be unsustainable under current stock conditions (high M)

#### **Board Adherence to Scientific Advice**

 Based on results of the stock assessment and peer review, the Board approved Addendum IV, which 1) revised the biological reference points; 2) implemented a commercial trip limit, and 3) reduced the recreational bag limit, the commercial bycatch limit, and the finfish trawl fishery's allowance for undersized fish.

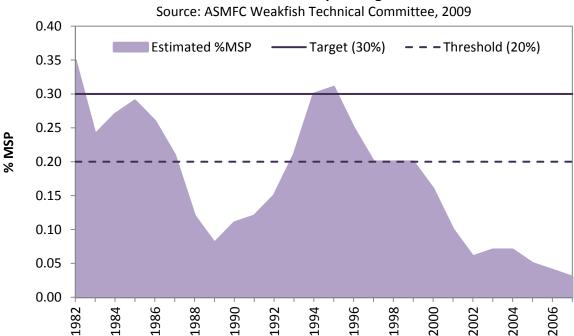


10% of MSP Target

• The Board will annually assess stock status indicators (e.g., relative F, juvenile indices) to monitor weakfish population changes until the next benchmark assessment.

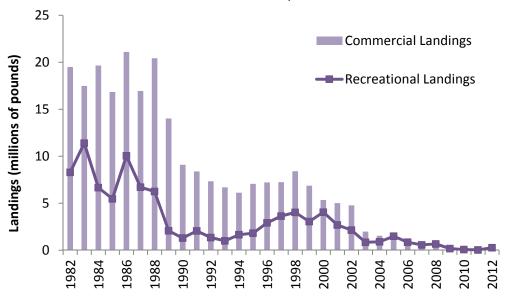
Next Assessment: Benchmark 2015 Rebuilding Trajectory: Declining

#### **Weakfish Maximum Spawning Potential**



## **Commercial and Recreational Weakfish Landings**

Source: ASMFC State Reports, 2013



**Timeline of Management Actions:** FMP (1985); Amendment 1 (1991); Amendment 2 (1995); Amendment 3 (1996); Amendment 4 (2002); Addendum I (2005); Addenda II & III (2007); Addendum IV (2009)

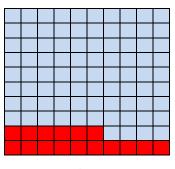
## Winter Flounder - SNE/MA: Depleted

Overfished: Stock is at 16% of SSB target (based on 2011 SAW/SARC 52)

Overfishing is Not Occurring: 2010 F = 0.051 well below F target (0.217)

#### **Board Adherence to Scientific Advice**

- GARM III estimated a 100% F reduction to achieve FREBUILD
- Following the TC advice, the Board approved Addendum I in May 2009, establishing small possession limits to discourage directed fishery and prevent increases in dead discards. Following the TC advice, the Board maintained a 50pound trip limit for non-federally permitted commercial vessels when it set the 2013 specifications.



16% of SSB Target

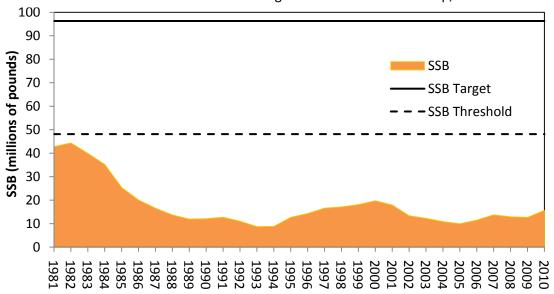
- In 2014, NOAA Fisheries extended the rebuilding timeline for this stock and allowed for increased fishing opportunities. The Board extended the recreational season from March 1 through December 31 to increase fishing opportunities based on species' availability.
- NOAA Fisheries set a new rebuilding target of 2023 for SNE/MA winter flounder and lifted the fishing
  moratorium implemented in 2009. For 2013, NOAA Fisheries set the state water sub-component at 235 mt
  and a total stock-wide annual catch limit of 1,612 mt (a 167% increase from 2012's 603 mt). The
  Commission's Winter Flounder TC advises that an average annual stock increase of 15% is necessary to
  rebuild by 2023.

**Next Assessment:** To be determined.

**Rebuilding Trajectory:** Flat but projected to be increasing in 2015

## Winter Flounder, SNE/MA Spawning Stock Biomass (SSB)

Source: NMFS 52nd Northeast Regional Assessment Workshop, 2011



Timeline of Management Actions: FMP & Addendum I (1992); Addendum II (1998); Amendment 1 (2005); Addendum I (2009); Addendum II (2012); Addendum III (2013)

# **Species of Unknown Stock Status**

- Atlantic Sturgeon
- Black Drum
- Spot

## **Atlantic Sturgeon: Unknown**

#### **Available Information**

- Current populations throughout the species' range are at low levels of abundance.
- The Hudson River stock may be showing a small increase in abundance, along with some rivers in Georgia and South Carolina, suggesting some population rebuilding.
- Commercial landings of Atlantic sturgeon peaked in 1890 at 7.5 million pounds.
- Effective April 6, 2012, NMFS listed five distinct population segments (DPS) of Atlantic sturgeon under the Endangered Species Act (Gulf of Maine DPS as threatened and the New York Bight, Chesapeake Bay, Carolina and South Atlantic DPS' as endangered)
- The states have been working with NOAA Fisheries on their Section 10 incidental take permits
- An Atlantic sturgeon bycatch reduction workshop was conducted in January 2013 to discuss technological solutions for reducing bycatch of Atlantic sturgeon and sea turtles.
- NOAA Fisheries released a draft biological opinion that found the continued operation of 7 Northeast federal fisheries does not jeopardize the survival or recovery of Atlantic sturgeon.

#### **Needed Information/Data**

- Conduct assessments of population abundance and age structure in various river systems
- Clearly define unit stocks of Atlantic sturgeon
- Improve bycatch and ship strike estimates.
- Further quantify critical habitat

#### **Monitoring and Management Measures**

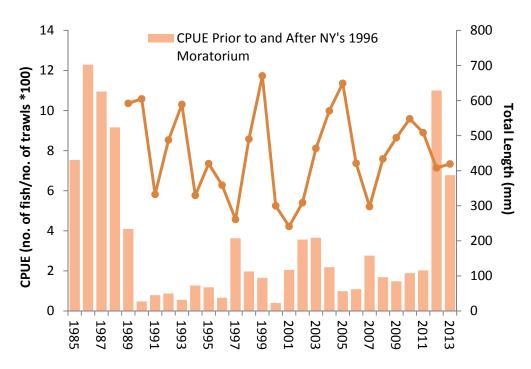
- Monitoring: States must report annually on Atlantic sturgeon bycatch, fisheries-independent monitoring, habitat status and authorized aquaculture operations.
- Management: Coastwide moratorium until 2038.

Next Assessment: 2015 benchmark assessment

#### Fishery-independent Catch Rates of Juvenile Atlantic Sturgeon in Albemarle Sound 7,000 0.09 Source: NC Division of Marine Fisheries, 2013 0.08 6,000 Effort 0.07 **CPUE** 5,000 Effort (net days) 0.06 4,000 0.05 0.04 3,000 0.03 2,000 0.02 1,000 0.01 0.00

## Catch Per Unit Effort (CPUE) of Hudson River Juvenile Atlantic Sturgeon

Source: NY State Dept. of Environmental Conservation with Survey Data from Hudson River Power Generating Companies, Hudson River Monitoring Program, 2013



Timeline of Management Actions: FMP (1990); Amendment 1 (1998); Addendum I (2001); Addendum II (2005); Addendum III (2006)

#### **Black Drum: Unknown**

#### **Available Information**

- Tagging evidence suggests black drum migrate along the coast, with a range extending along the nearshore
  western Atlantic coast from the Gulf of Maine to Florida, into the Gulf of Mexico, and as far south as
  Argentina
- Black drum are fast growing, long-lived fish that spend most of their life in nearshore waters along the Atlantic coast.
- The targeted fishery in some areas may be on very young fish, which have yet to contribute to the population, and other areas may be more heavily targeting the established breeding stock.
- In recent years, harvest of black drum has increased substantially in both the commercial and recreational sectors.

#### **Needed Information/Data**

- Further quantify critical, spawning, and essential habitat
- More information on threats at each life stage, from offshore wind to beach nourishment
- Indices of juvenile abundance (set to be determined in August 2013).

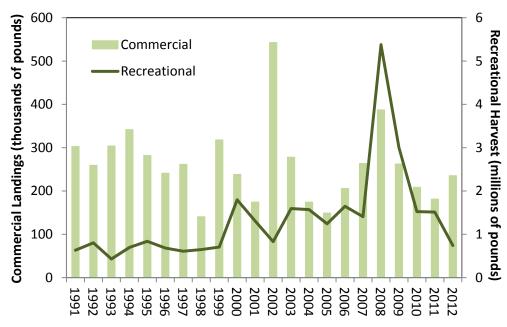
#### **Management Measures**

FMP approved in 2013; All states are required to maintain current regulations for black drum and implement a maximum possession limit and minimum size limit (of no less than 12 inches) by January 1, 2014. States will be required to further increase the minimum size limit (to no less than 14 inches) by January 1, 2016.

Next Assessment: Scheduled for peer review in 2014

#### **Recreational and Commercial Black Drum Landings**

Source: ACCSP Data Warehouse and MRIP, 2013



#### **Spot: Unknown**

#### **Unfavorable Data Trends**

- Coastwide commercial landings have declined since 1950; commercial harvest-per-unit effort generally stable or declining in the two states with the largest landings.
- Commercial catch-at-age data, which showed an expansion of the age structure in the early 2000s, has contracted the last several years.
- Length-at-age and weight-at-age have decreased for ages 1-3 from 2009-2012 for both measures.
- Distribution of trophy citations for recreational catch of spot has decreased the last several years.
- Recruitment indices show great inter-annual variability as expected, but those with longer time series
  exhibit a decline in the magnitude of peaks over time with poor recruitment in 2009 and 2011 in recent
  years.
- Most indices of adult spot abundance in the species core area exhibit high inter-annual variability.

A stock assessment has not been completed; ability to conduct a defensible assessment is hindered by inadequate discard data, particularly in the South Atlantic shrimp trawl fishery.

#### **Board Adherence to Scientific Advice**

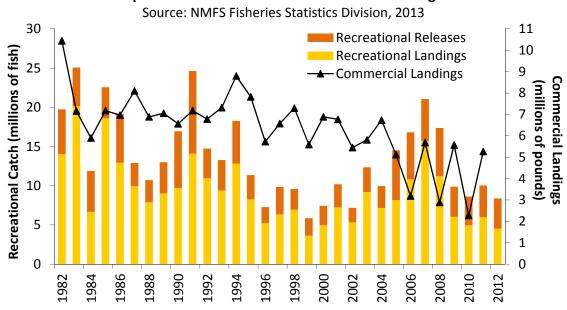
• The Management Board followed recommendations from the Plan Review Team to monitor the stock with available data the last four years, evaluate data availability and adequacy for a stock assessment, and conduct a life history workshop.

#### **Monitoring and Management Measures**

- Omnibus Amendment, approved in 2011, includes a management trigger to assist Board in monitoring stock status until coastwide stock assessment can be completed.
- High levels of spot bycatch present a challenge in terms of both yearly management and overall assessment of stock health.

Next Assessment: None scheduled.

#### **Spot Recreational Catch & Commercial Landings**



Timeline of Management Actions: FMP (1987); Omnibus Amendment (2011)



#### UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE GREATER ATLANTIC REGIONAL FISHERIES OFFICE 55 Great Republic Drive Gloucester, MA 01930-2276

JUN 19 2014

Robert E. Beal, Executive Director Atlantic States Marine Fisheries Commission 1050 N. Highland Street, Suite 200 A-N Arlington, VA 22201

#### Dear Bob:

We recently published in the <u>Federal Register</u> a proposed rule on Special Management Zones (SMZs) for five Delaware Artificial Reefs in the Exclusive Economic Zone (EEZ). This proposed rule responds to the recommendations of the Mid-Atlantic Fishery Management Council under the black sea bass provisions of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP).

The five proposed artificial reef SMZ sites are off the coast of Delaware at various distances from approximately 4 to 58 nautical miles, rectangular in shape, and, including their 0.46 km buffer zones, encompass areas from 7.42 to 8.81 square km. Within the established areas of the SMZs, vessels would only be allowed to fish with hook and line and spear (including the taking of fish by hand). (See attachment).

The proposed measures and alternatives were analyzed in an Environmental Assessment. Copies of the Environmental Assessment and Initial Regulatory Flexibility Analysis (EA/IRFA) and other supporting documents for the Special Management Zones measures are available from Paul Perra, NOAA/NMFS, Sustainable Fisheries Division, 55 Great Republic Drive, Gloucester, MA 01930.

We provided advance information on these SMZ recommendations at the Commission's February Interstate Fishery Management Policy Board meeting, after we received a recommendation to implement them from the Mid-Atlantic Fishery Management Council. We understand the proposed rule may affect black sea bass and lobster fishing in or near the proposed SMZs. Therefore, the proposed rule has a 45 day comment period, in consideration that the Commission may want to have its Policy Board confer on any further comments. A copy of the proposed rule is enclosed for your review and comment. Please submit any comments you may have on this action according to the instructions under the ADDRESSES section of the attached proposed rule. Comments must be received by August 4, 2014.



If you have questions or would like to consult further on this issue, please contact Paul Perra at (978) 281-9153 or by email at paul.perra@noaa.gov.

Thank you for your cooperation.

Sincerely,

John K. Bullard
Regional Administrator

Enclosure

#### **DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration

#### 50 CFR Part 648

[Docket 130702585-4484-01]

RIN 0648-BD42

Fisheries of the Northeastern United States; Special Management Zones for Five Delaware Artificial Reefs

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce

**ACTION:** Proposed rule; request for comments.

**SUMMARY:** NMFS proposes management measures to implement Special Management Zones for five Delaware artificial reefs under the black sea bass provisions of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. The implementing regulations for the Special Management Zones require NMFS to publish proposed measures to provide an opportunity for public comment. The intent of these measures is to promote orderly use of the resource by reducing user group conflicts, and help maintain the intended socioeconomic benefits of the artificial reefs to the maximum extent practicable.

**DATES:** Comments must be received by 5 p.m. local time, on August 4, 2014. **ADDRESSES:** You may submit comments on this document, identified NOAA–NMFS–2014–0060, by any of the following methods:

- Electronic Submission: Submit all electronic public comments via the Federal e-Rulemaking Portal. Go to www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2014-0060 click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.
- Mail and Hand Delivery: John K. Bullard, Regional Administrator, NMFS, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930. Mark the outside of the envelope: "Comments on SMZ Measures."

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.),

confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

Copies of the Environmental Assessment and Initial Regulatory Flexibility Analysis (EA/IRFA) and other supporting documents for the Special Management Zones measures are available from Paul Perra, NOAA/NMFS, Sustainable Fisheries Division, 55 Great Republic Drive, Gloucester, MA 01930. The Special Management Zone measures document is also accessible via the Internet at: http://www.nero.noaa.gov.

FOR FURTHER INFORMATION CONTACT: Paul Perra, Fishery Policy Analyst, (978) 281–9153.

SUPPLEMENTARY INFORMATION: The Delaware Fish and Wildlife Department (DFW) has requested and the Mid-Atlantic Fishery Management Council has recommended that five Delaware artificial reef sites, currently permitted by the U.S. Corps of Engineers in the Exclusive Economic Zone (EEZ), be designated as Special Management Zones (SMZs) under the regulations implementing the Council's Summer Flounder, Scup and Black Sea Bass Fishery Management Plan (FMP).

The summer flounder, scup, and black sea bass fisheries are managed cooperatively under the provisions of the FMP developed by the Council and the Atlantic States Marine Fisheries Commission, in consultation with the New England and South Atlantic Fishery Management Councils. The management units specified in the FMP include summer flounder (Paralichthys dentatus) in U.S. waters of the Atlantic Ocean from the southern border of North Carolina (NC) northward to the U.S./Canada border, and scup (Stenotomus chrysops) and black sea bass (Centropristis striata) in U.S. waters of the Atlantic Ocean from 35° 13.3' N. lat. (the latitude of Cape Hatteras Lighthouse, Buxton, NC) northward to the U.S./Canada border.

The Council prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. 1801 et seq. Regulations implementing the FMP appear at 50 CFR part 648, subparts A (general provisions), G (summer flounder), H (scup), and I (black sea bass). General regulations governing fisheries of the Northeastern

U.S. also appear at 50 CFR part 648. States manage these three species within 3 nautical miles (4.83 km) of their coasts, under the Commission's plan for summer flounder, scup, and black sea bass. The applicable species-specific Federal regulations govern vessels and individual fishermen fishing in Federal waters of the EEZ, as well as vessels possessing a summer flounder, scup, or black sea bass Federal charter/party vessel permit, regardless of where they fish.

## **Special Management Zone Measures Background**

The DFW requested in June 2011 that the Council designate five artificial reef sites, currently permitted by the U.S. Corps of Engineers in the EEZ, as SMZs under the regulations implementing the Council's FMP. The SMZ request noted that the DFW has received complaints from hook-and-line anglers regarding fouling of their fishing gear in commercial pots and lines on ocean reef sites for more than 10 years. It also noted that the U.S. Fish and Wildlife Service (FWS) Sportfish Restoration Program (SRP) had notified DFW that these gear conflicts are not consistent with the objectives of the SRP program, which provides funding for the building and maintenance of the artificial reefs. In order to comply with the goals of the SRP, the FWS is requiring that state artificial reef programs be able to limit gear conflicts by state regulations in state waters or by SMZs for sites in the

The Council process for devising SMZ management measures is to recommend measures to NMFS for rulemaking, and is described in the following section. All meetings are open to the public and the materials utilized during such meetings, as well as any documents created to summarize the meeting results, are public information and typically posted on the Council's Web site (www.mafmc.org) or are available from the Council by request. Extensive background on the SMZ management measures recommendation process is therefore not repeated in this preamble.

The SMZ recommendations from the Council were established under the FMP's black sea bass provisions (§ 648.148). A monitoring committee, consisting of representatives from the Council, NMFS Greater Atlantic Regional Fisheries Office, and NMFS Northeast Fisheries Science Center was formed to review the DFW SMZ request. The FMP's implementing regulations require the monitoring committee to review scientific and other relevant information to evaluate the SMZ

requests in the form of a written report, considering the following criteria:

- (1) Fairness and equity;
- (2) Promotion of conservation;
- (3) Avoidance of excessive shares;
- (4) Consistency with the objectives of Amendment 9 to the FMP, the Magnuson-Stevens Act, and other applicable law;

(5) The natural bottom in and surrounding potential SMZs; and

(6) Impacts on historical uses. The Council then considered the monitoring committee's recommendations and any public comment in finalizing its recommendations. The Council forwarded its final recommendations to NMFS for review. NMFS is required to review the Council's recommendations to ensure that they are consistent with the FMP and all applicable laws and Executive Orders before ultimately implementing measures for Federal waters.

The timeline for establishing the SMZs is summarized here: The DFW requested SMZ status for the artificial reefs in June 2011; the Council and NMFS established a monitoring committee to review the request in April 2012; the monitoring committee provided a report to the Council evaluating the SMZ request in October 15–18, 2012, in Long Branch, New Jersey, and December 10–13, 2012, in Baltimore, Maryland.

Following these meetings, the Council held three public hearings on the proposed SMZs (Ocean City, Maryland, January 15, 2013; Lewes, Delaware, January 16, 2013; and Toms River, New Jersey, January 17, 2013), and final recommendations on the SMZs were made by the Council at its February 12–13, 2013, meeting in Hampton, Virginia. NMFS subsequently has reviewed the Council's recommendations through the development of an EA and this proposed rule.

#### **Proposed SMZ Measures**

NMFS is proposing the Council's recommended measures that would

apply in the Federal waters of the EEZ and to all vessels: That all five Delaware artificial reefs, including a 0.46-km buffer around each artificial reef, be established as year-round SMZs, and within the established areas of the SMZs, all vessels would only be allowed to conduct fishing with hook and line and spear (including the taking of fish by hand). The five designated SMZ reef areas are U. S. Army Corps of Engineers permit Delaware artificial reef sites 9, 10, 11, 13, and 14. The five Delaware artificial reef sites are off the coast of Delaware at various distances from approximately 4 to 58 nautical miles (7.4 to 107.0 km), rectangular in shape, and encompass areas 3.21 to 4.11 square km.

The boundaries of the proposed SMZs artificial reef sites, including their buffers, encompass 7.4 to 8.8 square km, and are in Federal waters bounded by the following coordinates connected by straight lines in the sequence specified in Tables 1–5 below (coordinates include a 500-yard (0.46-km) squared-off buffer placed around each artificial reef site).

In order to facilitate the codification of the coordinates for the five SMZ reef areas, this rule proposes to re-organize 50 CFR 648.148 in its entirety. This rule would to redesignate the special management zone designation criteria and process provisions, currently at 50 CFR 648.148(a)-(e), in 50 CFR 648.148(a). The coordinates of the five SMZ reef areas proposed to be created by this rule would be codified at 50 CFR 648.148(b). The re-organization of the existing regulations concerning the special management zones designation criteria and process into CFR 648.148(a) is a change only to the format; no substantive changes are intended or proposed for those provisions. NMFS also proposes to add new § 648.14(p)(1)(vi) to cross reference to the new coordinates at § 648.148(b).

TABLE 1—REEF SITE 9

Corner	N. Latitude	W. Longitude
9SE 9SW 9NW 9NE 9SE	38°39.71016′ 38°39.82578′ 38°41.1048′ 38°41.03244′ 38°39.71016′	- 74°59.0883' - 75°1.11264' - 75°0.63288' - 74°58.45098' - 74°59.0883'

Table 2—Reef Site 10

Corner	N. Latitude	W. Longitude
10SE 10SW 10NW 10NE	38°35.93706′ 38°36.0759′ 38°37.36314′ 38°37.21938′ 38°35.93706′	- 74°55.44408′ - 74°57.57864′ - 74°57.01812′ - 74°54.96474′ - 74°55.44408′

TABLE 3—REEF SITE 11

11SE 38°39.61578′ -74°42.8146⁄ 11SW 38°39.7797′ -74°45.2048⁄ 11NW 38°41.11092′ -74°44.7347⁄ 11NE 38°40.97472′ -74°42.345⁄			
11SW 38°39.7797′ -74°45.2048⁄ 11NW 38°41.11092′ -74°44.7347⁄ 11NE 38°40.97472′ -74°42.345⁄	Corner	N. Latitude	W. Longitude
11SE 38°39.61578°   -74°42.81462	11SW 11NW	38°39.7797′ 38°41.11092′	- 74°42.81462′ - 74°45.20484′ - 74°44.73474′ - 74°42.3459′ - 74°42.81462′

TABLE 4—REEF SITE 13

Corner	N. Latitude	W. Longitude
13SE 13SW 13NW 13NE 13SE	38°29.87118′ 38°30.00876′ 38°31.83384′ 38°32.04756′ 38°29.87118′	- 74°30.34818′ - 74°31.93008′ - 74°31.09968′ - 74°29.5839′ - 74°30.34818′

TABLE 5—REEF SITE 14

Corner	N. Latitude	W. Longitude
14SE 14SW 14NW 14NE 14SE	38°31.55286′ 38°31.55286′ 38°32.94684′ 38°32.94714′ 38°31.55286′	-73°47.75244′ -73° 0.08164′ -73°50.08158′ -73°47.75232′ -73°47.75244′

Figure 1. shows the location of the five proposed artificial reef sites off the coast of Delaware.

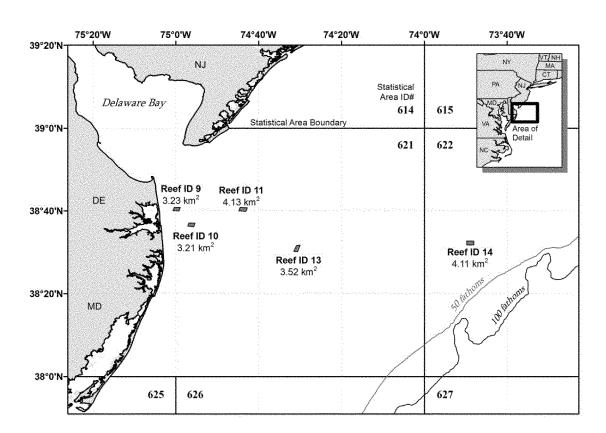


Figure 1. Location of Five Delaware Artificial Reef Sites in the EEZ Proposed for SMZ Status.

#### Classification

Pursuant to section 304(b)(1)(A) of the Magnuson-Stevens Act, the Assistant Administrator has determined that this proposed rule is consistent with the Summer Flounder, Scup, and Black Sea Bass FMP, other provisions of the Magnuson-Stevens Act, and other applicable law, subject to further consideration after public comment.

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

NMFS prepared an IRFA, as required by section 603 of the Regulatory Flexibility Act (RFA), which is included in the EA and supplemented by information contained in the preamble to this proposed rule. The IRFA describes the economic impact this proposed rule, if adopted, would have on small entities. A summary of the IRFA follows. A copy of this analysis is available from the Greater Atlantic Regional Fisheries Office (see ADDRESSES).

Federal Rules Which May Duplicate, Overlap, or Conflict With This Proposed Rule

This proposed action will not duplicate, overlap, or conflict with any other Federal rules. NMFS did not consider any alternatives that would provide additional fishing opportunities beyond what was recommended by the Council because of the through consideration of alternatives by the SMZ monitoring committee and Council.

Description of the Reasons Why Action by the Agency Is Being Considered

DFW requested and the Council has recommended that five Delaware artificial reef sites, currently permitted by the U.S. Corps of Engineers in the EEZ, be designated as SMZs to limit recreational/commercial gear conflicts on the artificial reefs, and to maintain FWS SRP funding for the building and maintenance of the artificial reefs.

Statement of the Objectives of and the Legal Basis for This Proposed Rule

To eliminate current and/or future potential for recreational/commercial gear conflicts on the five Delaware artificial reefs in order to maintain access to the reefs for recreational fishing. This action is proposed through the Magnuson-Stevens Act, 16 U.S.C. 1801 *et seq.* 

Description of the Projected Reporting, Record-Keeping, and Other Compliance Requirements of the Proposed Rule

This action does not introduce any new reporting, recordkeeping, or other compliance requirements.

Description of an Estimate of the Number of Small Entities To Which the Proposed Rule Would Apply

The Small Business Administration (SBA) defines a small commercial finfish fishing business as a firm with annual receipts (gross revenues) of up to \$19 million. A small commercial shellfishing business is a firm with annual receipts of up to \$5 million and small for-hire recreational fishing businesses are defined as firms with receipts of up to \$7 million.

Having different size standards for different types of fishing activities creates difficulties in categorizing businesses that participate in multiple fishing related activities. For purposes of this assessment, business entities have been classified into the SBA-defined categories based on the activity that produced the highest percentage of average annual gross revenues from 2010—2012. This classification is now possible because vessel ownership data have been added to Northeast permit database. The ownership data identify all individuals who own fishing vessels. Using this information, vessels can be grouped together according to common owners. The resulting groupings were treated as a fishing business for purposes of this analysis. Revenues

summed across all vessels in a group and the activities that generate those revenues form the basis for determining whether the entity is a large or small business.

This rule would apply to all Federal permit holders except recreational for-hire permit holders. Thus, the affected business entities of concern are businesses that hold commercial Federal fishing permits with the exception of those that fish with hook and line. While all business entities that hold commercial Federal fishing permits could be directly affected by

these regulations, not all business entities that hold Federal fishing permits fish in the areas identified as potential SMZs. Those who actively participate, i.e., land fish, in the areas identified as potential SMZs would be the group of business entities that are directly impacted by the regulations.

The number of possible affected entities as well as an enumeration of the number of commercial fishing vessels with recent activity at the five reef sites, by gear type are described in detail in Table 6.

TABLE 6—NUMBER OF REPORTED VESSEL TRIP REPORTS OF COMMERCIAL FISHING TRIPS WITHIN 0.46 KM OF THE REEF SITES, BY GEAR TYPE

	Reef site and gear type								
	-	10		11 13		14			
	9	Trawl	Pot/Trap	Pot/Trap	Pot/Trap	Dredge	Trawl		
2004	0	0	0	10	3	0	0		
2005	0	0	1	25	0	0	0		
2006	0	0	0	7	2	0	0		
2007	0	0	0	0	1	0	0		
2008	0	0	0	4	10	0	0		
2009	0	0	0	8	14	17	7		
2010	0	1	0	3	12	0	0		

NMFS considered two option under this action, the no buffer and two SMZ buffer zones around the five artificial reefs. The no buffer alternative would have had no effect on the commercial vessels operating near the artificial reefs, so assessments of commercial activity within the 500-yard (0.46 km) buffer zone is included in this IRFA summary. The buffer area was recommended to improve enforcement of the recommended SMZ management measures for the artificial reefs. The 0.46-km buffer is the preferred measure. The no buffer alternative and an alternative for a 1,000-yard (0.91-km) buffer were not preferred because they were considered either too small for enforcement to effectively protect the SMZs (no buffer) or needlessly too large (1,000-yard (0.91-km) buffer) and disruptive to commercial fishing near the artificial reefs.

During 2008, 2009, and 2010, only 2 commercial vessels reported landings within 0.46 km of the reef sites in each of these years, 1 vessel reported landings in two of the three years, and

12 vessels reported landings in only one of the three years. This implies a total of 15 unique commercial vessels reported landings within 0.46 km of the reef sites from 2008–2010.

Based on the ownership data classification process described above, all of the directly affected participating commercial fishing vessels were found to be unique fishing business entities. The ownership data indicated that no two affected vessels were owned by the same business entity. Total revenue earned by these business was derived from both shellfishing and finfishing, but the highest percentage of average annual revenue for the majority of the businesses was from shellfishing. Of the 15 unique fishing business entities potentially estimated to be affected by implementation of a 0.46-km buffer around the five reef sites, 9 entities earned the majority of their total revenues (i.e., from all species and areas fished) from landings of shellfish, and 6 entities earned the majority of the their total revenues from landings of finfish. Thus, under the 0.46-km buffer

alternative, nine of the potentially affected businesses are classified as shellfishing business entities and six as finfishing business entities.

Average annual gross revenue estimates calculated from the most recent 3 years of available Northeast regional dealer data (2010-2012) indicate that only one of the potentially affected shellfishing business entities under the preferred 0.46-km buffer alternative would be considered large according to the SBA size standards. In other words, one business, classified as a shellfishing business, averaged more than \$5 million annually in gross revenues from all of its fishing activities during 2010-2012. Therefore, under the preferred 0.46-km buffer alternative, 14 of the 15 potentially affected business entities are considered small (8 shellfish and 6 finfish) and 1 business entity is considered large (shellfish).

Table 7 shows the number of potentially affected business entities by percent of total average annual gross revenue landed within 0.46 km of the reef sites.

TABLE 7—NUMBER OF POTENTIAL BUSINESS ENTITIES AFFECTED BY PERCENT OF TOTAL AVERAGE ANNUAL GROSS
REVENUE LANDED WITHIN 0.46 KM OF THE REFE SITES

Business entity	Percent of total average annual gross revenue (2010–2012			(2010–2012)
Dusiness entity	<5%	5–9%	10–19%	20–29%
Shellfish (Small)	6 1 3	1 0 1	1 0 1	0 0 1

Of the eight shellfishing businesses categorized as small in this assessment, six obtained less than 5 percent of their total average annual gross revenues from landings within 0.46-km of the reef sites, one obtained between 5-9 percent, and one between 10-19 percent. The only business entity defined as large (shellfish) in this assessment, under the preferred 0.46-km buffer, earned less than 5 percent of its total average annual gross revenues from landings at the reef sites. Finally, of the six finfish business entities defined as small finfishing businesses, under the preferred 0.46-km buffer, three obtained less than 5 percent of their total average annual gross revenues from landings at the reef sites, one obtained between 5-9 percent, one obtained between 10-19 percent, and one between 20-29 percent.

Description of Significant Alternatives to the Proposed Action Which Accomplish the Stated Objectives of Applicable Statues and Which Minimize Any Significant Economic Impact on Small Entities

The Council initially considered a range of alternatives for the provions proposed in this action, such as seasonal restrictions, which Delaware permitted artificial reef sites to designate as SMZs, and gear restrictions associated with the SMZs. NMFS considered three alternatives for the seasonal closures that would prohibit commercial gears in the SMZs: all year (Alternative 1), when the recreational black sea bass season was open (Alternative 2), or from Memorial Day to Labor Day (Alternative 3). Under Alternative 1, NMFS would designate all or some of the Delaware EEZ reef sites as SMZs when the recreational season for the federal black sea bass is open. Since the rational for the SMZ request relates to the black sea bass fishery this alternative seeks to reduce gear conflicts throughout the recreational season for black sea bass on the artificial reefs. The open season for black sea bass can vary by state and year. But as an example, NMFS implemented black sea bass recreational fishery open seasons from May 19-October 14 and November 1-December

31 for 2013. Delaware implemented open black sea bass season from January 1-February 28, May 19-October 14 and November 1-December 31 in 2013. If this Alternative is selected, the ability of the recreational fleet to fish the reefs during the Federal season could differ from the regulations for the state in which the fish will be landed. In this case the more restrictive regulations must be followed. Under Alternative 2 the SMZ designation for any or all of the five artificial reefs would be in effect for the entire calendar year. Under Alternative 3, the SMZ designation for any or all of the five artificial reefs would be in effect from Memorial Day to Labor Day. This alternative attempts to reduce gear conflicts at Delaware reefs sites by designating SMZs during periods when the chance of gear conflicts would be expected to be at a maximum (i.e., during periods of peak recreational fishing activity).

NMFS considered three different SMZ site area designations in this action: designate all sites (sites 9, 10, 11, 13 and 14) (Alternative 1), designate sites 11, 13, and 14 (Alternative 2), or designate sites 9, 10, 13, and 14 (Alternative 3). Under Alternative 1, NMFS would designate all five of the Delaware reef sites as SMZs. Under Alternative 2, NMFS would designate reef sites 11, 13 and 14 as SMZs. Little or no commercial fishing activity was documented in the vicinity of reef sites 9 and 10, so there appears to be little opportunity for gear conflicts to occur at these sites (especially for fixed pot/trap gear) unless there is some unforeseen shift in commercial fishing effort. However, commercial fishing activity on sites 11, 13 and 14 was documented at these sites based on VTR data, so the potential for gear conflicts exists at these sites. While gill nets and long lines are not currently reported being used on the artificial reefs, they pose further potential for gear conflicts because of their ability to restrict recreational fishing on the reefs by causing fouling or snagging of hooks as recreational vessels attempt to fish on or drift over the artificial reefs. Also, displaced pot fishing vessels from the artificial reef may shift to long lines or gill nets to maintain access to their same

fishing grounds, and this would continue the recreational/commercial gear conflicts on the artificial reef sites. Under Alternative 3, NMFS would designate reef sites 9, 10, 13 and 14 as SMZs. During the original permit process for reef sites 9, 10 and 11, the Council opposed the granting of a permit for reef site 11 by the COE because there were indications that considerable commercial fishing activity took place at this location. Therefore, NMFS could designate reef sites 9, 10, 13, and 14 as SMZs but not site 11 based on the argument that it would remain consistent with that historical position. However, site 11 appears to be the area that has the greatest potential for gear conflicts between hook & line gear and fixed pot/trap gear.

Different gear types were considered to be prohibited in the SMZs: prohibit the use of fixed pot/trap gear (Alternative 1), or prohibit the use of all gear except hook and line, and spear fishing (Alternative 2). Under Alternative 1 (the preferred alternative), NMFS would prohibit the use of fixed pot/trap gear on reef sites designated as SMZs. Under Alternative 2, NMFS would prohibit the use all fishing gear on reef sites designated as SMZs, except hook & line and spear-fishing gear. Under this alternative, the use of commercial hook & line fishing gear within the designated boundaries of SMZs would still be permitted, however the use of all other commercial fishing gears would be prohibited (i.e., gill nets, long lines, etc.).

These multiple alternatives were narrowed to only consider all five sites as SMZs with a year round closure to all commercial gear except hook and line and spear fishing. The five site SMZ alternative with the year round closure to all commercial gear except hook and line and spear fishing in combination with no buffer, 0.46 km buffer, or 0.91 km buffer was then analyzed for its effects on small entities.

The 0.46-km buffer alternative is the preferred measure and the only significant alternative which accomplishes the stated objectives of applicable statutes and which minimizes any significant economic

impact on small entities. The 0.46-km buffer is considered large enough to effectively protect the SMZs, while not being overly disruptive to commercial fishing near the artificial reefs. NMFS considered two alternatives to the selected provision, the no buffer alternative and the 0.91-km buffer alternative. The no buffer alternative was considered too small for enforcement and makes enforcement of the SMZs impractical, undermining the objectives of the proposed action. The 0.91-km buffer alternative was considered too severe and would cause undue economic impacts.

An assessment of potential impacts by gear type was examined to investigate whether business entities might be disproportionately impacted according to the type of fishing gear employed by the business. If the artificial reefs are designated as SMZs through this action, commercial fishing effort in the SMZs would likely shift to other open areas mitigating potential revenue losses, but fishing businesses that employ fixed gear likely fish at the reef sites because catch rates are higher and because conflicts with mobile gear vessels are reduced. Forcing fixed gear vessels out of the SMZ sites may increase the likelihood of conflicts with vessels in other areas, and expose them to additional costs if their gear is dragged through by vessels fishing mobile gear. Nonetheless, vessels that drag mobile gear through the proposed 0.46-km closed buffer area around the reef sites will also have to shift to other areas that are potentially less productive, so it is difficult to ascertain with certainty whether disproportionate impacts will occur according to the type of fishing gear employed.

There were four business entities that employed pot/trap gear within 0.46 km of the artificial reef sites in at least one of the three years included in this assessment (2008-2010). All four businesses entities were determined to be "small" according to the SBA size standards. Two of the four business entities obtained less than 5 percent of their total average annual gross revenues from landings at the reef sites, one obtained between 5-9 percent, and one between 10-19 percent. Thus, there will likely be adverse economic consequences for at least four small business entities that employ pot/trap gear in the areas under consideration for SMZ designation. The economic losses suffered by the four small business entities displaced from the SMZs, however, will likely be mitigated to some degree by redirection of fishing effort to other areas. The combined areas under consideration for SMZ

designation represent about 10 square km of the total available fishing area over the continental shelf off of Delaware so alternative fishing areas are prevalent. A quantitative assessment of these changes on revenues for the four small business entities under SMZ designation is not possible to a lack of sufficient data. Additionally, there were no small business entities that reported pot/trap landings at more than one of the reef sites in any given year.

Business entities that use mobile gear (dredge and trawl) also reported trips within 0.46 km of reef site 14 on their VTRs. There were no reported trips at the other reef sites, except for one trip within 0.46 km of reef site 10 in 2010. There were 11 business entities that employed mobile gear within 0.46 km during the three years included in this assessment (2008–2010). However, none of the businesses demonstrated a consistent pattern of annual landings since all 11 reported trips in only one of the three years. Ten of the businesses were determined to be "small" according to the SBA size standards and one was categorized as "large." Six of the 11 business entities obtained less than 5 percent of their total average annual gross revenues from landings at the reef sites, 2 obtained between 5-9 percent, and 1 between 10-19 percent, and 1 between 20-29 percent. Sea scallops comprised 99 percent of the total value on those mobile gear trips occurring within 0.46 km of reef site 14. This action would preclude the 11 mobile gear vessels from fishing within 0.46 km of reef site 14 or any of the other reef sites. As previously mentioned though, commercial fishermen are only required to report location information once on their VTRs when fishing within a single NMFS statistical area, even when using mobile gear that can be towed over the bottom for hours covering many miles. In fact, according to VTR data in 2010, the average limited access sea scallop dredge trip covered approximately 9.3 km per haul and consisted of 66 hauls per trip. This means that the average limited access dredge vessel covered approximately 614 km total per trip in 2010. The area under consideration surrounding reef site 14 is only approximately 2.5 square nautical miles (4.6 square km) so the majority of the scallop landings on those trips in 2010 likely occurred in areas that will remain open under this action. Therefore, given that all but one mobile gear trip was reported in only one year within 0.46 km of reef 14 during 2004-2010, the impacts of the proposed action on earnings by mobile gear vessels is likely

to be minimal under the Council preferred buffer zone of 0.46 km.

### List of Subjects in 50 CFR Part 648

Fisheries, Fishing, Reporting and recordkeeping requirements.

Dated: June 16, 2014.

#### Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 648 is proposed to be amended as follows:

# PART 648—FISHERIES OF THE NORTHEASTERN UNITED STATES

■ 1. The authority citation for part 648 continues to read as follows:

Authority: 16 U.S.C. 1801 et seq.

■ 2. In § 648.14, paragraph (p)(1)(vi) is added to read as follows:

### § 648.14 Prohibitions.

(p) \* \* \* (1) \* \* \*

- (vi) Special management zone. Fail to comply with any of the restrictions for special management zones specified in § 648.148(b).
- 3. In § 648.148, the introductory paragraph is removed, paragraphs (a) and (b) are revised, and paragraphs (c), (d) and (e) are removed, as follows:

### § 648.148 Special management zones.

(a) General. The recipient of a U.S. Army Corps of Engineers permit for an artificial reef, fish attraction device, or other modification of habitat for purposes of fishing may request that an area surrounding and including the site be designated by the MAFMC as a special management zone (SMZ). The MAFMC may prohibit or restrain the use of specific types of fishing gear that are not compatible with the intent of the artificial reef or fish attraction device or other habitat modification within the SMZ. The establishment of an SMZ will be effected by a regulatory amendment, pursuant to the following procedure: A SMZ monitoring team comprised of members of staff from the MAFMC, NMFS Greater Atlantic Fisheries Region, and NMFS Northeast Fisheries Science Center will evaluate the request in the form of a written report.

(1) Evaluation criteria. In establishing a SMZ, the SMZ monitoring team will consider the following criteria:

(i) Fairness and equity;

(ii) Promotion of conservation;

(iii) Avoidance of excessive shares;(iv) Consistency with the objectives of Amendment 9 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan, the Magnuson-Stevens Act, and other applicable law;

- (v) The natural bottom in and surrounding potential SMZs; and
  - (vi) Impacts on historical uses.
- (2) The MAFMC Chairman may schedule meetings of MAFMC's industry advisors and/or the SSC to review the report and associated documents and to advise the MAFMC. The MAFMC Chairman may also schedule public hearings.
- (3) The MAFMC, following review of the SMZ monitoring teams's report, supporting data, public comments, and other relevant information, may recommend to the Regional Administrator that a SMZ be approved. Such a recommendation will be accompanied by all relevant background information.
- (4) The Regional Administrator will review the MAFMC's recommendation. If the Regional Administrator concurs in the recommendation, he or she will publish a proposed rule in the **Federal Register** in accordance with the recommendations. If the Regional Administrator rejects the MAFMC's recommendation, he or she shall advise the MAFMC in writing of the basis for the rejection.
- (5) The proposed rule to establish a SMZ shall afford a reasonable period for public comment. Following a review of

public comments and any information or data not previously available, the Regional Administrator will publish a final rule if he or she determines that the establishment of the SMZ is supported by the substantial weight of evidence in the record and consistent with the Magnuson-Stevens Act and other applicable law.

(b) Approved/Established SMZs— Delaware Special Management Zone Areas. Special management zones are established for Delaware artificial reef permit areas # 9, 10, 11, 13, and 14 in the area of the U.S. Exclusive Economic Zone. From January 1 through December 31 of each year, no fishing vessel or person on a fishing vessel may fish in the Delaware Special Management Zones with any gear except hook and line and spear fishing (including the taking of fish by hand). The Delaware Special Management Zones are defined by straight lines connecting the following points N. latitude and W. longitude in the order stated:

(1) Delaware artificial reef # 9:

(i) 38°39.71016′ lat., 74°59.0883′ long.;

(ii) 38°39.82578′ lat., 75°1.11264′ long;

- (iii) 38°41.1048′ lat., 75°0.63288′ long; and
- (iv) 38°41.03244′ lat., 74°58.45098′ long; and then ending at the first point.
  - (2) Delaware artificial reef # 10:
- (i) 38°35.93706′ lat, 74°55.44408′ long;

- (ii) 38°36.0759′ lat., 74°57.57864′ ong;
- (iii) 38°37.36314′ lat., 74°57.01812′ long; and
- (iv)  $38^{\circ}37.21938'$  lat.,  $74^{\circ}54.96474'$  long; and then ending at the first point.
  - (3) Delaware artificial reef # 11:
- (i) 38°39.61578′ lat., 74°42.81462′ long.;
- (ii) 38°39.7797′ lat.; 74°45.20484′ long.;
- (iii) 38°41.11092′ lat., 74°44.73474′ long.; and
- (iv) 38°40.97472′ lat., 74°42.3459′ long.; and then ending at the first point.
- (4) Delaware artificial reef # 13:
- (i) 38°29.87118′ lat.; SE. 74°30.34818′ long.;
- (ii) 38°30.00876′ lat., 74°31.93008′ long.;
- (iii) 38°31.83384′ lat., 74°31.09968′ long.; and
- (iv) 38°32.04756′ lat., l74°29.5839′ long.; and then ending at the first point.
  - (5) Delaware artificial reef # 14:
- (i) 38°31.55286′ lat., 73°47.75244′ long.;
- (ii) 38°31.55286′ lat., 73°50.08164′ long.;
- (iii) 38°32.94684′ lat.; 73°50.08158′ long.; and
- (iv) 38°32.94714′ lat, 73°47.75232′ long.; and then ending at the first point. [FR Doc. 2014–14358 Filed 6–18–14: 8:45 am]

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# DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL

DELAWARE COASTAL
MANAGEMENT PROGRAM

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May 20, 2014

John K. Bullard National Marine Fisheries Service – Northeast Region 55 Great Republic Drive Gloucester, MA 01930-2276

RE: Delaware Coastal Management Federal Consistency Determination

**Delaware Artificial Reef Special Management Zones** 

FC # 2014.0055

Dear Mr. Bullard:

The Delaware Coastal Management Program (DCMP) has received and reviewed your consistency determination for the proposed rule to establish Special Management Zones (SMZs) for five artificial reef sites in Delaware in federal waters under the black sea bass provisions of the Summer flounder, Scup, and Black Sea Bass Fishery Management Plan. Based upon our review and pursuant to National Oceanic & Atmospheric Administration regulations (15 CFR 930), the DCMP concurs with your consistency determination for the above referenced project.

However, we offer the following comments for your thoughtful consideration:

Delaware is committed to maintaining quality recreational fishing opportunities consistent with the U.S. Fish and Wildlife Service's Sport Fish Restoration Office funding requirements. To this end, fishing gear conflicts were required to be minimized at our artificial reef sites. Delaware's request to the Mid-Atlantic Fisheries Management Council (MAFMC) for the establishment of the SMZs to reduce gear conflicts included only the area within the permitted reef sites. During the MAFMC process, the U.S. Coast Guard added the 500 yard buffer around each site to the SMZ area. This increases the total area of the closure by more than 50%. We believe this should be reconsidered for the following reasons in order to minimize adverse impacts to the commercial watermen using pot/trap gear:

1. Delaware's SMZ regulations for sites in state waters include only the area of the permitted site, without buffers. Delaware Fish & Wildlife Enforcement agents do not consider this to be an enforcement problem.

Delaware's good nature depends on you!

- 2. In permitting ocean sites, Delaware included only featureless bottom within sites, but in most cases natural wrecks were adjacent to sites, within the proposed 500 yard buffer. These are traditional areas for commercial pot fisherman and should not be lost.
- 3. The precedent for this proposed buffer may be SMZs established by the South Atlantic Fishery Management Council for Snapper/grouper. These have been in effect for over 20 years. At that time, LORAN C was the best navigational aid available, crude by today's standards. Today we have GPS which is far more accurate, and AIS (Automatic Identification System) with which it is possible to identify vessels and pinpoint their location from a considerable distance. These should be sufficient for enforcement purposes and the 500 yard buffer should be eliminated.

We ask that your agency consider modifying the boundaries of the SMZ proposal for the reef sites in Delaware based on the reasons stated above. If you have any questions please do not hesitate to contact me or Tricia Arndt of my staff at (302) 739-9283.

Sincerely,

Sarah W. Cooksey, Administrator

Delaware Coastal Management Program

SWC/tka cc: File 2014.0055 Paul Perra-NMFS Jeff Tinsman-DFW [FR Doc. 2014–15695 Filed 7–15–14; 8:45 am] BILLING CODE 4000–01–C

### **DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration

### 50 CFR Part 648

[Docket No. 130702585-4484-01]

RIN 0648-BD42

Magnuson-Stevens Fishery
Conservation and Management Act
Provisions; Fisheries of the
Northeastern United States; Special
Management Zones for Five Delaware
Artificial Reefs

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed rule; extension of comment period.

**SUMMARY:** NMFS extends for 15 days the comment period on the proposed rule to implement special management zones for five Delaware artificial reefs.

**DATES:** The deadline for written comments on the proposed rule published on June 19, 2014 (79 FR 35141), is extended from August 4, 2014, to August 19, 2014.

**ADDRESSES:** You may submit comments, identified NOAA–NMFS–2014–0060, by any of the following methods:

- Federal e-rulemaking portal: Go to www.regulations.gov/#!docketDetail; D=NOAA-NMFS-2014-0060 click the "Comment Now!" icon, complete the required fields, and enter or attach your comments.
- Mail and Hand Delivery: John K. Bullard, Regional Administrator, NMFS, Greater Atlantic Regional Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930. Mark the outside of the envelope: "Comments on SMZ Measures."

*Instructions:* Comments sent by any other method, to any other address or

individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter "N/ A" in the required fields if you wish to remain anonymous). Attachments to electronic comments will be accepted in Microsoft Word, Excel, or Adobe PDF file formats only.

Copies of the Environmental Assessment and Initial Regulatory Flexibility Analysis (EA/IRFA) and other supporting documents for the Special Management Zones measures are available from Paul Perra, NOAA/NMFS, Sustainable Fisheries Division, 55 Great Republic Drive, Gloucester, MA 01930. The Special Management Zone measures document is also accessible via the Internet at: http://www.nero.noaa.gov.

FOR FURTHER INFORMATION CONTACT: Paul Perra, Fishery Policy Analyst, (978) 281–9153.

SUPPLEMENTARY INFORMATION: The Delaware Fish and Wildlife Department (DFW) requested that the Mid-Atlantic Fishery Management Council designate five artificial reef sites, currently permitted by the U.S. Corps of Engineers in the Exclusive Economic Zone (EEZ), as Special management Zones (SMZs) under the regulations implementing the Council's Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP). The SMZ request noted that the DFW has received complaints from hook-and-line anglers regarding fouling of their fishing gear in commercial pots and lines on ocean reef sites for more than 10 years. It also noted that the U.S. Fish and Wildlife Service (FWS) Sportfish Restoration Program had notified DFW that these gear conflicts are not consistent with the objectives of the

Sportfish Restoration Program, which provides funding for the building and maintenance of the artificial reefs. In order to comply with the goals of the Sportfish Restoration Program, the FWS is requiring that state artificial reef programs be able to limit gear conflicts by state regulations in state waters or by SMZs for sites in the EEZ.

After considering the DFW request, the Council recommended that all five artificial reefs be established as SMZs through a regulatory amendment. The action, as proposed, would allow only hook-and-line and spear fishing (including the taking of fish by hand) in the artificial reef designated areas, and these measures should be implemented with a 500-yard (457.2-m) enforcement buffer around each artificial reef site. In response to the Council's recommendation, NMFS developed a Draft Environmental Assessment and a proposed rule to implement the SMZs measures, as recommended by the Council, published in the Federal **Register** on June 19, 2014, (79 FR 35141), with a 45-day comment period that closes August 4, 2014.

Summer flounder, scup, and black sea bass are managed jointly by the Council and Atlantic States Marine Fisheries Commission. The comment period on the proposed rule is scheduled to close on August 4, 2014, the day before the start of the next meeting of the Commission, and a week before the next Council meeting. In order to provide further opportunity for the Commission and Council to formulate comments, and give more opportunity for the public to review and provide comments on the proposed rule to implement SMZs for five Delaware artificial reefs, NMFS is extending the comment period on the proposed rule until August 19, 2014.

Dated: July 11, 2014.

### Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

[FR Doc. 2014-16704 Filed 7-15-14; 8:45 am]

BILLING CODE 3510-22-P



# **Atlantic States Marine Fisheries Commission**

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## **MEMORANDUM**

**To:** ISFMP Policy Board

From: Atlantic Menhaden Technical Committee

**RE**: Quarterly Update on 2014 Benchmark Stock Assessment Progress

**Date**: July 22, 2014

In preparation for the 2014 benchmark stock assessment, the Atlantic menhaden Technical Committee (TC) and Stock Assessment Subcommittee (SAS) have held nine joint webinars and five in-person meetings to date. This sixth progress report memorandum contains a summary from one webinar and one Assessment Workshop conducted by the SAS that occurred since the last progress report on April 25, 2014 (M14-039). The primary goal of these webinars and workshops was to finalize data preparations and preliminary analyses in preparation for the December 9-11, 2014 Peer Review Workshop (SEDAR 40).

The SAS will hold additional webinars and a second Assessment Workshop August 12-15, 2014 to ensure steady progress on modeling tasks. Final decision-making with regard to data inclusion and modeling approaches will be made at the August Assessment Workshop. Final consideration of any analyses and alternative models submitted by the public will occur at the August Assessment Workshop as well. Review of the benchmark stock assessment by the TC will occur at a meeting to be held in November of 2014.

Below is a brief summary of topics discussed and progress made at each meeting since April 2014. A tentative timeline for the 2014 Atlantic menhaden workshops follows.

### May 9 conference call and June 2-5 Assessment Workshop summary:

- Reviewed all finalized input data sources and decisions regarding treatment of data in assessment models.
- Reviewed all parameter and model configuration options and identified base vs. sensitivity model options.
- Reviewed tagging data analyses and discussed potential ways in which the data could inform assessment questions and models.
- Began initial discussions with regard to biological reference points.
- Provided feedback on development of assessment models.
- Reviewed stakeholder analysis on the potential effects of menhaden migration on fishery selectivity patterns.

### Tentative timeline for 2014 Atlantic menhaden benchmark stock assessment:

August 12-15, 2014 – Assessment Workshop II

September TC Meeting Week – Ecological Reference Points committee meeting

November 2014 – Technical Committee Reviews Benchmark Stock Assessment

December 9-11, 2014 – Peer Review Workshop (SEDAR 40)

February Meeting 2015 – Assessment presented to Atlantic menhaden Board

# River Herring Technical Expert Working Group (TEWG) Progress To-Date for ISFMP Policy Board

July 16, 2014

### **Background**

NOAA Fisheries' and the Atlantic States Marine Fisheries Commission's (ASMFC) are collaborating to develop and implement a dynamic conservation plan by summer of 2015 to help restore river herring throughout their Atlantic coastal range. This includes identifying important conservation efforts, critical data gaps, and monitoring and evaluating progress in achieving the goals. The initiative will coordinate and build upon the many previous and ongoing efforts to further river herring conservation. The plan is intended to increase public awareness about river herring, stimulate cooperative research efforts, and inform efforts to conserve the species. The River Herring Technical Expert Working Group (TEWG) has been established to provide and compile information to develop this conservation plan.

NOAA Fisheries has provided ASMFC with \$95,000 to support independent research projects to fill in data gaps and implement conservation actions for river herring. NOAA Fisheries is planning to supplement these funds with an additional \$200,000 (FY 2014 funds) for an expanded joint conservation planning initiative (\$295,000 total). In the fall, a competitive request for research projects or conservation actions will be released. This request will be formulated based on the TEWG and its subgroups, public comment/input provided at the TEWG meetings, and specific river herring management and science needs. The conservation planning process and the TEWG discussions are anticipated to be long-term efforts.

### March and June 2014 Conference Calls

The first full TEWG conference call was on March 27, 2014, with over 80 participants. The group discussed the conservation planning initiative, the structure and process of the TEWG and any membership gaps. The TEWG was split into six subgroups (stock status, genetics/hybrids/landlocked, habitat, fisheries, climate change, and species interactions). Based on discussions during the call, one overarching committee was formed to ensure the work of the subgroups is fully integrated to facilitate subgroup and TEWG discussions, as well as conservation planning development (Ecosystem Integration Committee).

The second full TEWG conference call was held on June 30, 2014 with 35 participants. The group discussed progress of the conservation planning, obtained input on draft documents and received updates from the subgroups on progress to-date (outlined below). Members of the TEWG were also notified that a call for research proposals will be forthcoming in the fall.

## **Subgroup Calls**

Subsequent to the full TEWG call in March, each of the subgroups and the Ecosystem Integration Committee (EIC) held conference calls. Below are summaries of each of the calls, with key outcomes that are most relevant to the states.

Stock Status Subgroup (Co-chairs: Kevin Sullivan and Michael Bailey)

The stock status subgroup focused on modelling approaches for river herring. The subgroup reviewed past models used to assess the stock. It was acknowledged that river herring are data poor. Key outcomes include:

- Models previously used by ASMFC are limited, but could continue to be refined for future use.
- In addition, alternative modeling approaches should be explored. The Subgroup should identify data needs for future assessments and ESA listing determination.
  - Look at data needs and/or research needs to inform short term (e.g., 3 5 years) and long term goals (e.g., 10 20 years) for potential modeling methods.
- Canadian data should be included in future assessments to ensure a coastwide approach is being considered.

### Genetics/Hybrid/Landlocked Subgroup (Chair: Dan Hasselman)

The subgroup discussed genetic tools that are useful to learn more about river herring. West Coast participants who have experience with Pacific salmon genetics were invited to the subgroup to provide insight. The subgroup agreed developing markers for river herring was important. Microsatellites are currently being used but have limitations, therefore other methods are being explored such as single nucleotide polymorphisms (SNPs). The group also discussed the integration of laboratories on the East Coast to standardize tissue sampling techniques and ensure comparability of results. Key outcomes include:

- Genetic homogenization due to effects from stock transfers is a threat. It decreases genetic differentiation and jeopardizes evolutionary potential (i.e., capacity to respond to future perturbations like climate change).
- More information is needed on the relative contribution of wild vs. hatchery broodstock to progeny in different river systems.
- More information is needed to understand the relative contribution of each population to species level genetic variation.

### Habitat Subgroup (Co-chairs: Alison Bowden and Jeff Pierce)

The subgroup discussed strategy development, identified various data gaps and determined more specifics are needed for those data gaps (e.g. conductivity and information such as why are there barriers, what types of barriers). A report for the National Fish and Wildlife Foundation, outlining habitat needs for major rivers of the Chesapeake Bay watershed, is being worked on

separately and will be compiled by the end of the year. The Habitat Subgroup will consider the report when published.

## Fisheries Subgroup (Co-chairs: Jason Didden and Mary Beth Tooley)

The subgroup discussed identifying strengths and weaknesses of catch estimates. The subgroup is also looking at management actions that have been implemented and how those could influence catch numbers. Current management information has been distributed to the subgroup to help inform future discussions. Key outcomes include:

- Additional information on catch is needed. The subgroup will work to flesh out the details as the initiative progresses.
  - o More information is needed on the stock structure of river herring catch.
- Increased observer coverage in the mid-water trawl and mackerel fisheries would improve data collection.
- Funding is needed to continue bycatch avoidance initiatives. The Nature Conservancy's support to help the fishing industry avoid river herring has been an appreciated partnership.

### Climate Change Subgroup (Co-chairs: Janet Nye and Mike Alexander)

The subgroup reviewed findings from the 2012 NMFS River Herring Climate Change Workshop. The topics brought up in that workshop were categorized into directly or indirectly related to climate change, and the subgroup agreed to focus solely on those threats that came directly from climate change. The subgroup is working to compile a list of speakers and invite them to the next subgroup calls. Key outcomes include:

- More information is needed on the amount of available river herring spawning habitat.
- More information is needed on the impacts of stream flow on passage and interactions with barriers.

### Species Interactions Subgroup (Chair: Eric Schultz)

The subgroup discussed topics related to species interactions that were brought up in the Endangered Species Act river herring listing determination, a majority of which focus on predation of river herring. Parasites and diseases were also touched upon. The subgroup is compiling a spreadsheet outlining the referenced studies (and others) to identify data gaps along the coast. Key outcomes include:

- More information on the relationship between predators and life stage of alewives (in terms of predation pressure) is needed.
- More information is needed on how predation impacts natural mortality in different regions.
- More information is needed on where river herring go after they leave river systems.

Ecosystem Integration Committee (Co-chairs: Kim-Damon Randall and Jon Hare)
The EIC reviewed overlapping topics between the subgroups. In order to ensure efficiencies and avoid duplication of effort, the committee compiled a table outlining issues that overlap between

the various subgroups. The table will be updated throughout the process.

Additional information on the TEWG, including meeting summaries and materials discussed in this document can be found on NOAA Fisheries/ River Herring TEWG website: http://www.nero.noaa.gov/protected/riverherring/tewg/index.html.

# MEMORANDUM OF UNDERSTANDING BETWEEN THE

ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERIES AND OCEANS CANADA
GREAT LAKES FISHERY COMMISSION
NOAA FISHERIES SERVICE
PROVINCE OF ONTARIO
PROVINCE OF QUEBEC
U.S. FISH AND WILIDLIFE SERVICE

FOR

### COOPERATION AND COORDINATION ON AMERICAN EEL MANAGEMENT

The Atlantic States Marine Fisheries Commission (ASMFC) was formed by the 15 Atlantic coast states and authorized by a Special Act of Congress in 1942 in recognition that fish do not adhere to political boundaries. The ASMFC serves as a deliberative body, coordinating the conservation and management of the states' shared near-shore resources—marine, shell, and anadromous—for sustainable use. American eel, a species native to all 15 member states, has been managed under the American Eel Fishery Management Plan since 2000. ASMFC has acknowledged that juvenile American eel abundance is experiencing a general decline coastwide.

The U. S. Fish and Wildlife Service (Service) has been part of fisheries management since 1871, and is committed to working with partners to achieve healthy fish and wildlife populations. The Service plays an important role to enhance fish passage and to conserve and expand fish habitat. The Service also participates in inter-jurisdictional fishery management for American eel.

The National Oceanic and Atmospheric Association's Fisheries Service (NOAA Fisheries Service) is dedicated to the stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems. As part of its mission, NOAA Fisheries Service works with regional fishery management councils to manage harvest of marine fishes, including the American eel.

Fisheries and Oceans Canada (DFO) is the lead agency for managing fish passage and habitat in Canada and for regulating American eel fisheries in the Atlantic and Maritime provinces. With its partners, the Province of Ontario and the Province of Quebec, DFO is developing a National Plan for management of American eel.

The Province of Ontario manages the harvest of American eel in the Canadian waters of Lake Ontario, provincial waters fo the St. Lawrence River, and in rivers and lakes tributary to these systems. Since 2004, Ontario has closed the harvest of American eel because of the strong population declines in its waters. Ontario is working in partnership with DFO and the Province of Quebec to reduce anthropogenic mortality on American eels in Canada by 50% in the forseeable future.

The Province of Quebec manages harvest of American eel in the St. Lawrence River and its estuary, systems tributary to this river, as well as systems adjacent to the Gulf of St. Lawrence in the Gaspé Peninsula. Quebec is working to reduce harvest of American eel from its waters and is committed to its partnerships with DFO and Ontario to reduce mortality of American eels escaping to the Atlantic Ocean.

The Great Lakes Fishery Commission (GLFC) was established by the *Convention on Great Lakes Fisheries* between Canada and the United States in 1955. The GLFC has two primary missions: to control sea lamprey in the Great Lakes basin and to develop coordinated programs of research in the Great Lakes. The GLFC also facilitates coordinated fishery management in the Great Lakes. As part of the *Strategic Vision of the Great Lakes Fishery Commission for the First Decade of the New Millenium*, the GLFC and its partner agencies, through *A Joint Strategic Plan for Management of Great Lakes Fisheries*, seek to ensure that no native fish species is lost from the system. American eel is a fish native to the St. Lawrence River and Lake Ontario (SLRLO), and to the entire Atlantic coast of North America. Over parts of its range, including the SLRLO, the Mississippi River system, and the Chesapeake Bay, American eel has been in strong decline for the past 15 years. In 2003, the GLFC issued a Statement of Concern about the status of American eel in Lake Ontario and the St. Lawrence River.

More recently, the governments of Canada and the United States have evaluated the status of American eel under their respective endangered species legislations. The Committee on the Status of Endangered Wildlife in Canada recommended in 2006 that American eel be listed as a species of special concern. That recommendation is now being considered. The Province of Ontario has determined that American eel is an endangered species in the province. The U.S. Fish and Wildlife Service, under the Endangered Species Act, determined that there was not sufficient evidence to list American eel at that time.

Because American eel is a species that serves valuable roles both as an important component of the fish assemblage and as a harvestable commodity, efforts must be undertaken to enhance the abundance of American eel. Most potential management actions involve reducing mortality imposed by humans, including that caused by harvest and that caused by passage through hydropower turbines, and restoring habitat.

Canada has developed a draft national management plan for the American eel. Consistent with the vision of the plan for development of regional and watershed-based implementation, the GLFC is supporting development of a recovery framework for the Lake Ontario/St. Lawrence River segment of the population in Ontario, New York, and Quebec. The framework for recovery establishes goals and targets that include reduction of harvest and turbine mortality, increased access to former habitat, and short-term stocking.

The goals of the ASMFC Fishery Management Plan (FMP) for American eel are to protect and enhance the abundance of American eel in inland and territorial waters of the Atlantic states, to contribute to the viability of the American eel spawning population; and to achieve sustainable commercial, subsistence, and recreational fisheries by preventing overharvest of any eel life stage. The FMP requires member states and jurisdictions to implement harvest restrictions as well as fishery-dependent and independent monitoring. At present, the ASMFC is developing an Addendum to the FMP that would include measures to increase escapement of sexually mature American eel to the spawning grounds.

NOW THEREFORE, because it is in the public interest that the ASMFC, Fisheries and Oceans Canada, the NOAA Fisheries Services, the U. S. Fish and Wildlife Service, Ontario, Quebec, and the GLFC work together to enhance and preserve, throughout its natural range in North America an abundant population of American eel capable of providing a harvestable surplus, this

Memorandum of Understanding establishes a formal agreement to facilitate such cooperation and coordination.

Article 1. <u>Purpose</u>. The Atlantic States Marine Fisheries Commission, Fisheries and Oceans Canada, the NOAA Fisheries Service, the U. S. Fish and Wildlife Service, Ontario, Quebec, and the Great Lakes Fishery Commission, collectively the parties, seek to develop a coordinated ecosystem approach to bi-national management of American eel throughout its North American range. Initial management activities will focus on reducing mortality, as well as improving access to suitable habitat. This management approach is necessary to preserve and enhance the American eel population so as to achieve a harvestable surplus.

**Article 2.** <u>Proposed Program</u>. To accomplish the purpose described above, the following objectives will serve as the cornerstone of this agreement:

- Develop coordinated management goals across jurisdictions, with final adoption of such management goals only after endorsement by the relevant groups within the structure of eachparty;
- Establish a science working group to share scientific information on American eel over its range along the Atlantic coast and in the SLRLO;
- Promote sound science to inform managers about American eel population dynamics, recruitment, and ecology; and
- Embrace a precautionary approach to American eel management when information is lacking.

**Article 3.** Commitments of the Parties. The signatories to this Memorandum of Understanding agree that, consistent with their mandates, cooperative work to enhance American eel abundance is needed and necessary. In support of the proposed program, the parties agree to use their best efforts to support needed meetings and to work collectively to leverage existing research and management resources.

**Article 4.** <u>Meetings</u>. The parties shall meet periodically to advance the objectives of the Proposed Program described above.

**Article 5.** <u>Duration</u>. This Memorandum of Understanding shall remain in effect until modified by mutual written agreement of the parties.

**Article 6.** <u>Termination</u>. Any signatory party may terminate its participation in this Memorandum of Understanding, in whole or in part, at any time.

# ATLANTIC STATES MARINE FISHERIES COMMISSION

Representative, Atlantic States Marine Fisheries Commission	Date
DEPARTMENT OF FISHERIES AND OCEANS	
Representative, Fisheries and Oceans Canada	Date
GREAT LAKES FISHERY COMMISSION	
Chair, Great Lakes Fishery Commission	Date
NOAA FISHERIES SERVICE	
Representative, NOAA Fisheries Service	Date
PROVINCE OF ONTARIO	
Representative, Ontario Ministry of Natural Resources	Date
PROVINCE OF QUEBEC	
Representative, QuebecMinistère des REssources Natureles et de le	e Faune Date
U. S. Fish and Wildlife Service	
Representative, U.S. Fish and Wildlife Service	Date