

Atlantic States Marine Fisheries Commission

ISFMP Policy Board

October 30, 2013

2:45 – 5:45 p.m.

St. Simons Island, Georgia

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/Introductions (*P. Diodati*) 2:45 p.m.
2. Board Consent (*P. Diodati*) 2:45 p.m.
 - Approval of Agenda
 - Approval of Proceedings from August 2013
3. Public Comment 2:50 p.m.
4. Marine Recreational Information Program Implementation Update (*G. Colvin*) 3:00 p.m.
5. NOAA Fisheries Electronic Technologies Initiative (*G. Lapointe*) 3:45 p.m.
6. Discussion of Cancer Crab White Paper (*T. Kerns*) 4:25 p.m.
7. Discuss MAFMC Action on Shad and River Herring Management (*T. Kerns*) 4:45 p.m.
8. Committee on Economics and Social Sciences Report (*M. Hall-Arber*) 5:05 p.m.
9. Atlantic Coastal Fish Habitat Partnership Report (*E. Greene*) 5:20 p.m.
10. Law Enforcement Committee Report (*M. Robson*) 5:25 p.m.
11. Management and Science Committee Report (*M. Armstrong*) 5:35 p.m.
12. Other Business/Adjourn 5:45 p.m.

The meeting will be held at the King and Prince Beach & Golf Resort, 201 Arnold Street, St. Simons Island, Georgia;
800-342-0212

Atlantic States Marine Fisheries Commission

ISFMP Policy Board

*October 31, 2013
12:30-1:00 p.m.
St. Simons Island, Georgia*

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.

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|---|------------|
| 1. Welcome; Introductions (<i>P. Diodati</i>) | 12:30 p.m. |
| 2. Board Consent (<i>P. Diodati</i>) | 12:30 p.m. |
| • Approval of Agenda | |
| 3. Public comment | 12:35 p.m. |
| 4. Review of Non-compliance Findings (if necessary) | 12:45 p.m. |
| 5. Other Business/Adjourn | 1:00 p.m. |

The meeting will be held at the King and Prince Beach & Golf Resort, 201 Arnold Street, St. Simons Island, Georgia;
800-342-0212

MEETING OVERVIEW

ISFMP Policy Board Meeting
Wednesday, October 30, 2013
2:45-5:45 p.m.
St. Simons Island, Georgia

Chair: Paul Diodati (MA) Assumed Chairmanship: 11/11	Vice Chair: Louis Daniel (NC)	Previous Board Meeting: August 7 and 8, 2013
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (19 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from August 7 and 8, 2013

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. Marine Recreational Information Program Implementation Update (3:00-3:45 p.m.)

Background

- The Marine Recreational Information Program (MRIP) has several new changes. Gordon Colvin will present an update on the following topics:
 1. The status of development of major components of new Atlantic coast survey design: estimation (complete); intercept design (complete, and working with states to improve productivity); effort (single-phase ABS mail survey pilot ongoing); for-hire.
 2. Next steps in implementation. Results of the Regional Implementation Workshop held this summer. Outline process for working with regional FINs (ACCSP, in this case), to determine needs and priorities for improved coverage, precision, timeliness and special purpose surveys, and to make decisions on survey methods and standards.
 3. Status of consideration of moving to electronic trip reporting for charter boats and headboats. Results of Gulf of Mexico Pilot Project, implications and possible next steps.

Presentations

- MRIP implementation update by G. Colvin

Board actions for consideration at this meeting

- None

5. NOAA Fisheries Electronic Technologies Initiative (3:45-4:25 p.m.)

Background

- George Lapointe is under contract with the NOAA Office of Science and Technology to

<p>work on the Regional Electronic Technologies Implementation Plans that are a part of the Electronic Technologies guidance from NMFS (Briefing CD).</p> <ul style="list-style-type: none"> • In the initial phase of the project he is meeting with groups to discuss opportunities, impediments and the needed steps to develop and implement regional electronic technology plans.
<p>Presentations</p> <ul style="list-style-type: none"> • Review and discussion of the NOAA Fisheries Electronic Technologies Initiative by G. Lapointe
<p>Board actions for consideration at this meeting</p> <ul style="list-style-type: none"> • None

<p>6. Discussion of Cancer Crab White Paper (4:25-4:45 p.m.) Possible Action</p>
<p>Background</p> <ul style="list-style-type: none"> • In August, the Policy Board requested staff prepare a white paper on cancer crab management and biology after a discussion of a Fishery Improvement Project request. The white paper • Staff prepared a white paper on current cancer crab management and biology (Supplemental Materials)
<p>Presentations</p> <ul style="list-style-type: none"> • A presentation will be given cancer crab management and biology by T. Kerns
<p>Board action for consideration at this meeting</p> <ul style="list-style-type: none"> • Discuss the potential for cancer crab management (single species FMP or a stock in the fishery)

<p>7. Discuss MAFMC Action on Shad and River Herring Management (4:45-5:05 p.m.)</p>
<p>Background</p> <ul style="list-style-type: none"> • The MAFMC considered the development of a Draft Environmental Impact Statement for Amendment 15 to designate shad and river herring as stocks in the fishery as a part of the Squid, Mackerel, Butterfish plan at its October meeting (see Council White Paper on CD Briefing Materials). The Council did not move forward with the DEIS instead passed the following motion: <i>I move the Council adopt a proactive coordinated approach to help the stocks of river herring and shads to recover. Specifically I propose the Council take the lead in forming a joint Council/ASFMC/state/regional office/center working group to cooperatively seek to improve current management by aligning current ASMFC, individual state, and at sea cap management measures to comprehensively address fishing mortality throughout the species range in state and federal waters, to use the Councils' SSCs and other relevant scientific bodies to develop a scientific based approach to determining the proper size of the catch cap in the mackerel and herring fisheries, and to monitor the success of current management actions by the Council and our partners. Including that the Council relook at the decision to make river herring and shads stocks in the fishery in three years after we have had a chance to determine if these current efforts are working and if by assessing the proposed interim work to develop scientifically-determined caps sizes we can better justify the decision to go ahead.</i>
<p>Presentations</p> <ul style="list-style-type: none"> • Overview of Council Action by T. Kerns

Board guidance for consideration at this meeting

- Discuss Commission participation in the Council working group

8. Committee and Economics and Social Science Report (5:05-5:20 p.m.)**Background**

- The Committee on Economics and Social Science (CESS) recently completed a survey of Commissioners' socioeconomic information needs.

Presentations

- Overview of survey report by M. Hall-Arber

Board guidance for consideration at this meeting

- Identify mechanism for providing economic input to management decisions

9. Atlantic Coastal Fish Habitat Partnership Report (5:20-5:25 p.m.)**Background**

- The ACFHP Steering Committee met on October 29-30, 2013.

Presentations

- Update on Partnership activities by E. Greene

Board actions for consideration at this meeting

- None

10. Law Enforcement Committee Report (5:25-5:35 p.m.)**Background**

- The LEC met on October 30, 2013

Presentations

- Update on LEC activities by M. Robson

Board actions for consideration at this meeting

- None

11. Management and Science Committee Report (3:35-3:45 p.m.)**Background**

- The Management and Science Committee (MSC) met October 28-29, 2013
- The Policy Board tasked MSC with investigating climate-induced shifts in stock distributions and possible re-evaluation of state quota allocations.

Presentations

- Report on MSC activities by M. Armstrong.

Board guidance for consideration at this meeting

- Provide direction to the climate, stock distributions, quota allocations work

12. Other Business/Recess

MEETING OVERVIEW

ISFMP Policy Board Meeting
Thursday, October 31, 2013
12:30-1:00 p.m.
St. Simons Island, Georgia

Chair: Paul Diodati (MA) Assumed Chairmanship: 11/11	Vice Chair: Louis Daniel (NC)	Previous Board Meeting: August 7 and 8, 2013
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

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 Non-Compliance Recommendations (If Necessary) (12:45-1:00 p.m.)
Background <ul style="list-style-type: none">• Species management boards and sections review compliance on an on-going basis.• If a board/section recommends that a state be found out of compliance, the Policy Board must review this finding prior to the Commission taking action.
Presentations <ul style="list-style-type: none">• Staff will provide background on any non-compliance recommendations
Board actions for consideration at this meeting <ul style="list-style-type: none">• Determine if a recommendation should be made for the Commission to notify the Secretaries of Interior and Commerce of a state's non-compliance

5. Other Business/Adjourn

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

**Crowne Plaza Hotel - Old Town
Alexandria, Virginia
August 7, 2013**

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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Adjournment 16

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1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of May 2013 by Consent** (Page 1).
3. **Move that the ISFMP Policy Board approve the Habitat Program Guidance Document as described today** (Page 9). Motion by Pat Augustine; second by Wilson Laney. Motion carried (Page 9).
4. **Motion to adjourn by Consent** (Page 16).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)	David Saveikis, DE (AA)
Steve Train, NH (GA)	Roy Miller, DE (GA)
Doug Grout, NH (AA)	Tom O’Connell, MD (AA)
G. Ritchie White, NH (GA)	Bill Goldsborough, MD (GA)
Paul Diodati, MA (AA)	Russell Dize, MD, proxy for Sen. Colburn (LA)
Bill Adler, MA (GA)	Jack Travelstead, VA (AA)
Mark Gibson, RI, proxy for R. Ballou (AA)	Cathy Davenport, VA (GA)
Rick Bellavance, RI, proxy for Sen. Sosnowski (LA)	Louis Daniel, NC (AA)
David Simpson, CT (AA)	Bill Cole, NC (GA)
Dr. Lance Stewart, CT (GA)	Robert Boyles, Jr., SC (AA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Pat Augustine, NY (GA)	Sen. Ronnie Cromer, SC (LA)
Tony Rios, NY, proxy for Sen. Boyle (LA)	Spud Woodward, GA (AA)
Adam Nowalsky, NJ, proxy for Asm. Albano (LA)	Patrick Geer, proxy for Rep. Burns (LA)
Brandon Muffley, NJ, proxy for D. Chanda (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Mitchell Feigenbaum, PA, proxy for Rep. Vereb (LA)	Kelly Denit, NMFS
Loren Lustig, PA (GA)	Wilson Laney, USFWS
Leroy Young, PA, proxy for J. Arway (AA)	Martin Gary, PRFC

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

Ex-Officio Members

Staff

Bob Beal

Toni Kerns

Guests

Jessica Coakley, MAFMC
Greg DiDomenico, GSSA
Raymond Kane, CHOIR
Mark Alexander, CT DEEP
Ned Cyr, NMFS
Jason McNamee, RI DFW

Aaron Kornbluth, Pew Trusts
Rob O’Reilly, VA MRC
Peter Burns, NMFS
Gordon Colvin, NOAA
Kelly Shotts
Margaret Hunter, ME DMF

The ISFMP Policy Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel Old Town, Alexandria, Virginia, August 7, 2013, and was called to order at 3:50 o'clock p.m. by Chairman Paul Diodati.

CALL TO ORDER

CHAIRMAN PAUL J. DIODATI: We're going to begin our next meeting, which is a meeting of our ISFMP Policy Board. Welcome, everybody. You have the agenda of the meeting and the proceedings from May.

APPROVAL OF AGENDA

I am going to make some changes to the agenda right now by adding a couple of items.

One is a discussion about Jonah crab that will come up under other business. I have a reminder here to circle back to our discussion about whelks, which we had at our last gathering. We'll do that. Also under other business, there is a request from the Lobster Board, I believe, to do a letter to NOAA Fisheries that someone will probably present a request for us to do that.

We'll consider that. Kelly is going to be giving a few minutes to provide an update about river herring. Unless there are other changes to the agenda, I'll consider it approved. Is there any other business to go on the agenda? Seeing none; the agenda is approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN DIODATI: Any changes to the minutes from the last meeting? Without objection; we'll approve the proceedings from our last meeting.

PUBLIC COMMENT

As always there is opportunity for public comment. If anyone in the audience would like to come before the policy board, now would be the time to do that. I don't see any hands going up, so we'll pass that. Now before we begin with these reports, Bob, I know that you have a

couple of things you want to go over or present, so why don't you start with that.

PRESENTATIONS

EXECUTIVE DIRECTOR ROBERT E. BEAL: Thank you, Paul, I appreciate the time on the agenda. Maggie, I appreciate you being here to give a presentation. Actually we have a presentation for you rather than one from you. Each year we give out the Annual Awards of Excellence. While you came down to talk about northern shrimp, which is certainly an important issue, we want instead to take this opportunity to recognize you for your years of outstanding contributions to not only the state of Maine but to the commission as well.

You served on the commission's Northern Shrimp Technical Committee for nearly 15 years, and for 12 of those you served the critical roles of leader and the chair of that group. Over your chairmanship, you directed the technical committee's work through two peer review benchmark stock assessments, annual stock assessment updates, two major plan amendments and several addenda. Further, you have provided valuable scientific advice to the Northern Shrimp Section on quota setting, monitoring, reference points and effort controls. You are one of those truly gifted scientists who not only are able to conduct sound, scientific analysis, but also able to communicate the analysis and the findings in a relatable and understandable way to fishery managers and fishermen alike. You have been a dedicated scientist for the Maine Department of Marine Resources for over 30 years, conducting field research on northern shrimp, Atlantic herring, sea urchins, groundfish, and other species, as well as providing valuable computer and analytical support for numerous fisheries projects.

Since 2000 you've been responsible for monitoring and assessment of Maine sea urchin and northern shrimp fisheries. Both programs are critically important in that they provide the scientific foundation for management of these valuable fisheries. Your outstanding work ethic and commitment to detail, but understandable

scientific advice has set an example for other scientists at Maine DMR, as well as those working on the commission's technical and stock assessment committees. It is for these reasons that I'm honored to present you with the 2013 Annual Award of Excellence for scientific, technical and advisory contributions. (Applause)

MS. MARGARET HUNTER: That's going to be a hard act to follow.

CHAIRMAN DIODATI: Maggie, you don't have to give the presentation; that is the good news. (Laughter)

EXECUTIVE DIRECTOR BEAL: If any commissioners really wanted to hear what Maggie has to say on shrimp, she will gladly send around her presentation.

MS. HUNTER: Well, I wondered why I was having such a hard time finding anybody to tell me what I was really supposed to talk about today. Thank you all. Thank you, I will keep it very short. That's it; thank you so much.

EXECUTIVE DIRECTOR BEAL: Paul, I've got one other thing to talk about real quickly before we move on to the more serious business of the Policy Board. I want to take this opportunity to recognize Toni Kerns. Would you please join me? July marked Toni's 10th anniversary with the commission.

Over this time in recognition of her in-depth knowledge of Atlantic Coastal Fisheries issues, her long-standing commitment to the commission's stewardship responsibilities and her strong work ethic, Toni was steadily promoted from FMP coordinator to senior FMP coordinator in 2006, and most recently to ISFMP Director this year.

As FMP coordinator, Toni was responsible for coordinating the management programs of several key and highly complex species, including bluefish, summer flounder, scup, black sea bass, American lobster, to name a few, and dabbled in a lot of others in between staff transitions at times.

During the past decade, she has worked cooperatively with the states and the Mid-Atlantic Fishery Management Council to craft measures that led to the rebuilding of all four Mid-Atlantic species. She also oversaw the successful completion of two American Lobster benchmark assessments, the adoption of new reference points to manage the resource, and the development of rebuilding a program for the southern New England stock.

As senior FMP coordinator for management, she assisted in the oversight and coordination of the ISFMP as well as the mentoring of new FMP coordinators. The dedication of her time, expertise and support has played an important role in ensuring the success of the new FMP coordinators, and in turn the species management programs they coordinate. For all these reasons, I am pleased to present Toni with this gift as a token of our appreciation, and somewhere there is a gift from Dr. Daniel. (Applause)

EXECUTIVE DIRECTOR BEAL: For those of you who don't know, there is an artist down in Beaufort, and he makes all sorts of semi-realistic and semi-cartoon looking fish out of old surfboard pieces that he finds from folks. That is one of those fishes from down in Beaufort where Toni went to grad school.

MR. DAVID G.SIMPSON: Yes I was going to say I think that is the biggest scup I've ever seen.

EXECUTIVE DIRECTOR BEAL: That gives her credit for rebuilding that stock, I suppose. It came right out of Long Island Sound, David.

DR. LOUIS DANIEL: When the guy started making those fish, he did, he would find the old busted surf boards in the trash can and stuff and he would reclaim them and recycle them and make them, and they are very, very popular and they are very collectable.

Now he actually goes out sometimes and buys actual brand new surf boards to make them, because he gets so much for them. He can make three or four out of one surfboard, and he makes

his money by it, but they are really special. Congratulations, Toni.

EXECUTIVE DIRECTOR BEAL: That is all the good news I have, Paul, and now you can go back to the real world.

CHAIRMAN DIODATI: Congratulations to Maggie and to Toni. With that, Toni, you do have to give a presentation and it is the review of the stock rebuilding performance report.

MS. TONI KERNS: Thank you all for that lovely gift, and it has just been fantastic working here for the last ten years. I hope there are many more.

2013 ANNUAL REVIEW OF THE STOCK REBUILDING PERFORMANCE

MS. TONI KERNS: I am going to go into the 2013 annual review of the stock rebuilding performance. This is our annual check on how we're doing in rebuilding all of their commissioned stocks.

It is part of the Strategic Plan, and the commissioners had requested that we have more frequent reviews. We started in 2009 and it is a part of each of our annual action plans. We're just trying to validate the status of each of these stocks; rate how well we're progressing forward; whether that be through technical advice or PRT advice.

If the Policy Board doesn't feel like we're moving in acceptable direction for any of these management species, then we would want to discuss how we would move towards corrective action at the end of my presentation. We're also looking for any direct feedback to the management boards if necessary on any of these species, so that we can put that into next year's action planning process as we begin to move forward into that.

We have the same five categories as we have had in previous years, rebuilt, rebuilding, concerned, depleted and unknown. The rebuilt/rebuilding categories haven't really changed much from last year. I'm not going to

read them all up on the board, but I will let you know that all of these are rebuilt except for red drum and Spanish mackerel, which are rebuilding.

For species of concern, I am going to go into detail for those species that we have made some management changes to or we've had some assessment updates. For three of these species, American shad, spot, and spotted seatrout, we haven't had much change in any actions since last year.

For shad we have the sustainable fishery management plans for Massachusetts, Connecticut, the Delaware River, Potomac River, North Carolina, South Carolina, Georgia and Florida. The states will be submitting habitat plans this fall, but we haven't taken much action and we haven't taken any action in spot and spotted seatrout; except for that the South Atlantic Board today is going to have the PRT look at a new traffic light approach and have the PRT develop any possible management triggers for that traffic light approach.

We're going to go into some detail about Atlantic menhaden. Overfishing is occurring. The overfished status is unknown. There has been some poor recruitment. This past year, as we all know, Amendment 2 set a TAC for the species, and the states have implemented those quotas for this fishing year.

The MSTC is developing a multi-species assessment approach for menhaden and a couple of other species. We are currently working on a benchmark assessment for next year. For coastal sharks, the overfished and overfishing status varies by species. We did add smoothhound sharks to the complex this year. The status is currently unknown.

Our most recent addenda set a quota for the smoothhound, but we will wait to implement that quota until NOAA Fisheries puts forward a quota for that species. as well as we did set a new fin-to-carcass ratio. For horseshoe crab, the last assessment and peer review was in 2009. The Delaware Bay and Southeast Region had

shown increases while the New England and New York areas had shown declines.

In 2013 we implemented the ARM Framework Model, which what we believe is a good step forward in horseshoe crab management, because it incorporates both the needs of the fishery as well as some of the needs of other species, including needs of coastal birds. The next benchmark assessment is in 2015, but we are doing an update to the model this year and we'll have results from that at the annual meeting in October.

Something to note is that we did not receive enough funding to do a survey this year, so there will not be a 2013 horseshoe survey. For northern shrimp, the stock is overfished and overfishing is occurring. We are at 16 percent of the biomass threshold, and there is a need to conserve the spawners.

This year a TAC was set on an F threshold as opposed to the target to try to offset some of the economic impacts to the fishery. This section also approved an addendum with management tools to slow down catch rates. Just a figure of where we are in that overfished/overfishing status.

For Gulf of Maine winter flounder; a proxy F threshold was derived from a length-based yield per recruit analysis. The overfished status is based on a ratio of the 2010 catch survey base swept-area estimate of biomass. In 2010 the F was estimated at 0.23. This was in lieu of an actual Bmsy and Fmsy, because the assessment results would not solidify.

The peer review had recommended using a proxy. In 2013 we maintained the state water subcomponent total quota of 272 metric tons, and the state water trip limit remained the same. For the depleted species; American eel, southern New England lobster, tautog, river herring, weakfish, and winter flounder for the Southern New England area are all depleted.

The Eel Working Group is working on the approval of Addendum III, and for river herring the states are also in the process – they just did

the habitat plan, not river herring, but they did do the sustainable fishery management plans. The tautog fishery; we're still at the 39 percent of the target – SSB overfishing is occurring.

The states implemented new regulations to meet the new F value. It is projected that we're unlikely to meet the 2015 rebuilding target. For Southern New England/Mid-Atlantic winter flounder; we're at 16 percent of the target SSB based on the 2011 assessment, but overfishing is not occurring. The board did follow the TC advice and approved a very limited fishery in 2009.

This year we did put forward an annual specification process if we were to see any increases in the fishery that would warrant an adjustment in trip limits. Then for the unknown category, we have Atlantic sturgeon, where it was prior to. We've added black drum because it is a new species for the commission.

For Atlantic sturgeon we are at low abundance. We need river-specific abundance estimates and better bycatch information. We're in the process of working with NOAA Fisheries in doing the stock assessment to help have a better identification for the listing, and the benchmark assessment will be completed in either late 2014 or early 2015.

For black drum, the assessment will be completed in 2014; and the FMP that we adopted this year has both size and possession limits listed; and then has tools in the tool box that the board can easily respond to when the results of the assessment come out. I'll take any questions on where we're going.

CHAIRMAN DIODATI: Okay, seeing none; that was very easy, good report.

DR. DANIEL: Just a question; I guess I am a little bit concerned about the rebuilt/rebuilding croaker after the discussion at the South Atlantic Board. A lot of you weren't there, but we were reviewing the traffic light approach; and albeit not complete yet, it does indicate a lot of concerns.

The South Atlantic Board elected to move forward and directed staff to move forward and develop the traffic light approach for spot and croaker and begin looking at some management approaches that we may want to use on those two species. That was the only one that kind of caught my eye that it might be more appropriately in concern, but I would defer to you and the board on that.

MS. KERNS: We can definitely consider moving it over. We based this on the information that we had prior to; and it wasn't based on what you all saw today at the South Atlantic Board.

MR. WILLIAM GOLDSBOROUGH: I had a similar question about American shad, which is listed as species of concern; whereas, their cousins, the river herring are where I think they should be under the depleted species category. I was under the impression that we had pretty strong information to suggest American shad sort of on a coast-wide basis were basically at their lowest point on record, but I could be wrong. Is there a rationale for why they're species of concern instead of depleted? I'm not sure what the criteria are.

MS. KERNS: It is because the shad status was not determined depleted through the stock assessment; just concern through that peer review.

MR. GOLDSBOROUGH: Okay, what is the difference? What are the criteria for those categories, then?

MS. KERNS: That's a good question.

MR. GOLDSBOROUGH: I'll be happy to talk to you later about that.

MS. KERNS: If this Policy Board thinks that we should move it over to depleted, then that is something that we can do. It could have been the terminology that was used, different terminology that was used in the peer review for river herring versus the peer review for shad, but it is consistent with the language that came out of those peer reviews.

MR. GOLDSBOROUGH: A follow-up, Mr. Chairman. Do we have a regular process for making changes to the list like on an annual basis; when does that happen?

MS. KERNS: At the August meeting every year we go through this. I should have said at the beginning on your meeting CD it has a thorough review of all the different species and all the information behind why we're putting some in concern versus depleted and what types of information we're looking for.

CHAIRMAN DIODATI: I'm going to suggest, based on Bill's line of questioning, that staff takes some time and clarify the differences between concern and depleted, review the list on both sides, and see if there is any reason to alter it. If there is a reason for an altered list, then we will get that at the fall meeting.

MR. PATRICK H. AUGUSTINE: Great approach; very clear, easy to follow. Do we have somewhere in the document that we make available to the public of definition of the terms? In other words, we're all back to the word depleted. Do we have something that was acceptable for ASMFC's determination of what that means?

It just seems to me that this kind of document is really going to be helpful to the public, but they need that understanding as to what those definitions are. I like the stop light approach. I observed some of the South Atlantic stuff earlier, and it really looks like a great way to go. I think it will be most helpful.

MS. KERNS: Pat, we can get a definition for all these different categories and bring that back at the annual meeting.

MR. AUGUSTINE: Yes, but will they show up also in the document at that time?

MS. KERNS: Will do.

DR. WILSON LANEY: I just would let Bill know that his memory is correct. I pulled up the American shad stock assessment, and it does say in the second paragraph; "The stocks of

American shad in their native range along the North American east coast are currently at all time lows.” But that was as of 2007. I can’t remember where that one is in the schedule. Aren’t we coming up on a redo of American shad in the not too distant future?

MS. KERNS: It is scheduled in the stock assessment schedule for 2016 for now. You know that is a moving document, so it may change in the future.

CHAIRMAN DIODATI: Okay, any more questions or comments on the performance report? Seeing none; we’re going to move to Melissa’s report. I think that is next, and this might result in a possible action. We’re going to consider the Habitat Program Guidance Document.

CONSIDERATION OF HABITAT PROGRAM GUIDANCE DOCUMENT

MS. MELISSA YUEN: Hopefully, you have had a chance to read the one-page summary that provides an update for the Habitat Committee’s current projects and FMP habitat sections. My presentation today focuses on the Habitat Committee Guidance Document, which the Habitat Committee is presenting to the Policy Board for consideration and approval as its governing document.

This guidance document incorporates many of the elements from the Habitat Program’s Operational Procedures Manual, so we’re not reinventing the wheel. It also includes recommendations from the Habitat Program Review completed in 2012 and additional guidance for FMP habitat sections.

This document compliments the Committee Guidance and Assessment Process, which was approved by the Policy Board in February 2013. That document actually takes precedence over this habitat guidance, and any changes that the committee guidance makes will be reflected in this document as well.

Any changes to the Habitat Committee Guidance Document will require Policy Board

approval in the future. The Habitat Program Review produced some recommendations that have been incorporated into this new guidance document. Currently the Habitat Program has its own strategic plan and an operational procedures manual.

The review recommended that there be one governing document. Like all other committees, the Habitat Committee should operate under the ASMFC Strategic Plan and support the commission’s vision and mission. The Annual Work Plan describes the work that needs to be completed each year by the Habitat Committee.

This also will help the commissioners understand how the Habitat Committee’s work aligns with the goals of the commission. There is also additional clarification of Habitat Committee member descriptions, which is taken from the Technical Committee Guidance Assessment Process. Habitat Committee members are expected to represent agency expertise and not policy or regulatory abuse.

It also clarifies that while members of the Habitat Committee may not have species-specific expertise, they are best served to identify authors for FMP habitat sections and review the work. A new feature for the habitat sections of FMPs is a description of habitat bottlenecks, and these are things that may be inhibiting a species’ ability to improve its status despite management measures.

Lastly, the Habitat Committee worked with Emily Greene of ACHFP to develop some concise bullets that distinguished the primary difference between ACHFP and the Habitat Committee. In the operational manual, the Habitat Committee actually had its own vision and mission. No other committee does this.

The Habitat Committee decided that a goal is more appropriate and in keeping with the committee guidance and assessment process. The latest version of the Habitat Committee’s goal is protecting and enhancing fish habitat and ecosystem health through partnerships and education. This may be modified depending on the commission’s new strategic plan.

At the spring meeting the Policy Board approved the Artificial Reef Committee as a stand-alone committee that reports directly to the Policy Board. This guidance document mentions the Artificial Reef Committee, but the information is specific to Habitat Committee. The Habitat Committee and Artificial Reef Committee will continue close coordination.

Habitat areas of particular concern; this is an issue that the Habitat Committee had debated about. They thought of changing the term to distinguish itself from the federal term to alleviate some of the confusion from our federal partners. For NMFS and councils, for instance, an HAPC designation actually triggers a review of federal actions.

However, the HC decided not to change the term, because a change in terminology would likely exacerbate confusion. It would be modified as FMP documents are updated. At a rate of one or two habitat addenda per year, this could take a long time and create inconsistency. Instead, to address the issue, the Habitat Committee is developing a reference document for our federal partners that would be available on the commission website and distributed to interested parties.

This document would clarify all commission-managed species with designated HAPCs in an FMP document, as well as any federal management or regulations for the species. It would clearly identify the ones that are solely managed by the commission or jointly or complementarily managed by federal councils or NMFS or U.S. Fish and Wildlife.

This can serve as a reference for preparing comment letters on proposed actions. We anticipate this document to be completed later this year. In response to the habitat program review, the 2013 action plan directed the Habitat Committee to look into the concept of habitat bottlenecks, which may be contributing to some species' inability to recover despite best management practices. The Habitat Committee developed guidance for authors off FMP habitat sections to discuss whether or not there are currently habitat bottlenecks or where these

bottlenecks could develop for a particular species.

First, the committee developed a definition for habitat bottlenecks as a constraint on a species' ability to survive, reproduce, or recruit to the next life stage that results from reductions in available habitat extent and/or capacity and reduces the effectiveness of traditional fisheries management options to control fishing mortality and spawning stock biomass.

It is a long definition. The HC is developing a white paper that looks at the commission-managed species with poor stock status. We are prioritizing those. We will be identifying existing and potential habitat bottlenecks for those poor stock status species. This is still in the formative stages and probably will not be available until late 2014.

Lastly, during the program review, the Policy Board had a lot of questions about the distinction between ACFHFP and the Habitat Committee. The working group, working with Emily Greene from ACFHFP, developed a set of concise bullets to define the difference between ACHFP and the Habitat Committee.

This was provided in your supplemental materials; but just to highlight the key difference. The Habitat Committee advises the Policy Board on conservation and protection of vital fish habitats for commission-managed species while ACFHFP prioritizes and provides support to on-the-ground conservation and restoration efforts. This concludes my presentation. Thank you.

CHAIRMAN DIODATI: Very good; any questions for Melissa? Keep in mind I'll be looking for a motion to approve this document. I don't see any questions; do I see a possible motion? There was a question over here.

MR. DOUGLAS E. GROUT: Yes, I have to admit I'm a little concerned about still continuing to use the habitat areas of particular concern in this document. I was wondering if you could define the ASMFC definition of

HAPC and what its effect is compared to what the federal HAPC designation is.

CHAIRMAN DIODATI: Wilson, did you want to answer that?

DR. LANEY: Well, yes, I'll help Melissa out on that one since I've been involved in that dialogue, Doug, for about 15 or 20 years now. You may recall, because you were around, I believe. We had a habitat manager's workshop. I think it was about 1999 or thereabouts. We had a thorough discussion of that issue of what would happen if we adopted the federal definitions when in fact there isn't any legal status associated with an ASMFC HAPC designation.

We decided that for the sake of consistency in terms of the science we would go ahead and use the same definition with the acknowledgement that it didn't result in federal review requirements as it does if it is designated for a jointly managed species or a council-managed species. We had this discussion.

I think Dr. Pace Wilbur from the National Marine Fisheries Service Southeast Region had raised the concern that it did create some confusion in their process when they're reviewing permits, and they have to speak to the status of ASMFC species that have HAPC versus federal species that have HAPC.

After quite a lengthy discussion between members of the Habitat Committee and staff, what we finally decided to do was to produce this document that Melissa alluded to a short while ago, wherein we clearly lay that all out. Pace has advised us that putting that down in black and white in that document will meet his needs as far as being able to allay any confusion that might arise.

If you look at the list of species, by the time you subtract out all the ones that are managed jointly by NMFS and ASMFC or by the councils and ASMFC, that only leaves a handful that is solely managed by ASMFC. What we did discover as Melissa and I were writing this document and going through the process of pulling out all the

HAPCs that have been designated for ASMFC species is that there hasn't been some necessary consistency in having done that.

This document will enable us to go back and basically clean up all those ASMFC designations. But you'll notice in the habitat guidance document that language to the effect that there isn't a legal ramification to ASMFC HAPCs is in bold print. Hopefully that will help also. But we decided it was a whole lot simpler to go ahead and prepare that other document and lay it all out in black and white than it would be to try and fix everything in terms of terminology in all the existing documents and any administrative record. The answer to your question is the definition of ASMFC HAPC is the same as the federal definition. It just doesn't carry any legal consultation requirements.

MR. GROUT: Just a follow-up. Now, if we're going to have commission documents that are going to refer to HAPCs – commission management plans that would refer to it and you are going to have this document identifying what the ramifications are or the lack of legal ramifications; what is the assurance that someone going up and reading that is also going to read the document that you're developing?

That is the problem with having them disconnected. Somebody can just grab something off the website and say; oh, this is an HAPC; who is ignorant of the process, the two agencies, and suddenly assume that there is some kind of federal consistency. Is there some way we can link the two documents together on the website that would somehow automatically refer them to the document that you're developing?

DR. LANEY: Well, I think the easiest way to address it in the future, Doug, would just make sure that we have the qualifying statement in any new FMP habitat sections that designate HAPC. Then the other thing I think we can do is just widely publicize the availability of this document once it is finalized. I think that is about the only fix, but again it is a relatively

small number of species for which this is an issue given the number that are jointly managed.

CHAIRMAN DIODATI: I think that is a logical approach for us to try; and if it becomes a problem, we can always circle back and fix it. Are there any other questions or comments before I consider a motion to approve the document?

MR. AUGUSTINE: I move that the ISFMP Policy Board approve the Habitat Program Guidance Document as described today.

CHAIRMAN DIODATI: Second; Wilson. Does anyone oppose the motion? Seeing no opposition; there are no null votes, no abstentions; **we'll consider this approved.** Emily Greene is going to give a presentation on the Atlantic Coastal Fish Habitat Partnership. Welcome, Emily.

ATLANTIC COASTAL FISH HABITAT PARTNERSHIP REPORT

MS. EMILY GREENE: I'm going to give a quick update on three actions which the partnership has been up to since our last meeting. The first one; in 2012 the Atlantic Coastal Fish Habitat Partnership solicited applications for on-the-ground habitat conservation and improvement projects. We reviewed these applications and submitted a ranked list to Fish and Wildlife Service at the end of the year.

Recently Fish and Wildlife Service announced those projects, which have been approved to receive 2013 funding. Two project applications submitted to the Atlantic Coastal Fish Habitat Partnership were approved. The first is restoring coastal fish habitat using oyster, mussels and marsh grass at Guana Peninsula, Florida; and the second, expanding marine meadow habitat in the Peconic Estuary in New York.

With the first project, which is up on the screen, the University of North Florida will be leading an effort to address the disappearance of oyster reef and spartina alterniflora salt marsh by preventing shoreline erosion and promoting

shoreline accretion using a combination of muscle and oyster-based living shorelines.

As you can see, there are several partners in the project, including members of the National Estuarine Research Reserve and academia. The second project; the Cornell Cooperative Extension will lead an effort to address the need to reestablish SAV in the Peconic Estuary; and eastern portions where water quality conditions are suitable, eel grass will be restored, and in the central and western reaches of the estuary, where initial water quality surveys have indicated insufficient light and temperature conditions, widgeon grass will be restored.

Again, here you see several partners involved, including local groups, again academia and one private group in the Peconic Estuary Program. Secondly, ACFHP endorsed two project proposals in the past couple of months. These are in support of the NFWF bring back the natives /More Fish funding program.

The first project, which we endorsed, is a river herring connectivity project in Connecticut on the West River; and the second is a total marsh restoration project in North Carolina. The first proposed project seeks to remove the Pond Billy Dam, which would expand the riverine migratory corridor habitat and spawning grounds for river herring.

As you can see, the partners there include the Connecticut Department of Environmental Protection and a local land trust. The second project, which again is proposed, seeks to create seven acres of salt marsh and 2,500 feet of tidal creek. This is part of a larger restoration effort, which involves removing farmland from cultivation and placing it under perpetual conservation easement.

There is also hydrology and water quality benefits to this project; and as you can see there, a large list of partners including; academia, Natural Resource Conservation Service, the states, and the North Carolina Coastal Federation. Lastly, I just wanted to make you all aware of our next funding opportunity.

The U.S. Fish and Wildlife Service and Atlantic Coastal Fish Habitat Partnership are requesting project applications to restore and conserve habitat necessary to support coastal estuarine dependent and diadromous fish species. These funds again can be used for on the ground projects and related design and monitoring activities.

We ask that these projects be geared towards meeting ACFHP's protection and restoration objectives as noted in our Strategic Plan. Applications are due by Friday, September 20. If you would like complete information or guidelines on how to apply, you can visit the website on the screen. That concludes my update. Any questions?

CHAIRMAN DIODATI: Thanks, Emily. Those projects you just presented; they are all past recipients of some of this type of funding, I take it?

MS. GREENE: The first two projects are recipients of the funding. The second two, which I spoke on, were proposals that we have endorsed. They have not received funding.

CHAIRMAN DIODATI: What is the level of funding for an average project; what could they expect?

MS. GREENE: For our funding program it is \$50,000 at the max.

CHAIRMAN DIODATI: Any questions for Emily?

MR. LOREN W. LUSTIG: Yes, thank you very much for that excellent report. I always find these projects very, very interesting, and I'm always intrigued with the partners that are developed for such projects, specifically the Peconic Area Project, I believe in New York. I was hoping to see some kind of partnership with an educational system, like a school system.

I am reminded of programs like exist in Maryland, Grasses in Classes; in Pennsylvania, Trout in the Classroom, that provides opportunities for students to actually get

involved in hands-on work like this. Can you comment about that? I didn't see them listed, but I thought perhaps I had missed partnerships that relate to educational systems.

MS. GREENE: There will be a public education component to that project. I'm not sure exactly which partner will be leading that, but there will be two land-based workshops where the public will be involved in helping to assemble the planting units, as well as learning about the importance of the marine habitat and what they can do to help preserve habitat in the area.

CHAIRMAN DIODATI: Any more questions? Yes, these types of projects always get my attention as well and we should tweet them. Oh, we don't have a Twitter account.

MS. GREENE: We do have a Facebook account.

OTHER BUSINESS

CHAIRMAN DIODATI: Okay, no more questions for Emily, we'll go on to the next agenda topic. These are the new items that were added to the agenda. One is a request to consider developing a mechanism for management of Jonah crab. One thought is that this becomes attached in some way or a vehicle of some sort of the Lobster FMP, which sounds reasonable.

The other is similar and was for channel whelk, and we had talked about this in the past relative to the horseshoe crab management plan. Since the Commonwealth of Massachusetts I think raised the topic for discussion on the whelk, I'm willing to withdraw that in favor of the Jonah crab discussion and move that up in priority.

I think based on past discussions about whelk is to close the door on that is that maybe, at least to begin with, we'll deal with that in some kind of informal, regional discussion; maybe a working group. I see some nodding heads from Connecticut. I know we've already worked a little bit with Rhode Island on this. I think that might be the better approach rather than do a formal plan. We'll pursue it that way. But

Jonah crab is another story, and I understand there might be reasonable benefits if this particular fishery is somehow recognized to a planning process. Do you want to talk to it?

MS. KERNS: I will; and before we dispense of the whelk, I have a question. I think that there were some of the southern, mid-Atlantic states that were also interested. Maybe what I'll do is start off by sending an e-mail out to the state directors trying to figure out where these regional working groups should be broke in or maybe having a couple phone calls with folks, and then help you guys facilitate those regional working groups, whether they be conference calls or we can look into the budget to see if we have funding to do that for in-person meetings or not. Does that sound like a good direction there?

CHAIRMAN DIODATI: That was the direction I was suggesting.

MR. ROY W. MILLER: Very quickly; if a working group is going to consider channel whelk, were knobbed whelk purposefully deleted from that consideration?

CHAIRMAN DIODATI: It is just that the Commonwealth didn't have a major problem at the time with knobbed whelk. Our fishery was focusing primarily on channel whelk, and that's what our regulations were dealing with. It seemed like that was the species that we had the interstate overlap with. But certainly knobbed whelk, we do have a fishery for that and interest in it, and we can combine the two.

MR. MILLER: That might be helpful, because certainly in the Mid-Atlantic area knobbed whelk and channeled whelk are dual, very often overlapping fisheries. Thanks.

MS. KERNS: Back to the Jonah crab, Steve Train actually had asked me to place this on the agenda or have brought up the topic. I had the staff pass out a paper that Steve has put together for us on Fishery Improvement Projects. I think he wanted to speak on the issue. I'm going to actually pass it off to Steve.

MR. STEPHEN R. TRAIN: If any of you actually believe I prepared this, you've got a lot more faith in me than I do. I was asked to participate in the Fisheries Improvement Project for Jonah crab, because this is a consumer-driven thing.

A lot of the retailers, whether it be Delhaize America, which owns Hannaford among others; for example Wal-Mart that wants MSC certification on anything, requiring, if at not least requesting that their seafood be proven certifiable or sustainably managed, as far as the ability to maintain the resource.

Delhaize America has presented the funding to start this Fisheries Improvement Project, because it was either that or pull Jonah crab off the shelves of all their stores. It does not fit their criteria, which would have destroyed the crab market in the short term, and I don't know what it would have done in the long term, because there are many other stores doing the same thing.

We are trying to come up with the tools we need to find out what we need to do with this fishery, to get the science we need to establish the status of the stock in the resource, and the effort level currently in the fishery. I'm here basically trying to find out what direction we go at this point, and on the assumption with the same boats and the same gear are using this fishery as are doing the lobster fishery, that it would be managed in very similar fashion by the same group.

The National Marine Fisheries has been informed, and I told Peter about it last week, but we also have had a member from Woods Hole involved in the process. We've met three times and we'll meet again in October.

MS. KERNS: If it is the will of the policy board to want to pursue this further, staff can put together a working paper similar to that that we pulled together for whelk with different ways that we can potentially bring Jonah crab into some sort of management plan through the commission; either through its own management plan or whether it be somehow incorporated into

the lobster management plan, and then be under the Lobster Board; what type of data we would need to collect from the states. We can see if we can get some of that data prior to the annual meeting and have a further discussion at the annual meeting.

CHAIRMAN DIODATI: Does that satisfy your request, Steve?

MR. TRAIN: That sounds good to me. Is there anything I can answer in bringing this forward to anybody here?

MR. AUGUSTINE: Where is it prosecuted; is it primarily federal waters, 50, 60, 80 feet deep, or does it border on state waters? I know you have the offshore lobstermen, and I know that is where you go, but is that where we primarily find these? Then again; does the range go all the way down to the Mid-Atlantic or is it primarily concentrated in New England area? The question begs to be asked whether it should be a council issue or a state issue. Can you help me with that, Steve?

MR. TRAIN: The range of the resource appears to be primarily the same range as the lobster fishery, but the primary harvest is occurring in Area 3.

MR. TERRY STOCKWELL: Just a quick question for Steve; is this going to remain specific to Jonah crab or how about any of the other crab stocks?

MR. TRAIN: The working group is specific at this point to Jonah crab. There are other crab stocks, but, for example, the red crab is already MSC certified and managed. The other crabs are carried on a different basis by the stores. The consumer that is driving this didn't request it of any other.

CHAIRMAN DIODATI: Why don't we ask staff in doing the background work if there are other crab species that they think should be combined, and then they'll make that recommendation? Likewise, on whether this should be an ASMFC versus federal council management plan, which is essentially what

we're talking about, I think we should progress as an ASMFC plan, given how closely linked these two are, lobster and Jonah crab. I don't think it would be productive to have something that closely linked outside of the commission.

MR. ADAM NOWALSKY: Two questions hopefully you can answer, Steve. One is that the harvest in Maine – I know in New Jersey this is primarily a bycatch in the lobster fishery from fairly far offshore – is this a state waters harvest in Maine or is it more of a deeper water, federal waters harvest in Maine?

MR. TRAIN: First of all, Maine has become a smaller player in this fishery, and it is a bycatch. It is harvested throughout the range where we fish. We catch Jonah crabs up in the bays and we catch them in deep water. The majority are further off, not nearshore.

MR. NOWALSKY: The second question would be the consumer that is driving this; is there a willingness to support funding for assessment work in your opinion or are they looking for us to foot the bill and then reap the benefits of us announcing its stock status?

MR. TRAIN: It may have been – you may have slightly misstated it. The fishermen would reap the benefits of maintaining markets, but I think they expect the stock of fishery to be managed as any other sustainable fishery is managed, at a cost of whoever is going to manage the fishery. We don't even know where to go from here right now. This is a very valuable fishery, and it is a directed fishery by some lobster boats during certain parts of the year. It is considered a bycatch, but for a big portion of the year it is a directed fishery. Did I answer you?

MR. NOWALSKY: Not really; I guess that would be a question. Maybe one question to consider as you're going through these working groups to get some feedback potentially where they think the funding for assessment is going to come from.

MR. WILLIAM A. ADLER: Down in Massachusetts, yes, the Jonah crab is right up to the beach. When we're catching lobsters, we

will be catching – we will be getting Jonah crabs. I know that, as Steve had said, certain times of the year the offshore lobster boats – and it is usually; I think this year it was pretty much in the late spring, early summer.

They were actually concentrating on crabs. Their catch of lobster from the offshore canyons was almost the bycatch for that time; then that dies off and they really get into heavy lobster landings. But I know in Massachusetts we've had some of these offshore boats that have come in, in late spring and early summer, and they are concentrating on – and their major catches are these crabs from the offshore waters.

MR. STOCKWELL: Maine DMR has done some preparatory work in anticipation of developing a Jonah crab or other Crab FMP. Each time we've moved it ahead, the crab population has crashed. There is some preliminary work done, Toni. I would contact either myself and/or Carl.

CHAIRMAN DIODATI: Okay, so why don't we sit back and wait until the staff has an opportunity to do some work on this, and we'll hear back a report at the annual meeting. I guess the other take home message is watch what you ask for. Because with this kind of an action, typically comes conservation needs and management in a style that fishermen or harvesters typically don't appreciate. These stamps of approval are more than a stamp. It is going to be a real program of regulation and management.

MR. WILLIAM A. McELROY.: In the southern region, it absolutely is an important part of the lobster fishery. Steve is absolutely right and Bill that the predominant catch comes from the offshore fleet, although the inshore fleet does catch crabs. Almost to a man down in my area, they take your advice and are they are very careful of what they ask for and are scared to death of opening up this can of worms.

Quite frankly, I'm a little bit surprised when I came here this week to find out that things had moved along this far, because there had been very little contact with the Southern New

England component of the lobster industry. I'm not sure that this is a direction that we want to go. There is an awful lot of marginal lobster fishermen where the crab catch is extremely important to them staying in business. To open up a can of worms and not know where we're going is a scary adventure down my way.

CHAIRMAN DIODATI: Okay, I think we've heard as much input as we need on that to get moving on it. We'll see what the report is in the fall. One other issue relative to the last Lobster Board meeting was a request for the commission to send a letter to National Marine Fisheries Service about one of the proposed rules, I believe it was. Is someone going to speak to this? Go ahead, Doug.

MR. DOUGLAS E. GROUT: On behalf of the Lobster Board, we had comment provided that – I think some of you may remember we had recently implemented a management action to try and implement an agreement that was put together between the groundfish mobile gear fleet and the offshore lobster fleet.

As National Marine Fisheries Service was looking at allowing the groundfish fleet into areas that had typically been closed to mobile gear, there was concern about the impacts from mobile gear on egg lobsters as well as the gear conflicts that could potentially occur. The upcoming habitat management action may open up a habitat area to the scallop fishery, and we have the same concerns about gear conflict and the impacts on egg females.

There are a large amount of egg females that are caught out there in June, July and August. The request of the board to the Policy Board is that the Executive Director write a letter expressing our concern about this to the council and the National Marine Fisheries Service. We would like approval for the Executive Director to craft that letter and send it out.

MS. KERNS: I was actually thinking about the letter that we need to send to NOAA on the proposed rule. The commission submitted comments on the lobster proposed rule that NOAA Fisheries has out that catches them up

with several addenda that the commission has passed regarding the allocation of several lobster management areas in the transferability program.

There were a couple of issues that did not align with the commission plan that were in the proposed rule, and the Lobster Board had discussed this at the meeting and agreed upon how we wanted to respond. We were going to send that letter on behalf of the commission, and the other letter I thought was on behalf of the Lobster Board to the council. Both should be from the commission, so there is just a second letter; two letters then.

MR. GROUT: Yes, I was going to get to that after the first one. As Toni so eloquently stated, there is a comment letter on the proposed trap transfer rules that NOAA had put out that we also wanted to have come out from the commission. Again, we needed a concurrence from the Policy Board on this.

MR. ADLER: Do you need a motion for that?

CHAIRMAN DIODATI: Not really; there is no opposition to sending these letters? I know you discussed this at the board. There seemed to be consensus to do this. I see heads nodding. Without objection, we'll prepare those, and those will be letters sent probably signed by the Executive Director. Kelly, are you ready to give your presentation? Do you want to do it from there? That would be fine.

MS. KELLY SHOTTS: This is on the River Herring Endangered Species Act listing. After reviewing the available data and information, we have concluded that listing alewife or blueback herring, collectively known as river herring, as either endangered or threatened under the Endangered Species Act is not warranted at this time.

The findings as well as the information that was used by us to make this decision will be posted on the Northeast Regional Office's Website, and I will be happy to provide that website link to the commission for you guys to post that and make sure that is circulated for folks to look at.

We plan to collect further data and information to fill in key data gaps for these two species.

Of course; we will be working with you all in the commission and our other partners in order to do that and have a coordinated coast-wide effort. We intend for this to lead to the development of a conservation plan that would focus on addressing the key data gaps and conserving river herring and their habitat.

I think we need to not necessarily right now, but talk with the commission about what's the format for that group to be able to have those conversations. The idea would be for this group to attempt to quantify the impact of ongoing restoration and conservation efforts and new fishery management measures that are being developed, such as catch caps in two federal fisheries; review any new information produced from ongoing scientific studies, such as genetic analyses, ocean migration patterns and climate change impacts, and assess available data to determine whether recent reports of higher river counts in many areas along the coast in the last two years represents sustained trends.

We're committed to continuing to work with partners and tribal governments to implement important conservation efforts and fund needed research for river herring. We intend to revisit the status of river herring within the next five years and are hopeful that the work we will be doing with the commission and our partners in the next few years will provide additional information for us to consider at that time.

We would really like to thank the Commission, the Fish and Wildlife Service, the states and tribal governments for their assistance in the status review process and hope to continue our collaboration as we move forward with the development and implementation of the conservation plan for these important forage fish. I would be happy to do my best to answer any questions.

CHAIRMAN DIODATI: Any questions for Kelly? That is excellent news, Kelly, and I really thank you for bringing that to us even

before it was posted although you know we're live on the internet right now.

MS. SHOTTS: I do.

CHAIRMAN DIODATI: Okay, but that is good news and I'm sure that the work that is done here or has been done here and our respective councils weighed into that decision. I think this means we have to continue to keep up our end of the bargain and continue to work hard with river herring.

MR. ADLER: There were two things; river herring and did you mention something else that was not warranted for listing; what was it?

CHAIRMAN DIODATI: Alewife and blueback; the two species that make the composite of river herring. Any other questions for Kelli?

EXECUTIVE DIRECTOR BEAL: Not a question, just a comment. I think when the sturgeon decision came out, there was a lot of fairly strong comments came out of the commission, and one of those comments centered around involving our technical folks at the commission and at the state level in some of the technical meetings that lead up to the decision whether to list or not to list a species.

I just want to thank NOAA Fisheries for involving the states and the commission a lot more in those technical meetings leading up to this river herring decision. It was a much more inclusive and open process of the technical work. The decision still has to be made by the federal government, but including the states and the data that the states can provide leading up to those decisions I think is helpful to the states. Hopefully it's helpful to the federal services as well. I just wanted to thank them for responding to the commission's concerns with the sturgeon process.

CHAIRMAN DIODATI: We should react in a similar way. When we're unhappy, we're quick to write letters, so maybe we should send a letter of thanks and appreciation and let them know

that we're standing by to continue our work on this. Bob, that will be three letters that we need.

EXECUTIVE DIRECTOR BEAL: I'll get my typewriter going.

CHAIRMAN DIODATI: There is a fourth letter coming; you had to mention sturgeon.

DR. DANIEL: My letter was not related to this or sturgeon. I am not going to go there today.

CHAIRMAN DIODATI: Unless there is something else; okay, go ahead, Louis.

DR. DANIEL: I just wanted to know what you all thought about perhaps sending – when the South Atlantic Board met the University of Florida graduate student intern that wrote the habitat section – Wilson, help me out – the red drum habitat.

DR. LANEY: I'll have to ask Jim to help me out. Was it the University of Florida or Florida state; one or the other, I think, or maybe was it Florida Atlantic. I don't remember. We'll determine that, Mr. Vice-Chairman.

DR. DANIEL: That would be a nice letter for some young start in the field to get a letter of appreciation from the commission for a lot of work directed towards developing our habitat addendum for red drum. If there is no objection, I would like to see a letter sent to that graduate student as well.

CHAIRMAN DIODATI: Well, we'll consider that done, then, a fourth letter, fifth letter. Unless there is something else, and I don't think there is, I know we have other meetings on the agenda. Bob, do you want to – are we going to get a reprieve? I guess there is no way. Go ahead; I'll let you refer to the next couple of meetings.

EXECUTIVE DIRECTOR BEAL: I think the Summer Flounder Board probably does need to meet today. There are some folks that came in just for that meeting. David Simpson and Toni talked a little bit. I think they can pare down a

couple of the agenda items and hopefully speed it up a bit.

Then concurrent with the Summer Flounder Board meeting, the ACCSP Executive Committee is going to meet down in the boardroom down the hall. That is where you are going to need to be, Paul. Then the Coordinating Council will meet immediately after the Summer Flounder Board. Hopefully, both these meetings can be done efficiently and expeditiously, because I know folks are more than worn out.

ADJOURNMENT

CHAIRMAN DIODATI: If there is no objection, I will consider this meeting adjourned.

(Whereupon, the meeting was adjourned at 5:05 o'clock p.m., August 7, 2013.)

A contractor is needed to help coordinate and facilitate the creation of regionally-specific EM/ER implementation plans in collaboration with Regional Councils, NOAA Regions and Centers, NOAA Office of Sustainable Fisheries' Atlantic Highly Migratory Species Management Division, states, Interstate Commissions, industry and other stakeholders. Tasks include:

1. Support and monitor the creation of regional electronic technology implementation plans, where applicable, for each region (e.g., NE, SE, AK, NW, SW, PI, and Atlantic HMS) as specified in the NOAA Fisheries Policy Directive.
2. Coordinate and facilitate planning by the Regional Councils, Atlantic Highly Migratory Species (HMS), Regions, Centers, and other NOAA offices, fishing industry, third-party EM/ER experts and other stakeholders as necessary to accomplish Task 1.
3. Recommend regionally-specific and cross-cutting means to resolve technical/scientific, budgetary and process obstacles to implementing electronic technology systems.
4. Document tasks 1-3 in regionally-specific implementation plans for each Council area, and Atlantic HMS.
5. Include in the plan a list of fisheries, by region, suitable for implementation of electronic monitoring and electronic reporting. Coordinate with and facilitate Councils, Atlantic HMS, Regions, and Centers creation of a list of fisheries for implementation of electronic technologies using the guidance document to guide the process. Develop a process for conducting the evaluation of fisheries for inclusion on the list. Work with the Councils, Regions, Centers, and Atlantic HMS to specify and implement a timeline/schedule for adopting electronic technologies by fisheries by region. The contractor shall document any outcomes.
6. Participate in a national electronic monitoring workshop. Coordinate with Councils, Atlantic HMS, Regions, Centers and other stakeholders to participate in a national EM/ER workshop.

REGIONAL ELECTRONIC MONITORING MEETINGS

The recent policy guidance on electronic technologies (ET) (broadly including electronic monitoring (EM) and electronic reporting (ER)) encourages the consideration of electronic technologies to (1) complement and/or (2) improve existing fishery dependent data collection programs to achieve the most cost-effective and sustainable approach that ensures alignment of management goals, data needs, funding sources, and regulations. To achieve this:

- 1) NOAA Fisheries encourages the consideration of all electronic technology options to meet science, management, and compliance data needs;
- 2) Fishery-dependent data collection programs will be designed and periodically reviewed by NOAA Fisheries regions to ensure effective, efficient monitoring programs that meet industry and government needs, increase coordination among regions, and promote sharing of research, development, and operational outcomes;
- 3) Fishery-dependent data collection programs may be comprised of a combination of methods and techniques including:
 - a. Self-reporting
 - b. On-board observers
 - c. Dockside monitoring
 - d. Electronic technologies including
 - i. Electronic reporting
 - ii. Video monitoring
- 4) Where full retention regulations and associated dockside catch accounting measures are in place, NOAA Fisheries supports and encourages the evaluation/adoption of video camera systems to meeting monitoring and compliance needs in federally managed fisheries;
- 5) NOAA Fisheries encourages the use of electronic technologies that use open source code or standards that facilitate data integration and offer long-term savings rather than becoming dependent on proprietary software
- 6) NOAA Fisheries, in consultation with the Councils and subject matter experts, will assemble guidance and best practices for use by Regional Offices, Councils and stakeholders when they consider electronic technologies
- 7) No electronic technology-based fishery-dependent data collection program will be approved by NOAA if its provisions create an unfunded or unsustainable cost of implementation or operation contrary to applicable law or regulations. Funding of fishery-dependent data collection programs is expected to consider the entire range of funding authorities available under federal law, including those that allow collection of funds from industry
- 8) Where cost-sharing of monitoring costs between the agency and industry is deemed appropriate and approved under applicable law or regulations, NOAA Fisheries will work with Councils and stakeholders to develop transition plans from present to future funding arrangements

Implementation of this policy will rely on Regional Offices (and the Office of Sustainable Fisheries with respect to Atlantic HMS) initiating consultations in FY2013 with their respective Science Centers, Councils, States, Commissions, industry, and other stakeholders on the consideration and design, as appropriate, of fishery-dependent data collection programs that use electronic technologies for each federal fishery

Effectiveness Measurement

By the end of calendar year 2014, complete a schedule of where and how to adopt appropriate electronic technologies, if any, for all fishery management plans. The following metrics will be used to evaluate progress toward implementing this policy:

- a) The number of FMPs with defined fishery-dependent data collection monitoring goals
- b) The number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs
- c) For fisheries where additional electronic technologies are identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs

The questions below are meant to promote conversation about regional electronic technology plans rather than being the only issues that are discussed in meetings with Council staff and members, NMFS Regional Office staff, NMFS Science Center staff, and others.

- I) What have been the past efforts in your regions regarding ET?
 - a. Who were they undertaken by? Council, Region, Science Center, Industry, Others?
 - i. Were there clear goals and objectives for the past ET efforts?
 - ii. What were the outcomes of the efforts?
 - iii. Are they still being used?

- II) Have there been ET pilot programs in your region?
- a. If so,
 - i. What were the ET pilot programs?

 - ii. Who were they begun by?

 - iii. How were they funded?

 - iv. What type of stakeholder involvement was part of the pilot ET programs?

 - v. What was the outcome of the pilot programs?

 - vi. Were the pilot programs turned into operational ET programs?
 - 1. If not, why not?
- III) What fisheries in your region merit consideration for implementing new or improved ET programs?

- IV) Have the costs of ET programs been determined in your region? If they have been, what are they or are there reports / summaries that list program costs?
- V) What fisheries in your region are **not** good candidates for implementing ET? Please state the reason why you believe this.
- VI) What are the challenges to implementing or improving ET programs in your region?
- a. Resistance by managers? If so, why?
 - b. Resistance by industry? If so, why?
 - c. Resistance by other stakeholders? If so, why?

- d. Are there:
 - i. Legal barriers or concerns?

 - ii. Law enforcement barriers or concerns?

 - iii. Funding / costs issues or concerns?

 - iv. Other issues or concerns? If so, what are they?

VII) What is needed in your region to assist in developing Regional ET plans and to implement the Policy Directive on ET? Please list specific issues / needs.

VIII) Are there other people that you think I should talk to about ET in your region?

<i>NATIONAL MARINE FISHERIES SERVICE POLICY DIRECTIVE 30-133 EFFECTIVE DATE</i>	
<i>Administration and Operations</i>	
<i>POLICY ON ELECTRONIC TECHNOLOGIES AND FISHERY-DEPENDENT DATA COLLECTION</i>	
NOTICE: This publication is available at: http://www.nmfs.noaa.gov/directives/ .	
OPR: F/OP Type of Issuance: Initial	Certified by: F/OP (M. Holliday)
<i>SUMMARY OF REVISIONS:</i>	

Introduction.

This policy provides guidance on the adoption of electronic technology solutions in fishery-dependent data collection programs. Electronic technologies include the use of vessel monitoring systems (VMS), electronic logbooks, video cameras for electronic monitoring (EM), and other technologies that provide EM and electronic reporting (ER). The policy also includes guidance on the funding for electronic technology use in fishery-dependent data collection programs.

Constraining budgets and increasing demands for data are driving the need to evaluate and improve existing fishery-dependent data collection programs, in particular with respect to cost-effectiveness, economies of scale and sharing of electronic technology solutions across regions. The demands for more precise, timelier, and more comprehensive fishery-dependent data continue to rise every year.

The implementation of fisheries management regulations that require near real-time monitoring of catch by species at the vessel level have challenged the methodological and budgetary limits of data collection methods such as self-reporting, on-board observers, and dockside monitoring. A policy and process to consider the adoption of electronic technology options can help ensure the agency's fishery-dependent data collection programs are cost-effective and sustainable.

Objective.

It is the policy of the National Oceanic & Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NOAA Fisheries) to encourage the consideration of electronic technologies to complement and/or improve existing fishery-dependent data collection programs to achieve the most cost-effective and sustainable approach that ensures alignment of management goals, data needs, funding sources and regulations.

To achieve this:

1. NOAA Fisheries encourages the consideration of all electronic technology options to meet science, management, and compliance data needs.
2. Fishery-dependent data collection programs will be designed and periodically reviewed by NOAA Fisheries regions to ensure effective, efficient monitoring programs that meet industry and government needs, increase coordination between regions, and promote sharing of research, development and operational outcomes.
3. Fishery-dependent data collection programs may be comprised of a combination of methods and techniques including self-reporting, on-board observers, and dockside monitoring, as well as the use of electronic technologies including electronic reporting and video monitoring.
4. Where full retention regulations and associated dockside catch accounting measures are in place, NOAA Fisheries supports and encourages the evaluation/adoption of video cameras to meet monitoring and compliance needs in federally managed fisheries.
5. NOAA Fisheries encourages the use of electronic technologies that utilize open source code or standards that facilitate data integration and offer long-term cost savings rather than becoming dependent on proprietary software.
6. NOAA Fisheries, in consultation with the Councils and subject matter experts, will assemble guidance and best practices for use by Regional Offices, Councils and stakeholders when they consider electronic technology options. Implementation of electronic technologies in a fishery-dependent data collection program is subject to the Magnuson-Stevens Act and Council regulatory process, other relevant state and federal regulations, and the availability of funds.
7. No electronic technology-based fishery-dependent data collection program will be approved by NOAA if its provisions create an unfunded or unsustainable cost of implementation or operation contrary to applicable law or regulation. Funding of fishery-dependent data collection programs is expected to consider the entire range of funding authorities available under federal law, including those that allow collection of funds from industry.
8. Where cost-sharing of monitoring costs between the agency and industry is deemed appropriate and approved under applicable law and regulation, NOAA Fisheries will work with Councils and stakeholders to develop transition plans from present to future funding arrangements.

Authorities and Responsibilities.

This policy directive establishes the following authorities and responsibilities:

- (1) The NOAA Fisheries Science Board and Regulatory Board are the Executive-level sponsors of the execution of this policy, including oversight of the development of guidance and best practices. Staff support to the Boards will be provided by the Offices of Policy,

Sustainable Fisheries, and Science and Technology. Technical assistance will be provided by *ad hoc* working groups, NOAA Fisheries Headquarters (HQ), Region and Science Center subject matter experts, and other agency or contract resources as requested by the Science or Regulatory Board, subject to the availability of funds. Approval of guidance and best practices is subject to Leadership Council concurrence and Assistant Administrator approval.

(2) Regional Administrators and the Office of Sustainable Fisheries - Implementation of this policy will rely on Regional Offices (and the Office of Sustainable Fisheries with respect to Atlantic Highly Migratory Species) initiating consultations in FY 2013 with their respective Science Centers, Councils, States, Commissions, industry, and other stakeholders on the consideration and design, as appropriate, of fishery-dependent data collection programs that utilize electronic technologies for each Federal fishery.

Measuring Effectiveness.

(1) The consultations by the Regional Administrators and the Office of Sustainable Fisheries will be initiated in FY2013 with the goal of completing by the end of calendar year 2014 a schedule of where and how to adopt appropriate electronic technologies, if any, for all fishery management plans (FMPs).

The following metrics will be used to evaluate progress towards the implementation of this policy:

- The number of FMPs with defined fishery-dependent data collection monitoring goals.
- The number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs.
- For fisheries where additional electronic technologies are identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs.

Status reviews of the metrics will take place twice a year by the Regulatory and Science Boards.

References.

Procedural directives will be issued to implement this policy as needed. This policy directive is supported by the glossary of terms listed in Attachment 1.

Signature and Date Line.

 5/3/13

Sam D. Rauch III Date
Acting Assistant Administrator
National Marine Fisheries Service

Attachment 1 GLOSSARY

Terms

Electronic Technology(ies) – Any electronic tool used to support catch monitoring efforts both on shore and at sea, including electronic reporting (e.g., e-logbooks, tablets, and other input devices) and electronic monitoring (Vessel Monitoring Systems, electronic cameras, and sensors on-board fishing vessels).

Electronic Monitoring (EM) – The use of technologies – such as vessel monitoring systems or video cameras – to passively monitor fishing operations through observing or tracking. Video monitoring is often referred to as EM.

Electronic Reporting (ER) – The use of technologies – such as smart phones, computers and tablets – to record, transmit, receive, and store fishery data.

Fishery-dependent Data Collection Program - Data collected in association with commercial, recreational or subsistence/customary fish harvesting or subsequent processing activities or operations, as opposed to data collected via means independent of fishing operations, such as from research vessel survey cruises or remote sensing devices.

Full Retention – A type of fishery where total catch is retained and brought to shore, without discards. This is a generic definition, used in the Policy Directive for illustrative purposes only. There are multiple stages in the fishing process where intentional and unintentional discards can occur. Such variations (e.g., maximum retention, operational discards, prohibited species catch, etc.) require specific definition in each fishery for regulatory compliance and/or enforcement purposes.



Mid-Atlantic Fishery Management Council

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Richard B. Robins, Jr., Chairman | Lee G. Anderson, Vice Chairman
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MEMORANDUM

Date: September 30, 2013
To: Mackerel, Squid, and Butterfish (MSB) Committee/Council
From: Jason Didden *ADD*
Subject: River Herring/Shad Management / Am 15

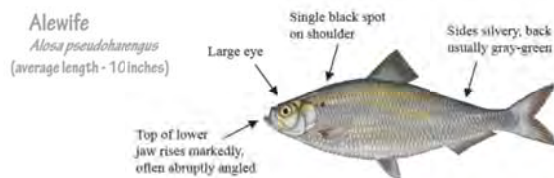
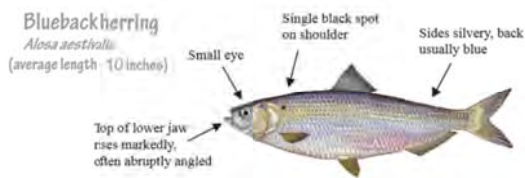
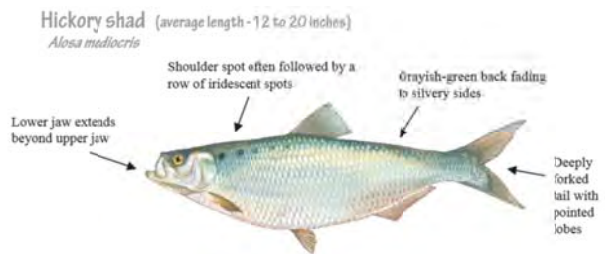
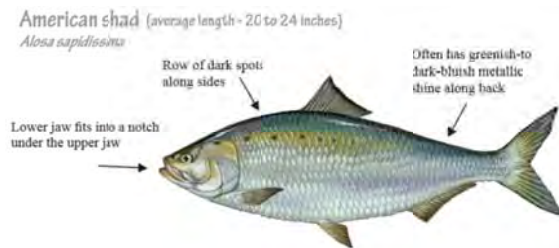
In this tab please find the following items:

1. The staff white paper that considers whether additional management by the Council via a fishery management plan is required and/or appropriate for river herrings and shads.
2. Public comments on this topic. While there was no official public comment period, the Council received substantial public comment on the river herring/shad issue. In instances where identical comments were received from many individuals, an exemplar and the number of comments is provided. Lists of names will be posted to the Council Website.

Staff is also drafting a short options document on possible approaches regarding currently un-managed forage fish (an Amendment 15 scoping comment issue). This options document will be forwarded to the Council as soon as possible.

RIVER HERRING AND SHAD - POTENTIAL MANAGEMENT BY THE MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

Staff White Paper
Jason Didden, Mid-Atlantic Fishery Management Council



Fish illustrations: Duane Raver/U.S. Fish and Wildlife Service, Source:
http://www.ncwildlife.org/Portals/0/Fishing/documents/Herring_Shad_ID_guide_sm.pdf



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1.2 NOTES ON STRUCTURE AND WORDING CONVENTIONS

Structure

This document first describes the context of the decision for the Council, some potential routes forward, and relevant background information. Then the question of whether river herrings and shads require additional Council management and conservation via a fishery management plan (FMP) is considered via the framework described by the National Marine Fisheries Service (NMFS) in the National Standard 7 guidelines. The question is also considered relative to National Standard 3.

This document is a Council staff product. It was reviewed by the Amendment 15 Fishery Management Action Team (FMAT) and their edits have been incorporated into the document.

Wording Conventions

In this document, "catch" refers to all fish caught in a fishery (whether targeted or not and whether retained or discarded). Targeted fish are those intended to be caught. Non-target species are those caught but not targeted. Bycatch usually refers to discards but is a term often used in fishery management to refer to several different things and so it is not used in this document except where unavoidable (for example a statute, report title, program name, etc.). Instead, fish caught and then discarded at sea are called "discards." Landings are fish caught and retained. Fish that are not targeted but are landed are called "incidentally landed catch."

In this document, "river herrings" include blueback herring and alewife. "Shads" include American shad and hickory shad.

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law governing marine fisheries management in United States federal waters. The Act was first enacted in 1976 and amended in 1996 and in 2006. In this document, "Magnuson-Stevens Act" refers to the Magnuson-Stevens Fishery Conservation and Management Act as currently amended.

The term "mortality cap" refers to a management system whereby directed fishing for one species may be stopped or limited when catch of some other species reaches a pre-set limit. Similar terms include bycatch caps or discard caps, but these would only apply to discarded fish, while a mortality cap would track all catch (retained or discarded).

List of Acronyms, Abbreviations, etc.

ABC	– Acceptable Biological Catch
ACL	– Annual Catch Limit
ACFCMA	– Atlantic Coastal Fisheries Cooperative Management Act
AM	– Accountability Measure
ASMFC	– Atlantic States Marine Fisheries Commission
Commission	– Atlantic States Marine Fisheries Commission
Corps	– U.S. Army Corps of Engineers
Council	– Mid-Atlantic Fishery Management Council
EA	– Environmental Assessment
EFH	– Essential Fish Habitat
FERC	– Federal Energy and Regulatory Commission
FMP	– Fishery Management Plan
Lb.	– pounds
Kg	– kilograms
MAFMC	– Mid-Atlantic Fishery Management Council
MT	– Metric Ton (~2204.6 pounds)
Nm	– Nautical Mile
NEFMC	– New England Fishery Management Council
NMFS	– National Marine Fisheries Service (also known as NOAA Fisheries)
NOAA	– National Oceanic and Atmospheric Administration
U.S.	– United States
U.S.C.	– United States Code

2.0 INTRODUCTION

The Mid-Atlantic Fishery Management Council (Council) is considering whether it is required and/or appropriate for river herrings and shads (which are all anadromous) to be species that are directly managed by a Council FMP. From a legal and decisional perspective it makes little difference if any river herring and/or shad species would be managed in a separate FMP or within the Mackerel, Squid, and Butterfish FMP, so no distinction is made in this document. Consideration of river herring and shad management began several years ago during development of Amendment 14 to the Mackerel, Squid, and Butterfish FMP. This topic was removed from Amendment 14 so that it could be considered separately given the variety of issues that needed to be addressed per the Magnuson-Stevens Act and per the National Standard Guidelines developed by the National Marine Fisheries Service (NMFS). The rest of this section will outline several potential routes forward as well as the applicable NMFS's guidelines that assist Councils in carrying out their responsibilities under the Magnuson-Stevens Act.

Potential Routes

If there was currently no management of river herrings and shads by any entity the need for additional management would be clear. At the other extreme, if existing management was known to be sufficient to conserve river herrings and shads then an FMP would not be required. Since the existing management framework for these species consists of A) measures that have been in place for quite some time, B) measures that have been recently implemented, and C) measures that are likely soon to be implemented, it is difficult to determine if additional conservation and management via a Council FMP is required. The following table summarizes several potential routes of future management.

Table 1. Potential Management Routes.

Management Route	Likely River Herring and Shad Impacts Beyond Current Management	Likely Costs (resources required)
a. FMP via MAFMC lead (complementary with the Commission and possibly joint with other Councils)	Positive (higher), but to unknown degree because there are many stressors, most of which are beyond the immediate control of the Council	Highest
b. FMP via NEFMC/other lead (MAFMC would support)	Positive (higher), but to unknown degree because there are many stressors, most of which are beyond the immediate control of the Council	Highest, but on other Council
c. Incremental Council involvement as opportunities present themselves via ongoing interagency coordination	Positive (higher), but to unknown degree because there are many stressors, most of which are beyond the immediate control of the Council	Lowest
d. Council focuses on catch caps and encourages Commission to pursue complementary management through NMFS (like striped bass) if additional measures are needed in federal waters	Positive (higher), but to unknown degree because there are many stressors, most of which are beyond the immediate control of the Council	Medium (mostly on Commission and NMFS)

FMP = Fishery Management Plan; MAFMC = Mid-Atlantic Fishery Management Plan; NEFMC = New England Fishery Management Plan; NMFS = National Marine Fisheries Service

The inability to quantitatively predict the benefits of additional Council involvement (as further explained below in this paper) makes it difficult to evaluate the question of whether to create an FMP(s) for river herrings and shads. As a result, staff took a qualitative approach to address this

question, utilizing quantitative data when possible. This paper concludes that a reasonable case can be made for two scenarios: 1) direct management by the Council now and 2) Council consideration in a few years after the results of other recent river herring and shad conservation efforts are understood.

The Magnuson-Stevens Act

The Magnuson-Stevens Act provides for management of fish by the Council. It states that “[e]ach Council shall...for each fishery under its authority that *requires* conservation and management, prepare and submit to the Secretary (A) a fishery management plan” 16 U.S.C. § 1852(h)(1) (emphasis added). Recent assessments by the Atlantic States Marine Fisheries Commission (Commission) clearly demonstrate that river herring and shads are generally in need of conservation and management. Many runs that can be assessed appear substantially depleted compared to historic data, and landings are a fraction of historic productivity (ASMFC 2007 and 2012). However, this paper presumes that to determine if a fishery that is already being managed to some degree *requires* additional conservation and management as a directly managed stock in a Council FMP under the Magnuson Stevens Act, an evaluation is necessary of what other management may be in place or likely to occur (and the prospects for success) if the Council does not include river herring and shads in an FMP, and also what impacts Council management would likely have beyond those other management endeavors.

The Magnuson-Stevens Act provides a definition of conservation and management in its definition section:

- (5) The term "conservation and management" refers to all of the rules, regulations, conditions, methods, and other measures
- (A) which are required to rebuild, restore, or maintain, and which are useful in rebuilding, restoring, or maintaining, any fishery resource and the marine environment; and
- (B) which are designed to assure that—
- (i) a supply of food and other products may be taken, and that recreational benefits may be obtained, on a continuing basis;
- (ii) irreversible or long-term adverse effects on fishery resources and the marine environment are avoided; and
- (iii) there will be a multiplicity of options available with respect to future uses of these resources.

If there was no management of river herrings and shads currently, it would seem clear that some Council action would be required. If there had been historical management but no recent additions or changes to those measures then it would also seem clear that action would be required, since river herring and shad stocks have not recovered. However since there have been recent actions and other actions are in the works (detailed below), it is unclear if conservation and management with an FMP under the Magnuson-Stevens Act is required. This paper looks at this question to inform a decision by the Council.

3.0 National Standard 7

National Standard 7 states that "[c]onservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication." 16 U.S.C. §1851(a)(7). Guidelines for National Standard 7 begin by stating that "[t]he principle that not every fishery needs regulation is implicit in this standard."

Striped Bass and Lobster may be examples of fisheries which generally require conservation and management but do not need a Council-based FMP since the Atlantic States Marine Fisheries Commission (Commission) and state efforts appear able to achieve effective management.

National Standard 7 guidelines provide direction on deciding whether a Council is required to engage in direct management of a fishery through a federal FMP. National Standard 7 (in the law) states that "[c]onservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication." (16 U.S.C. §1851(a)(7)) but does not directly address the question of "Whether to manage or not?" However, determining an answer to whether conservation and management is "required" still needs an evaluation, and the criteria in the National Standard 7 guidelines are a reasonable framework for examining the question

The guidelines related to National Standard 7 recommend that the following criteria be considered when deciding whether a fishery needs management through an FMP:

- (1) The importance of the fishery to the Nation and to the regional economy.
- (2) The condition of the stock or stocks of fish and whether an FMP can improve or maintain that condition.
- (3) The extent to which the fishery could be or is already adequately managed by states, by state/Federal programs, by Federal regulations pursuant to FMPs or international commissions, or by industry self-regulation, consistent with the policies and standards of the Magnuson-Stevens Act.
- (4) The need to resolve competing interests and conflicts among user groups and whether an FMP can further that resolution.
- (5) The economic condition of a fishery and whether an FMP can produce more efficient utilization.
- (6) The needs of a developing fishery, and whether an FMP can foster orderly growth.
- (7) The costs associated with an FMP, balanced against the benefits (see paragraph (d) of this section as a guide). (d) Analysis. The supporting analyses for FMPs should demonstrate that the benefits of fishery regulation are real and substantial relative to the added research, administrative, and enforcement costs, as well as costs to the industry of compliance. In determining the benefits and costs of management

measures, each management strategy considered and its impacts on different user groups in the fishery should be evaluated. This requirement need not produce an elaborate, formalistic cost/benefit analysis. Rather, an evaluation of effects and costs, especially of differences among workable alternatives, including the status quo, is adequate. If quantitative estimates are not possible, qualitative estimates will suffice.

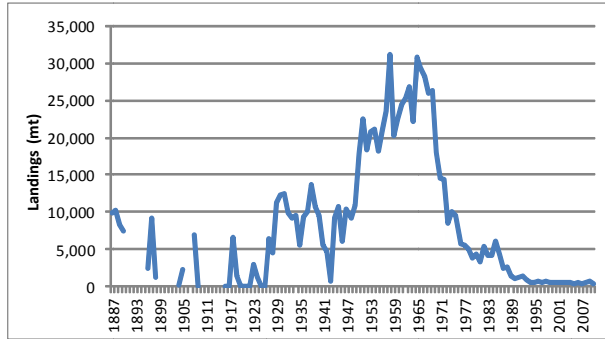
Each of these criteria is examined below.

3.1 The importance of the fishery to the Nation and to the regional economy.

This section describes several types of value including commercial, recreational, ecological, existence, and cultural. These are not necessarily the only types of value, and this is not an exhaustive treatment of the subject. The description does establish that these fisheries likely have, or at least could have if revived, substantial importance to the nation.

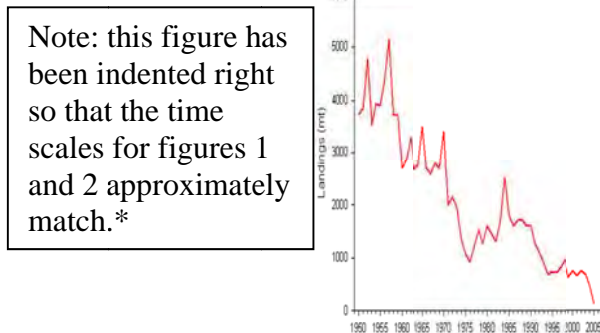
First, while the historical peak commercial river herring and shad catches were likely unsustainable, these species have supported substantial commercial fisheries in the past that were, and could be important to their regional economies. Benefits of potential higher future harvests would accrue to producers in the form of profits (revenues minus costs) and to consumers in the form of higher consumer surplus (the difference between consumers willingness to pay and what they actually had to pay). Because of the lack of information about what level of harvest would actually be sustainable (as well as unknown economic factors such as production costs), it is not possible to quantify the *economic value* of these potential landings. However, given the available price data in recent river herring and shad Commission plan amendments (ASMFC 2009, ASMFC 2010), if total combined sustainable landings of 4,000 mt (about 8.6 million pounds) each of river herrings and shads were possible, and if an average ex-vessel price of \$0.27/Lb. and \$1.09/Lb. is used for river herring and shad, respectively (these values were reported by Commission staff, K. Taylor, for 2012 fisheries), this example would result in about \$12 million dollars per year in ex-vessel revenues (1 mt equals about 2204.6 pounds). It is important to note that higher landings may result in lower prices per pound so the ex-vessel value of a higher quantity of fish may be lower. Figures 1-2 below describe historical coastwide commercial landing trends for river herrings and American shad, respectively.

Figure 1. Commercial River Herring Landings



Source: http://www.asmfc.org/speciesDocuments/shad/stockassmtreports/riverHerringStockAssessmentOverview_May2012.pdf

Figure 2. Commercial American Shad Landings



Source: <http://www.nefsc.noaa.gov/sos/spsyn/af/shad/> *earlier shad landings peaked around 22,000 mt in 1896 after rising rapidly in the late 1800s before declining in the early 1900s to approximately 4,000-5,000 mt by 1930 (DOI, 1968 - <http://www.nativefishlab.net/library/textpdf/16110.pdf>)

Second, there is economic value in recreational fishing and subsistence fishing, which can be important to local and regional economies. Presumably each fishing trip provides some value to each angler, whether in the form of recreation or food. If fish runs increase, there can be benefits related to higher angler satisfaction from higher catch each trip and/or related to taking more trips. For river herring, recreational benefits primarily accrue related to their use as bait for other, larger fish but there is still definite value in that respect (some fishermen pay \$1-\$3 per fish for similar live baits depending on local conditions, based on personal communication with Kate Taylor (ASMFC) and staff observations at local tackle stores). For shad, they are often the primary target but may also be used as bait. Recreational catch data on these species is poor since recreational catch primarily takes place out of the geographical scope of the NMFS recreational surveys, but harvest is currently relatively low due to the moratoria and other recreational restrictions.

The general literature on the value of recreational fishing is well developed, though little information is available specific to river herring and/or shad fishing. One study did estimate an annual aggregate "willingness to pay" (value) of \$3.2 million dollars for Delaware River shad fishing in 1986 (based on 63,000 angler days and a per angler day value of \$50 - Lupine and Miller 1987), which is equivalent to \$6.5 million in 2012 dollars. Additional reference

documents on the general economic value of saltwater recreational fishing in the Mid-Atlantic may be accessed at http://www.st.nmfs.noaa.gov/st5/RecFishEcon_pubs.html. An econometric analysis is beyond the scope of this document, but based on the large existing body of recreational-demand literature, there are often substantial socio-economic benefits related to improved recreational fisheries and there is no reason to conclude that this would not be the case with river herrings and shads.

Third, there could be indirect ecological value related to recreational activities. This comes from river herrings' and shads' role as forage species for higher trophic level predators such as striped bass or whales. Higher forage populations could indirectly help predator populations, which support better recreation such as fishing or whale-watching. From this perspective the ecological benefits of healthy populations create recreational benefits, as described above. There are ways to measure these benefits but not within the scope of this paper.

Fourth, there are non-market existence values (i.e., value gained by individuals related to the knowledge that these species are being conserved successfully) that can result from successful management, especially given these species role as forage. Public interest in this issue demonstrates that a segment of the general public holds a certain value for the knowledge that these fisheries are being sustainably managed, and even if each individual's value is small the total value may be quite large when many people are involved. While there are not existing studies related to non-use benefits from river herring and shad, there are many non-use studies on other environmental issues documenting the occurrence of such values.

Finally there is cultural value, which may be thought of as a separate type of existence value. River herring and shad runs are or have been important culturally for many communities (just Google "Shad Festival" or "Herring Festival") and there can also be cultural value beyond food value related to subsistence fishing (e.g. Mashpee Wampanoag Indian Tribe on Cape Cod, Massachusetts (ASMFC 2011)). While difficult to quantify, this is another potential benefit related to river herring and shad conservation that contributes toward its importance to the Nation. The recent Commission Shad and River Herring Plans also describe that river herring and shad festivals can be important sources of regional economic activity. If the related economic activity is lost, replacement activities will mitigate the net loss, but there is still some loss of net value and certainly local or regional distributional consequences in terms of jobs.

Benefits Summary: Healthier river herring and shad runs and fisheries would likely constitute substantial value to the Nation, but it is beyond the scope of this paper to estimate what that value might be.

3.2 The condition of the stock or stocks of fish and whether an FMP can improve or maintain that condition.

This criterion really asks two separate questions, and they are addressed separately below.

3.2.a The condition of the stock or stocks of fish

Coastwide absolute river herring and shad abundance estimates are not available (we only have relative indices and trends) so overfished/overfishing determinations are not possible. With a few exceptions, current river-specific absolute river herring and shad abundance estimates are also not available. As described below, these species are generally considered "depleted" due to a variety of factors.

In the most recent Commission river herring stock assessment (ASMFC 2012), of the 24 river herring stocks for which sufficient data are available to make a conclusion, 23 were depleted relative to historic levels and one was increasing. The status of 28 additional stocks could not be determined because the time-series of available data was too short. Estimates of coastwide abundance and fishing mortality could not be developed because of the lack of adequate data. The "depleted" determination was used instead of "overfished" because of the many factors that have contributed to the declining abundance of river herring, which include not just directed and incidental fishing, but likely also habitat issues (including dam passage and water quality), predation, and climate change. There are no coastwide reference points.

As part of the listing determination for river herring, NMFS completed an extinction risk analysis (http://www.nero.noaa.gov/prot_res/candidatespeciesprogram/RiverHerringSOC.htm). This analysis investigated trends in river herring relative abundance for each species range-wide as well as for each identified stock complex. This analysis found that "the abundance of alewife range-wide significantly increased over time (mid 1970s-2012), but the increase in blueback herring abundance was not significant (page 7 and Figures 8 and 9). These range-wide analyses incorporated data from fishery independent surveys with the widest geographic extent, specifically the Northeast Fisheries Science Center spring and fall bottom trawl surveys and Canada's Department of Fisheries and Oceans (DFO) Scotian Shelf survey. Stock-specific analyses incorporated run count data and stock-specific fishery-independent surveys. Stock-specific analyses indicated that the abundance of the Canadian alewife stock complex was significantly increasing, the abundance of the mid-Atlantic blueback herring stock complex was significantly decreasing, and all other analyzed stock complexes were not significantly increasing or decreasing in abundance.

The most recent American shad stock assessment report (ASMFC 2007) identified that American shad stocks are highly depressed from historical levels. Of the 24 stocks of American shad for which sufficient information was available, 11 were depleted relative to historic levels, 2 were increasing, and 11 were stable (but still below historic levels). The status of 8 additional stocks could not be determined because the time-series of data was too short or analyses indicated conflicting trends. Taken in total, American shad stocks do not appear to be recovering. The assessment concluded that current restoration actions need to be reviewed and new ones need to be identified and applied. These include fishing rates, dam passage, stocking, and habitat restoration. There are no coastwide reference points for American shad. There is no stock assessment available for hickory shad.

3.2.b Whether a Council fishery management plan can improve river herring and/or shad stocks?

This is probably the most critical question, but unfortunately it is characterized by uncertainty regarding the effectiveness of any actions that the Council could/would take with an FMP. The underlying roots of this uncertainty are the difficulty in assessing these species, the lack of understanding about what impediments to run productivity (dams, water quality/quantity, fishing, predation) are most pressing, and the uncertainty about the Council's ability to impact issues other than fishing mortality. Given that we do not know what proportion of the stock is removed through incidental catch it is also not possible to quantify the impact of that catch and know how much we would need to reduce catch by to have a positive impact on the stock.

Based on how Council management typically operates, there are some factors that suggest that a Council FMP could improve river herring and/or shad stocks, and there are some factors which suggest that a Council FMP might not have much impact. The following discussion describes these factors.

1. There would be some additional federal support of River Herring and Shad coordination and management (assessments, FMP and specifications review, etc.).

Coordination

At present, there is federal involvement by U.S. Fish and Wildlife Service, NMFS Northeast Regional Office staff, NMFS Northeast Fisheries Science Center staff, and Council staff (quasi-federal) in river herring and shad management. At these agencies, there are lead staffers for river herring and shad issues, though river herring and shad are not their primary responsibility. There are no river herring and shad coordinators at the NMFS Northeast Regional Office or Councils. There is a Commission coordinator however, who is involved in substantial river herring and shad coordination activities. The lead staffers at the U.S. Fish and Wildlife Service, the NMFS Northeast Regional Office and the NMFS Northeast Fisheries Science Center also engage in substantial river herring and shad coordination activities through participation in assessments, workgroups, etc.

Direct Council management may add staff with river herring and shad responsibilities (in NMFS or at the Council). Perhaps more likely given existing budget constraints, existing staff would have additional river herring and shad responsibilities added to their other tasks. If river herrings and/or shads were added as directly managed species, Council and NMFS staff would likely become more involved in conservation activities, especially in terms of how fishing interacts with the variety of challenges facing these stocks and how various local, state, regional, and federal entities interact. However, NMFS and Council staffers have become much more collaborative regarding river herrings and shads in recent years, so it is not clear how much of an additional change would be brought about by direct management. In addition to overall coordination through the Commission, the states currently coordinate substantial conservation activities with other agencies and entities (e.g. *see* Bowden 2013).

Assessments

If directly managed, the NMFS Northeast Fishery Science Center would probably become more involved in river herring and shad assessments. Adding these stocks into an FMP would not guarantee that reference points/stock determination criteria would be available - reference points are generally not available for species in the Mackerel, Squid, and Butterfish FMP due to high levels of scientific uncertainty. The same uncertainty issues would impact river herring and shad assessments (absolute abundance estimates may still be unavailable). Some additional resources would likely be expended on assessments, but the same data problems and uncertainties would be likely to plague an assessment organized or reviewed through the Northeast Fisheries Science Center as with an assessment conducted by the Commission. Assessments coming out of both the NMFS Northeast Fisheries Science Center and the Commission undergo peer-review.

If one believed that river herring and shad assessments would be more explanatory if the NMFS Northeast Fisheries Science Center had a larger or joint role in river herring and shad assessments, then direct Council management might lead to improvements. If one believes that the outcome would be similar to results from the Commission process then this is not the case. Since similar data would be used in either case, and would be characterized by similar uncertainties, it is not clear if additional NMFS Northeast Fisheries Science Center involvement would substantially improve river herring and/or shad assessments.

Additional NMFS Northeast Fisheries Science Center involvement could also occur independently of direct Council management of river herrings and shads, as occurs with striped bass assessments, which go through the review process utilized by the NMFS Northeast Fisheries Science Center even though there is no Council management plan for striped bass. Also, the NMFS Northeast Fisheries Science Center did provide staff support to the recent river herring assessment and that participation appears likely to continue.

Given current funding restrictions, additional Northeast Fisheries Science Center efforts around river herrings and shads would likely reduce effort on other species. NMFS, the Commission, and the Councils prioritize assessments regularly so a rearrangement of the planned assessment schedule would likely occur if additional Northeast Fisheries Science Center resources were to be utilized for river herrings and shads. This prioritization also determines the frequency of assessments for Council-managed species. The Commission has been working to increase the frequency of assessments (personal communication Kate Taylor, ASMFC), and it is not clear whether additional Council/federal involvement via an FMP would lead to more frequent assessments.

Related to assessments, the question has been raised whether additional research funding would be available for river herrings and shads if they were in a Council FMP. While the Council does generate some funding through its research set-aside program, money from that program can already be used to fund projects involving river herring. It is not believed that identification of river herrings and/or shads as stocks within a Council management plan would generate additional research funds, but Council management could indirectly encourage interest in research.

Bycatch (discard) Reporting and Estimation

Related to non-target catch management (most river herring are retained in high volume fisheries), another new annual activity would be integrating river herring and shad considerations into discard reporting and observer prioritization. However, this prioritization focuses only on discards. While NMFS has been diverting resources from other small mesh fisheries to mackerel and herring in recent years to get better information on river herring catch, as a stock in the fishery NMFS would have to directly describe its plans for river herring and shad discard monitoring. Also, the Council would presumably have a stronger case arguing for more monitoring and observer coverage for a managed species than it currently can make with river herrings and shads addressed as a discard issue in other managed fisheries. However, it is not clear if coverage would be increased regardless due to budget issues, and the issue remains that the links between non-target catch and river herring and shad stock statuses are not well understood. Since most river herring are retained in high volume fisheries, and NMFS's bycatch (discard) prioritization only looks at discards, this facet of additional federal involvement may not be especially fruitful. While higher observer coverage via regulatory action is likely on hold because of ongoing exploration of funding mechanisms, if coverage was mandated, NMFS's prioritization might matter even less.

Other Fisheries

Adding river herrings and/or shads as stocks in the fishery would change the nature of management actions that are available to the Council. Currently the Council is limited to addressing river herring and shad catch in its managed fisheries. Amendment 14 analyses estimated that about 24% of river herring and shad catch in federal waters was from the small mesh bottom trawl fleet (which could be targeting more than just Atlantic mackerel, squid, or Atlantic herring). As managed stocks, the Council could implement restrictions on other fisheries that interact with river herring and shad. As an example, currently the Summer Flounder, Scup, and Black Sea Bass plan generally restricts bottom trawling in certain areas/times where survey data has shown scup to aggregate. If river herring and shad were managed species, the Council could implement broader area/gear restrictions on fishing activities if such measures were demonstrated to be necessary and/or appropriate to conserve river herrings and shads. However, as described above, the impact of river herring and shad catch in federal waters and/or federally-managed fisheries is not clear. Amendment 14 also demonstrated that area-based management may be problematic for river herring and shad catch avoidance.

2. Essential Fish Habitat (EFH) would be designated for river herrings and shads.

Designating essential fish habitat (EFH) for river herrings and shads would increase NMFS's authority but not necessarily NMFS's ability to conserve habitats used by these anadromous species, especially freshwater habitats used for spawning and as juvenile nursery areas that are most affected by a wide range of human activities.

Currently, acting under the authority of the Magnuson-Stevens Act, there is a mandatory requirement that NMFS must designate essential fish habitat for managed species and issue essential fish habitat conservation recommendations to federal agencies for activities proposed,

funded, permitted, or undertaken by those agencies. Designation of essential fish habitat for river herrings and shads would expand the geographic boundaries where mandatory consultations would be required including most coastal rivers and their watersheds on the Atlantic coast.

EFH Consultations (summary from <http://www.nero.noaa.gov/hcd/appguide1.html>)

Federal agencies which fund, permit, or undertake activities that may adversely affect EFH are required to consult with NMFS regarding the potential effects of their actions on EFH, and respond in writing to NMFS's recommendations. Wherever possible, NMFS is utilizing existing interagency coordination processes to fulfill EFH consultations with federal agencies. These existing coordination procedures include the National Environmental Policy Act (NEPA), Endangered Species Act, Clean Water Act, and Fish and Wildlife Coordination Act. Use of these existing processes allows for efficient project review by NMFS and the other federal agencies.

Although the federal action agency is ultimately responsible for complying with the EFH Consultation requirements of the Magnuson-Stevens Act, the agency may designate a non-federal representative to conduct an abbreviated consultation or prepare an EFH Assessment. Generally this means that a permit applicant or consultant prepares the required EFH Assessment.

There are basically two types of consultations, abbreviated and expanded. The type of consultation necessary depends upon the magnitude of the adverse effect on EFH. Abbreviated consultations are used when a proposed project will have a less than substantial adverse impact on EFH. Expanded consultations are used when the adverse impact on EFH may be substantial. Regardless of consultation type, there are four required components to consultations:

1. Notification - The federal agency must notify NMFS regarding a proposed action that may adversely affect EFH. The notification will typically be in the form of a Public Notice, Draft Environmental Assessment (EA), or Draft Environmental Impact Statement (EIS).
2. EFH Assessment - This is a written assessment of the effects of the action on EFH. The EFH Assessment will typically be incorporated within the notification document (Public Notice or Environmental Assessment) or submitted as a separate document in cases where an expanded consultation is required.

An EFH Assessment must contain the following four sections:

- A description of the proposed action.
- An analysis of the potential adverse effects of the action on EFH, and managed species.
- The federal agency's conclusions regarding the effects of the action on EFH, and the managed species. The agency's views will usually determine the type of consultation. Examples of agency determinations are as follows: A) no adverse effect to EFH (no consultation required); B) minimal adverse effect or less than substantial adverse effect to EFH (abbreviated consultation can be conducted); or C) substantial adverse effect to EFH (expanded consultation required).
- Proposed mitigation, if applicable.

Other information may also be appropriate to include in the assessment such as: the results of an on-site inspection to evaluate habitat and site-specific effects of the project; the views of recognized experts on the habitat or species that may be affected; a review of pertinent literature and relevant information; an analysis of alternatives to the proposed action including those alternatives that avoid or minimize the adverse effects on EFH. The level of detail contained within the EFH Assessment should be commensurate with the degree of adverse impact to EFH.

3. EFH Conservation Recommendations - After receipt of the completed EFH Assessment, NMFS will provide EFH Conservation Recommendations to the federal agency detailing measures that can be taken by that agency to conserve EFH.

4. Agency Response - Within 30 days of receiving NMFS' recommendations, the federal agency must provide a detailed written response to NMFS. The response must include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case where a response is inconsistent with NMFS' recommendations, the federal agency must explain (and only explain) its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the proposed action and the measures needed to minimize, mitigate or offset such effects.

The Magnuson-Stevens Act also states that Councils "shall comment on and make recommendations to the Secretary and any Federal or State agency concerning any such activity that, in the view of the Council, is likely to substantially affect the habitat, including essential fish habitat, of an anadromous fishery resource under its authority." While the Council's resources would likely preclude comment on every activity, this could be a component of Council coordination. However, other entities have no obligations regarding the Council's recommendations unless they prompt NMFS recommendations in the above-described consultation process.

To summarize, EFH designations provide NMFS the authority to recommend mitigation measures for proposed actions and permitting. NMFS does make such recommendations with other species' EFH and often does secure some level of mitigation. However, the agency may lack the resources to effectively implement the necessary actions related to river herrings and/or shads. Limited resources (staff and funding) already restrict the agency's ability to effectively manage essential fish habitat for Atlantic salmon and there is no reason to believe that this situation will be different for river herrings and shads if they became federally-managed species.

It is unclear if substantial and tangible habitat benefits would accrue beyond those already being pursued by the states, NMFS, and other federal agencies, especially given current funding limitations. It is unclear exactly what the additional impact on river herring and shad stocks of NMFS's essential fish habitat efforts would be since: A) states are already independently acting to improve riverine habitats B) NMFS has ongoing consultations with upstream dam removal/riverine habitat improvement projects (as well as funding them), and C) NMFS has already been successful in mitigating impacts to some habitats (tidal riverine waters) used by river herrings and shads because they are forage species for other federally-managed fish species

(e.g., bluefish), and are, therefore, considered a component of essential fish habitat for those predatory species. The impacts would likely be positive, but the extent of the impacts cannot be determined and may be small compared to ongoing activities, especially given current budget limitations.

3. Annual Catch Limits (ACLs) and Accountability Measures (AMs) (or something very similar) would likely be implemented.

Annual Catch Limits are required by the Magnuson-Stevens Act in order to prevent overfishing. To accomplish this, these limits must be the same or lower than the Acceptable Biological Catch (ABC) for a stock as provided by the Council's Scientific and Statistical Committee. That committee reviews the available information and recommends an acceptable biological catch that they certify as being unlikely to cause overfishing to the best of its ability. Accountability Measures are designed to prevent overages from occurring or pay back prior overages. Accountability measures could close fisheries at a buffered threshold before an annual catch limit is reached or institute measures to avoid future overages.

Scientific and Statistical Committee (SSC)

As part of specifications for managed species, the Council's Scientific and Statistical Committee reviews stock status and makes Acceptable Biological Catch recommendations, which form the upper limits on catches for Council-managed species. However, without estimates of absolute abundance and an improved understanding of the relative contribution of the various roadblocks to river herring and shad recovery, it is not clear that any limit set by the Scientific and Statistical Committee would have a substantial impact on river herring and shad stocks. Given the depleted status of river herring and shads, the high levels of uncertainty, and the Council's existing risk policy, it would seem likely that a low Acceptable Biological Catch recommendation would result from any Scientific and Statistical Committee recommendation, which could limit or reduce fishing mortality and potentially improve river herring and shad stocks - however, it is not measurable or certain. In addition, the Council would still have limited control over total catch since most harvest of river herrings and shads occurs in state waters. If catch in state waters was predicted to be near or above the limit set by the Council's Scientific and Statistical Committee, there would be little or no catch available to be taken from federal waters (whether as landings or discards). If catch in federal waters is a major cause of depleted river herring and shad stocks (this is unknown) then this could improve stocks, but if catch in federal waters is not a primary cause of depletion then this would not lead to major improvements in river herring and shad stocks but possibly severe restrictions on federal fisheries that catch river herrings and shads as non-target species.

Given the strict state measures in place for directed harvest, and that in the near future river herring and shad mortality caps for the Atlantic mackerel (being implemented for 2014) and Atlantic herring (under Council consideration, possible 2015 implementation) fisheries appear likely to be implemented independently of the direct management question¹, the additional

¹ The caps should control most federal waters catch since over 70% of river herring and shad catch in the Amendment 14 analyses was accounted for by the mid-water trawl fleet that targets Atlantic mackerel and Atlantic herring

benefits to river herring and shad stocks from receiving acceptable biological catch recommendations may be negligible, as catch appears generally controlled or controllable. The tools to effectively control catch in federal waters should exist independently of the stock in the fishery question, at least if the Council(s) sets mortality caps that are consistent with the best available science. The Council could also request for its Scientific and Statistical Committee to review its river herring and shad mortality cap for the mackerel fishery to help ensure that the best available science is being used regardless of whether river herrings and shads are managed fisheries, and the New England Fishery Management Council could do the same. Unless the recommendations of the Scientific and Statistical Committee were shown to not constitute best available science, they would be binding because of National Standard 2 even without being a stock in an FMP.

ACLs/AMs Continued

If ACLs/AMs were established there likely would be better accounting of annual river herring and shad catch since NMFS will be responsible for monitoring whether all catch exceeds the ACL or not. NMFS could probably produce these catch estimates without including river herring and shad as managed fisheries however (but they would not be required to do so). If overfishing limits are identified (none exist now) and then higher quality catch data are used to prevent overfishing, this would be a positive impact for any river herring and/or shad species that had ACLs/AMs. The teams working on this question have also repeatedly concluded that port-side monitoring could be an effective component to monitoring this fishery since catch-sorting is difficult. However, regardless of the ACL/AM question, additional catch reporting, monitoring, and control (through mortality caps) provisions are being implemented or developed for river herrings and shads through Amendment 5 to the Atlantic herring plan, Amendment 14 to the Atlantic mackerel, Squid, and Butterfish plan, and Framework 3 to the Atlantic herring plan. While NMFS may not approve all of the monitoring provisions initially recommended in these amendments, discussions among Council and regional office staff are leading to options that could be approvable and serve the intended purposes of the recommended measures.

One question that has surfaced repeatedly is “Could the Council add river herring or shad as stocks in the fishery but use the ACL/AM flexibility provisions of the National Standard 1 guidance to defer to the Commission for primary management?” The North Pacific Fishery Management Council has implemented such a system for salmon and defers salmon management to Alaska. This could theoretically allow the designation of Essential Fish Habitat and result in greater federal resources without having to deal with ACLs for the currently data-poor river herring and shad stocks. There are several key issues however, which become evident when reviewing analysis for updating the North Pacific Fishery Management Council's salmon plan (<http://www.fakr.noaa.gov/npfmc/>), where Alaska has primary authority even though it is a federally managed species. First, Alaska has a long history of well-documented successful/sustainable management with salmon, with specific escapement-based methodologies for determining catch levels. Second, the salmon situation is different in that river herring and shad catch appears to not even be nearly as well documented (especially at the species level) as salmon catch in Alaska. Existing or pending Commission moratoriums will likely address most of the landings control but not discards in state waters, though pending mortality caps should control incidental catch in federal waters. For these reasons it currently seems unlikely that a Council FMP could make the case that turning over management to the Commission will meet

the requirements of the Magnuson Stevens Act. If this was attempted but rejected then the responsibility for annual catch limits would fall back to the Council. This was the viewpoint of the Amendment 14 Fishery Management Action Team and remains the perspective of the Amendment 15 Fishery Management Action Team.

The ACL flexibility guidelines also still require consistency with Magnuson (alternatives to ACLs/AMs would have to achieve the same basic results). So even if under an FMP primary catch management could be ceded to the Commission, the Council's suite of management measures would still have to function as ACLs/AMs in that an overall Acceptable Biological Catch would not be able to be exceeded. Thus the Council would still have to implement hard caps on its other managed species to control overall catch based on a recommendation from its Scientific and Statistical Committee absent another authority on the matter. Thus while there might not be ACLs/AMs on paper, the caps on incidental catch in Council-managed fisheries would need to have the same function as ACLs/AMs in order to be consistent with the Magnuson Act and the National Standard One final rule guidelines. Catch in non-Council managed fisheries would also have to be addressed.

While Commission/Council coordination for river herring and shad issues has been extensive in the last 2 years, the ramifications of ACLs would likely lead to additional collaboration. The Council would likely engage in complementary management with the Commission and ACLs or other catch quotas for federal management would be based on ABCs provided by its Scientific and Statistical Committee and would have to account for any state fishing mortality beyond the control of the Council. The Council and Commission would likely negotiate (via a joint meeting) how to utilize the ABC provided by the Scientific and Statistical Committee. While the Council and Commission may come to an agreement, the Council would be bound to enact measures that keep catch at or below the ABC regardless. This could mean closing other federal directed fisheries quite earlier than would otherwise occur if state-waters catch approached (or was expected to approach) the ABC. The exact accountability measures would be developed during implementation if that is the chosen path, but since the states are not bound by the Scientific and Statistical Committee's decision, and since substantial catch may occur in state waters, and an ABC could be quite low, impacts on federal fisheries like Atlantic herring and mackerel that catch river herrings and/or shads could be substantial. Mortality caps for federal fisheries could be part of the accountability measures that are used, but they would have to be set low enough such that state waters catch plus any mortality caps were expected to restrain catch at or below the ABC. While the Council could be unable to totally control all mortality because of state fisheries and discards in state waters, mortality in federal waters would be limited. Mortality caps being developed for the Atlantic mackerel and Atlantic herring fisheries should also control river herring and shad mortality in federal waters.

3.3 The extent to which the fishery could be or is already adequately managed by states, by state/Federal programs, by Federal regulations pursuant to fishery management plans or international commissions, or by industry self-regulation, consistent with the policies and standards of the Magnuson-Stevens Act.

The recent negative Endangered Species Act Determination by NMFS describes the existing management measures being taken for river herring and is utilized here (see link at: <http://www.nero.noaa.gov/stories/2013/riverherring.html>). As wide-ranging anadromous species, alewife and blueback herring are subject to numerous Federal (U.S. and Canadian), state and provincial, Tribal, and inter-jurisdictional laws, regulations, and agency activities. These regulatory mechanisms are described in detail in the following section.

International

The Canadian Department of Fisheries and Oceans manages American shad, alewife, and blueback herring fisheries that occur in the rivers of the Canadian Maritimes under the Fisheries Act (R.S.C., 1985, c. F-14). The Maritime Provinces Fishery Regulations includes requirements when fishing for or catching and retaining river herring in recreational and commercial fisheries (Canadian Department of Fisheries and Oceans, 2006; <http://laws-lois.justice.gc.ca>).

Commission (ASMFC) and Enabling Legislation

Authorized under the terms of the Atlantic States Marine Fisheries Compact, as amended (Pub. L. 81-721), the purpose of the Commission is to promote the better utilization of the fisheries (marine, shell, and anadromous) of the Atlantic seaboard ``by the development of a joint program for the promotion and protection of such fisheries, and by the prevention of the physical waste of the fisheries from any cause."

Given management authority in 1993 under the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA - 16 U.S.C. 5101-5108), the Commission may issue interstate FMPs that must be administered by state agencies. If the Commission believes that a state is not in compliance with a coastal FMP, it must notify the Secretaries of Commerce and Interior. If the Secretaries find the state not in compliance with the management plan, the Secretaries must declare a moratorium on the fishery in question.

The Commission manages river herring and shad stocks under the authority of section 803(b) of the ACFCMA (16 U.S.C. 5101 et seq.), which states, in the absence of an approved and implemented FMP under the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.) and, after consultation with the appropriate Fishery Management Council(s), the Secretary of Commerce may implement regulations to govern fishing in the Exclusive Economic Zone (EEZ), i.e., from 3 to 200 nautical mi (nm) offshore. The regulations must be: (1) Compatible with the effective implementation of an Interstate FMP (Commission Plan) for American Shad and River Herring developed by the Commission; and (2) consistent with the national standards set forth in section 301 of the Magnuson-Stevens Act.

The states, through the Commission and its Interstate FMP for Shad and River Herring, appear to have effectively controlled directed harvest of river herrings and shads in state waters. The Commission also has a stock assessment process in place that effectively integrates data from the states, though there are a variety of data gaps. The Commission peer-reviewed stock assessment process integrates data from both the states' and federal waters and the stock assessment committee has both NMFS and U.S. Fish and Wildlife Service representatives.

The Magnuson Stevens Act precludes federal regulation of a fishery in state waters unless the fishery occurs predominantly in federal waters. 16 U.S.C. § 1856(3)(b). All river herring and American shad state fisheries that have not been designated by the Commission as sustainable were closed by January 1, 2013. The Commission has communicated to the Council (Dec 5, 2012 letter, attached) that it will take 3-5 years to determine the effect of these measures. In the same letter, the Commission encouraged exploration of the concept of Council management but also indicated a preference that the Commission would retain authority to manage in-river state-water fisheries. The Council would not have the authority to manage in-river state-water fisheries, and the potential consequences of this on annual catch limits and accountability measures are described above.

It is not clear that states/the Commission have effectively controlled discards in state waters, but they could and would be in a better position to do this given the Council's limited authorities in state waters. State regulations also appear likely to avoid redevelopment of directed ocean fisheries for river herrings and shads since outside of approved state-specific sustainable FMPs, possession is either banned or only allowed as limited incidental catch related to directed landings of other species.

In addition to the state sustainability plan mandate, the Commission makes recommendations to states for the conservation, restoration, and protection of habitat. States are involved in many habitat improvement projects. The Commission also requires states to implement fisheries-dependent and independent monitoring programs to provide data for use in future stock assessments.

Magnuson-Stevens Act

The Magnuson-Stevens Act is the primary law governing marine fisheries management in Federal waters. The Magnuson-Stevens Act was first enacted in 1976 and amended in 1996 and 2006. Most notably, the Magnuson-Stevens Act aided in the development of the domestic fishing industry by phasing out foreign fishing. To manage the fisheries and promote conservation, the Magnuson-Stevens Act created eight regional fishery management councils. A 1996 amendment focused on rebuilding overfished fisheries, protecting Essential Fish Habitat (EFH), and reducing bycatch. A 2006 amendment mandated the use of Annual Catch Limits (ACL) and Accountability Measures (AM) to end overfishing, provided for widespread market-based fishery management through limited access privilege programs, and called for increased international cooperation. The likely key provisions for river herrings and shads are the ACLs and AMs (described above), EFH (described above), bycatch (discard) reduction requirements, and discretionary authority to generally reduce non-target interactions. The discussions above address the ACL and AM issues in detail, but additional information on EFH and bycatch is provided next.

The Magnuson-Stevens Act requires that Federal FMPs contain conservation and management measures that are consistent with the ten National Standards. National Standard 9 states that conservation and management measures shall, to the extent practicable, (A) minimize bycatch (discards) and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. The Magnuson-Stevens Act defines bycatch as fish that are harvested in a fishery, but which are not sold or kept for personal use. This includes economic discards and regulatory discards. River herring is encountered both as discards and caught and landed in Federal fisheries. While there is no directed fishery for river herring in Federal waters, river herring co-occur with other species that have directed fisheries (Atlantic mackerel, Atlantic herring, whiting, squid and butterfish) and are either discarded or retained in those fisheries when caught.

The mortality caps being implemented/developed for the Atlantic mackerel and Atlantic herring fisheries respectively appear likely to be able to control total catch (and therefore discards/bycatch) of river herrings and shads in federal waters. The overall catches will depend on the limits the Councils choose. The precision of the estimates generated by the caps will depend on observer coverage, but that will be the case regardless of whether river herrings and shads are directly managed species or not.

Essential Fish Habitat Under the Magnuson-Stevens Act

Under the Magnuson-Stevens Act, there is a requirement to describe and identify EFH in each Federal FMP. EFH is defined as ". . . those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The rules promulgated by the NMFS in 1997 and 2002 further clarify EFH with the following definitions: (1) Waters--aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; (2) substrate--sediment, hard bottom, structures underlying the waters, and associated biological communities; (3) necessary--the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and (4) spawning, breeding, feeding, or growth to maturity--stages representing a species' full life cycle. EFH has not been designated for alewife or blueback herring, but has been for some other relevant species.

River herrings and shads can be found along the Atlantic coast of North America, from the Southern Gulf of St. Lawrence, Canada to the southeastern United States and Florida. They are anadromous, so they spawn and do early maturing in freshwater rivers and further mature and live as adults in the ocean. Conservation measures implemented in response to the designation of Atlantic salmon EFH likely provide the most conservation benefit to river herrings and shads over any other EFH designation. Atlantic federal coastal waters are generally also designated as EFH for other species (e.g. Atlantic herring, Atlantic mackerel, southeast coastal pelagics, bluefish, etc.) but EFH impacts and consultations in coastal/pelagic waters are not as likely to be critical. River herrings, shads, and Atlantic salmon utilize the same areas for in-river dependent life stages however (where impacts are more likely due to water passage and water quality issues), and the in-river geographic range in which river herring may benefit from the designation of Atlantic salmon EFH extends from Connecticut to the Maine/Canada border.

Table 2. Magnuson-Stevens Act Required Plan Provisions and How They May be Addressed by Existing Authorities.

Provision	Current measures using existing authority
Measures for the conservation and management of the fishery to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery	<ul style="list-style-type: none"> • Commission Amendments 2 and 3 to the Commission Plan for Shad and River Herring, which requires states to close their waters to recreational and commercial river herring harvest unless they have an approved sustainable plan in place that will “not diminish the potential future stock reproduction and recruitment.” Currently ME, NH, RI, NY, NC and SC have approved plans for river herring; DE River Basin, Potomac River Fisheries Commission, NC, SC, GA and FL have plans for shad (Atlantic Coastal Fisheries Cooperative Management Act - ACFCMA). • Proposed catch caps in the Atlantic mackerel and Atlantic herring fisheries will address incidental catch (Magnuson-Stevens Act, through existing FMPs).
Description of the fishery	<ul style="list-style-type: none"> • Amendments 2 and 3 to the Commission Plan for Shad and River herring describe commercial/recreational fisheries in state waters (ACFCMA). • Atlantic herring and MSB actions that relate to river herring and shad, most recently Amendments 5 and 14, describe river herring and shad catch in federal waters (Magnuson-Stevens Act, through existing FMPs).
Assessment and specification of present and probable future condition of, and the maximum sustainable yield and optimum yield from the fishery.	<ul style="list-style-type: none"> • Present condition of the fishery is described in recent Commission stock assessment. • Trend analysis for river herring included in recent Endangered Species Act decision.
Assessment and specification of domestic harvesting and processing capacities	<ul style="list-style-type: none"> • U.S. fishing vessels are capable of, and expected to, harvest the optimum yield from the river herring and shad fisheries. U.S. processors are also expected to process the harvest of U.S. fishing vessels. None of the optimum yield from this fishery can be made available to foreign fishing.
Specification of the pertinent fishery data that shall be submitted to NMFS	<ul style="list-style-type: none"> • Amendments 2 and 3 to the River Herring and Shad Commission Plan specify fishery dependent and fishery independent monitoring requirements (ACFCMA). • At-sea monitors and port-side samplers collect species composition and biological information related to river herring and shad (Magnuson-Stevens Act, related to existing FMPs).
Provision of temporary adjustments to fishery access because of weather or other ocean conditions affecting the safe conduct of the fishery	<ul style="list-style-type: none"> • Could be provided to states on an as needed basis.

Provision	Current measures using existing authority
Description and identification of essential fish habitat, and minimization to the extent practicable adverse effects on such habitat caused by fishing	<ul style="list-style-type: none"> • Amendments 2 and 3 to the River Herring and Shad Commission Plan require states to identify, categorize and prioritize important existing and historic shad and river herring and shad habitat within its area of jurisdiction, establish periodic monitoring to ensure the long-term health and viability of the habitat, and develop plans to restore access to rivers (ACFCMA). • EFH consultations for currently managed species, including Atlantic salmon, Atlantic herring, and Atlantic mackerel could benefit river herring and shad where their habitats overlap (Magnuson-Stevens Act). • Critical habitat consultations for Atlantic salmon and Atlantic sturgeon could benefit river herring and shad where their habitats overlap (Endangered Species Act). • Consultations related to hydroelectric projects could benefit river herring and shad (Federal Power Act). • Federal protection of water quality is afforded through the Federal Water Pollution Control Act (also called the “Clean Water Act”). This act has played a role in reducing discharges of pollutants, restricting the timing and location of dredge and fill operations, and affecting other changes that have improved river herring and shad habitat in many rivers and estuaries. • Other state and federal habitat restoration activities (as described in this document).
Specification of the nature and extent of scientific data which is needed for effective implementation of the plan	<ul style="list-style-type: none"> • Current research needs were identified in Amendments 2 and 3 to the River Herring and Shad Commission Plan, and the most recent assessments for river herring and shad (ACFCMA).
Description of the likely effects of management measures on fishery participants and fishing communities	<ul style="list-style-type: none"> • National Environmental Policy Act (NEPA) analyses are conducted for all federal actions (not just fishery management measures) to evaluate the impacts of the federal action on fishery participants and fishing communities.
Specification of objective and measurable criteria for identifying when the fishery to which the plan applies is overfished and conservation and management measures to prevent overfishing, end overfishing, and rebuild the fishery as appropriate	<ul style="list-style-type: none"> • KEY POTENTIAL BENEFIT of Magnuson-Stevens Act; this would be required in a Federal FMP. • No definition currently for river herring in Amendment 2 to the Shad and River Herring Commission Plan. • The most recent stock assessment (ASMFC 2007) concluded that the definition of overfishing in Amendment 1 to the Shad and River Herring Commission plan that focused only on directed fishing mortality (F) was no longer valid for American shad stocks because shad are affected by several sources of human-induced mortality, including directed fishing (F), fish passage mortality at dams, mortality from pollution, and bycatch and discard mortality in indirect fisheries activity.
Assessment of the amount and type of bycatch occurring in the fishery and minimize bycatch to the extent practicable	<ul style="list-style-type: none"> • Adjustments to federal monitoring programs can be made to assess river herring and shad bycatch in federal fisheries (Magnuson-Stevens Act, through existing FMPs). • Proposed catch caps to minimize bycatch in Atlantic herring and Atlantic mackerel fisheries (Magnuson-Stevens Act, through existing FMPs).
Assessment of recreational release mortality and minimization of such mortality to the extent practicable	<ul style="list-style-type: none"> • States and jurisdictions must monitor recreational catch and effort within certain specified rivers under Amendments 2 and 3 of the Shad and River Herring Commission Plan. Techniques used to gather this data may include creel surveys, surveys of license/permit holders, Marine Recreational Fisheries Statistical Survey (MRFSS) / Marine Recreational Information Program (MRIP) and reporting requirements for obtaining/maintaining license or permit (ACFCMA).

Provision	Current measures using existing authority
	<ul style="list-style-type: none"> • Amendments 2 and 3 to the Commission Plan for Shad and River Herring, which requires states to close their waters to recreational and commercial river herring harvest unless they have an approved sustainable plan in place that will “not diminish the potential future stock reproduction and recruitment.” Currently ME, NH, RI, NY, NC and SC have approved plans for river herring; DE River Basin, Potomac River Fisheries Commission, NC, SC, GA and FL have plans for shad (ACFCMA).
Allocation of harvest restrictions or recovery benefits fairly and equitably among the commercial, recreational, and charter fishing sectors	<ul style="list-style-type: none"> • Could be coordinated through Councils and Commission.
Establishment annual catch limits, and measures to ensure accountability.	<ul style="list-style-type: none"> • KEY POTENTIAL BENEFIT OF Magnuson-Stevens Act; this would be required in a Federal FMP. • Catch is limited through Amendments 2 and 3 to the Commission Plan for Shad and River Herring, and under the state plans that have already been approved • Federal bycatch limits proposed in Atlantic herring and Atlantic mackerel fisheries; proposed consequence (similar to an accountability measure) is closure of directed fisheries for these species once cap is attained (Magnuson-Stevens Act, existing FMPs).

Federal Power Act (16 U.S.C. 791-828) and Amendments

The Federal Power Act, as amended, provides for protecting, mitigating damages to, and enhancing fish and wildlife resources (including anadromous fish) impacted by hydroelectric facilities regulated by the Federal Energy and Regulatory Commission (FERC). Applicants must consult with state and Federal resource agencies who review proposed hydroelectric projects and make recommendations to FERC concerning fish and wildlife and their habitat, e.g., including spawning habitat, wetlands, instream flows (timing, quality, quantity), reservoir establishment and regulation, project construction and operation, fish entrainment and mortality, and recreational access. Section 10(j) of the Federal Power Act provides that licenses issued by FERC contain conditions to protect, mitigate damages to, and enhance fish and wildlife based on recommendations received from state and Federal agencies during the licensing process. With regard to fish passage, Section 18 requires a FERC licensee to construct, maintain, and operate fishways prescribed by the Secretary of the Interior or the Secretary of Commerce. Under the Federal Power Act, others may review proposed projects and make timely recommendations to FERC to represent additional interests. Interested parties may intervene in the FERC proceeding for any project to receive pertinent documentation and to appeal an adverse decision by FERC.

While the construction of hydroelectric dams contributed to historical losses of spawning habitat, only a few new dams have been constructed in the range of these species in the last 50 years. In some areas, successful fish passage has been created; thus, restoring access to many habitats once blocked. Thus, river herring and shad may often benefit from Federal Power Act fishway requirements when prescriptions are made to address anadromous fish passage and during the re-licensing of existing hydroelectric dams when anadromous species are considered.

Anadromous Fish Conservation Act (16 U.S.C. 757a-757f) as Amended

This law authorizes the Secretaries of Interior and Commerce to enter into cost sharing with states and other non-Federal interests for the conservation, development, and enhancement of the nation's anadromous fish. Investigations, engineering, biological surveys, and research, as well as the construction, maintenance, and operations of hatcheries, are authorized. This Act was last authorized in 2002, which provided 5 million dollars for the fiscal years 2005 and 2006 (Pub. L. 107-372). There was an attempt to reauthorize the Act in 2012; however, this action has not yet been authorized.

Fish and Wildlife Coordination Act (FWCA) (16 U.S.C. 661-666)

The Fish and Wildlife Coordination Act is the primary law providing for consideration of fish and wildlife habitat values in conjunction with Federal water development activities. Under this law, the Secretaries of Interior and Commerce may investigate and advise on the effects of Federal water development projects on fish and wildlife habitat. Such reports and recommendations, which require concurrence of the state fish and wildlife agency(ies) involved, must accompany the construction agency's request for congressional authorization, although the construction agency is not bound by the recommendations.

The Fish and Wildlife Coordination Act applies to water-related activities proposed by non-Federal entities for which a Federal permit or license is required. The most significant permits or licenses required are Section 404 and discharge permits under the Clean Water Act and Section 10 permits under the Rivers and Harbors Act. The U.S. Fish and Wildlife Service and NMFS may review the proposed permit action and make recommendations to the permitting agencies to avoid or mitigate any potential adverse effects on fish and wildlife habitat. These recommendations must be given full consideration by the permitting agency, but are not binding. Federal Water Pollution Control Act, and amendments (FWPCA) (33 U.S.C. 1251-1376)

Also called the "Clean Water Act," the FWPCA mandates Federal protection of water quality. The law also provides for assessment of injury, destruction, or loss of natural resources caused by discharge of pollutants.

Of major significance is Section 404 of the FWPCA, which prohibits the discharge of dredged or fill material into navigable waters without a permit. Navigable waters are defined under the FWPCA to include all waters of the United States, including the territorial seas and wetlands adjacent to such waters. The permit program is administered by the Army Corps of Engineers (Corps). The Environmental Protection Agency (EPA) may approve delegation of Section 404 permit authority for certain waters (not including traditional navigable waters) to a state agency; however, the EPA retains the authority to prohibit or deny a proposed discharge under Section 404 of the FWPCA.

The FWPCA (Section 401) also authorizes programs to remove or limit the entry of various types of pollutants into the nation's waters. A point source permit system was established by the EPA and is now being administered at the state level in most states. This system, referred to as the National Pollutant Discharge Elimination System (NPDES), sets specific limits on discharge

of various types of pollutants from point source outfalls. A non-point source control program focuses primarily on the reduction of agricultural siltation and chemical pollution resulting from rain runoff into the nation's streams. This effort currently relies on the use of land management practices to reduce surface runoff through programs administered primarily by the Department of Agriculture.

Like the Fish and Wildlife Coordination and River and Harbors Acts, Sections 401 and 404 of the FWPCA have played a role in reducing discharges of pollutants, restricting the timing and location of dredge and fill operations, and affecting other changes that have improved river herring and shad habitat in many rivers and estuaries over the last several decades. Examples include reductions in sewage discharges into the Hudson River (A. Kahnle, New York State, Pers. comm. 1998) and nutrient reduction strategies implemented in the Chesapeake Bay.

Rivers and Harbors Act of 1899

Section 10 of the Rivers and Harbors Act requires a permit from the Corps to place structures in navigable waters of the United States or modify a navigable stream by excavation or filling activities. The permitting then requires EFH Consultation.

National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4347)

The National Environmental Policy Act requires an environmental review process of all Federal actions. This includes preparation of an environmental impact statement for major Federal actions that may affect the quality of the human environment. Less rigorous environmental assessments are reviewed for most other actions, while some actions are categorically excluded from formal review. These reviews provide an opportunity for the agency and the public to comment on projects that may impact fish and wildlife habitat.

Coastal Zone Management Act (16 U.S.C. 1451-1464) and Estuarine Areas Act

Congress passed policy on values of estuaries and coastal areas through these Acts. Comprehensive planning programs, to be carried out at the state level, were established to enhance, protect, and utilize coastal resources. Federal activities must comply with the individual state programs. Habitat may be protected by planning and regulating development that could cause damage to sensitive coastal habitats.

Federal Land Management and Other Protective Designations

Protection and good stewardship of lands and waters managed by Federal agencies, such as the Departments of Defense, Energy and Interior (National Parks and National Wildlife Refuges, as well as state-protected park, wildlife and other natural areas), contributes to the health of nearby aquatic systems that support important river herring and shad spawning and nursery habitats. Relevant examples include the Great Bay, Rachel Carson's and Corps Basin National Estuarine Research Reserves, Department of Defense properties in the Chesapeake Bay, and many National Wildlife Refuges.

Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA), Titles I and III and the Shore Protection Act of 1988 (SPA)

The Marine Protection, Research and Sanctuaries Act protects fish habitat through establishment and maintenance of marine sanctuaries. The Marine Protection, Research and Sanctuaries Act and the Shore Protection Act regulate ocean transportation and dumping of dredge materials, sewage sludge, and other materials. Criteria that the Corps uses for issuing permits include considering the effects dumping has on the marine environment, ecological systems and fisheries resources. NMFS must be consulted per its EFH responsibilities.

State Regulations and Activities

Per Commission requirements, by January 1, 2013 the Atlantic Coast states had all either developed sustainable fishing plans that had been approved by the Commission or they had closed their waters to harvest of river herrings and shads. Some states allow an incidental landings allowance for federal fisheries while others do not. The states and their municipalities use a variety of management measures given their plans or moratoria. The states are also involved in a variety of habitat improvement projects, including water passage improvements.

Tribal and First Nation Fisheries

We have identified thirteen federally recognized East Coast tribes from Maine to South Carolina that have tribal rights to sustenance and ceremonial fishing, and which may harvest river herring for sustenance and ceremonial purposes and/or engage in other river herring conservation and management activities. The Mashpee Wampanoag tribe is the only East Coast tribe that voluntarily reported harvest numbers to the State of Massachusetts that were incorporated into the Commission Management Plan as subsistence harvest. The reported harvest for 2006 and 2008 ranged between 1,200 and 3,500 fish per year, with removals coming from several rivers. Aside from the harvest reported by Commission for the Mashpee Wampanoag tribe, information as to what tribes may harvest river herring for sustenance and/or ceremonial purposes is not available. Letters have been sent to all 13 potentially affected tribes to solicit any input they may have on the conservation status of the species and/or health of particular riverine populations, tribal conservation and management activities for river herring, biological data for either species, and comments and/or concerns regarding the status review process and potential implications for tribal trust resources and activities. To date, we have not received any information from any tribes.

Industry

Industry has also been self-regulating through cooperative catch-avoidance work with The School for Marine Science and Technology (SMAST) at the University of Massachusetts Dartmouth (<http://www.umassd.edu/smast/smastnewsyoucanuse/bycatchavoidanceprograms/>) and Cornell's Cooperative Extension Program/The Squid Trawl Network (<http://www.squidtrawlnetwork.com/>). Since there is no control group to compare performance against, it is not possible to determine the success of these networks other than reporting that fishermen have been participating in them. It seems likely that fishermen will use these catch

avoidance networks to help the fisheries stay within the mortality caps that are being implemented, but again their success is uncertain at present.

Endangered Species Act Determination - River Herring

http://www.nero.noaa.gov/prot_res/candidatespeciesprogram/RiverHerringSOC.htm

Subsequent to NMFS's findings that river herring are not endangered, NMFS also announced a variety of measures that it will be undertaking to assist river herring conservation. The agency has provided funding to the Atlantic States Marine Fisheries Commission and will be working with the Commission and other partners to implement a coordinated coastwide effort to continue to address data gaps and proactively conserve river herring and their habitat.

NMFS intends to establish a technical working group and to continue to work closely with the Commission and others to develop a long-term and dynamic conservation plan for river herring throughout both species' range from Canada to Florida. This group will attempt to quantify the impact of ongoing restoration and conservation efforts and new fisheries management measures that are being developed (e.g., mortality caps in two federal fisheries), which should benefit the species, review any new information produced from ongoing scientific studies (e.g., genetic analyses, ocean migration patterns, climate change impacts) that are completed in the next 3-5 years, and assess available data to determine whether recent reports of higher river counts in many areas along the coast in the last two years represent sustained trends. During this time, NMFS is also committed to working with partners and tribal governments to continue implementing important conservation efforts and fund needed research for river herring. NMFS intends to revisit the status of river herring within the next five years. Council staff will likely be involved in these efforts.

Endangered Species Act Listing - Sturgeon

<http://www.nero.noaa.gov/stories/2013/riverherringlistingfrnotice.pdf>

In 2012, five distinct population segments of Atlantic sturgeon were listed under the Endangered Species Act. The Chesapeake Bay, New York Bight, Carolina, and South Atlantic Distinct Population Segments of Atlantic sturgeon are listed as endangered, while the Gulf of Maine Distinct Population Segment is listed as threatened. Measures to improve habitats and reduce impacts to Atlantic sturgeon may directly or indirectly benefit river herring. Atlantic sturgeon critical habitat will be specified in the next year. Like river herrings and shad, Atlantic sturgeon are anadromous; adults spawn in freshwater in the spring and early summer and migrate into estuarine and marine waters where they spend most of their lives. As with Atlantic salmon, many of the habitats that Atlantic sturgeon occupy are also habitats that river herring use for spawning, migration and juvenile rearing. The geographic range in which river herring may benefit from Atlantic sturgeon Endangered Species Act protections extends from the Maine/Canada border to Florida. Therefore, any protection measures within this range such as improved fish passage or a reduction of water withdrawals may also provide a benefit to river herring. River herrings and/or shads travel further upriver than sturgeon to spawn so the overlap would not be complete. Rivers in which sturgeon are found and which are likely to receive critical habitat designation may be found at:

<http://www.nmfs.noaa.gov/pr/species/fish/atlanticsturgeon.htm>.

Endangered Species Act Listing - Atlantic salmon & Critical Habitat Designation

In 2009, the Gulf of Maine Distinct Population Segment of Atlantic salmon was listed as endangered under the Endangered Species Act (74 FR 29344). The Gulf of Maine Distinct Population Segment includes all anadromous Atlantic salmon whose freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River. Concurrently in 2009, critical habitat was designated for the Atlantic salmon Gulf of Maine Distinct Population Segment pursuant to section 4(b)(2) of the Endangered Species Act (74 FR 29300; August 10, 2009). The critical habitat designation includes 45 specific areas occupied by Atlantic salmon at the time of listing, and includes approximately 12,160 miles (19,600 km) of perennial river, stream, and estuary habitat and 308 square miles (495 sq km) of lake habitat within the range of the Gulf of Maine Distinct Population Segment in the State of Maine.

Measures to improve habitats and reduce impacts to Atlantic salmon as a result of the Endangered Species Act listing may directly or indirectly benefit river herrings and shads. Atlantic salmon are anadromous and spend a portion of their life in freshwater and the remaining portion in the marine environment. River herring occupy a lot of the same habitats as listed Atlantic salmon for spawning, breeding, feeding, growth and maturity. Therefore, protection measures such as improved fish passage or reduced discharge permits may benefit river herrings and shads.

The critical habitat designation provides additional protections beyond classifying a species as endangered by preserving the physical and biological features essential for the conservation of the species in designated waters in Maine. One of the biological features identified in the critical habitat designation for Atlantic salmon was freshwater and estuary migration sites with abundant, diverse native fish communities to serve as a protective buffer against predation. Co-evolved diadromous fish species are included in this native fish community.

The U.S. Fish and Wildlife Service and NOAA are also engaged in general riverine habitat issues with a focus on dam removal and fish passage improvement. They work in cooperation with other agencies and non-governmental agencies.

The efforts described above in this section (that will be ongoing regardless of the Council's decision regarding an FMP for river herring and/or shad) mean that many of the management activities that would normally be stimulated by management within an FMP are, or could be addressed by existing management programs and authorities. While there are some gaps that might be filled (see Section 3.2 above), this is not a case where there is a complete void of existing management.

3.4 The need to resolve competing interests and conflicts among user groups and whether Council management could further that resolution.

There is conflict between the Atlantic mackerel/herring fisheries and non-governmental organizations seeking additional monitoring and restrictions for those fisheries. The conflict involves both catch of non-target species like river herrings and shads as well as the optimal amount of directed harvest, but the most immediate issue is whether the at-sea catch of river herrings and shads is having a substantial detrimental impact on river herring and shad populations.

Since recreational fisheries have largely lost access to river herring harvest through state moratoria and shad catches are often very restricted as well if not totally banned, a fairness issue has been raised that all parties that catch river herrings and shads should be limited in similar fashions.

Establishing Council management of river herrings and shads via an FMP does not seem likely to immediately resolve these conflicts, especially because of the lack of absolute abundance estimates. If additional assessment information and additional monitoring was obtained as a result of Council management, then the conflict might be partially resolved, but probably not solved.

The Council would be an additional forum for this conflict to be addressed, so that all parties' concerns are considered - the Council has made allocations between commercial and recreational fisheries before, and theoretically an allocation could be made with river herrings and/or shads. However, as has been seen with other Council-managed species, just because an allocation exists does not mean the conflict is resolved if there are competing interests for a resource.

3.5 a) The economic condition of a fishery and b) whether an FMP can produce more efficient utilization.

Most of the fishery operations that used to catch these species either no longer exist or have moved on to other species. Since the only remaining directed fishery occurs in state waters (see summary of regulations under Section 3.3), this criterion is unlikely to be a strong factor in terms of the efficiency of harvesting operations in state waters. As a contrast, most Atlantic mackerel or Atlantic herring are caught in federal waters. However, an FMP could examine the relative value of river herrings and shads across fishing interests (commercial versus recreational) and consider efficiency in that respect. It is beyond the scope of this paper to attempt to analyze this question but potential econometric tools do exist to examine such questions.

3.6 The needs of a developing fishery, and whether an FMP can foster orderly growth.

Since there is not a developing fishery for river herring and/or shad in Federal waters, and since harvest primarily occurs in state waters, this criterion is unlikely to be a strong factor. The existing moratoria and requirement to get sustainable fishing plans approved if directed fishing is to occur for river herrings and shads also means that re-growth of the fishery should be orderly through Commission management.

3.7 The costs associated with an FMP, balanced against the benefits

(see paragraph (d) of this section as a guide). (d) Analysis. The supporting analyses for FMPs should demonstrate that the benefits of fishery regulation are real and substantial relative to the added research, administrative, and enforcement costs, as well as costs to the industry of compliance. In determining the benefits and costs of management measures, each management strategy considered and its impacts on different user groups in the fishery should be evaluated. This requirement need not produce an elaborate, formalistic cost/benefit analysis. Rather, an evaluation of effects and costs, especially of differences among workable alternatives, including the status quo, is adequate. If quantitative estimates are not possible, qualitative estimates will suffice.

Table 1 summarizes several approaches which can further be streamlined into direct management under an FMP (a-b), incremental collaboration (c), and caps plus Commission-NMFS complementary measures in federal waters.

Under (a-b), direct management, there would be substantial costs associated in developing, implementing, and running a federal FMP. The primary cost would likely be in the form of personnel opportunity costs. Several Council and NMFS staff would likely spend substantial amounts of time over the next 2-3 years developing an FMP and all of the required provisions (EFH, status determination criteria, ACLs, AMs, etc.). A larger group of NMFS, State, and Commission staff would also likely be needed to ensure adequate coordination. Staff from other Councils would likely be involved as well, especially if a joint plan was developed

Under c, incremental collaboration, the Council and Council staff would search out opportunities for collaboration, but not do much more beyond the mortality caps currently in place. Costs would be low.

Under d, focusing on caps plus encouraging and seeking to actively facilitate Commission-NMFS complementary measures in federal waters, the Council could aggressively work on some of the issues of the caps (e.g. possibly slippage, observer coverage, and Scientific and Statistical Committee review) as well as investigating what other complementary measures the Commission would like to see in Federal waters in the absence of a Council FMP. This option likely has medium costs, and most of those costs may be for other entities.

If one had a reasonable assurance that any of these efforts would substantially contribute to recovery of river herring and shad populations, the benefits (see section 3.1) would likely outweigh the costs. The problem that staff continues to have is the unclear connection between Council involvement, and the conservation benefits that would result from that specific involvement beyond other river herring and shad conservation activities that are ongoing. As described in Sections 3.3 and 3.4, many of the tasks that would take place within a federal FMP are or will be taking place in some fashion through actions at other agencies (local, state, regional, federal, non-governmental). Also, some issues (dams, water quality, predation, state catch etc.) are largely out of the scope of the Council's power to affect substantial change. Thus the additional impact of the Council's involvement is difficult to quantify, which makes evaluating the costs and benefits very difficult. It seems like the potential exists for a, b, and d to

have higher benefits than c, but comparing them to costs is impossible without a direct and discernible connection being known between additional Council involvement and river herring and shad stocks. It is true that the effects of other management efforts to date seem insufficient, but the effects of recent efforts are not known, and more efforts are underway. As described further in the conclusion, to a large degree either choice (to manage or not via an FMP) will be an experiment with unknown outcomes that will have to be monitored to determine if it continues to appear to be the best choice.

4.0 National Standard 3

National Standard 3 requires that "to the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination." The "purpose" is "to induce a comprehensive approach to fishery management." The guidelines state that "Where management of a fishery involves multiple jurisdictions, coordination among the several entities should be sought in the development of an FMP." The guidelines also state that there should be discussion of "Alternative management units and reasons for selecting a particular one." National Standard 3 guidelines also state that "Where state action is necessary to implement measures within state waters to achieve FMP objectives, the FMP should identify what state action is necessary, discuss the consequences of state inaction or contrary action, and make appropriate recommendations."

Council staff interprets these recommendations as primarily guiding how management should occur, not whether management should occur. Given the purpose is "to induce a comprehensive approach to fishery management," it would seem that whatever is established as an individual stock should be managed throughout its range. In other words, if alewife in the Delaware River are treated as an individual stock, then they should be managed as a unit throughout their range. The multitude of crisscrossing stocks (which mix in federal waters) that could result from a river-specific approach probably makes such an approach infeasible. However, the National Standard also states that "interrelated stocks of fish shall be managed as a unit or in close coordination," and there is genetic analysis (unpublished but evaluated as part of the recent river herring Endangered Species Listing determination) that suggests that broader areas, including a Mid-Atlantic area, could be treated as being composed of interrelated stocks (NMFS 2012 - 2012 River Herring Stock Structure Working Group Report). If the Council decides that direct management is appropriate, a range of management units would be considered, such as described in the 2012 River Herring Stock Structure Working Group Report. Since mixing at sea between river runs or regions occurs, each management unit likely would need to be managed throughout the species range (i.e. overlapping management units for different regional stocks would need to exist). Generating catch limits for each stock and determining how to apportion catch between stock areas or how to use the regional information to determine an overall catch limit would be a very challenging and complicated, but not necessarily insurmountable, management problem. Ongoing genetic work may suggest approaches to this problem and the Council's Scientific and Statistical Committee does have extensive experience in developing catch recommendations in data poor situations.

National Standard 3 states that "to the extent practicable, an individual stock of fish shall be managed as a unit throughout its range." It may not be practicable to manage an individual stock of fish as a unit in this case and still induce comprehensive management. Rather, to achieve this stated purpose of National Standard 3, it may only be feasible to treat multiple, or all stocks as one unit. This would induce a comprehensive approach to management and align with the fact that the stocks mix at sea. This could also facilitate a relatively simple management approach, whereby even if status determination criteria cannot be determined at river or regional levels, the Scientific and Statistical Committee could still recommend an acceptable biological catch for the management unit, which in this case could be the Atlantic Coast (which is still not an easy task without coastwide absolute abundance estimates). Since the various stocks inhabit coastal waters together, they are interrelated, so managing them as one management unit would appear consistent with National Standard 3 in that respect as well.

Again, this discussion is primarily intended to illustrate the way that management units could be evaluated if the Council decided that river herring and shads required additional conservation and management by the Council. National Standard 3 also recommends coordination when management extends jurisdictional boundaries. If the Council decided that Council management was required, then one of the first steps would be to engage the Commission, the South Atlantic Fishery Management Council, the New England Fishery Management Council, and NMFS to determine the optimal way to devise a coordinated approach. The plan would most likely be complementary with the Commission and consider being joint with the South Atlantic and New England Fishery Management Councils. Canadian involvement may also be appropriate.

5.0 Council Staff Conclusion

The ability of existing management to successfully improve river herring and shad stocks is uncertain, and declines in these species (overall landings and many runs) appear to have persisted over long time scales, on the order of 50 years or more. In this respect, since the benefits of recovered fisheries are generally substantial and enduring, one could likely justify Council management (and the investment of time and resources) on the grounds that even though the expected value of Council management is unknown (because of the unknown relative restriction of other factors like dams, water quality, predation, etc. that are largely out of the Council's control), the potential value of restored river herring and shad fisheries appears quite substantial.

However, given A) the ongoing river herring and shad conservation efforts at various levels as coordinated by the Commission and NMFS, B) the recently increased control of state landings through the Commission, C) the pending mortality caps for river herring and shad in the Atlantic mackerel and herring fisheries, D) NMFS's finding that river herrings are not endangered or threatened, and E) NMFS's commitment to be engaged in river herring conservation, it is possible that river herrings and shads may not require conservation and management by a Council FMP at this time. The existing management authorities may be sufficient to recover river herrings and shads from their depleted status. In fact, the Commission has implemented actions to successfully rebuild anadromous stocks that were in poor condition in the past (i.e.

striped bass). It is also uncertain if Council management through an FMP *could* substantially improve the status of river herrings and shads beyond what would be expected with other ongoing efforts. As such, it is difficult to say if the costs of management would be offset by increased and additional benefits to the nation given the uncertainty related to the various threats facing river herrings and shads, and the unknown impacts of recent actions by the Council and other management partners. The qualitative threats analysis summary from the river herring endangered species determination noted the following:

Rangewide, for alewife and blueback herring, no other threats rose to the level of dams, but several other stressors ranked near the moderate threat level. The Team ranked incidental catch, water quality, and predation as threats likely to have some effect on the species now and into the foreseeable future that are widespread throughout the species' range...Overall, the degree of certainty associated with these midlevel threats is much lower, primarily due to lack of information on how these stressors are affecting both species. (available at: http://www.nero.noaa.gov/prot_res/candidatespeciesprogram/RiverHerringSOC.htm).

If either option appears justifiable, the question of priorities and resources available to the Council and its management partners may be important. It is not immediately evident that Council management would or would not produce net benefits to the Nation, especially if other conservation efforts are reduced because of the time dedicated to river herrings and/or shads. The Council must ask itself if it wants to engage in river herring and shad management now with a potentially substantial but highly uncertain pay-off, or would it rather take a wait-and-see approach given that there are other recently-begun or soon-to-begin conservation efforts regarding river herrings and shads and the results of those efforts are not yet fully evident. It is likely that continued evaluation of the effectiveness of a possible FMP or of existing and pending management measures would have to be tracked on an ongoing basis to determine if whichever path is chosen remains justifiable.

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PRESS RELEASE

FOR IMMEDIATE RELEASE
October 11, 2013

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Council Votes to Initiate Interagency Working Group on River Herring and Shad

Philadelphia, PA This week the Mid-Atlantic Fishery Management Council voted to address additional conservation of river herring and shad through an interagency working group. Once abundant throughout the region, river herring (alewives and blueback) and shad (American and hickory) populations have declined to historic lows in recent decades as a result of habitat loss, overfishing, and other factors. Their depletion has sparked serious concern among scientists, managers, environmental groups, fishermen, and the general public.

The Council has been working for several years to develop management measures to help assist the recovery of river herring and shad populations. In June 2012, the Council approved a suite of measures designed to reduce and monitor incidental catch of river herring and shad in the longfin squid and Atlantic mackerel fisheries, including a cap to directly limit river herring and shad catch in the mackerel fishery. At the same meeting, the Council voted to consider adding river herring and shad as stocks managed under the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan (FMP).

After extensive discussion, public testimony, and consideration of more than 37,000 public comments during this week's meeting in Philadelphia, PA, the Council determined that additional management of river herrings and shads under an FMP was neither required nor appropriate at this time. Instead, the Council adopted a motion to establish a working group composed of regional, state, and Federal management partners that will work to comprehensively address river herring and shad mortality and stock status throughout their range. The Council's decision was based on a range of considerations related to ongoing river herring and shad conservation and management efforts, including:

1. There are many ongoing river herring and shad conservation efforts at various levels which are already coordinated by the Atlantic States Marine Fisheries Commission (Commission) and NOAA Fisheries;
2. The Commission and states have recently increased their control of state landings;
3. The pending catch caps for river herring and shad in the Atlantic mackerel and Atlantic herring fisheries will control fishing mortality of river herring and shad in Federal waters;
4. NOAA Fisheries recently found that river herrings are not endangered or threatened and that coastwide abundances of river herrings appear stable or increasing;
5. Additional research into stock abundance is needed to establish biological reference points; and
6. NOAA Fisheries has recently committed to expanded engagement in river herring conservation.

The Council will review the progress of the working group on a regular basis, with the first review occurring at the June 2014 Council meeting. In three years, the Council will conduct a formal evaluation of the effectiveness of the approved working group approach and determine if it is appropriate, or if a different strategy is required to protect river herring and shad. The Council is also initiating a framework that would improve precision and increase accountability in the river herring and shad cap for the mackerel fishery. A decision on this framework is expected at the February 2014 Council meeting.

For additional information and related documents, visit <http://www.mafmc.org/actions/msb/am15>.

Socioeconomic Survey of ASMFC Commissioners 2013

22 respondents

1. Which state and/or agency do you represent?

Maine

New Hampshire (3)

Massachusetts (2)

Rhode Island

Connecticut

New York

New Jersey (2)

Pennsylvania

Delaware (2)

Maryland

Virginia

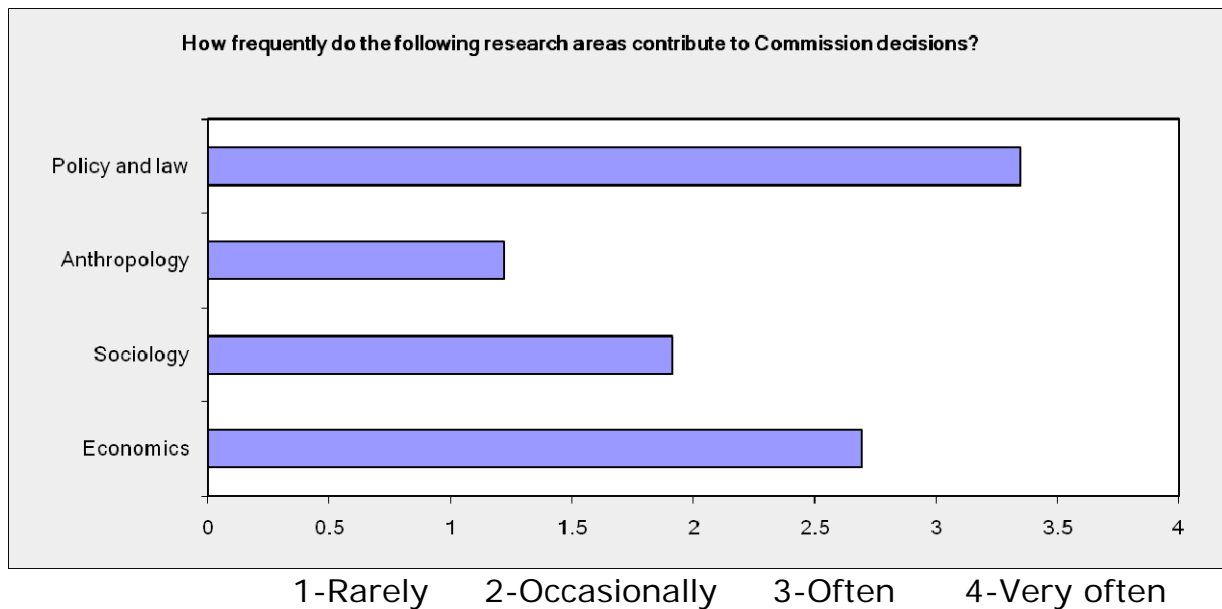
North Carolina

South Carolina (2)

Georgia

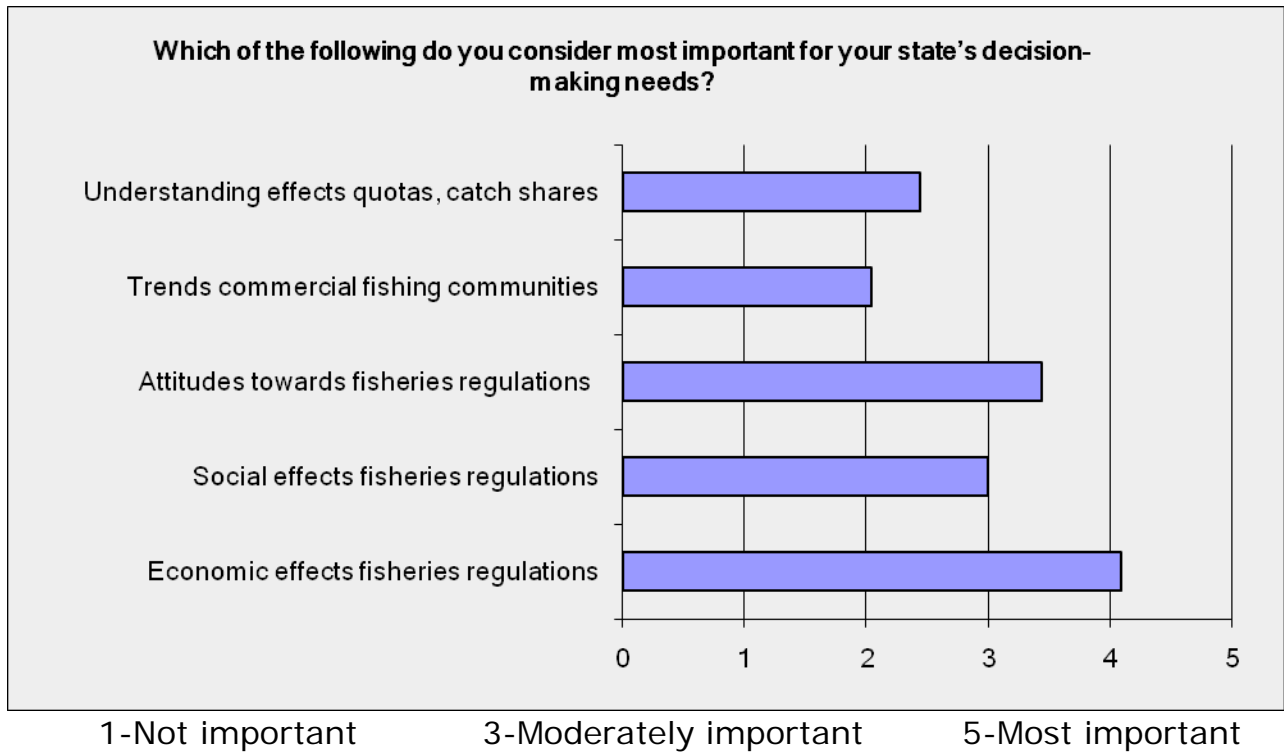
Florida

2. How frequently do the following research areas contribute to Commission decisions?



3. Which of the following do you consider most important for your state's decision making needs?

- Economic effects of fisheries regulations
- Social effects of fisheries regulations
- Attitudes towards proposed fisheries regulations, including values & goals
- Trends in commercial fishing communities
- Understanding the effects of tradable quotas, catch shares and caps



4. What limits the incorporation of social and economic information in fisheries management decision making?

Funding

Access to reliable information from trusted sources

Access to timely information about fishermen, fishing communities and key stakeholders

Access to clearly communicated, easily understood information

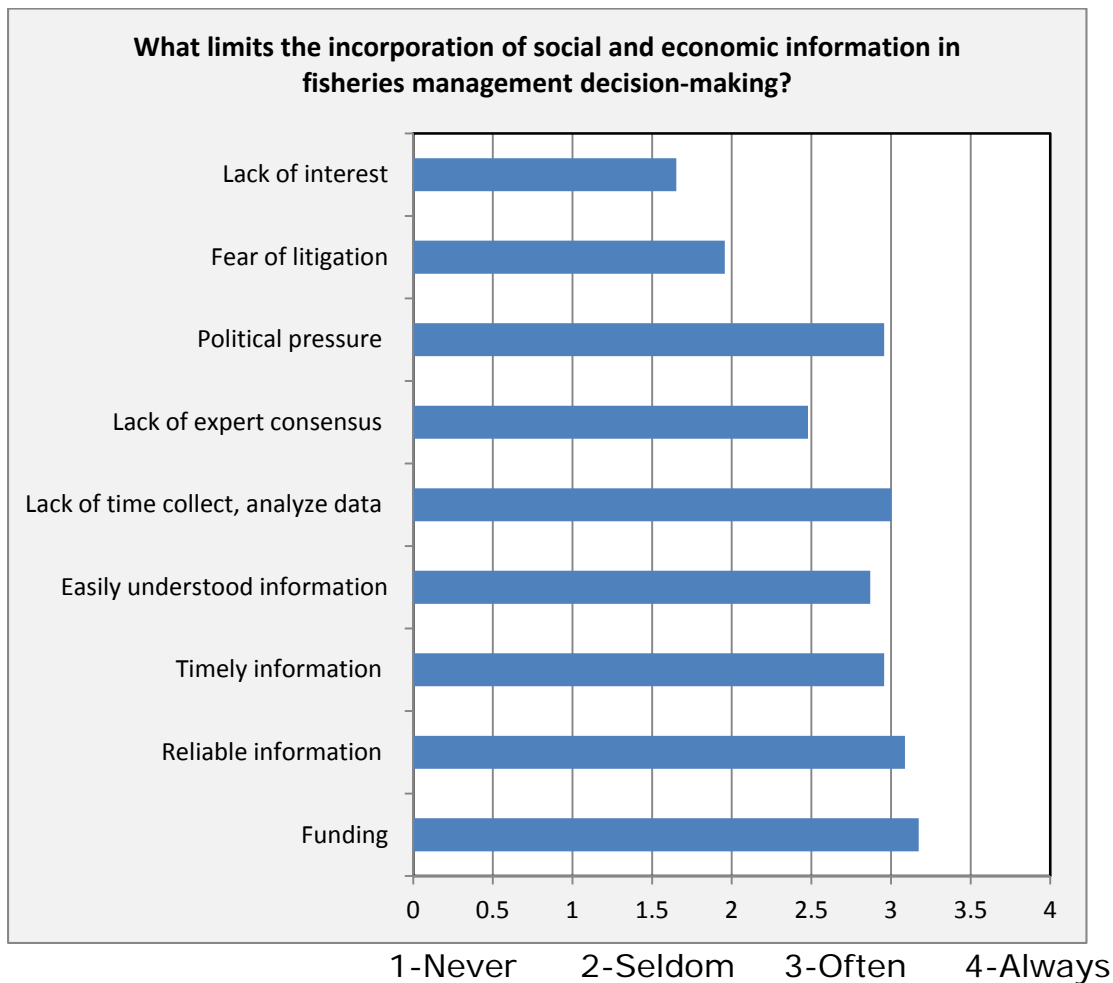
Lack of adequate time to collect and analyze data before management decision needs to be made

Lack of consensus among experts

Political pressure or influence by dominant stakeholders

Fear of litigation

Lack of interest

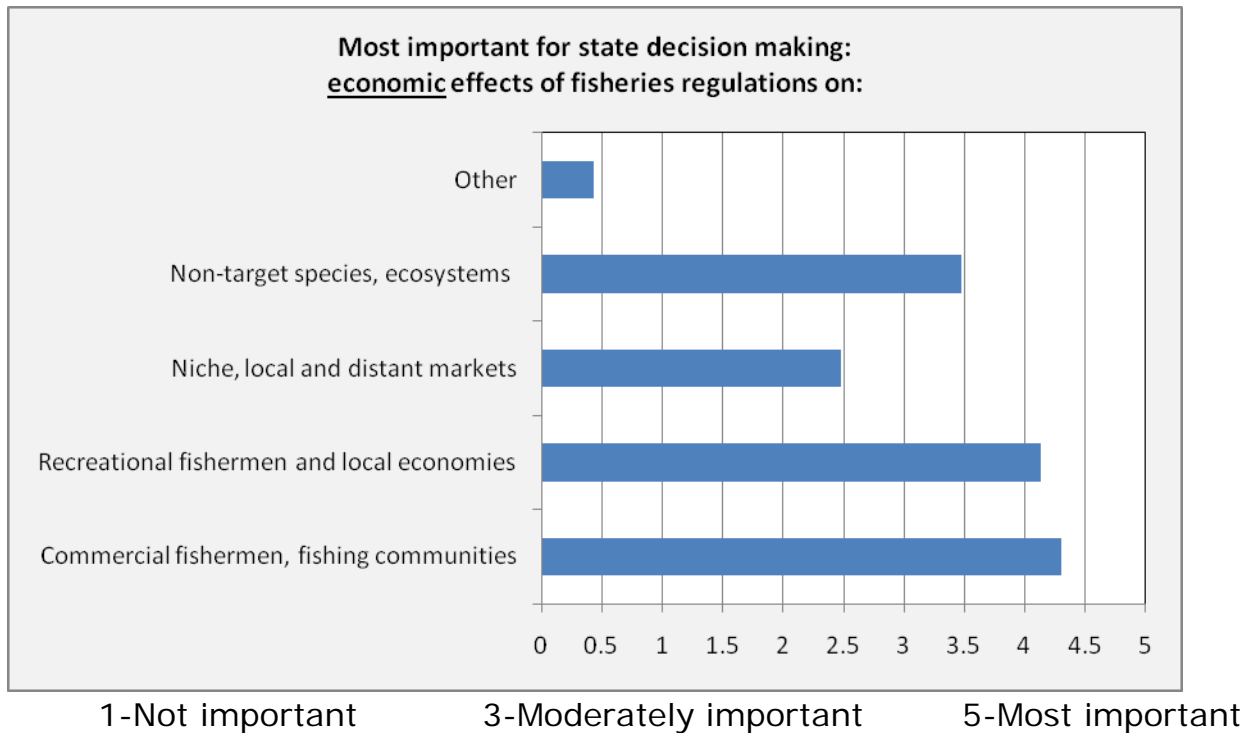


Other comments: joint plans are a problem and little real data

5. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

Economic effects of fisheries regulations on:

- Commercial fishermen and fishing communities
- Recreational fishermen and local economies
- Niche, local and distant markets
- Non-target species, ecosystems and ecosystem services
- Other



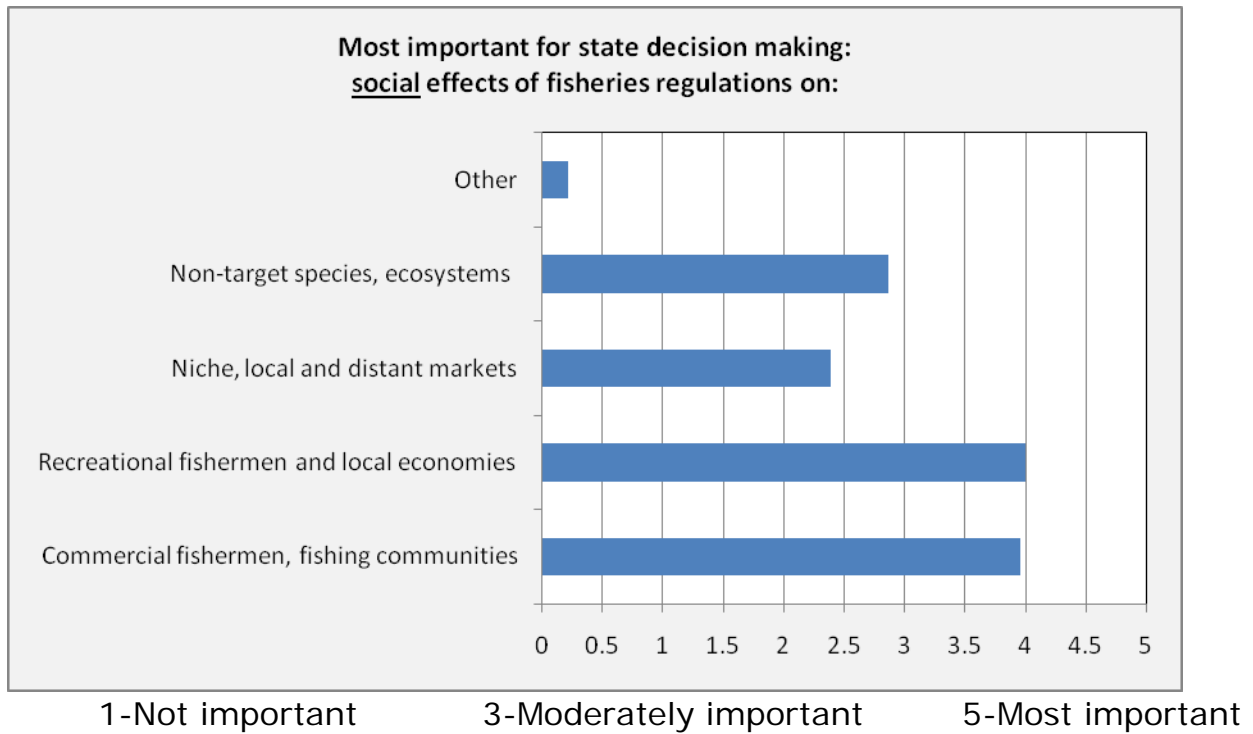
Other comments:

valid set of data to help forge decisions.
far sighted view to species recovery, leading to economic benefits on the long term

6. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

Social effects of fisheries regulations on:

- Commercial fishermen and fishing communities
- Recreational fishermen and local economies
- Niche, local and distant markets
- Non-target species, ecosystems and ecosystem services

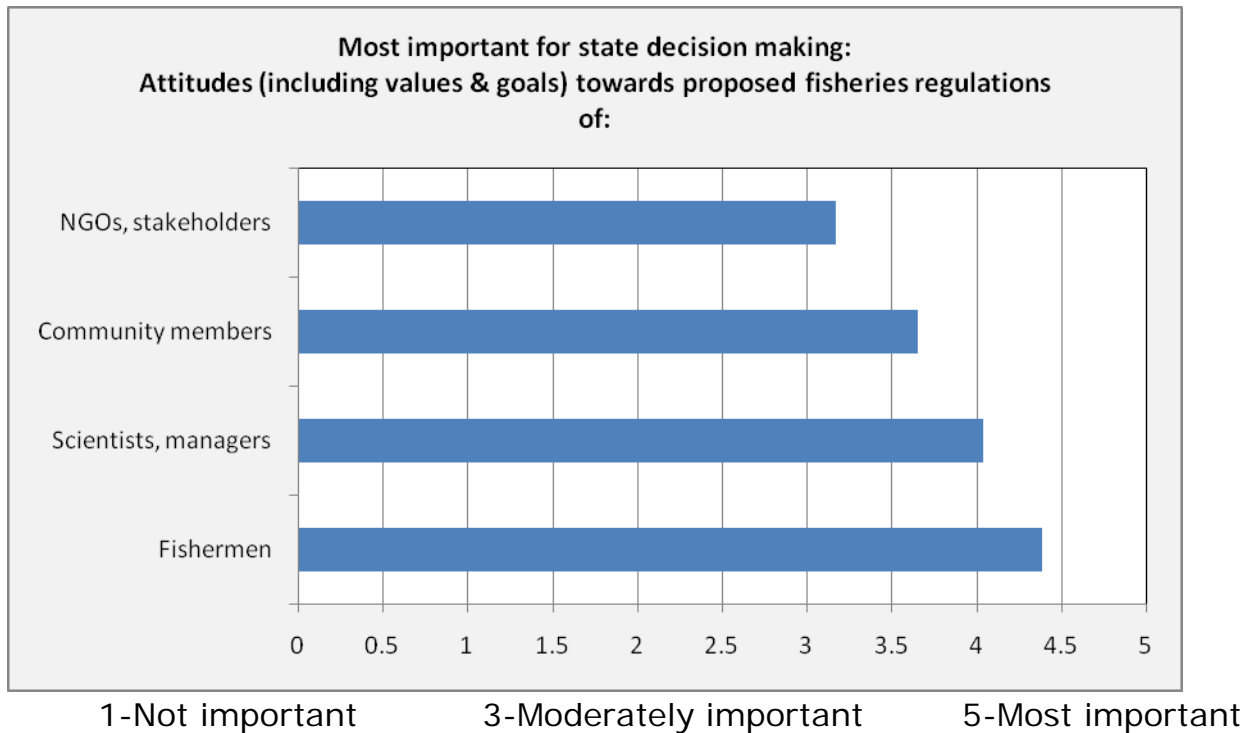


Other comments: Valid set of data to forge decisions

7. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

Attitudes (including values & goals) towards proposed fisheries regulations of:

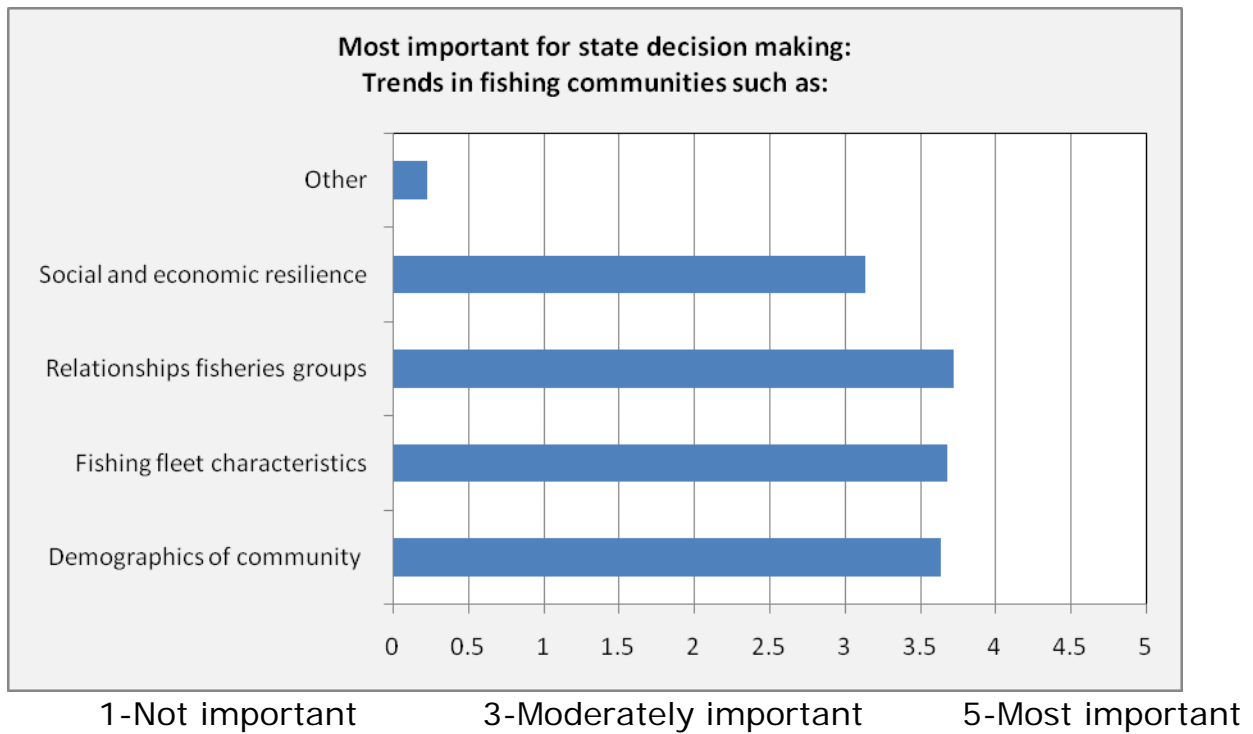
- Fishermen, especially by target species and/or gear
- Scientists and managers
- Community members, including families/groups
- NGOs and other stakeholders



8. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

Trends in fishing communities such as:

- Demographics of the community, including social welfare, distribution of wealth, gentrification of ports
- Fishing fleet characteristics, including vessel or permit ownership, gear type, employment, time at sea
- Relationships among commercial and recreational fisheries, support/associated industries, fisheries scientists, managers, ENGOs and other stakeholders
- Social and economic resilience, e.g., social and professional communication networks
- Other

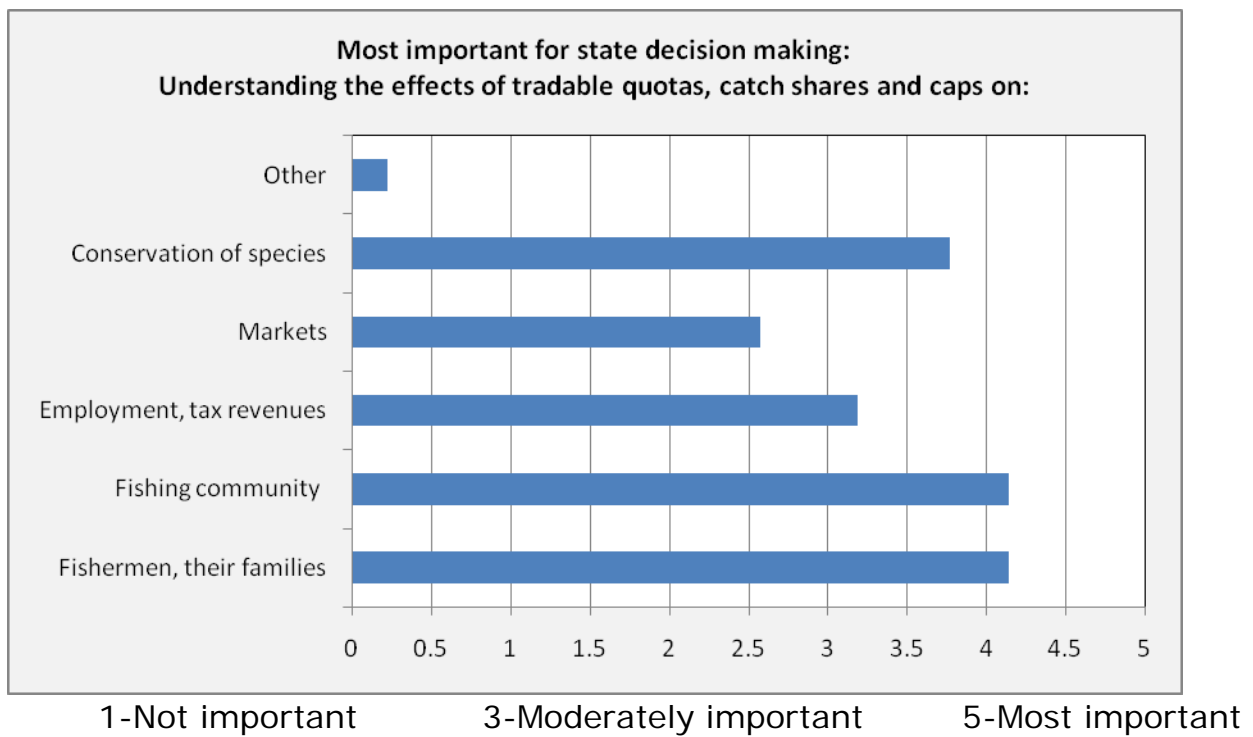


Other comments: conservation of natural resources

9. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

Understanding the effects of tradable quotas, catch shares and caps on:

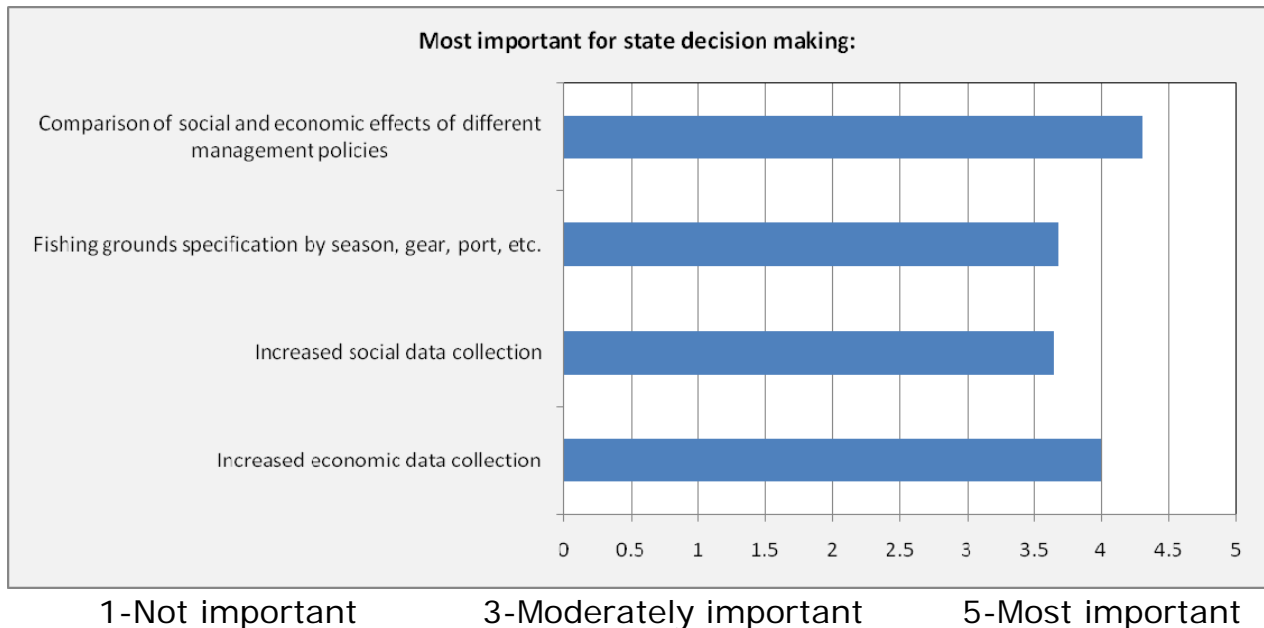
- Fishermen and their families
- The fishing community (e.g., including shoreside businesses)
- Employment, tax revenues
- Niche, local and distant markets
- Conservation of target and non-target species
- Other



Other comments: do not support

10. Which of the following do you consider important for your state's decision making needs? (Please rank each on a scale of 1-5 with 5 being most important, 3 moderately important, 1 not important)

- Increased economic data collection
- Increased social data collection
- Fishing grounds specification by season, gear, port, etc.
- Comparison of social and economic effects of different management policies



11. Please select one or more social and economic information or research needs listed in this survey or other(s) that you consider a need or priority area.

(Answers by respondents provided below, grouped by subject. Numbers denote the ranking (#1-3) respondents designated each response.)

Socioeconomic effects of actions

- 1 Comparison of social and economic effects of different management policies
- 1 economic impact of management alternatives, standard methods
- 2 best management practices and their social effects
- Economic effects of fisheries regulations on non-target species, ecosystems and ecosystem services
- 1

- 2 data on economic effects of regulatory actions
 - 1 Regulatory impacts on fishermen
- Economic data needs, especially recreational
- 2 Increased economic and social data collection
 - 1 access to reliable fisheries economic information
 - 1 Basic recreational fisheries since we have very little data
 - 2 recreational fisheries data by species
 - 1 survey data relative to VTR's for party/charter vessels.
 - 2 Accurate data of actual recreational fishers
 - Standardization of methods used to determine value of recreational fishing
 - 1 experiences
- ITQ's, catch shares
- 2 Are ITQs desirable for society as a whole?
 - 1 understanding the effects of tradable quotas
 - Understanding the effects of tradable quotas, catch shares and caps on
 - 2,1 conservation of target and non-target species
 - Understanding the effects of tradable quotas, catch shares and caps on
 - 3 fishermen and their families
- Allocation
- 1 allocation
 - how to allocate allowable catch between commercial and recreational
 - 1 interests
 - 1 recreational fishing
 - 2 commercial fishing
- Climate change, ecosystem
- 1 Habitat and populations changes due to climate change.
 - social and economic impacts of a changing ecosystem resulting from
 - 2 climate change
 - 2 Ecology, multi-species management
 - 3 Value of ecological services provided by fish biomass left unharvested
- Community impacts
- 2 Commercial fishermen and local economies
 - 3 Recreational fishermen and local economies
 - 2 Community impacts
 - 3 effect on coastal fishing operations
 - Demographics of the community, including social welfare, distribution of
 - 3 wealth, gentrification of ports
- Other
- 1 Menhaden bait versus reduction fishery
 - 2 Horseshoe crab and shorebird ecotourism
 - 3 Recognition of needs of small boat operators
 - Methods to determine cost-benefit of impacts of protected species policy
 - 2 on recreation and commercial fishing
 - 3 value if pound of fish both commercial and &recreationly

12. Are there specific social and economic questions you would like CESS to examine to inform pending or future fisheries management decisions?

from Question 11 categories

Socioeconomic effects of actions	-comparison of economic and social consequences of various management actions
Economic data needs, especially recreational	-Commercial fishery multipliers from dockside value to consumers.
ITQ's, catch shares	-There are so many questions related to tradable quotas, I would like to know what is behind those questions. As a believer that fishery resources belong to the public, I am opposed to giving away exclusive harvest rights which can then be bought and sold as though it were IBM stock.
Allocation	-How should we allocate allowable catch between states and regions, between groups of fishermen? -Division of quotas between states and sectors
Climate change, ecosystem	-The full value of healthy food webs to maintaining stable and productive fisheries. -Effects of climate change, sea level rise.
Community impacts	--
Other	-Would like to know the percentage of comm. landings are for out of US sales.

13. Have you been involved in management decisions in which you wished you had access to better social or economic information? If yes, please explain.

94% of respondents have been involved in management decisions in which they wished they had access to better social or economic information

- yes. Many decisions at the state level.
- Yes. Menhaden. Societal/economic benefits of menhaden used in reduction vs bait.
- Amendment 16 catch share program
- Yes. Any quota-managed species or species with biological reference points as the basis for management.
- Yes, see #1 and #2 in line 11.
- Didn't have enough time or analysis while considering moving from days at sea to sector management in groundfish
- Sure, just about all of the management decisions I've been involved in including species like horseshoe crabs and summer flounder and black sea bass, just to name a few.
- Yes. Historically, the approach to menhaden management (& other forage species) has been skewed toward short term catch benefits due to lack of information on & understanding of the value to all fisheries of maintaining high menhaden biomass (see #12).
- yes
- Yes - occasionally economic data was lacking where decisions were made only to find out later a better decision would have been made with better data
- Yes--distribution of impacts associated with managing fisheries as an ecosystem component
- yes. re. menhaden and state-by-state quotas.
- no
- Habitat issues concerning dam removal.
- In almost every management decision, I wish we had better social and economic information. What we usually have is sparse, dated, and debated by those in the field of socio-economic surveys.
- Yes and there are too many reasons to list
- Yes, most recently in proposed size increases for lobster and conch, better descriptions of short and long-term economic impacts would have been helpful.

14. If you have been involved in management decisions in which you wished you had access to better social or economic information, then please explain your involvement.

- yes. Many decisions at the state level.
- As a Board member.
- Recreational fisheries decisions involving size limits that impact different areas in different ways.
- Menhaden Amendment 2, the report the CESS produced was very uninformative, it generally pointed out qualitative information we already knew. There was little to no guidance provided to the Board.
- NEFMC member- Decisions on moving to catch share system(sectors) in groundfish
- As an ASMFC Commissioner (Governor's Appointee as well as an Administrative Commissioner proxy). Making decisions without a lot of economic/social data was routine.
- This has been my experience as a commissioner, an advisory panel member and a stakeholder advocate for conservation.
- yes
- In-state quota management and regulatory decisions
- yes. Horseshoe crabs and impact on NY comm. sector due to restricted quota.
- no
- As a commissioner
- Working on NE Groundfish, Amendment 16 post-implementation impact analysis.