

# Atlantic States Marine Fisheries Commission

## American Eel Management Board

*January 31, 2017  
4:45 – 5:15 p.m.  
Alexandria, Virginia*

### Draft Agenda

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

1. Welcome/Call to Order (*J. Clark*) 4:45 p.m.
2. Board Consent 4:45 p.m.
  - Approval of Agenda
  - Approval of Proceedings from August 2016
3. Public Comment 4:50 p.m.
4. Review 2017 Stock Assessment Update Schedule (*K. Anstead*) 5:00 p.m.
5. Review Technical Committee Report (*K. Rootes-Murdy*) 5:10 p.m.
  - Review YOY surveys and Maine Life Cycle Survey
6. Other Business/Adjourn 5:15 p.m.

The meeting will be held at The Westin Alexandria, 400 Courthouse Square, Alexandria, Virginia; 703.253.8600

*Vision: Sustainably Managing Atlantic Coastal Fisheries*

# ***Atlantic States Marine Fisheries Commission***

## **MEETING OVERVIEW**

### **American Eel Management Board Meeting**

**January 31, 2017**

**4:45 – 5:15 p.m.**

**Alexandria, Virginia**

Chair: John Clark Assumed Chairmanship: 8/15	Technical Committee Chair: Tim Wildman (CT)	Law Enforcement Committee Representative: Cornish
Vice Chair: Martin Gary	Advisory Panel Chair: Mari-Beth Delucia	Previous Board Meeting: August 4, 2016

**Voting Members:** ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, VA, NC, SC, GA, FL, D.C., PRFC, USFWS, NMFS (19 votes)

#### **2. Board Consent:**

- Approval of Agenda
- Approval of Proceedings from August 2016 Board Meeting

#### **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-up 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 Board Chair will not allow additional public comment. 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 2017 Stock Assessment Update Schedule (5:00 – 5:10 p.m.)**

##### **Background**

- In Spring 2016, the Technical Committee (TC) recommended that a stock assessment update be completed in 2017. The TC recommended a stock assessment update over a benchmark stock assessment due to the lack of progress in eel research since the last benchmark stock assessment in 2012.
- In November 2016, staff requested nominees to populate the Stock Assessment Subcommittee. The subcommittee was finalized in December 2016 and met via conference call earlier this month to begin planning calls and meetings to complete the Stock Assessment Update by fall 2017.

##### **Presentation**

- 2017 Stock Assessment Update by K. Anstead

##### **Board Actions for Consideration**

- None

**5. Review Technical Committee Report (5:10 – 5:15 p.m.)**

**Background**

- The Technical Committee met in September 2016 to review a number of items including young-of-year (YOY) surveys, discuss the upcoming stock assessment update scheduled for 2017, landings versus harvester reports for quota tracking, the Maine life-cycle study, and current research items. (**Briefing Materials**)

**Presentation**

- Technical Committee Report by K. Rootes-Murdy

**Board Actions for Consideration**

- None

**6. Other Business/ Adjourn**

**DRAFT PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
AMERICAN EEL MANAGEMENT BOARD**

**The Westin Alexandria**  
Alexandria, Virginia  
**August 4, 2016**

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

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1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of May, 2016** by Consent (Page 1).
3. **Tabled motion from the May 2016 meeting: To initiate an addendum to reconsider the coastal cap and the commercial yellow eel state-by-state allocation.**  
  
**Move to postpone the proposal indefinitely** (Page 6). Motion by Steve Heins; second by Pat Keliher. Motion carried (Page 6).
4. **Move to approve the proposed North Carolina Glass Eel Aquaculture Plan for 2017 and the Technical Committee recommendations** (Page 14). Motion by Bob Ballou; second by Bill Adler. Motion carried unanimously (Page 16).
5. **Move to adjourn** by consent (Page 17).

**ATTENDANCE**

**Board Members**

Pat Keliher, ME (AA)	Tom Fote, NJ (GA)
Steve Train, ME (GA)	J. Thomas Moore, PA, proxy for Rep. Vereb (LA)
Rep. Jeffrey Pierce, ME, proxy for Sen. Langley (LA)	Loren Lustig, PA (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Andrew Shiels, PA, proxy for J. Arway (AA)
Cheri Patterson, NH, proxy for D. Grout (AA)	John Clark, DE, proxy for D. Saveikis (AA)
G. Ritchie White, NH (GA)	Roy Miller, DE (GA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Rachel Dean, MD (GA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
William Adler, MA (GA)	David Blazer, MD (AA)
Robert Ballou, RI, proxy for J. Coit (AA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
David Borden, RI (GA)	Doug Brady, NC (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Michelle Duval, NC, proxy for B. Davis (AA)
Rep. Melissa Ziobron, CT, proxy for Rep. Miner (LA)	Ross Self, SC, proxy for R. Boyles, Jr. (AA)
Dave Simpson, CT (AA)	Malcolm Rhodes, SC (GA)
Steve Heins, NY, proxy for J. Gilmore (AA)	Pat Geer, GA, proxy for Rep. Nimmer (LA)
Emerson Hasbrouck, NY (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
John McMurray, NY, proxy for Sen. Boyle (LA)	Sherry White, USFWS
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Chris Wright, NMFS
Russ Allen, NJ, proxy for D. Chanda (AA)	Martin Gary, PRFC

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

**Ex-Officio Members**

Tim Wildman, Technical Committee Chair

**Staff**

Bob Beal	Kirby Rootes-Murdy
Toni Kerns	Max Appelman
Mark Robson	

**Guests**

Chip Lynch, NOAA	Justin Davis, CT DEEP
Deborah Lambert, NOAA	Peter Aarrestad, CT DEEP
Mike Millard, USFWS	Doug Christel, MA Dept. Fish & Game
Wilson Laney, USFWS	Mike Luisi, MD DNR
Lynn Fegley, MD DNR	Brandon Muffley, NJ DFW
Jack Travelstead, CCA	Darrel Young, MEFA
Abden Simmons, MEFA	Arnold Leo, E. Hampton, NY
Angela Young, MEFA	Raymond Kane, CHOIR
Deborah Hahn, Assn. of Fish & Wildlife Agency	

The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, August 4, 2016, and was called to order at 8:00 o'clock a.m. by Chairman John Clark.

**CALL TO ORDER**

CHAIRMAN JOHN CLARK: Good morning, everybody. This is the American Eel Management Board; starting here on the last day of the Summer Meeting. I'm John Clark, the Chair from Delaware.

**APPROVAL OF AGENDA**

CHAIRMAN CLARK: Let's get right into this here. Everybody has an agenda. Are there any additions to the agenda? Seeing none; the agenda is accepted as written.

**APPROVAL OF PROCEEDINGS**

CHAIRMAN CLARK: Everybody has had a chance to look at the proceedings from the Spring Meeting, are there any changes to the proceedings? Seeing none; those are accepted.

**DISCUSSION TO CONSIDER CHANGES TO  
ADDENDUM IV YELLOW EEL ALLOCATIONS**

CHAIRMAN CLARK: We've had no sign ups for public comment; so we will go right into Agenda Item 4, which is Discussion to Consider Changes to addendum IV Yellow Eel Allocations, and I'll turn it over to Kirby.

MR. KIRBY ROOTES-MURDY: I'm going to walk through a presentation that you all received back in the spring of 2016, so it is going to be pretty quick, in terms of covering material. There will be a couple of new slides, just for your consideration; but I would ask that you hold any questions until after we get done with the Technical Committee report.

Just as some background, Addendum IV implemented a coastwide cap of 907,671 pounds for the yellow eel commercial fishery starting in 2015. There are two management triggers associated with this cap. If the coastwide quota is exceeded by more than 10 percent in a given year, or if the quota is exceeded by any amount in two consecutive years, this triggers state-by-state quotas.

Moving forward, the coastwide quota the states work under is 907,669 pounds. Addendum IV commercial yellow eel allocations use basically the average landings from 2011 to 2013, with a fixed quota of 200,000 pounds. If you had no landings in your state, you automatically were bumped up to 2,000 pounds.

Additionally, quota could not exceed 2,000 pounds above the 2010 landings, so prior to 2011, 2010 was set as the base year. The minimum quota change had to be within 15 percent of the 2010 landings. After this filtering process was applied, there was about 13,762 pounds that were leftover. They were then divided among the states that have been negatively impacted by this process of filtering.

I've got up here on this slide, a table that's in Addendum IV, it is in the appendix section, and it basically walks through what each of the states landings were in 2010, what the 2011 through 2013 average was, the initial allocation they would receive based on that; then their quota, and after a filtering method that was applied, what their final quota was. Again, for today, this meeting we're considering New York's proposal. The second slide here really highlights what New York's quota is. While they had approximately 4.26 percent of the harvest, based on that average harvest from 2011 to 2013, because it was much higher than what their 2010 landings were, they were bumped back down to 15,220 pounds.



At the May ASMFC Spring Meeting Board, New York proposed to reconsider the coastwide cap and state-by-state yellow eel allocation as specified in Addendum IV, and that motion was tabled. After I go through this PowerPoint and we hear the Technical Committee report, the board will consider that tabled motion.

New York's proposal highlights a number of points in which they think that allocation should be reconsidered. In particular, incomplete landings in New York were attributed during the allocation years. New York and other states now have several years of more accurate landings data, and the ASMFC operating principal to use the most accurate data for management is what carries most of the states through the fishery management plans.

Addendum IV does not have an allocation revisiting provision, and New York submitted a proposal for the board to discuss the highlighted four points, which was documenting why New York's landings were incomplete, documenting how much of an increase in the quota New York was seeking, reconsidering the commercial yellow eel state-by-state allocation and reconsidering the timeframe for revisiting that allocation moving forward.

In this slide, New York has pulled together their landings, relative to those that are reported out by federal dealer reports. Prior to 2011, data that was queried from NOAA National Marine Fisheries Service commercial fishing statistics database reported yellow eels to ASMFC via the annual compliance reports.

New York later determined that NOAA's data did not include confidential landings, or data from fishermen and dealers who had state but not federal licensing permits. The NOAA database also did not include landings from inland waters, such as the Hudson and Delaware River, and it

did not always include landings that were sold by fishermen for cash or for bait.

New York then concentrated their effort on getting more accurate data into the ACCSP database that is currently now available. When walking through the New York proposal, New York's 2011 to 2015 harvest ranged from a low of 32,000 pounds to a high of 56,000 pounds. The average harvest from 2013 to 2015 was 40,000 pounds.

Average harvest from 2011 to 2015 was 45,000 pounds. If New York's quota was increased by 24,815 pounds, it would achieve its 2013 to 2015 harvest. If the quota was increased by approximately 29,900 pounds, it would achieve its 2011 through 2015 average harvest. This table here is highlighted in the New York proposal as what the scenario would play out if in 2015, state-by-state quotas were implemented based on 2014 harvest.

It shows that overall the overage could not be compensated by transfers among states. In the proposal New York circulated and was included in your supplemental materials for this meeting, they put forward two points in terms of consideration; the first is reconsidering the Addendum IV allocation. There are four options in that A, B, C and D. Option A would be to stay at status quo, B would be to change the allocation based on the most recent three years of data. Option C would be to change that allocation based on the most recent five years worth of data, and Option D would be a mix of recent five years of data as a partial percentage and some historical landings timeframe, as another partial percentage. Now this Option D was not included in the proposal, so Options B and C are what folks may have tables that they can reference and look at.

The next slide here walks through what the Options B and C are, in terms of looking at either

a 2013 to 2015 average or a 2011 to 2015 average. The second decision point that New York brought up was the time table for revisiting the allocation, so there are three options here, Options A, B and C.

A would be to stay at status quo, B would be to revisit allocation every three years, and Option C would be to revisit allocation every five years. New York's recommendation, they circulated the proposal to the board for consideration today and initiation of an addendum at the August, 2016 board meeting, so that is the tabled motion that the board will take up.

One other point that was raised by Virginia, regarding reconciling differences in landings information, when it comes to looking at the yellow eel fishery, there are at least two types of reporting that need to be considered. There are harvester reports and there are dealer reports. Harvest reports account for eels that are sent out of state, so they're sold to dealers out of state, eels that are sold to dealers in state, as well as eels that are used for either personal consumption or bait.

Dealer reports account for eels that are sold to in-state dealers, and at the October, 2015 TC meeting, the TC recommended that moving forward all states should use harvester reporting to track quota to eliminate concerns about double counting and to resolve any issues associated with personal bait. Those are some things to consider when looking at reallocation, as well.

Again, the motion that was put forward at the May meeting was to initiate an addendum to reconsider the coastal cap and the commercial yellow eel state-by-state allocation. The motion was by Mr. Gilmore and seconded by Mr. Borden. I'll take any question at this point, if there is any confusion; but hopefully, this is

pretty straightforward to what was presented back in May.

CHAIRMAN CLARK: Okay questions, we have Tom Fote.

MR. THOMAS P. FOTE: If I'm understanding this right, it is similar to what happened in summer flounder. When you start getting a better estimate of what you're actually landing, or in the recreational sector what you're actually catching; all of a sudden your quota exceeds your needs, because that is really what you're catching.

Instead of basically changing the allocations, would it be possible just to say, we under reported the landings. It means the stock was big, because we were catching more eels than we thought were out there. Wouldn't it just be easier to increase the quota to handle those adjustments, because we underestimated a stock by not having those landings in the first place?

This is the argument I made in 2003, to try to help New York through the summer flounder situation. Well, we couldn't do that because it was tied with the Mid-Atlantic Council. Here at the Atlantic States Marine Fisheries Commission, we try to help our partners and the other states involved; and couldn't we do something like that, which means we don't have to get into this allocation thing, just adjust it according to what they were actually landing, as we figure out that NMFS wasn't recording what they were landing.

MR. ROOTES-MURDY: I'll take a stab at answering that. As was pointed out at the last meeting, to make an adjustment to the coastwide cap or the state-by-state allocations would require an addendum. Regarding accounting for inaccurate landings, this gets to a point that we're going to get into it, the TC report in just a couple minutes, and there is a

recommendation for them on how to deal with that; in terms of accounting for all states that may have under reported or have inaccuracies with their data.

CHAIRMAN CLARK: Next question is Rob O'Reilly.

MR. ROB O'REILLY: I just wanted to respond a little bit. I don't want to take away from the process that we're going to look at now with the addendum. It is simpler than what Kirby had indicated for the case that Virginia has been making for several meetings. We've had a mandatory harvest reporting system since 1993.

What was placed into the addendum, which could turn out to be an active quota, is our harvest just from Virginia waters. We may not be unique, but a lot of states have a little bit of overlap where they have harvest from their own waters and harvest from neighboring state waters as landings.

We just have the harvest. What is the impact of that? The impact of that is anywhere from 2 to 20,000 pounds a year, if we had landings. Now unfortunately, the landings include the Potomac River Fishery Commission; because they don't have landings sites, so they're either landing in Virginia or Maryland. I'm not sure how that gets taken care of, or if it can, but that is really the situation.

CHAIRMAN CLARK: The next question is from Dan McKiernan.

MR. DAN MCKIERNAN: Just to clarify, is one of the options or the proposals in the proposed addendum to shift to harvested data to monitor quotas? Is that actually going to be proposed?

MR. ROOTES-MURDY: In the New York proposal that is not a specific option or recommendation.

CHAIRMAN CLARK: Seeing no further questions, oh Lynn Fegley.

MS. LYNNE FEGLEY: This isn't so much of a question. I just wanted to put on the record that the Maryland landings are incorrect in Table 2 of the New York proposal. They are slightly off for 2013 and 2015. In 2013 the landings were 539,775 pounds. That is what is in the table. In actuality, those landings were 568,199; and in 2015 the landings should be 493,043 pounds as opposed to 470,532. I just wanted to get that on the record, thank you.

CHAIRMAN CLARK: Okay, we're going to have the Technical Committee report.

#### **TECHNICAL COMMITTEE REPORT**

MR. TIM WILDMAN: Good morning, everyone. Back in July, the TC met and reviewed a proposal from New York to address the quota allocation in Addendum IV. The harvest records that determine New York's quota were based on incomplete data, resulting in potentially inequality in allocation to the state. Concerns were expressed from several TC members regarding the reporting of landings from all the states, and it was reiterated that the TC members need to confirm reference period landings in the Addendum IV table.

Additionally, there was concern that New York's revised landings could include silver eels from the Delaware River weir fishery, thus over inflating their need for yellow eel allocation. There are no current datasets to address this historical data correctly, but New York is working on parsing out the numbers of silver eels from annual landings moving forward.

In the meantime, the state-by-state landings data will be updated, and then revised if need be during the 2017 stock assessment update. Therefore, the TC concluded that a discussion of

expanding the coastwide cap, in light of the New York situation, should be set aside until the update is performed.

CHAIRMAN CLARK: Thank you, Tim; I'm sorry I forgot to introduce Tim. Tim Wildman is the TC Chair from the state of Connecticut. Any questions for Tim about the TC report? Roy.

MR. ROY W. MILLER: It is not a question so much for Tim, but perhaps, Steve. Steve, how would you answer the question of whether the silver eel landings were perhaps included in those yellow eel landings?

MR. STEVE HEINS: Well, I think that New York is going to be held accountable for our Delaware River eel fishery. We're going to have to count those landings, unless we're being held harmless for harvesting those eels. Are they separate from our yellow eel fishery? I don't know. If we're going to be held responsible for those landings, I don't know why they wouldn't be part of the equation.

Certainly, some of them are silver eels, and some of them are yellow eels; and we're working on that right now, trying to determine. But as you might imagine, it is difficult unless the fish are metamorphosed to determine whether they're – even if they're out migrating – I mean they may enter the traps just inadvertently in the weirs. I just think that we have to look at this Delaware River eel fishery and include the eel fishery in the Hudson River along with our landings on the coast. That's the whole equation. That would be my response.

CHAIRMAN CLARK: Follow up, Roy, and I would just like to point out that in Addendum IV, the silver eel harvest is just limited by number of permits in New York. From my recollection, there is no reporting requirement for those silver eels in the poundage.

MR. MILLER: I take it, Steve, at this point we can't really parse out from the new landings attributed to New York for 2011 to 2013, we can't really parse any silver eels out of that. Is that what you're saying, that they are part of those landings?

CHAIRMAN CLARK: Go ahead, Steve.

MR. HEINS: Right, whatever landings we have from the Delaware River are accounted for as Delaware River. In other words those fishermen report to us. We can tell you what those weir landings were, but I cannot tell you what proportion of them were silver eels. If you want to assume that they're all silver eels, that's fine, but we can't determine that at this point. We are collecting data, and we do have people that are sampling. We have some idea, but at this point, we don't.

MR. PATRICK C. KELIHER: If you recall at the last meeting, I made a big swing and a miss about trying to include elvers into this conversation, and to me there is a little bit of a fairness question. The state of Maine has invested thousands and thousands of dollars into a swipe card reporting system; very robust system to be able to track our catch. We've already made some changes to allow silver eel harvest within New York, where the rest of us have given up our silver eel fisheries. I just think this is premature, and I support, at this time, the TCs recommendation.

CHAIRMAN CLARK: All these questions would require an addendum, as Pat pointed out, so that could be the direction we go. But at this point, are there any further questions for Tim or for Kirby? Seeing none; I guess at this point we'll bring back the question that was tabled. Let me turn it over to Steve, for New York to fill us in on their position on this now.

MR. HEINS: I think that there is sufficient concern around the table for improvement of the states records on the landings. We heard concerns about the elver fishery. New York's biggest concern at this point is that all the work that we put into trying to improve our reporting and get better information into our system, is not going to punish us in this situation in this fishery, in menhaden and other fisheries.

We're very interested in moving forward with changes to our quota. At the same time, I think that maybe all the states need a chance to take a crack at this; and we're not going to be able to do that until after we get the next stock assessment update in 2017. **I would move to postpone indefinitely, unless there are other thoughts on the matter.**

CHAIRMAN CLARK: This is a new motion, is there a second? We have a second from Pat Keliher, any discussion of the motion, seeing none; why don't we take a second to caucus and then we'll vote. A question from Jim.

MR. JIM ESTES: I am a little bit confused by what this motion will do. If I could get a further explanation so I could know what to do here?

CHAIRMAN CLARK: I believe what we're doing is postponing consideration of the main motion indefinitely, which I guess means until after we've gotten the next assessment and have started the next addendum process. I think it essentially kills it. Is everybody ready to vote? Do we have any objections to the motion? **Seeing none; the motion passes and the proposal is postponed indefinitely.**

At this point then, we will move on to Agenda Item 5, which is to consider the North Carolina Glass Eel Aquaculture Plan for 2017. Kirby has a report to start.

### **CONSIDER THE NORTH CAROLINA GLASS EEL AQUACULTURE PLAN FOR 2017**

MR. ROOTES-MURDY: Similar to, I believe, the February meeting, I'm actually going to walk through North Carolina's proposal as it was presented to the Technical Committee in July. Then I will turn it over to Tim to provide the TC report; and if there are any further questions on the proposal, I might direct those questions towards Dr. Duval to be able to answer. North Carolina has put forward a revised aquaculture plan for 2017. Just again, some background. At the February meeting the board approved the North Carolina aquaculture plan for 2016; allowing up to 200 pounds of glass eels to be harvested for aquaculture purposes. The board's approval was contingent on two issues, that exports of glass eels would be prohibited, and that the second year of the plan would be conducted as a pilot program; where the TC would try to determine sampling protocols to get at estimates of abundance and possibly develop a young-of-year survey off of it.

In February of this year, North Carolina Marine Fisheries Commission approved declaration ruling, allowing the American Eel Farm to possess American eels less than nine inches from North Carolina waters. As of March 18, they were notified they would be able to start fishing on March 21st. They officially started that day and the following day they had an official declaration from the state.

In looking at the results, the American eel farm was able to fish for about three weeks, from the last week of March through the middle of April. They fished five of 13 sites and caught zero glass eels. Two elvers were captured and released, and it was confirmed that it was difficult to catch glass eels with fyke nets in coastal waters.

In May of this year, North Carolina DMF informed the American Eel Board of its intent to

submit a new aquaculture plan for a second year program, due to the late start and zero harvest. On May 31st, North Carolina submitted a plan to ASMFC staff, which was then circulated to the Technical Committee.

I'm going to walk through next the major changes that have happened; just outlining from what the 2016 plan that the board considered and approved in February, and what the 2017 plan offers. Currently, the difference in the 2017 plan is that instead of starting harvest on February 22, in 2017, harvest would begin January 1 and go through April 30th.

Regarding the fish time, during the months of January 1st through February 28th, the fish nets would be done once every 24 hours, and then from March 1st through April 30th, fish nets would be fished every two hours before sunset through two hours after sunrise. This was different in that previously, the two hours before sunset through two hours after sunrise applied throughout the entire period. This will only apply from March 1st through April 30<sup>th</sup>; whereas, January 1 through February 28th is once every 24 hours.

Additionally, in the 2017 plan, there would be one individual on the permit and allowed for two mates to help; whereas, in the 2016 plan there were three individuals who were allowed to fish under the permit and allowed for one mate each; so a total of three mates total. In the 2017 plan there is an additional site, which includes the White Oak River; whereas, in 2016 there were ten primary sites, so it increases it by one. There are 11 sites in the 2017 plan.

This map here demonstrates the area of the North Carolina coast in which the additional site would take place in the White Oak River. This offers kind of a land use breakdown of what the watershed looks like. It is mixed use in terms of

residential, further up there is more vegetative cover, but it is an impaired water body.

As just noted, the White Oak meets the criteria of a Category 4 and 5, impaired water body. Shellfish collection is prohibited from the area, and it is a relatively small river located outside of the Albemarle and Pamlico Sound along central North Carolina coast. Some of the benefits is that it would not need to use alternate sites located near the mouth of the Neuse River, and that it had been a data poor area previously; in terms of sampling of American eel, and that there was greater freshwater influence in this area, which would hopefully increase the likelihood of encountering glass eels.

In terms of the new plan, I'm going to walk through the monitoring components that differ in this version versus the last. For the 2017 plan, glass eel harvest at each net would be recorded out as actual weight; whereas, in the 2016 plan it was estimated weight. For this revised plan, the total glass eel harvest reported before returning to the landing site would be actual weight; whereas, in the 2016 plan it was estimated weight.

In the 2017 plan, elver weight would be recorded at each net; whereas, there was no elver work up in the 2016 plan. There would be a change in terms of calculating the CPUE from going to a monthly calculation as opposed to doing it at the end of the harvest season. An important other point to note is that in terms of the monitoring program, there was a change to the permit requirement; which was that instead of allowing for warrantless inspections, they now will not have that provision on it.

Warrantless inspections and searches of gear and vessel and persons will not be allowed. There will also be less phone calls to the communications center reporting out on harvest, and a shift in the time when the gear will

be inoperable on weekends. This, again, just shows where, in terms of the likely harvest boundary for glass eels on the White Oak River is.

This last slide just provides a full summary of the changes between the 2016 plan and the 2017 plan. Just to tee up Tim's presentation and then Mark Robson, our LEC representative's report. This report was submitted to the TC, they considered it, the LEC also had time to review it, and that will be for the board to consider after those two reports. I'll turn it over to Tim, unless there are any questions at this point.

#### **TECHNICAL COMMITTEE REPORT**

MR. WILDMAN: During our last meeting we met and discussed this proposal, obviously. The TC felt that the addition of the White Oak Cove as an additional site, we received that favorably since there has been some previous research in this site; and that could complement the dataset from the aquaculture plan. It could additionally serve as a permanent young-of-year survey site.

The other changes were also accepted by the TC, contingent on the following recommendations: that a YOY survey site should be developed at one of the sites, in conjunction with the aquaculture plan going out in year three, which is 2018. Due to the 24 hour soak times, fyke net mortality should be addressed during the months of January and February.

CHAIRMAN CLARK: Now, we'll have a report from the Law Enforcement Committee from Mark Robson.

#### **LAW ENFORCEMENT COMMITTEE REPORT**

MR. MARK ROBSON: The Law Enforcement Committee had an opportunity to review this revised aquaculture plan proposal during its teleconference call on July 8th. We had good attendance for that meeting. During the call we

were briefed on the substantive changes to the permit, and the permit conditions from last year's implementation. If you recall, the LEC had commented on that original proposal in a memo, January 15, 2016. During our recent teleconference call, our North Carolina law enforcement representative did report on the shared learning experiences of the enforcement officers and the vendor in this new program. As a result of our discussions, there really were no significant concerns or questions raised regarding the proposed changes to the aquaculture collection program as it is being revised or requested to be revised; and the LEC continues to support the plan as one that has taken reasonable steps to ensure adequate enforcement and monitoring of collection activity. That concludes my report, Mr. Chairman.

CHAIRMAN CLARK: Do we have any questions for Kirby, Tim or Mark? Bob Ballou, Tom Fote.

MR. BOB BALLOU: Mark, I'm just curious. The proposal to drop the warrantless search provision, how did the LEC review that; and apparently why were there no concerns about dropping that provision from the plan?

MR. ROBSON: That was mentioned of course as a change, and there was some question as to why that was done. The general response was that it was something that North Carolina felt they needed to do, and as a result of the discussions there were no more questions about that issue. There didn't seem to be any major concerns about that change.

MR. FOTE: My question was going along the same line. I mean, in New Jersey, you don't need a warrant to check anybody operating, the fisheries are onboard. Do you need a warrant in North Carolina to basically search any boat that is actively fishing? That is what's confusing to

me. Are your laws different than the ones in New Jersey – through the Chair?

CHAIRMAN CLARK: Michelle, can you answer that?

DR. MICHELLE DUVAL: I'll do my best, Mr. Chairman. There were some recent legislative changes as a result of last session that significantly, I think, reduced the ability of law enforcement to be able to board a boat and inspect coolers or anyone's fishing catch. It was something that we're actually trying to get modified in a future session.

I think it was aimed more at wildlife inspections. Unfortunately, the way the legislation was written, it also incorporated marine patrol. But because it is statutory language, it has significantly reduced our ability to do that. That is why this request was made by marine patrol, so as not to be in conflict with statute.

CHAIRMAN CLARK: Follow up, Tom.

MR. FOTE: Yes, but if it was part of the contract and they agreed to sign the contract, then they're waving their right to a warrant, and why not leave that in there? The only thing that is a concern to me is this is a fishery that can be ripe for poaching, for basically because of the price per pound; and that's one of my concerns here.

We have these problems going on in Jersey where we catch people doing it. It happens in numerous states. I always thought that this was a good deterrent. There is no reason for a person to give up, they can give up their rights to do that and all they have to do is keep it in the proposal. That is what I'm trying to figure out, why they can't voluntarily say, because we're actively involved in this fishery that needs to be monitored a certain way; that we support being able to be searched.

CHAIRMAN CLARK: Michelle, would you like to respond to that?

DR. DUVAL: Again Tom, it is a concern that anything that would be in there that would be inconsistent with the statutory language could put us, the Division, at risk, and we didn't want to do that.

CHAIRMAN CLARK: Do we have any other questions?

MS. CHERI PATTERSON: My question as a follow up would be, what does North Carolina have in its arsenal to safeguard these rules that we are anticipating to be followed?

CHAIRMAN CLARK: Looks like that's another one for you, Michelle.

DR. DUVAL: We do have license suspension and revocation rules, just like I think most of the states do, so those would certainly apply. It's a matter of the statutory language to read; that has reduced our ability to board and inspect without permission. None of the other tools that we have in our toolbox that would allow for license suspension and revocation if a licensee fails to meet the requirements, would prevent us from revoking a license or permit, it is just the inspection thing.

CHAIRMAN CLARK: Follow up from Cheri.

MS. PATTERSON: Again, how would you get to that point? How would you know that they were doing anything illegal if they can't?

CHAIRMAN CLARK: I'll let you take that again, Michelle.

DR. DUVAL: We can go to a facility and – Cheri, where is your question coming from? I guess I'm just trying to understand that – because I think I've tried to outline the discrepancy between



statutory language and our ability to inspect without permission. I guess I am a little bit confused by the question.

MS. PATTERSON: Okay, maybe I misunderstood. How can you inspect without authority?

DR. DUVAL: We can show up and we can try to inspect, but the way the statutory language is written is that if a person says no, then our officers are not allowed to open a cooler or something like that.

CHAIRMAN CLARK: Rob O'Reilly is next.

MR. ROB O'REILLY: I guess what I'm wondering is their points of landing, and do the North Carolina changes apply to the points of landing where a lot of the law enforcement activity occurs, anyway?

CHAIRMAN CLARK: Michelle, do you want to --?  
DR. DUVAL: It is pretty broad, Rob, this statutory change. Again, if I were to come to you and say, hey, do you mind if I look in your cooler? If you say yes, there is no problem. The way the statutory language is written is there has to be obvious evidence of violation for the officer to do something.

I don't have the statutory language in front of me, so I'm really reluctant to go into it much further. I'm happy to look it up and provide it to the board, if you guys are interested. As I said, it is something that I think was inadvertently inclusive of our marine patrol when the statutory language went through; and the intent was really for wildlife inspectors. That is something that we're actively working to modify.

CHAIRMAN CLARK: This issue has obviously gotten a lot of interest. Mark, could you maybe expound a little more on why the Law Enforcement Committee did not feel that North

Carolina would be hampered in doing inspections because of this clause?

MR. ROBSON: Well, the general discussion I think revolved around the fact that there was still adequate safeguards and conditions in the permit itself, as far as notifications and monitoring of harvest collection sites; that they would be able to keep up with the activities in that way.

CHAIRMAN CLARK: Next, we have Ritchie White.

MR. G. RITCHIE WHITE: I guess I'm still struggling with this some, because part of our approval of this plan was assurances on keeping track of this process through the harvesting and through the development at the aquaculture site. It seems to me that this has clearly opened the door for some potential problems.

I guess I'm not comfortable that law enforcement thinks that they have the issue covered; where it doesn't sound like they can do any inspections if the person says no. We're not going to know what's going on there. I'm not sure what the next step is, but it makes me uncomfortable that we've approved this on a certain basis, and now that basis is no longer available.

CHAIRMAN CLARK: Kirby would like to make a comment on this.

MR. ROOTES-MURDY: Just one other point for the board's consideration, as I was going through the changes in the 2017 plan relative to the 2016 plan. There is, again, a change in the number of Permittees. There is now only one person who is operating with a permit, as opposed to three before with three possible mates, so there is one permit person with two mates. It actually is reducing the number of people that would be potentially looked at to be searched or considered for this.

CHAIRMAN CLARK: Follow up, Ritchie.

MR. WHITE: But what about at the aquaculture site, what about at the plant? What if they just say no, not allowed in anymore?

CHAIRMAN CLARK: Michelle, would you like to respond to that?

DR. DUVAL: Yes. Ritchie, I think if there is evidence, and I think officers would be looking quite closely to see if there is obvious evidence of potential violation that they can note. That gives them enough grounds to move further. This operation has to have an aquaculture collection permit; it has to have an aquaculture operation permit.

There are conditions associated with that that would allow the revocation of those permits, as well as the suspension of the license that allows for harvesting; no different than any other state. I'm a little concerned about this type of questioning at this hour, quite frankly.

CHAIRMAN CLARK: Next question is Dave Simpson.

MR. DAVID G. SIMPSON: Thinking well beyond eels, it seems there is a difference in North Carolina now that makes fisheries enforcement much more like general law enforcement on roads, cars, private property and so forth that is different from the standard that I think there is universally.

I wonder if it wouldn't be helpful for us for all of our plans to ask the Law Enforcement Committee to kind of do a review from NOAA Fisheries down through all the states, in terms of the ability to effectively enforce, ACFCMA mandated measures. I don't think it is fair to grill Michelle on state law and the details and the nuance differences.

But I would like to hear from Law Enforcement generally how much consistency we have and if there are some important areas. I mean, North Carolina lands a third of some of our species. If that is also occurring elsewhere, I think we would need to know where we stand for that effective enforcement of our ACFCMA- based regulations.

CHAIRMAN CLARK: Mark would like to respond.

MR. ROBSON: We would be happy to comply with that request, and I think that would be helpful to get the entire LEC involved in reviewing their current policies and statutes and provisions; and we can provide a report to you.

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CHAIRMAN CLARK: Next on the list, I have Tom Fote.

MR. FOTE: I hate to belabor the point, but it is really a serious concern for me. I mean, one of the good options that we have in Law Enforcement, especially in New Jersey, is that you can go in and search a cooler, whether it's summer flounder, striped bass and everything else. Now if the person refuses your permission to go in there, you could still, if I'm not completely wrong, you can still give them a citation on the fish, because you didn't get his permission.

But you can't give him a citation like in Island Beach State Park where you're not allowed to have beer, if you've got beer, you're all right, because he can't do anything about the beer in your cooler. That is one of those rules. This is actually more stringent than a traffic cop.

CHAIRMAN CLARK: Tom, do you have a question?

MR. FOTE: Yes. I make a recommendation that we write a letter of concern, because this affects, not only as Dave pointed out, but in my

estimation, the enforcement of any of the rules, whether it is striped bass, summer flounder or anything else. If a law enforcement officer can't go in to check a cooler without permission, especially when it's a fish thing, I'm really concerned over it.

CHAIRMAN CLARK: Next question is Dennis Abbott.

MR. DENNIS ABBOTT: Another thing that I surely didn't expect to talk about this morning. However, I would say that the Law Enforcement position raises much concern with me. I can't believe that Law Enforcement wouldn't be opposed to this issue. I really want a better answer from Law Enforcement of why they should agree that they don't have the right to look without a search warrant. It seemed like that is normal practice for a fisheries person. Second to Michelle, I know you may be concerned with the questioning, but this raises a lot of questions in people's eyes.

It is curious to me, Michelle. I know you're having problem answering the question, but the legislative person in your delegation, maybe they could go back and find out from the legislature why they would enact statutory language to protect one harvester. It seems so contrary. Maybe I'm not understanding, but it just really raises a lot of questions with, I'm sure, everyone around the table at this point. I think maybe we should be looking at whether this permit should be revoked.

CHAIRMAN CLARK: Okay, Dennis, I am going to let Michelle respond to that.

DR. DUVAL: I think that is Dennis, definitely misunderstanding. This is statutory language that applies broadly to -- this is not specific to the American Eel Farm. This applies across all of our fisheries, all marine patrol officers, all wildlife inspectors. It is very broad-reaching legislation.

I regret that Representative Steinburg was unable to be here at this meeting. But this was just as much of a surprise to the Division when we saw this at the end of last session. I think if folks want to advocate to our legislature on behalf of making some changes; that would be wonderful, but that is something out of my control right now.

CHAIRMAN CLARK: Follow up, Dennis?

MR. ABBOTT: I apologize, Michelle, it's my misunderstanding. But it even seems like a broader problem for you and the state of North Carolina.

CHAIRMAN CLARK: Mr. Brady, would you like to respond further on that?

MR. DOUG BRADY: Just some perspective, but this was a law or regulation, or a law that was written on a bill that basically said that wildlife officers and others could not search a cooler without permission. The practicality of it, and especially dealing with one Permittee owner, is if a law enforcement officer was to probably come up to this individual and say, I want to search your cooler and he said I'm not going to let you.

That would send off red flags. They can, there is a mechanism to go get permission to go search the facilities, go search coolers. But it is just another step. I don't see that this person would be in business, refuse to let officers go in the coolers, and think that there is not going to be further action taken to look at their facility and really ratchet up inspection. I think this is a little bit of a red herring in this particular case. It is an issue that I think needs to be addressed on a larger level that maybe the commission wants to write a letter, because it does pose some issues in terms of enforcement.

But in this particular case, I think this conversation is getting kind of way outside the bounds. I don't see an individual trying to conduct business with all these permits and telling the enforcement people they can't search their facilities or their coolers.

CHAIRMAN CLARK: We have a few more questions, and then maybe we can move on to making a motion here. But the next question we have is Pat Keliher.

MR. KELIHER: I know everybody is wrapped up around the enforcement piece and consent to search, I mean, every state probably has a little bit of a nuance here. If you don't mind, Mr. Chairman, if I can direct a question to Michelle. Michelle, just from a practical standpoint when you issue aquaculture permits, can't non-law enforcement staff inspect any aquaculture facilities to ensure they are compliant with any other environmental rules and laws associated with those facilities?

DR. DUVAL: Yes, we have had staff go out to the American Eel Farm's facility to ensure that it is operational; that it would meet all the requirements of ensuring that the critters are going to be able to survive and be cared for appropriately. We have had non-law-enforcement staff go out there and do that. My understanding is that law enforcement was concerned about the constitutionality, in addition to this statutory language change that occurred. That resulted in this request to remove the warrantless piece of the searching.

CHAIRMAN CLARK: A quick follow up from Pat.

MR. KELIHER: It would seem to me in a case like this, and we do this all the time with facilities in the state of Maine; that a contractual agreement could be made between the applicant and the state of Maine. I know the concern is regarding an agreement that is not consistent with law.

But if it's a contractual agreement in this to ensure you're allowing inspections, I'd be surprised if their state's attorney general wouldn't allow that type of practice to happen.

CHAIRMAN CLARK: Next question is Bill Adler.

MR. WILLIAM ADLER: I think Pat pretty much covered it. I was just trying to figure out why the conditions on a permit wouldn't say, you must be ready to open your cooler, basically; and have that as part of the permit. I'm not sure; Michelle may have said that well that would go against the law. That might be the case, but I just thought that would be the simple way is, write on your permit you've got to open the cooler. They couldn't say no.

CHAIRMAN CLARK: Next question is Steve Train.

MR. STEPHEN TRAIN: Maybe I'm just not as cynical, maybe I'm too trusting. But we're talking about the 2017 season, one person, two months. I'm assuming he's been vetted. I'm assuming we don't think he's a criminal genius who is going to smuggle 20,000 pounds of elver eels out; and they've got a legislative problem. This goes away in a year. How bad could this get? I don't mean we should let people get away with whatever, but I just think that if there is no violation history and we say look, this won't happen again; we need a better plan. You need this. But this is for every species in North Carolina, and we're holding up one facility that wants to try to do something, because their legislature messed it up, over one person for two months. It just seems a little extreme.

CHAIRMAN CLARK: Next questioner is Lynn Fegley.

MS. FEGLEY: It's actually more of a comment, and I'm sort of right there with Mr. Train. They were talking about 200 pounds. This is a 2017 plan. It doesn't strike me that it is in the best

interest of these individuals to conduct a lot of shenanigans, because they are going to have to come back in 2018. Just trying to keep it in perspective that I sympathize and empathize with North Carolina's legislative issues, we've certainly had our own share of those in the state of Maryland.

MR. BALLOU: I would like to make a comment and then offer a motion. My comment is that I concur with the last two comments made by Steve and Lynn, and I'm reading from the plan and it says that; this is under enforcement capabilities and penalties for violations. Random inspections will be taking place at the harvest and landing sites to ensure the conditions of the permit and all applicable rules and regulations are being followed.

Random inspections will also be performed at the aquaculture facility to ensure the proper records are being kept to account for all eels. Clearly, there is accountability built into this proposal. The proof is in the pudding that it will be back before us a year from now, when we hear back as to how the Permittee responded to the state's request for random inspections.

If the Permittee denied those requests, and we do not feel that we had good accountability, to me the permit would very unlikely be continued, or the program would very likely be discontinued for the very reasons that I'm going to express today. For a one-year proposal with good accountability measures built in, and accordance with North Carolina's laws, which is all they can do. I feel very comfortable supporting this, and I would make a motion to approve at the appropriate time.

CHAIRMAN CLARK: I think we have gone through and the questions have moved more into discussion; so please go ahead and make a motion.

MR. BALLOU: Sorry, if I jumped the gun. **I would move to approve the proposed North Carolina Glass Eel Aquaculture Plan for 2017**, and if there is a second, I would like to make one additional comment.

CHAIRMAN CLARK: Bill Adler seconds.

MR. BALLOU: My one additional comment is to Dr. Duval. Is there going to be an opportunity for you on behalf of the state to report back to us, not only on these accountability issues, but just on the overall efficacy of the program? If it's working, which of course we're all interested in finding out; because we might want to be pursuing similar ventures in our own states. Is the information going to be shareable, or is there a proprietary interest here where we really won't be able to know if it's working or not; and if so, why?

CHAIRMAN CLARK: Do you want to respond to that, Michelle?

DR. DUVAL: I would expect that I would be able to share that information. I think, in the briefing materials and from Kirby's presentation you've seen. I mean we've certainly shared the applicant's lack of ability to have been able to harvest eels this year, simply because of logistical conditions.

I would expect that we would be more than willing to share the lessons learned, I guess, from this upcoming year; where hopefully, there will be a little bit more success for the applicant, in terms of harvest and anything that we have found out. I would be happy to ask our Law Enforcement Staff to put together a short report; based on their experiences with their inspection.

Perhaps inspection is the wrong word here, but their visits to the facility as well as inspections at landing sites and their experience with the call-in -- some of those conditions have changed,

both at the request of marine patrol as well as at the request of the permittee. I think that is a long winded way of saying yes.

I would hope that we would be able to provide you a report. Probably nothing that would be proprietary, obviously. I'm thinking off the top of my head here. There is a 200 pound quota, so you know that there won't be more than 200 pounds of glass eels that are harvested. In terms of exact numbers I'm not sure that we would be able to give that out, but it is going to be 0 to 200.

MR. BALLOU: Quick follow up.

CHAIRMAN CLARK: Go ahead, Bob.

MR. BALLOU: I'm sorry; I was just as interested in what you just responded to as I am in the efficacy of the grow-out facility. That is the potentially proprietary area that I was wondering about. Because this is a state proposal, I'm hoping that the state of North Carolina is going to be very interested in knowing how well this facility performs, whether the grow-out is successful or not.

Then to report back on that; as essentially a trial that you're undertaking, an experiment, whatever you want to call it. Obviously, there are proprietary interests in terms of the facility. But I think the board would very much want to know about the success of the grow-out, and that is the kind of information I am looking for, as well.

CHAIRMAN CLARK: Before we discuss the motion, Bob. We're going to ask for a point of clarification as to whether your motion includes the Technical Committee recommendations.

MR. BALLOU: Oh yes, I'm sorry, I think it should and I was hoping that maybe Dr. Duval would acknowledge their willingness to go along with those. Yes, I would like to have that motion

amended to include, I think, at least two TC recommendations. Thank you.

CHAIRMAN CLARK: Do you want to just review those recommendations again?

MR. ROOTES-MURDY: Just for the board's consideration again. We put these up before. The two recommendations from the Technical Committee were that a young-of-the-year survey be developed at one of the sites in conjunction with the aquaculture plan in 2018, and that would be based on how well the facility performed in being able to catch and grow out eels.

The second was to address fyke net mortality during the months of January and February when the nets will only be fished once every 24 hour period. There was a recommendation for the possible use of a live car by the Delaware Technical Committee representative, and I believe Chairman Clark could maybe speak to that if board members have any confusion or need clarification on what that recommendation is.

CHAIRMAN CLARK: I think, because it is just a recommendation and it's not specifying how this be addressed, the concern that came up was based on some fyke net situations we've had, where we have huge numbers of glass eels in the net. I don't believe that they are probably having that same situation at some of the sites that they are planning to use in North Carolina, just from observation of those areas. In the general terms that it is, if it does become a problem, I think that the motion is hopefully worded broad enough that they can come up with some solutions to that; if that would be satisfactory. Yes, Michelle.

DR. DUVAL: Definitely our staff has worked with the applicant. He is well aware that a young-of-the-year survey would need to be developed for 2018, so yes, we accept that condition. Then in

terms of the potential for mortality during the months of January and February, I would just note that the applicant is required to leave the caught ends open for a 48-hour period on the weekend.

There is escapement and follow through there. As the Chairman has indicated, just based on where these sites are located, it is unlikely that we'll have the same issues with mortality. But we do have the example that was provided of a live car that we could work with the applicant on, should that become a problem in the future.

CHAIRMAN CLARK: Can I get a show of hands of those who would like to speak for the motion. Anybody want to speak against the motion? Not seeing any; I am assuming we're ready to vote. Does anybody need time to caucus on this? No. **In that case, are there any objections to the motion as written here? No seeing any; the motion passes unanimously.**

#### OTHER BUSINESS

That concludes our agenda Item 5, and now we are just on to other business. Is there any other business? Dan McKiernan.

MR. MCKIERNAN: I was listening to the New York proposal earlier and the discussion about out-of-state dealers, and it really piqued my interest. I'm wondering, since the Law Enforcement Committee has agreed to look at a report of the ability to do warrantless searches around the various states, if we could task them with a second task.

That would be to compare state rules regarding out-of-state dealers purchasing quota-managed species from fishermen; and the challenges this creates for tracking state-by-state quotas. In my state, we tell folks, you have to sell to a Massachusetts dealer, and we force out-of-state dealers to set up kind of an office in Massachusetts so the records are there. But if

fish are leaving the state and going to another state, I don't think it is as traceable.

If that state where it's going isn't a member of this commission and doesn't comply with all of the rules of the various management plans, then that fish is lost. Would it be possible to ask the Law Enforcement Committee to do that as well, with an eye on the eel quotas? Should we institute state-by-state quotas with transfers? I think that is going to be a challenge.

CHAIRMAN CLARK: Mark, is that something the Law Enforcement Committee can look into?

MR. ROBSON: I believe so, although this may get into areas within each state or jurisdiction, of how commercial harvest and dealer records are kept. It may go a little beyond the Law Enforcement Division's areas of expertise. But we can certainly ask if that is something that LEC members can do.

CHAIRMAN CLARK: Any other business to come before the board?

MR. BALLOU: I just wanted to acknowledge receipt of a letter from the Maine Elver Fishermen, and my question to the Maine delegation is whether there is intent to propose an increase in the glass eel harvest at some point in the future; I'm sorry, in the glass eel quota in the near future. Is that where the state is going? I'm just curious as to Maine's response to the letter that the board has been provided from the elver fishermen, thank you.

CHAIRMAN CLARK: Before I turn it over to Pat. That would have to be done through an addendum process. But I'll let you respond to that, Pat.

MR. KELIHER: This is the first I've ever seen this letter.

**ADJOURNMENT**

CHAIRMAN CLARK: Anything else? Seeing nothing; are there any objections to adjourning? Seeing none; we are adjourned. Thank you.

(Whereupon the meeting was adjourned at 9:11 o'clock a.m. on August 4, 2016.)



# Atlantic States Marine Fisheries Commission

## American Eel Technical Committee Meeting

### Meeting Summary

*September 14-15, 2016*

*The Hotel at Arundel Preserve*

#### **Attendees**

Tim Wildman (chair; CT DEEP), Jordan Zimmerman (vice-chair; DE DNREC), Carol Hoffman (NYSDEC), Allan Hazel (SC DNR), Sean Doyle (DC DEE), Todd Mathes (NC DMF), Jennifer Pyle (NJ DFW), Lindsay Aubart (GA), Patrick McGee (RI DEM), Bradford Chase (MA DMF), Sheila Eyler (US FWS), Ellen Crosby (PRFC), Troy Tuckey (VIMS), Kim Bonvechio (FL FWC), Keith Whiteford (MD DNR), Gail Wippelhauser (ME DNR), Laura Lee (SAS chair; NC DMF)

ASMFC Staff: Kirby Rootes-Murdy, Kristen Anstead

Members of the Public: Desmond Kahn and Zoemma Warshafsky (VIMS)

Members of the American eel technical committee (TC) met during TC meeting week to:

1. Review the methods and results of the coastwide young of year (YOY) surveys and evaluate differences, challenges, and future considerations,
2. Discuss the upcoming stock assessment update scheduled for 2017,
3. Get updates on nematode research, the Maine life cycle study, and otolith exchange,
4. Discuss landings versus harvester reports, and
5. Discuss research items needed to be completed ahead of the next Benchmark stock assessment and potential timing.

#### **Review of state YOY surveys**

Each state presented their methods, results, challenges, and status of their YOY surveys, with the exception of Georgia since it recently switched from a YOY survey to a yellow eel pot survey. States discussed their site locations, timing of sampling, gear type, and biological sampling protocol and results. More information on each state's survey can be found on the spreadsheet and combined presentations pdf document.

After each state presented, the TC discussed how to determine if a site should be discontinued and how a new site should be developed to replace it. Consensus was that many of these sites were chosen opportunistically due to logistics (limited staff, restricted options for other locations, gear, etc.) and if a YOY survey was going to be discontinued in a state, another survey should replace it – YOY, yellow, or silver eel – to be decided on a case by case basis and discussed with the TC. Some exploratory analysis should be done to see if a single YOY survey in a region could be tracking the whole region, and thus have the supporting surveys altered to

measure a different population (yellow or silver). Additionally, many states are using different gear types and the TC discussed the preferred gears while recognizing that many of these are not options in other locations and some states may have restrictions that cannot accommodate them. Specifically, the group recommended that if a state switches to new site or gear type, all the same environmental data (dissolved oxygen, temperature, etc.), and flow attractant (additional possible rain gauge if possible) should be recorded. Additionally, eel mops are not a good replacement gear type for other conventional YOY gears (fyke net, eel ramp, etc.) because of area covered and difficulties in standardizing across river systems and sites.

Brad Chase and Laura Lee outlined their previously developed analysis on YOY surveys. They pursued publishing this work, but there were issues with data ownership and the need for official permissions from member states. In seeking to better understand the significance of YOY surveys and their trends (at the state, regional, and coastwide level) there has been difficulty in quantifying which are tracking overall stock abundance trends. The group has discussed the standardization of YOY surveys since 2006, but there has not been much process. Kirby highlights that there was a data and survey standardization meeting last fall for river herring. The river herring group summarized the main conclusions of survey standardization were: 1) identifying the goal of the survey at the beginning is important- whether for state purposes or for assessment purposes, and revisiting it to make sure its continually useful for that goal 2) to try and have minimum biosampling requirements by gear type 3) when switching gear types, or sites, to consult with other states/agencies that implemented the same survey to ensure Best Management Practices are being used. Some of these considerations could be kept in mind for further evaluating eel YOY surveys in the future.

The TC discussed that not all YOY surveys equally provide information to the stock assessment and that some track a signal better than others. Sheila Eyler pointed out this has been a problem in trying to provide the Board with guidance on whether to fund YOY surveys or continue to require them as part of FMP compliance. As part of the publication's analysis, Brad and Laura were looking at a power analysis that would demonstrate which YOY surveys best track overall coastwide abundance and that correlate with environmental factors. The concluding notion from the group was that this analysis may help inform the Board in how to treat different regions of the coast that may not have good YOY surveys 'signals'/lack structure/and/or would be better suited to a different life stage survey. **Brad and Laura are interested in continuing to pursue this work, the TC is in agreement that it should be done, and Troy Tuckey is willing to contribute.**

### **Stock Assessment Update Planning**

A stock assessment update - which consists of adding the most recent years of data to existing models from the 2012 benchmark - is scheduled for next year. The life history and habitat sections will be updated with any new research or published literature and the description of the fisheries will be reviewed and changed by each member state to reflect the current status. Because both the DB-SRA and TLA models were not recommended for management use and would require additional work that would need a peer-review, only the trend (Mann-Kendall, Manly, and ARIMA) and growth analyses will be updated. The TC discussed when states could

have their data available and submitted to the stock assessment subcommittee. **All surveys and biological data that was previously used in the trend or growth analyses will need to be updated through the terminal year of 2016- the group agreed to the deadline of submitting updated survey information from 2016 by March 1<sup>st</sup> 2017.** Landings and harvester data will also be updated, but only through 2015 because of the timing of the update.

On the end of the first day, Des Kahn asked the group to consider revisiting recreational MRIP data for the Assessment update. The group was generally indicated there are significant caveats with the MRIP data and that drawing conclusions from the data regarding stock condition is not advised, although this data will be revisited during the next benchmark assessment.

### **Presentation & Discussion on Nematode Research**

Zoemma Warshafsky, a graduate student at VIMS, presented her thesis work regarding the effect of the parasitic nematode *A. Crassus* on the American eel. This research addresses one of the research recommendations in the benchmark (2012) and could potential adjust mortality rates for the next benchmark assessment. Each state previously submitted their methods for evaluating the nematode's presence/absence to Warshafsky and these differed along the Atlantic coast. **Warshafsky will present her finalized results next year to the TC, but in the meantime she hopes to develop a standardized methodology for TC members to identify the nematode and stage of infection.**

### **Update from Maine on Life Cycle Monitoring program**

The TC received an update on Maine's life cycle study. Due to staffing, gear, and construction issues at the site, as well as a drought, sampling did not go smoothly this year and the beginning of the YOY run was missed and only one yellow eel was caught. With a new dedicated staff member for the project and lessons learned from this past year, Maine is confident that the second year will be more productive.

### **Otolith Exchange for American Eel**

Many states along the coast have provided otolith samples and are participating in an ageing exchange that is currently underway. Samples represent rivers from Maine to Florida and the goal is to develop a standardized protocol for processing and reading samples, compare ageing accuracy in and between ageing labs, and identify any persisting issues along the coast. Participants will review the results after the hard part exchange and decide at a later time if an in-person workshop is needed. **In the future there may be an ageing workshop that in addition to the ageing data could include sexing as well as incorporating information from Zoemma's research.**

### **Discuss Landings vs Harvester Reports**

The TC revisited the issue of how some states use harvester reports and others use landings for yellow eel. These terms are often used interchangeably but measure different things and have implications for quota monitoring and allocation. Kirby highlighted that making sense of the best data will be important for both the Stock Assessment Update and possible management response the assessment in terms of revisiting quota & allocation (items laid out in Addendum

**IV). The TC agreed that states should be using harvester reports, but that they should also look at landings data (if available) to evaluate discrepancies and improve their data. Right now, the standard approach is to take the higher of two numbers- ahead of the Assessment Update, folks should ensure their data as up to date and as accurate as possible.**

Next, the group revisited outstanding questions that were raised during the workshop on 1) downstream fish passage mortality at hydropower dams 2) where to transport eels when moving them upstream and 3) the question of how best to decipher when to classify an eel YOY or glass eel. While there was good discussion on each questions, the only clear consensus was to transport eels over dams that eels should be deposited within the same watershed when moving them upstream. For the other two questions, there was not clear consensus on how to move forward. **The group was in agreement that these questions should be addressed as research recommendations. An additional research recommendation that was discussed was evaluating the effectiveness of 1/8 sieve (something like a soil sieve) for collecting and counting eels.**

#### **Review TC reporting out & Future Assessment Planning**

Lastly, the group discussed the hurdles to be overcome to complete the next benchmark stock assessment. The group provided information in May 2016 on a number of items that had been identified as needing to be improved based on the 2012 Benchmark stock assessment. The group was in agreement that seeking to engage scientists and managers outside of the ASMFC's process- specifically Canada DFO and Gulf of Mexico (specifically Robby Maxwell)- are important for addressing the research recommendation of moving the stock assessment to a 'continental' stock assessment. **Kirby will work to re-establish communication again with interested parties from both regions.**

#### **Next Steps**

- The states will get their survey information updated through 2016 and submit them to Kirby and Kristen no later than March 1, 2017
- The Board is not meeting at the Annual Meeting, so the TC report will be submitted if needed ahead of the next Board Meeting in 2017
- States should continue to track their eel landings with harvester reports.