Atlantic States Marine Fisheries Commission

Tautog Management Board

May 9, 2017 10:30 – 12:30 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 (A. Nowalsky)

10:30 a.m.

2. Board Consent

10:30 a.m.

- Approval of Agenda
- Approval of Proceedings from February 2017

3. Public Comment

10:35 a.m.

- 4. Review Consistent Management Measures by Region (J. McNamee & A. Harp) 10:45 a.m.
 - Massachusetts-Rhode Island
 - Long Island Sound (LIS)
 - New Jersey-New York Bight
 - Delaware-Maryland-Virginia
- 5. Consider Draft Amendment 1 for Public Comment Action

11:15 a.m.

- Review Management Options (A. Harp)
- Review Law Enforcement Report (J. Snellbaker)
 - o New York Letter to the Board Regarding the LIS Boundaries (J. Gilmore)
- 6. Other Business/Adjourn

12:30 p.m.

MEETING OVERVIEW

Tautog Management Board Meeting
May 9, 2017
10:30 a.m. – 12:30 p.m.
Alexandria, Virginia

Chair: Adam Nowalsky (NJ) Assumed Chairmanship: 05/15	Technical Committee Chair: Jason McNamee (RI)	Law Enforcement Committee Representative: Jason Snellbaker
Vice Chair: David Simpson (11/15)	Advisory Panel Chair: VACANT	Previous Board Meeting: January 31, 2017
Voting Members: MA, RI, CT, NY, NJ, DE, MD, VA, NMFS, USFWS (10 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from January 2017
- **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 Consistent Management Measures by Region

Background

- At the Winter Meeting the TC presented state-by-state harvest reductions; however the Board wanted to see regional management measures that would be implemented consistently by all states within a region. The Board tasked the TC with creating specific regional management options.
- Two regions have to take harvest reductions in Draft Amendment 1 due to stock status: LIS and NJ-NYB. The options respective to these regions include traditional harvest reductions related to minimum size, possession limits, seasons, quota. In addition, there are options for a slot limit analysis that would apply to the recreational and commercial fisheries.
- Two regions do not have to take harvest reductions, but are proposing regional measures in Draft Amendment 1: MARI and DelMarVa.
- A TC meeting summary discussing the Board tasks and the proposed LIS and DelMarVA options are in **Briefing Materials**.

• The NJ-NYB and MARI proposed options will be in **Supplemental Materials.**

5. Consider Draft Amendment 1 for Public Comment (Action)

Background

- Draft Amendment I includes multiple management options to update the 1996 FMP and proposes a four-region management scenario.
- The LEC discussed splitting the New York into two separate management areas and the implementation challenges.
- New York has submitted a letter of concern regarding the Long Island Sound boundaries, and more specifically the splitting of New York into two regions.
- LEC Report and NY Letter are in **Briefing Materials**
- Draft Amendment I will be in Supplemental Materials

6. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

TAUTOG MANAGEMENT BOARD

The Westin Alexandria
Alexandria, Virginia
January 31, 2017

These minutes are draft and subject to approval by the Tautog Management Board

The Board will review the minutes during its next meeting

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INDEX OF MOTIONS

- 1. Approval of Agenda by Consent (Page 1).
- 2. Approval of Proceedings of October 2016 by Consent (Page 1).
- 3. Move that the Mass-Rhode Island Region go out for public comment including only the SPR reference points (Page 16). Motion by Dan McKiernan; second by Mark Gibson. Motion carried (Page 17)
- Move that the Long Island Sound region go out for public comment including only the MSY reference points (Page 18). Motion by Mark Alexander; second by Steve Heins. Motion carried (Page 18)
- 5. Motion to adjourn by Consent (Page 20).

ATTENDANCE

Board Members

Dan McKiernan, MA, proxy for D. Pierce (AA)

Raymond Kane, MA (GA)

Sarah Ferrara, MA, proxy for Rep. Peake (LA)

David Borden, RI (GA)

Mark Gibson, RI, proxy for J. Coit (AA)

Eric Reid, RI, proxy for Sen. Sosnowski (LA)

Sen. Craig Miner, CT (LA) Mark Alexander, CT (AA)

John McMurray, NY, proxy for Sen. Boyle (LA)

Steve Heins, NY, proxy for J. Gilmore (AA)

Emerson Hasbrouck, NY (GA)

Russ Allen, NJ, proxy for D. Chanda (AA)

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)

John Clark, DE, proxy for D. Saveikis (AA) Craig Pugh, DE, proxy for Rep. Carson (LA) Ed O'Brien, DE, proxy for Del. Stein (LA)

Rachel Dean, MD (GA)

Michael Luisi, MD, proxy for D. Blazer (AA)

Joe Cimino, VA, proxy for J. Bull (AA)

Kyle Schick, VA, proxy for Sen. Stuart (LA)

Peter Burns, NMFS Sherry White, USFWS

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

Ex-Officio Members

Jason McNamee, Technical Committee Chair

Staff

Bob Beal Toni Kerns

Ashton Harp Katie Drew

Guests

Jonathan Atwood, Ofc. Asm. Andrzejczak Jon Hare, NMFS Chris Wright, NMFS Bob Ballou, RI DEM Tom Baum, NJ DFW Doug Grout, NH F&G Jack Travelstead, CCA
Zach Greenberg, PEW
Fred Russo, Long Island, NY
Ilya Elkin, Penthouse Marine, NY
Arnold Leo, E. Hampton, NY

The Tautog Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, January 31, 2017, and was called to order at 9:45 o'clock a.m. by Chairman Adam Nowalsky.

CALL TO ORDER

CHAIRMAN ADAM NOWALSKY: Good morning everyone, I would like to call the Tautog Management Board to order please.

APPROVAL OF AGENDA

CHAIRMAN NOWALSKY: Our first order of business will be the approval of the agenda. Does anyone have any requests to modify the agenda? Seeing none; is there any objection to approving the agenda as provided? Seeing none; the agenda stands approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN NOWALSKY: The next order of business will be to approve the proceedings from the October, 2016 Board meeting.

Is there any objection to approval of those proceedings? Seeing none; those stand approved.

PUBLIC COMMENT

CHAIRMAN NOWALSKY: The next item on the agenda will be to take public comment on any item not on our agenda this morning; which would be the tagging trial report or discussion about the harvest reductions and Regional Working Group work for Amendment 1. Is there any public comment not on those issues? Seeing none; we'll move along.

TAGGING TRIAL REPORT

CHAIRMAN NOWALSKY: Next order of business, Ashton Harp will present the Tagging Trial report. Ashton.

MS. ASHTON HARP: I'm going to present the Tautog tagging trial that was done earlier this fall. The tank trial was led by the New York Division of Marine Resources, and conducted at the Stony Brook University, the Flax Pond Marine Laboratory. It began in September and concluded 30 days later in October.

There were originally three tags that we were considering that the Law Enforcement Subcommittee looked at. When these tags were given to the Research Team, they determined that only one tag would actually be feasible for the research study; and I did kind of preview this with the Board as well at the last meeting, but just wanted to give that as a reminder that only one tag, the strap tag which is a mono tag was used in this study.

Actually the Subcommittee feedback on this trap tag was that this was the best option; as far as size and durability. When Law Enforcement had tried to open the tag using pliers, they were not successful. The tag was actually deformed in a manner that would be noticeable. Therefore, the durability of the tag outweighed some of the lack of the color options; since it is kind of a metal tag it doesn't have different colors by state.

At the last meeting there was also a comment made that since this is a fish, it's going to be consumed by humans; does the tag have to comply with some kind of FDA requirements? After the meeting we reached out to the FDA. The response from them was that the FDA does not provide approval or oversight on tags for wild caught fish. This tagging program is in the clear, as far as FDA requirements. This is the strap tag with the applicator. I had done some commercial harvester interviews last year, and one of the things that they had said was it will be really nice if we have to do this that there is an applicator for the tag, for the ease of applying the tag to the fish. This tag does require an applicator to shut the tag on the fish. This next slide is the research team tagging the fish.

You'll see it's going through the operculum bone. This is a tagged fish, so you can see the size of the tag relative to the size of the fish. It is rather small. The last one is the tanks that were at the Marine Lab. There were three tanks that were used to house the fish for 30 days. Now I'm going to just go through some of the tag trial highlights.

Twenty-one fish were collected from the Long Island Sound and transferred to the Marine Laboratory using coolers. Each fish was randomly assigned to be either a tagged fish or a control fish. The control fish did not receive a tag. The trial included 15 tagged fish and 6 control fish.

The tag was placed on the operculum bone using an applicator. The majority of the fish remained calm while being tagged. The exception was that if a tag was not applied properly, which resulted in the fish feeling pressure and thus thrashing and making it extremely hard to apply the tag; but this was not common, as reported in the report.

The tagged and control fish were assigned to one of three large open flow holding tags, and the research team monitored water temperature, oxygen levels, respiration rates and food consumption while in captivity for 30 days. Initially the fish were slow to move and to eat, so they were just kind of more like lying at the bottom of the tank, which we have seen in previous pictures.

But after two weeks all the fish were exhibiting normal behavior. There were no signs of disease. There were low respiration rates, and the fish were readily and eagerly accepting food when fed. After one week the research team did fine one of the tags at the bottom of the tank, so the tag had become loose from the fish. That is because the locking mechanism was not properly engaged during the application. The fish was subsequently retagged.

At the end of the trial when the tags were taken off of the fish, there was some localized damage to the gill, but it was not life threatening or inhibiting the fish's ability to survive. Therefore this tagging trial, there was no mortality and all of the fish were returned to the Long Island Sound. There is also some other tagging tips are included in the final report from the Research Team.

Just most notably, it will take a few fish for a tagger to kind of properly understand how to practice on a fish. Practicing on a dead fish would be one of their main things to do before moving on to a live fish. The Commercial Harvest Tagging Program, the Law Enforcement Subcommittee last year developed four goals for this program, and the goals are paraphrased and italicized on this slide.

The first one is to implement a program that will reduce the illegal, unreported and unregulated fishing that has been persistent in this fishery for quite some time. The PDT is developing a program. At the last meeting the Board said that they would like to move forward with developing a comprehensive commercial harvest tagging program in Draft Addendum I, so the PDT is working on the first objective. The second objective is to have standardized tags across states. All states would use the same vendor to obtain the strap tags. As this trial has determined, the strap tags are useful and they are feasible, and the fish are not harmed as a result of having these tags; so standardized tags across states can be achieved. Another goal is single use tags.

If one attempts to open a closed tag using pliers it is deformed in a manner that is noticeable, as has already been performed by the Law Enforcement Subcommittee. The last objective, which this tag also meets, is to accommodate the live market fishery. The tags are applied to the operculum bone and they do not degrade the meat quality of the fish nor do they restrict the

ability of the fish to eat; so the fish can continue to gain weight while it's in captivity.

As we've shown through the tag trial, the fish did not die as a result of the tags; and they were actually released live back into the Long Island Sound. Actually a very quick overview of the tagging trial, so the full report was released in briefing materials; and if there are any questions on kind of the tagging tips or how the fish were handled during this process, I will take questions on that now.

CHAIRMAN NOWALSKY: Before we go to the Board let me just ask, are there next steps with the tagging study with regards to having any type of TC review; or would you characterize the report available for Board use with regards to the addendum implementing of a tagging program, or do you see additional review steps that are needed?

MS. HARP: I think that we would like to present this to the Law Enforcement Subcommittee again. They had a significant amount of input into this process, and the final report was just released, so it was not released to that committee yet. I would probably hold one more meeting to brief them on the details; and see if there is anything else that they want to review. But as far as a TC review of the tagging trial, we did not feel like that was necessary.

CHAIRMAN NOWALSKY: With that we'll turn to the Board. Are there any questions for Ashton on the program? Dan McKiernan.

MR. DAN McKIERNAN: Ashton, do you think it would be appropriate to create a video; maybe like a two or three minute video of the proper techniques and handling of fish, so that when you go to the Law Enforcement Committee you won't have to be carrying a bunch of live fish, which could be challenging.

MS. HARP: I was thinking about it more whenever we kind of rolled out the program that

there does need to be some kind of socialization of these tagging; and how to apply the tag properly to the fish, so people are not immediately perturbed by the program when it doesn't work right.

Yes, it would be nice to have some kind of video, and I can reach out to New York to see if they would be willing to do that. I don't think it would be too much. I know that they already have a considerable amount of video that they did, so it might already be on file and I can just check with them.

CHAIRMAN NOWALSKY: John Clark.

MR. JOHN CLARK: Thank you for the report, Ashton. That was really good news. If I recall from one of the previous meetings, sometimes these tautog are kept for up to six months. I was just curious at the end of the trial whether there were any signs that the tag were eroding the opercula there, and it could actually fall off if these fish were kept for much longer.

MS. HARP: When I talked to the Research Team, they seemed to think that the fish were doing fine. They did say that there was some localized gill depletion just like a little bit around. It's in the report. We have specific pictures of where the tag was taken off and you can see there is like a little bit of a mark, of course where there was a tag.

But there was nothing to say that the fish was not swimming properly, eating properly or anything that would limit its ability to live. Whenever they were feeding a fish they were like they had normal feeding behavior after two weeks. There was just an initial shock after bringing the fish out of the Sound and putting it in a tank.

CHAIRMAN NOWALSKY: Okay would there be any objection from the Board for next steps with this, taking this to the LEC Subcommittee? Okay seeing none; that is how we'll proceed. Is there

anything else for the Board on this agenda item, Ashton?

MS. HARP: No.

TECHNICAL COMMITTEE REPORT ON HARVEST REDUCTION AND PROJECTION ANALYSIS

CHAIRMAN NOWALSKY: Our next two agenda items, we've got a TC Report on Harvest Reduction and Projection Analysis, and then a PDT Report from the Working Groups. If you'll recall at the annual meeting we formed working groups, Mass-Rhode Island, New York-New Jersey, Connecticut for Long Island Sound as well, and the Virginia, Maryland, and Delaware; with the goal of how to address a tagging program.

As those calls were initiated, it became apparent that some of the path forward was intertwined with the harvest reduction, and we wound up on the first calls having discussion about the mechanisms for that. We wound up having two sets of calls with those working groups, one on the tagging program; commercial end of it.

Then a second call for two of the three groups the analysis for the reduction and projection analysis was not finalized in time for the Mass-Rhode Island Review, so we elected not to hold that call prior to the meeting. How I propose we proceed, because these two items are intertwined at this point as the Working Group saw it, is to have the presentation for both of the next two agenda items; and then proceed with questions and discussion on both of them without any objection from the Board. All right seeing none; let's go.

MR. JASON McNAMEE: My name is Jason McNamee; I work for Rhode Island DEM, and I am the Chair of the Tautog Technical Committee. We've got a presentation here for you. It's medium in length, so I'll try to get through it pretty quickly. But we had two main tasks that we've been working on; that is to calculate

harvest reductions and then the Board had tasked us with an additional projection analysis. I'll show you some information on that.

METHODOLOGY

MR. McNAMEE: Quick overview, I'm going to go information some methodology used for the various options. We're going to give you, I'll call it a sampling of some initial options that the Technical folks had put together, and then I'll go into the projection portion of the presentation. For the analyses, the Technical Committee calculated harvest reductions to bring F to the target within three vears. You had asked for two different probability scenarios, one with a 50 percent probability, and one with a 70 percent probability of reaching the F target in three years. The reductions were calculated on a state-by-state basis at this point.

HARVEST REDUCTION ANALYSIS FOR MA-RI, LIS AND NJ/NY BIGHT

MR. McNAMEE: Just as a note, new ways of managing the fishery, so what you're going to see is kind of your standard approach for calculating harvest reductions. For those out there enjoying the fluke situation, here is more of that. This is standard stuff you've seen already. But there are some alternative ideas that have come up, and that will come up in Ashton's report next.

As you know, the tautog stock will now be assessed with a regional approach. The regions are up there in different colors. You have Delmarva, then what we're calling the New Jersey-New York Bight; so that's New Jersey and the outside of Long Island. Then the Long Island Sound, which is Connecticut and the inside of Long Island, the New York portion of Long Island Sound, and then Rhode Island and Massachusetts up there in blue.

Getting into the methodology for Delmarva, they don't have to do anything; they are at the target

a little bit below the target, when you add in the uncertainty. There was no need for them to calculate any reductions for that region. For the other regions, the methodology in general, one of the first things we did was we removed illegal harvest; so people aren't getting credit for undersized fish and things of that nature.

Illegal fish that are showing up in the MRIP information are removed before further analyses are conducted, the idea being to not give credit for those fish. In addition, with regard to our size analyses, we applied discard mortality; so there would be this new, when you're going up in minimum size potentially there will be this new subset of fish that are now out there but getting discarded.

We thought it was important to account for discard mortality. For tautog there a pretty hardy fish, so it is a pretty low discard mortality; only 2.5 percent of the B2s are assumed to be dead, so it really is not a major impact, but we thought an important one to account for. We used the 2013 through 2015 set of information, so we're taking an average here.

We used MRIP data for all of the recreational information. ACCSP data in some parts for commercial harvest, in particular in the Mass-Rhode Island Region. Then there was also some state-specific harvest and size data, some volunteer angler survey information that were used in size analyses and things like that; so all of that kind of information was approved for use by the Technical Committee, and was used at various points in the different analyses.

Options for the New Jersey-New York Bight Region, the New Jersey-New York Bight Region calculated options to meet the 70 percent probability of meeting the target, the F target by 2020. That resulted in an 11 percent decrease in harvest. Then to meet the 50 percent probability, it was only a 2 percent decrease in harvest.

This bullet is up in all of the different regions, but in the report there are multiple options, all kinds of different ways you can add these things together; different versions of size limits and bag limits and all that sort of stuff. What we've put in the presentation just to save some time, is just again a sampling of those. For the New Jersey-New York Bight Region, were you to institute size limit changes this is basically what you're looking at. If you went up about a half an inch, you would end up reducing harvest by about 16 percent. You can see that doubles as you go up another half an inch to 16 inches. An interesting and important note is for New Jersey and New York, their commercial fishery is managed in the same way as their recreational fishery; so there is no quota in these areas, and so their specifications are set for commercial as well as recreational to achieve harvest targets.

That is why the size information is accounting for both of those. That was the New Jersey information is on the top of that table and then the New York information is below, a little bit less of a reduction for a half an inch increase; and basically across the board there is not as much reduction for the New York information.

Here are some options that are maintaining current size limits, and it shows you what you would need to do with your season. You can see these are moderate in most cases, but the New Jersey season for the commercial side, if there was an 11 percent decrease you would have to reduce by 11 days. Conversely in the recreational side, New York an 11 percent reduction would be about 11 days. There is some consistency between the two states and what they would need to do to achieve these reductions.

Moving on now to Long Island Sound, the Long Island Sound report calculated options for a 47.2 percent decrease in harvest, this represents the 50 percent probability of meeting the F target by 2020. This also in Long Island Sound and Mass-

Rhode Island, there are two variations on what the targets can be calculated for.

Here for Long Island Sound they went with the MSY calculations as an initial cut. If the Board decides that they want to go in an additional direction, the technical folks would have to go back and calculate those. But at least the methodology is sort of set. What this in fact changes is the actual reduction percentage that is needed, so the methodology stays the same; it is just being applied to a different level of harvest reduction.

Again you've got two states here, New York and Connecticut up on the top. What you can see are bag limit and size limit adjustments, and then the number of additional days that you would need to close to meet that 47.2 percent reduction in harvest. If you take that first line there, you would keep that size limit at 16 inches but drop the bag down to one, and that would maintain the current season.

But if you did a similar thing with the Connecticut information you have to reduce by an additional 30 days. Okay the last region we'll talk about is Mass-Rhode Island. This region calculated reductions on a state specific and a combined basis. The previous two regions they were state specific and didn't do any analysis; as far as what it would look like if you aggregated all of the state information and set one set of specifications.

In the case of Mass-Rhode Island, we did take a crack at that combination. Again for these analyses illegal harvest was removed, so there is no credit. But once the proportion calculations were made they were added back in. This is a nuance difference, but it ends up validating the assumption that illegal harvest is not going to stop in total in the following year; but will probably continue forward. The assumption being that it continues forward in some semblance to what it has been in the past. That is something that we'll have to just finalize as a

Technical Committee which version we think is most appropriate, as far as dealing with the illegal harvest that shows up in the data. One other comment, just to jump back a little bit, I talked about the addition of 2.5 percent of the discards being attributed to dead discards; that is only for the recreational fishery, and that is consistent with the assessment.

We didn't deal with the discards on the commercial side, because there wasn't good information on that; and that holds into these calculations as well. Keep in mind that the recreational side represents the vast majority of the harvest in this fishery. Again, as was done for Long Island Sound, there was only one set of options created here, jut for brevity's sake.

For the Mass-Rhode Island Region we calculated options for a 60 percent decrease in harvest. This set the goal at the more extreme, so this kind of sets the upper bound on these options. These are calculated to meet that 70 percent probability of meeting the F target by 2020; again using the MSY calculations and not the SPR calculations.

Here is a quick slide on the size limit changes. For Rhode Island going up a half an inch, there is about a 13.6 percent reduction. If you go up a full inch you end up with about just over double that. Massachusetts, it is a little bit more in each case. Then when you combine the two states together you can see it is very similar, going up half an inch to what Rhode Island calculated; but the 17 inch, the one inch increase, you can see kind of shoots the middle between the two states, which makes sense.

Here is a table with some options in them. The first two rows are the Rhode Island specific options, the next two rows down are the Massachusetts options, and then the final two rows at the bottom of this table are the combined states. Again, I won't step through this table in its entirety, but a couple of different options were selected here; one that keeps the

bag limit at three fish, jumps the size limit up an inch, and then this is what the season needs to be to meet the target.

The second option there keeps a two-season approach. Massachusetts only has a single season, Rhode Island has two seasons. The thing that changes in that second season is the bag limit goes up a little bit. You can see the effects of these various dials that we have to work with; with regard to the season that you get. That was it for the options; again there is a lot more information in the reports. But that is just sort of to give you a sense of where your region is at with regards to these options and the harvest reductions that you might need to take.

PROJECTION ANALYSIS TO ACHIEVE SPAWNING STOCK BIOMASS THRESHOLD FOR ALL REGIONS

MR. McNAMEE: Spawning stock biomass projections, at our last meeting the Board asked the question, thanks for the three year projections, what we would be curious to know now is when does the SSB rebuild? When do you meet your threshold? That is what we went back and recalculated. We just extended those projections out to see when that SSB would rebuild to our threshold. Again we ran three scenarios, status quo, 50 percent probability, and a 70 percent probability; keeping in line with the short term projections we had already done.

Just a couple of notes about projections, nothing you haven't heard before, but the biological parameters such as maturity, natural mortality, weights at age, they were all the same used in the model in the previous projections; so no changes there. The only change from the assessment was the catch weights at age were set equal to the average of the latest selectivity block. That was seen as a best practice, and so we carried that forward in the long term projections as well. These tables represent the results. Again I won't step through; I'll kind of get into the gory details on this first table and then jump through a little bit quicker. On this

table the left hand column that is what your scenarios are, so in each case status quo which is the average three-year harvest. That is what we're calling status quo that is the very first row. Then the two harvest amounts that would reach your specified targets. In this case status quo for the Delmarva Region is about 77 metric tons. To meet the 50 percent probability it actually goes up to 139 metric tons, and then for 70 percent it is 125 metric tons. The second column in there is your probability of being at or below the F target.

One note, so again just to reiterate, status quo is an average so it could be, and that's what you're seeing here. That average is either a little bit above or a little below what that terminal year estimate is, and so that's why you'll see in the coming tables that that number in the status quo row will change; depending on the region that you're in.

We already noted that Delmarva was right around the F target already, and so that's why they're almost 100 percent in that status quo category. The middle column there is the probability of being at or above the SSB threshold in the short-term projections, and then the final column gives you the year when the SSB would cross the threshold at these various harvest levels.

You can see in the case of Delmarva, the probability of the SSB being at or above the threshold, not quite as rosy as being at the F target; but they rebuild in relatively short, relative to some of the other regions short timeframe, so 2020 or 2022; depending on the scenario you're looking at. One final note on this one, Delmarva, it was decided already that they would be using SPR calculations in their analyses.

New Jersey-New York Bight also decided that they would be using SPR calculations. The MSY calculations from the assessment were deemed not appropriate for management use. Again you can see the short term information there. But then pretty far out before that SSB reaches the SSB threshold, in this case 2046 under status quo.

It does rebuild under status quo, which is good news; but it takes a long time to get there. Even under the other scenarios it is a slow growing, long lived fish. These things shouldn't be too surprising. Long Island Sound, in the case of Long Island Sound we're still undecided as to which reference points we're going to be using SPR or MSY.

There are two tables for Long Island Sound, the first are the SPR calculations, and you can see really low probability of being at or below the F target. Under status quo, really low probability of being at the SSB target and it takes a real long time under status quo, 2238 before you rebuild the stock in the Long Island Sound Region.

Under the other two scenarios, because they're pretty significant cuts, very significant cuts from the status quo, these rebuilding timelines aren't that far out, 2021 for the SPR calculations. For MSY, again not too different by way of information there under status quo, it does rebuild, but it takes a long time.

Then because of the significance of the harvest reductions to meet the F targets, rebuilding occurs relatively quickly for Long Island Sound. Mass-Rhode Island, a quick note in the original short-term projections when we met as a Technical Committee, someone noted the really tight confidence bounds on the information and I went back and checked and found an error, I was pointing to the wrong file in the projection module; and so I corrected that. It doesn't have a very meaningful impact by way of the information you've already seen, just adjust the harvest levels a little bit more and actually puts a little more spread between the 50 and 70 percent probability targets, which makes a little more sense.

Again, status quo is about 390 metric tons. These are the SPR calculations. Again Mass-Rhode Island it's unsettled as to the reference points that we're using at this juncture. Status quo under SPR, there is a zero percent probability of being at or below the F target. Very low probability of being above the SSB threshold and it takes until 2025 to get there under status quo.

A little more optimistic as far as SSB, but again has to do with the degree of cut needed to achieve the F targets. Then MSY calculations, under status quo the population go extinct. It never reaches the SSB target and in fact goes to zero or pretty close to it. Again, you can see under the other two targets much bigger cuts needed in the harvest. Under the MSY calculations it takes a little longer for SSB to rebuild as well.

Okay almost done, two quick slides on caveats. These are obligatory Technical Committee caveats on projections and the options that we've created. The projections didn't include any structural model uncertainty. They use a bunch of deterministic functional forms and a lot of the information such as recruitment in some cases, or selectivity.

The fisheries are assumed to continue at current allocations using current selectivity; not as bad an assumption for tautog, it's a pretty large component as all the same fishing gear, rod and reel. Just to finish that caveat. New management regulations that alter the proportions or selectivities would affect the projection results.

Again, if future recruitment is characterized by long runs of large or small year classes due to any number of different reasons, the stock trajectories may be affected and so they won't be as reliable if things happen that are outside of the average. Then final caveat, the options are premised on future years harvest occurring in a similar fashion to the average; so seasonal

harvest rates, bag limit achieved per angler, population size structure.

All of these things are assumed to be fairly consistent moving forward, at least into the near future. That is what the options are premised on. I think we are not going to take questions yet, but we're going to go right into the next presentation. There is just a final slide that we can come back to; I think maybe at the end that summarizes the options and how they kind of differ from each other.

CHAIRMAN NOWALSKY: With that last slide anyone can have thoughts about how to fill in that question mark about what the tautog is actually thinking, and we can have discussion about that later if you'd like. Because we did have quite a bit of discussion about the items that Jay just presented at the working groups, we're going to go right into those slides; and then we'll take questions for the combined presentations.

PDT REPORT ON REGIONAL WORKING GROUPS

MS. HARP: I'm going to go through the Regional Working Group Feedback. At the October, 2016 meeting the Board reviewed seven potential issues to include in Draft Amendment 1. The first three are grayed out because the Board deferred any decision to kind of public comment. The public will review the MSY and SPR reference points as noted by Jay for the Massachusetts-Rhode Island and Long Island Sound Regions; as well as metrics respective to a 50 percent and a 70 percent probability of achieving F target.

The amendment will not include options for a rebuilding plan; instead a rebuilding plan will be included under adaptive management as something that could be considered into the future. Issues 4 through 7 were deferred to further discussion by Regional Working Groups. Three working groups were created and the most working groups, as Adam mentioned met via conference call twice to discuss these issues.

OVERVIEW OF TOPICS AND WORKING GROUP INPUT BY REGION

MS. HARP: On the first call the working groups discussed potential commercial management measures to implement the commercial harvest tagging program. We received quite a lot of feedback on how to potentially manage the commercial fisheries to kind of account for how many tags need to be distributed per region. The group also discussed differential sector reductions, so should the commercial or recreational sector take a larger cut than the other; and all regions decided that a 50 percent cut for each is preferred.

On the second call the working group reviewed the TC Harvest Reduction Analysis that Jay just presented for these regions. Based on those inputs and based on the options provided, based on some of the severe cuts that some regions need to take; these regions provided input on how to manage the fishery within each region, or potential ways to manage the fishery in options that should be included in Draft Amendment 1 for the public to consider.

An overview of the presentation, so I'm going to go through each regional working group and I'll kind of start with the reference points, then an overview of the discussion; followed by the PDT guidance that was given by each group. Each group kind of said; include these options in Draft Amendment 1 but not these options.

That was just kind of for the PDT to think about as they continue to craft the document. Lastly, Regional Working Groups kind of said, okay we're reviewing this harvest reduction now so that you present it, and we kind of have some additional TC tasks that we would like the Board to consider at this meeting.

If the Board thinks that these are valid tasks then the Board would have to actually task the TC with moving forward with these. These are kind of alternative ways of managing the fishery. I'm going to start with Delmarva. The Delmarva reference points as you can see the region, the stock status is overfished but overfishing is not occurring, therefore the region did not have to take any harvest reductions.

However, the group still met to discuss all of the issues that I just mentioned. There was kind of a general agreement to propose measures that will not greatly expand the fishery. On the first call there was a discussion of just rolling over the status quo measures. Since those seemed to suffice, the fishery seemed to be doing well, it is not overfishing.

On the second call there was more of a discussion about having consistent measures across the region. There was just kind of some impetus to say let's think about a different way of managing this fishery. The stock is overfished in this region, and if we can come together to have consistent management measures then this is the time to do it. As far as commercial regulations on the first call, what was discussed was that Virginia harvests the majority of the commercially caught fish in the region; therefore they would be considering a hard commercial quota. Delaware and Maryland are considering limited entry programs to cap effort and provide adequate accountability to distribute the tags.

This is a little bit tricky, so the sights would have to meet annually to discuss this soft quota for the region, and then how to kind of allocate how much Virginia is going to have for their hard quota. As far as PDT guidance for Draft Amendment 1 from the Delmarva Region, they want to include option for a limited entry program.

The states, it is not like they want to move forward with limited entry program, they want to see if this is what stakeholders want as the best way to kind of allocate tags. They want to include an option that requires the sale of tautog to a federally permitted dealer, to also improve on the accountability and transparency of how

these commercially caught fish are moving through the market.

They also want to insure that the gear restrictions align with black sea bass gear restrictions, so we're pretty sure that they do. The PDT just needs to double check to make sure they do, since tautog is often caught as bycatch in that fishery. Also since there is kind of one state is considering a quota and the other states are not, they want to require state quotas to be reviewed by the TC and the Board prior to implementation.

Lastly that de minimis states would be required to participate in a commercial harvest tagging program, so they would not be exempt; and this is kind of a recommendation from the Law Enforcement Subcommittee that they felt that that should be implemented, not only for this region but also kind of for the fishery coastwide.

For the TC task to consider, so as I said on the second call there was kind of some thinking of well okay what if we do have consistent management measures. Is it possible for the TC to evaluate the impact of a uniform 16 inch size limit and possession limits across the regions, and then also only closing for spawning closures?

Right now that there are a lot of different closures within each region and they are saying if we were to kind of increase the size limit to 16 inches, which is an increase for some of these states, and make the possession limit the same, maybe we can only close just for spawning time periods; not have these extra closures.

They're asking for the TC to kind of do this analysis, and one part of that would be that the TC would need to research the peak spawning time periods for tautog in this region. Moving on to the next working group, the second working group consisted of Long Island Sound, a region that is overfished and overfishing is occurring, when you look at either the MSY of the SPR

reference points that are both presented on this slide.

This working group also included the region of New Jersey and New York Bight. This region is only considering SPR reference points. The status of the stock is overfished and overfishing is occurring. On the first call the group met, and as I said it was pretty much geared around the commercial regulations to implement this tagging program. Connecticut is considering a lottery or a lease scenario. They were pretty adamant on the call, at least at that time, not to allocate based on history. They didn't want to kind of exclude people from joining the fishery; so they thought his was a more fair way of kind of issuing tags, but also capping effort. New York was considering a limited entry program.

They also said they may consider a quota down the road, but they would like to see how the limited entry program kind of worked to begin with, and how many people were actually in the fishery, how many tags would be given out; before they kind of got locked into a quota. New Jersey has already implemented a limited entry program; and already has a commercial quota.

After seeing the harvest reductions for the Long Island Sound, they're facing some pretty steep reductions, and so they wanted to explore new ways of managing the fishery in Draft Amendment I. I'll explain that more in TC tasks. There was also quite a bit of discussion about the complicated spawning pattern for tautog in that some of the states don't have closures during what would we consider, without even doing more research as a spawning time period for tautog.

They were thinking that maybe all regions should kind of be, as Delmarva said, on the same page as far as spawning closures, and institute those at the same time period to protect these spawning fish; because in most cases the stock status for spawning stock biomass is overfished. For PDT guidance that they gave for Draft

Amendment 1, there was a general agreement to explore a consistent minimum size and seasonal spawning closures across the two regions.

I just wanted to give options to illustrate that. They wanted to also include in the document that the spawning closures should be included in recreational and commercial measures; to protect brooding females and large males. There was quite a bit of discussion over that. Are we just protecting brooding females, and shall we just do it in one part of the sector of the fishery and not the other?

After the discussion it came out that no, it should be in the recreational sector as well as commercial sector, it should be protecting females and males; they are both necessary to protect and kind of expand the biomass of the fishery. There were some options included that Jay noted that did bring up the minimum size limit to 16.5, 17, 18 inches.

The states did not prefer anything more than 16 inches. It did come out on the call that there is a biological justification for this. As you increase the minimum size, then you are having more fishing effort on larger females, which produce more eggs, which could also have an unintended negative impact on the fishery; if people just start targeting these large, brooding females or just large females in general.

There is also a concern about compliance. If we were to continue to increase the size limit, there is a high level of noncompliance in this fishery. There is a black market in this fishery. This could just further exacerbate that noncompliance if we could just continue to raise the minimum size limit.

There was discussion about the implementation of harvest reductions should happen concurrently with the commercial harvest tagging program. This is a really interesting point to bring up, because in other meetings we had

kind of discussed the commercial harvest tagging program might take a little bit of thought. It could be an addendum to the Draft Amendment 1 if it's not ready. How this came about was that it probably shouldn't happen that way. They should probably implement it together, because legal fishermen are looking at some pretty steep harvest reductions in their regions; and it would be seen as vastly unfair for those fishermen to have to take the first cuts while the black market fishermen, which is really what the commercial harvest tagging program is targeting, would not have to take cuts until later or whenever that would happen.

They want these cuts to happen, or these limitations to happen at the same time for legal fishermen and seemingly illegal fishermen. The PDT noted that and will of course make every effort to include the commercial harvest tagging program in a draft amendment; and it won't be considered as an addendum.

There were also comments to consider a date for the commercial harvest tags, such as when they should be returned by, just like a detailed question, but just to say the tags need to be returned. You can't continue to get tags year after year if you haven't returned them; so possibly February 15th is when people should return the tags or they wouldn't get tags for the following year.

Then as we saw, this region is unique in that New York is split between two regions. This is something the PDT will have to think about as kind of a unique tag code for New York's Long Island Sound fishery versus New York South Shore fishery. For the TC tasks for the Board to consider, as I mentioned this region was also interested in making sure we have spawning closures at the right time.

The TC would need to research peak spawning time periods for tautog. Also, two ways of evaluating the impact on potential harvest, one is implementing a slot limit. The slot limit would be implemented, and then there would be similar seasonal closures; including spawning closures across the region.

That is a completely new thing. This was not discussed in any other region, but when they were facing those increasing minimum size limits there was a thought that maybe a slot limit would be a way to kind of avoid that. Another way of looking at how to implement the harvest reductions would be to have consistent minimum size limit, either 15 or 16 inches; so both would be shown, as well as seasonal closures including spawning closures, and similar bag limits across the region.

Once again kind of a way to look to have consistent measures across the region, knowing that if one area closes in one state, especially in these two regions; if you're in New York you'll just go to the other state, and you know how to kind of squash that kind of behavior from happening or limit that behavior and trying to really think about how we reduce harvest for this fishery. Not just have regulations where people just go across state lines to where it benefits them.

Lastly, we have the Massachusetts-Rhode Island Region. These will be taken out for public comment as MSY and SPR reference points. The SPR reference points indicate the region is not overfished and overfishing is not occurring. The MSY reference points indicate the region is overfished; but overfishing is not occurring.

PDT/WORKING GROUP RECOMMENDATIONS ON HARVEST REDUCTION OPTIONS FOR DRAFT AMENDMENT 1

MS. HARP: This region only had one call due to some scheduling conflicts, so this region did not see or preview the harvest reduction analysis that was just presented. But on the first call the region actually kind of jumped into discussing regional management; a little bit more than the others did, so there was some progress made on that. Two ways of regional management that

this group was considering was that they could allocate the regional maximum harvest by state. Not just a commercial harvest, the overall maximum harvest for this region, they would come up with a way to allocate it by state based on some review of history over a three, five or ten year timeframe.

The region would still have to present the proposed recreational measures and commercial quotas for the TC and Board for review as well. But they would kind of take the lead on thinking about how to allocate this maximum harvest. The second way that they were thinking was the region was considering consistent recreational management measures across the region, and then managing the commercial fishery with a quota.

Each state already has a quota, they want to continue using the quota; however, it is to be determined if it would be a state quota or a regional quota. I also wanted to note that Rhode Island has a quasi-limited entry requirement, and Massachusetts may consider a limited entry program. There was, and this kind of came up throughout some of the other regions as well.

I was thinking about tautog as bycatch, and kind of how to include them into a limited entry program if people are catching black sea bass, but they're also catching tautog quite frequently. That was the quick overview of the feedback that I got from the Regional Working Groups; and I'll take questions as well as Jay will take questions on the TC analysis.

CHAIRMAN NOWALSKY: All right great. Our goal here today we'll ask questions, we'll have discussion. But the goal here today for this group would be whether to task the TC with answering or attempt to answer the questions that were raised regarding how to take the reductions and the development of other commercial programs. Do we have any insight, Ashton about how if we tasked all of those items it would impact the schedule timeline for the amendment at this present time?

MS. HARP: It would impact it. These Regional Working Group discussions came about like two weeks ago; so they were quite recent and not enough time to schedule a TC meeting to fully review the impact of these. I can defer also to the TC too, but these are just vastly new ways of thinking about how to manage the fishery; and it will take the TC time to calculate how to do consistent management measures across the region, so it will delay it. How much, I'm not sure.

CHAIRMAN NOWALSKY: We'll turn to the Board for questions about the presentations and then after we have a question period, we'll then turn towards how the Board wants to proceed. We'll start with Dan McKiernan.

MR. McKIERNAN: My first question is for Jay. In your presentation you talked about illegal fish is in the assessment, credit won't be given for illegal fish et cetera. But it seems to me that that illegal fish that you're detecting is only the illegal fish in an MRIP interview where an angler says, yes you can look at my fish; and lo and behold there are some undersized fish, and that shows up as an illegal fish.

Would you consider broadening, in terms of the presentation, the recognition that the illegal fish is probably much broader; in terms of the conspiracy to take small fish? The greatest hits of coastal law enforcement in the last couple years have been sea bass and tautog busts. Tautog of course is so well known that we're about to endeavor into a very administratively burdensome tagging program. Would you consider changing the focus of this consideration of the illegal catch to at least mention those other areas?

MR. McNAMEE: Really good point. Just to restate what we did. It was exactly as you said, just the illegal harvest that shows up in the MRIP data; presumably by folks that don't know that they're doing something wrong. I imagine the illegal harvest is not well represented by that

information; there are probably larger – how to quantify how much larger – that is always the struggle that we have. But you're absolutely correct that this is mostly likely an under representation of illegal harvest. We've not accounted for it in total by any stretch.

CHAIRMAN NOWALSKY: I think Joe, is that a hand? Great; good morning, Joe.

MR. JOE CIMINO: Very different question, but I think this is still for Jay. One of the slides that talked about increasing size limits and the biology of the species, I don't remember seeing anything in our working group. I feel pretty sure we didn't. Has the TC examined sex ratio? We have a lot of sampling, and even regionally you should be able to do it, kind of where males start dropping out and where percentage of females at a certain size.

MR. McNAMEE: That wasn't considered for this scope of work. I guess sex ratio is an important consideration. Another one that we have discussed a lot is also the fecundity impacts; it's an exponential relationship with size and fecundity. Neither of those things was considered in the analyses we did.

CHAIRMAN NOWALSKY: Follow up, Joe?

MR. CIMINO: I guess would that be something that would be forthcoming? To me it looked like one of the tasks, I think it was the New York slide, suggesting that a maximum size wouldn't go above 16 inches. Just curious if that is what that was referring to.

MR. McNAMEE: I'm sorry, Joe, could you repeat that? I'm not sure I understood your question.

MR. CIMINO: Yes, and maybe if we can get Ashton to help. I thought that one of the Working Group slides suggested that a max of 16 inches would be considered for biological reasons. If that is true then would there be an analysis that suggests that is a real cutoff?

DR. KATIE DREW: The discussion about a maximum biological size limit or a biological justification for not raising that minimum size only happened at the Working Group level. I think if the Board is interested in that kind of information they could certainly task the TC to come back and look at that issue. But it was not something that was discussed as part of the options that we developed to talk to them.

CHAIRMAN NOWALSKY: Additional questions on the presentations. Dan is going to take another bite at the apple.

MR. McKIERNAN: In the talk about slot limits, was there any consideration given to slot limits on the commercial sector? I ask that because if you're trying to hand out the appropriate number of tags, if you knew the size range and the weight range you could probably narrow that number more effectively. Plus I think typically in the market, smaller fish are being preferred anyway. Did that come up at all?

MS. HARP: We did discuss that the smaller size, I mean like a plate size 12 inch fish is like the preferred size for the illegal market. But as far as whether it would cross over between commercial and recreational, I don't remember that specific discussion; someone else could, but we just kind of discussed slot limits in general.

CHAIRMAN NOWALSKY: Follow up.

MR. McKIERNAN: It is unrelated. I know we didn't get to talk about this as a group, Mass and Rhode Island, but in your slide you mentioned one of the bullet points was a state allocation within the regional management approach. Is that even necessary? If we have quotas and we let the recreational fishery proceed with common limits.

Do you think or does the Board think that it's necessary for states to continue to have this rigid pie sharing? I think that we all believe the striped bass model is one of the most successful

ASMFC models, and in that fishery we do not have recreational shares of the total take. My vision is to create within Mass-Rhode Island a striped bass like model.

Where if MRIP comes back and shows the recreational fishery larger in one side of the other, or if for some reason one states fishery was more active. I don't know if we want to constrain that. Did you consider that? How did you get to that? How do we get to a conclusion that there would need to be sharing or specific shares?

MS. HARP: Are you talking about the first pathway for the Massachusetts-Rhode Island? There were only two people on the call. The other state kind of thought that might be a better way forward. I would have to look at my notes as to how we got to that. But it was just kind of a way to provide more flexibility for the region.

Saying this is the maximum harvest and these states can allocate how they want; to have the states manage their fisheries. That wasn't really saying that there is going to be consistent management measures, it was just kind of saying that this is the way we think might be a more flexible way of doing it.

CHAIRMAN NOWALSKY: Okay so I'm not seeing any additional hands for questions. I think our next area to cover is discussion about how to proceed with this amendment. Specifically what we would need, we have a couple of known items that will be part of a draft amendment. That will come back to this Board for review before going out to public comment; with regards to the discussion about which reference points to use.

Long Island Sound and Mass-Rhode Island, SPR/MSY as well as allowing the public the opportunity to comment on which probabilities of achieving the F target we're going to manage with. Where that leaves us though is still further

developing the tagging program. We got the report about the trials. Now as a result of the Working Group calls since the last Board meeting, we have a number of tasks that I had asked Ashton to frantically try to quantify for us and put up in front of us; so we can all look at what those are, which would likely delay. Is it fair that if we did not have the TC tasks that the PDT would be prepared to have a draft amendment before us in May, with no additional feedback?

I guess we need two pieces of information. What additional feedback do we need from the Board today to give the PDT to bring a document to us in May, versus this Board asking for additional tasks; and would that likely put us off until August or sometime further down the road?

MS. HARP: What I gather is we don't really want to continue to delay this Draft Amendment 1. The PDT needs to continue moving forward on the tasks that it can or the issues that it can. The main issue that I would say that would only be the real delay is the regional management issue. There were a lot of other issues, for the commercial harvest tagging program, for other things that we can move forward on.

Some of these specific details on these options that the TC is considering, it's not like they're going to go in Draft Amendment 1 specifically. They are not going to be hard coded in Draft Amendment 1 that this is going to be the bag limit for forever. Those things are always up for debate, depending on the stock assessment.

To a certain degree it doesn't have to delay the document. It doesn't have to delay the document, but we need that information prepared for whenever we go out to public comment. I know that's not like a concrete answer. But I think the PDT can continue moving forward on the document and then kind of see what the TC has together and to see if that is enough to show the public.

CHAIRMAN NOWALSKY: That would be with no further Board input today.

MS. HARP: I'll think about this.

CHAIRMAN NOWALSKY: All right we'll give Ashton a moment. Does anyone have additional discussion, thoughts? Dan.

MR. McKIERNAN: A question for you Adam. Given that the document is going to go out, and I'm fairly confident how the public and Mass and Rhode Island might respond to the MSY versus SPR reference points. Can this Board vote today to choose one to make the document a little cleaner?

CHAIRMAN NOWALSKY: The Board has taken that action in other regions. We've taken the action on whether to include a rebuilding plan. I would say it's within the scope of this Board to do that. I would just have to turn to Toni to see if there is any element of reconsideration here. I don't recall if we had specifically taken a vote to include MSY and SPR reference points in the document that we're effectively reconsidering, or whether this would just be a new decision point that we're having here today. I would have to turn to Toni for a clarification on that.

MS. TONI KERNS: I don't recall whether or not you guys did any decision making or votes on it. But because they were not final decisions, because you hadn't finalized the document yet, you are at a new meeting so you can bring up new concepts and ideas without having to go through the revisit two-thirds vote. You can make that any motion that you want on that at this meeting.

CHAIRMAN NOWALSKY: Okay so I think that answers that. We'll have those lists of tasks up here in just a moment. Was there anything you wanted to proceed with, Dan, after those last comments?

MR. McKIERNAN: Can I make a motion that the Mass-Rhode Island Region adopts for the public hearing document only the SPR reference points?

CHAIRMAN NOWALSKY: You can make that motion. Do we have a second on that motion? Second from Mark Gibson, let's take a moment to get that up on the board. Okay so we have a motion to move that the Mass-Rhode Island Region go out for public comment only to include the SPR reference points. Motion by Mr. McKiernan, seconded by Mr. Gibson, is there discussion on the motion? Mark, go ahead.

MR. MARK GIBSON: Could we just get a quick refresher, particularly from Mass and Rhode Island. Could you show us that table again, the difference in the stock status relative to the two different reference points first; and then I would like to hear from Jason and the Technical people about why they feel, they had some confidence in the MSY calculations based on estimation of the stock recruit slope; so I would just like to hear a summary of that again.

CHAIRMAN NOWALSKY: Great Jay, if you could go ahead and comment while they're bringing up that slide. We've got three things going on at once, the motion, the list of TC tasks and now going back to another slide; so thanks for your patience. Jay.

MR. McNAMEE: Very good question, I will do the best I can to search the memory banks here. I think the easy one is in looking at the output from the stock assessment for the Mass-Rhode Island Region, the relationship looked reasonable, the model was able to estimate steepness; the steepness parameter.

I guess that was the first order, kind of decision we made was in the Delmarva and the New Jersey-New York Bight. It was not able to estimate any sort of relationship however, in Long Island Sound and Mass-Rhode Island it was. I think at that point we started to think a little bit

about the biology and what the relationship parameter estimates were saying.

I think we felt comfortable with that information as well that it seemed reasonable for an animal that we knew to be slow growing, long lived. I'll kind of yammer for another minute here while I'm trying to think if there is anything else. But those were the two big ones from what I can recall. I don't know that there was any other.

I guess the final one more of a qualitative assessment was I think in particular, because of the low abundance that we've seen for so long since going way back in the time series of information that we had. We felt that it was probably not reasonable, the stock status determination that was coming out of the SPR calculations. Taking all of that information in a weight of evidence kind of way; that is why we I think decided in the end to recommend MSY for Long Island Sound and Mass-Rhode Island.

CHAIRMAN NOWALSKY: We're also going to have staff, they had prepared in anticipation of a question that what would, we haven't seen it yet, but what would those impacts of the reduction between the two reference points be, so we're going to have that slide pulled up in just a moment.

MR. McKIERNAN: Jay already told us that under the MSY calculations this stock is going extinct at status quo, which to me is difficult to swallow; because we have a very conservative management approach and we're about to make it more conservative, which I'm certainly willing to do. But I just think it is a difficult sell to the public to suggest that the level of conservation that we have currently, is going to create a trajectory that will lead to extinction. That is status quo.

CHAIRMAN NOWALSKY: Okay and the slide is up on the board that would basically show what the change in fishery performance would need to be, based on SPR versus MSY. Yes, Jay, did you have another comment for us?

MR. McNAMEE: Yes, a quick comment to what Dan just said. I appreciate his comment, because that was being a little glib. I mean that is what the projection showed. I think the important consideration is in the Mass-Rhode Island Region in particular, the annual estimate of recreational harvest can jump quite a bit; and has in the past three years. I think that's more what it was indicating is that average of 390 metric tons. That was what the projection showed that if you maintain that moving forward it declines.

But I don't think that is indicative of our current management necessarily, because the year prior to that it may have dropped by, I don't know 50 percent or something like that. Those may have been, long story short, the 390 metric tons is an average of the three years; and there is high variability in that estimate year to year. I think that's why you get that outcome. It is not necessarily a statement about our current management specifically.

CHAIRMAN NOWALSKY: Further comments or is the Board ready for a caucus followed by a vote? Okay seeing no other hands up, I'll give the Board a moment to caucus. We'll go ahead and take a vote. Again, move that the Mass-Rhode Island Region go out for public comment including only the SPR reference points. All those in favor of the motion, please raise your right hand. Please, put your hands down. All those opposed, please raise your right hand; abstentions, two abstentions, null votes. Motion carries by a vote of 7 in favor, 0 opposed, 2 abstentions.

With that I'll just bring to the Board's attention that for three of the four regions we're now using SPR and that leaves only Long Island Sound as a potential decision point, which the PDT would have to work on to include in the document. I'll put out there, does the Board want to have discussion.

Maybe staff could just bring up those Long Island Sound reference points, and have discussion about do we want to continue to have this question in the document. Long Island Sound would now be the only region for an MSY versus SPR decision. Having it in the document provides opportunity for public comment.

It also provides opportunity for the public to discuss why wasn't it included for the other options? I thought I would put it out there, given that action for consideration. Mark Alexander.

MR. MARK ALEXANDER: Jason, I think I heard you say that the PDT favored MSY for the Long Island Sound Region. Is that true and could you elaborate on that please?

MR. McNAMEE: Yes it was the Technical Committee, and that was the discussion. It was very similar to that had for the Mass-Rhode Island Region; again the model was able estimate steepness. The steepness parameter that it was estimating seemed reasonable for tautog. It was the same exact discussion for Long Island Sound that we had for Mass-Rhode Island. But yes, I'm sorry, to answer your question. The recommendation from the Technical Committee was to use the MSY calculations.

CHAIRMAN NOWALSKY: Mark Gibson.

MR. GIBSON: I appreciate you bringing that up, because I was expecting that there would be a motion to amend the Long Island Sound Region to add them to the past motion; that didn't happen. I would just point out a couple of things that just does leave the complication in the action that the public is going to struggle with; albeit at a reduced geographic scale.

Also it is so inconsequential at this point. The SSB thresholds and the F thresholds are well within the statistical uncertainty of their estimations. There is really no difference between those numbers. I'm not going to make the motion on behalf of my Long Island Sound

colleagues, but it seems to me it's unnecessary to have this choice in the addendum at this point.

CHAIRMAN NOWALSKY: Again, it is entirely up to the will of the Board. I'm going to have staff just put up a similar slide that we looked at for Mass-Rhode Island that would show a comparison of the reductions. Okay so that's a comparison of the reductions there for Long Island Sound is in the top two-thirds of that chart. All right I'm not seeing any, oh there we go. Mark.

MR. ALEXANDER: I'll offer the motion for the Long Island Sound Region that we opt for an MSY approach.

CHAIRMAN NOWALSKY: Okay so we have a motion to use MSY for the Long Island Sound Region. Steve is seconding the motion, so we have that motion from Mark Alexander seconded by Steve Heins. Discussion on the motion? Mark.

MR. ALEXANDER: Well, I would just like to offer that the Technical Committee does support this approach for Long Island Sound. I think just because it differs from the approaches preferred by the other regions that that is not really a valid reason to reject going with this approach here.

CHAIRMAN NOWALSKY: Okay let me see a show of hands of people that want to comment on this. All right so seeing none; we have a motion to use the MSY reference points for the Long Island Sound Region. I'll give the Board a moment to caucus. Okay all those in favor of the motion, please raise your right hand.

Please, put your hands down. All those opposed to the motion raise your right hand, abstentions; you can put your hands down, null votes. Motion carries 7 in favor, 1 opposed 2 abstentions. I'm hearing smiles from the PDT.

BOARD GUIDANCE TO THE PDT ON DRAFT AMENDMENT 1

CHAIRMAN NOWALSKY: Okay that brings us next to the list of TC tasks. Are we ready to put that slide up to have discussion amongst the Board about how we want to proceed with potentially tasking the TC to look at these before further development can be done by the PDT? Ashton, if I heard you correctly, it was really the regional component of this, which is the last bullet point of what's up that would potentially have the greatest impact on a timeline for continued development of the document.

MS. HARP: Yes, so it is just a different way of looking at the harvest reductions; with a regional approach, with consistent management measures across the region. I was wondering if I could ask the TC, like what is involved with doing that considering this is time periods when other states are not fishing, but now that they would be fishing. How do you analyze that and what are the complexities involved?

CHAIRMAN NOWALSKY: Jay, not to put you on the spot or anything.

MR. McNAMEE: No that's okay; I can answer because that was what delayed the Mass-Rhode Island calculations, because I thought we were doing that originally. It makes it difficult, not impossible. However, what happens as you increase the amount of uncertainty that you are putting into the management decision, because of the assumptions that need to be made.

For instance, if there is a closed season in one state and an open season, you need to make and now you open during that period of time you need to make some assumptions about the state that was closed and their harvest rates during that period of time. I won't itemize all of the millions of different ways that the uncertainty increases. But it makes it difficult, it's not impossible, but it is a significant amount of work; in particular for the regions that haven't already done it. I see it being about equal to the amount

of time they probably already spent on crafting their options.

CHAIRMAN NOWALSKY: I guess that brings us back to the question of, would it likely delay a draft amendment from coming before this Board in May?

MS. HARP: I think that the PDT can continue working on the document and all of the issues that we already have made decisions on. Then just kind of be ready to have some options that are kind of prepared for consistent regional management within regions. We could do that. I could go back to the PDT.

Say, for the regional management we can have some different ways of looking at regions; would it be consistent management measures or would it be state-by-state specific? It would just be a little bit more work, but I don't think it has to delay it. Because a lot of the options that are going to come out of this, they're not going to be hardwired in the amendment.

CHAIRMAN NOWALSKY: Okay, so I don't think we would necessarily need a specific motion from the Board for these tasks, but I would just ask if there is any objection to moving forward with tasking the TC to look at these issues. Seeing none; are there any tweaks, changes, clarifications anybody needs?

There was one question on here to include that conversation for slot limits for both recreational and commercial. Because nobody clarified one or the other, I would interpret that as asking the TC to potentially look at both. Where that leaves us is the TC will look at these issues. Would you propose having them brought back to the Working Groups prior to May?

MS. HARP: I see no reason. I think it might still be under a tight timeframe as it was this time; so I wouldn't expect them months in advance. I want to have the TC an adequate amount of time to prepare these; given the amount of work

needed. We can do two weeks before, or maybe a little bit more, time before the meeting to kind of preview the results to have that initial discussion. I thought that it was really helpful to have those kinds of initial discussions, and very kind of candid Regional Working Group discussions prior to this meeting.

CHAIRMAN NOWALSKY: What I'm hearing is that assuming the schedule allows, we would reconvene the working groups another time to have discussion about that; and the expectation would be the PDT would bring a draft document before the Board in May. Okay, further discussion. Mark Alexander.

MR. ALEXANDER: I just wanted to add one thing to the slot limit. Because tautog is a popular fish for spear fishermen, managing under a slot limit may be a little difficult unless the measures that are developed, relative to a slot limit, includes say one fish in the slot and one fish just bigger than some minimum length. I think that may make compliance by the public a little easier when it comes to spear fishing.

ADJOURNMENT

CHAIRMAN NOWALSKY: Any other comments? Is there anything else from staff regarding needs on this topic? Okay, is there any other business to come before the Board? With no other business and having completed the items on the agenda, we stand adjourned. Thank you very much.

(Whereupon the meeting adjourned at 11:15 p.m. on January 31, 2017.)



Atlantic States Marine Fisheries Commission

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Tautog Technical Committee / Stock Assessment Subcommittee Meeting Summary February 7, 2017

Technical Committee / Stock-Assessment Subcommittee: Jason McNamee, Jeff Brust, Bob Glenn, Sandy Dumais, Katie May Laumann, Alexei Sharov, Lindy Barry, Craig Weedon, Scott Newlin

University of Connecticut: Jacob Kasper

Staff: Ashton Harp, Katie Drew

At the Winter Meeting, state-specific harvest reduction analyses were presented to the Tautog Board. The Board voiced interest in an alternative harvest reduction analysis, whereby states within a region would have consistent management measures. The Technical Committee (TC) was subsequently tasked with evaluating consistent management options within the regions of Long Island Sound (LIS), New Jersey-New York Bight (NJ-NYB), Delaware-Maryland-Virginia (DelMarVa). The TC met via conference call to review the regional tasks assigned by the Tautog Board. The next progress call is scheduled for March 16th.

The TC tasks by region include:

- DelMarVa: TC to evaluate consistent possession limits and spawning periods with a 16" minimum size limit
- **NJ-NYB:** TC to evaluate consistent possession limits and spawning periods with a 15" and 16" minimum size limit and a 'pure' slot limit for the recreational and commercial fishery
- **LIS:** TC to evaluate consistent possession limits and spawning periods with a 15" and 16" minimum size limit and a 'pure' slot limit for the recreational and commercial fishery
- All 3 regions: Research peak spawning time periods in LIS, NJ-NYB and DelMarVa

In-Person TC Meeting

The TC would like to meet in-person to review the regional analyses. The meeting will be on March 29-30th in Arlington, Virginia.

- 1. Meet on March 29 and 30th at ASMFC (Arlington, VA)
 - a. Finalize the TC reports on April 14th for Briefing Materials

Draft Amendment 1 will be presented at the May Board meeting. Aspects of the regional analyses will be included in Draft Amendment 1, therefore there is a preference for an earlier meeting date.

DelMarVa

- Scott, Alexei and Katie May will correspond via phone or email to ground truth proposed options.
- On the first call the group will discuss recreational options. The priority is a consistent minimum size (16") and consistent spawning closures across the region. The group will evaluate options, respective to the priority management measures, which could include:
 - o Option 1: 16" minimum size, shorter closed season and lower possession limits
 - Option 2: 16 " minimum size, increased closed seasons and higher possession limits
 - Questions to consider when developing the parameters of the options: Are there studies to indicate peak spawning timeframes? Where do the closed seasons currently overlap across states? Are there certain timeframes that states have to be open or closed? What is the lowest/highest possession limit to consider?

New Jersey-New York Bight and Long Island Sound

- The Board tasks are the same for each region, therefore the two regions will continue to correspond while completing the separate analyses. Where possible, the analysts will try to complement management options across the two regions. For example, consistent minimum size and possession limits and to some degree consistent seasons, although the LIS would likely have a longer closed season (than NJ-NYB) due to the need for a larger reduction.
- Jacob has expressed interest in completing both LIS tasks. He has started the slot limit analysis for LIS and is willing to evaluate consistent management measures across the region. The TC discussed the applicability of a slot limit to all regions. Jacob noted that the R code he is developing could be retrofitted for use in other regions. The code is not yet complete but the input into the code is a length distribution of catch compiled from fisheries dependent surveys (e.g., MRIP harvest, Type 9, as well as CT VAS and NY Headboat surveys) as well as harvest/release information from MRIP.

Massachusetts-Rhode Island

The MARI analysts intend to provide additional management options for consideration. These will be provided to the TC prior to the in-person meeting. This will include slot limit options if time allows.

Spawning Analysis

MARI has implemented spawning closures, these were guided by ichthyoplankton studies conducted in Narragansett Bay. Researchers pinpointed when eggs were showing up in high abundance to set the bounds of the spawning closures.

DelMarVa, NJ-NYB and LIS will evaluate the appropriate time period for spawning closures using available data or through a meta-analysis.

Assumptions when liberalizing management measures

Similar to the process to restrict harvest, there should be some common assumptions to apply when liberalizing measures. Liberalizations are more difficult to calculate because the analyst is often working with a lack of data. However, some techniques that may be applied include:

- Seasons: to open a closed season, one may look back to find the last time the season
 was open and apply those harvest rates to the newly opened season. The TC will have to
 determine how far back is appropriate to use for contemporary fishing rates.
 Additionally, if a portion of a wave is open, the rate for the open portion of the wave
 may be applied to the closed portion of the wave.
- 2. Bag limit: increasing bag limits can be based on data that includes discards, bag limit catch rates from previous periods when the bag limit may have been higher may be used (as stated for seasons, how far back one can go will have to be discussed), or calculations can be made by using data from alternative sources such as volunteer angler surveys. If a good source of data does not exist, a Bayesian approach will be reviewed by the technical committee for potential use.
- 3. Size limit: similar approaches as those described above can be used such as MRIP information including discard information, volunteer angler information, and in this case, fishery independent information can be used to supplement if it exists and is needed (i.e. size distribution from a trawl survey dataset).

Standardized Methodology

The TC had previously discussed the value of a standardized approach to calculate recreational reductions. The new task of consistent management measures across a region will make it more difficult to standardize methodology in all cases. Jay will test his R code versus Jeff's R code and report on the comparison.

After the call, Katie shared the R functions for a simulation model Gary Nelson (MA DMF) created to examine the impact of different size and bag limits on removals/harvest levels. It is a two sex length platoon-based model. It is currently parameterized for striped bass, but it could parameterized for any species.

Tautog Harvest Reduction Regional Analysis for the Long Island Sound Region

Executive Summary

This update provides specific management measures that meet the proposed Tautog harvest reductions in the Long Island Sound (LIS) region (Connecticut and New York north shore of Long Island). Options are given for both commercial and recreational fisheries in in each state and regionally. Under the recent proposal, LIS harvest should be reduced by either 47.2 or 52.6% to achieve biological reference points in 2021. Management measures to achieve the required reduction would be based on the methods presented for recreational and commercial fisheries.

Reference Points

Two biological reference points for LIS are currently under discussion. Two reductions in landings provide a 50% and 70% probability of reaching the target value of F under MSY in three years (Table 1).

Table 1. Projections associated with the LIS MSY reference points

MSY Reference Points							
2018-2020 Landings Scenario	Probability of being at or below F target in 3 years	Probability of being at or above SSB threshold in 3 years	Target Percent reduction	Year at RP			
Status quo (500 mt)	1.7%	0.6%	NA	2149			
264 mt	50.0%	34.0%	47.2%	2021			
237 mt	70.0%	40.0%	52.6%	2021			

Assumptions and biases

There is a discrepancy between the total commercial harvest by wave and the total annual landings used in the stock assessment. The reason for this is that some of the landings data reported by the dealers (NMFS data) are missing the Vessel Trip Report. This discrepancy accounts for about 15% of the commercial landings.

All calculations rely on MRIP and NMFS data. MRIP harvest data is only available on a per wave basis (NMFS per month), so the calculations assume consistent harvest across the open wave (or month). This might be problematic, particularly in waves 5 and 6 where storms and cold weather are more likely to keep recreational anglers off the water as the season progresses. All calculations also assume no change in angler behavior as a result of regulatory change. While seasonal closures are likely to result in harvest reduction, the extent to which the predicted reductions match realized reductions has yet to be seen.

Recreational

Recreational options were developed by adjusting season, size and possession limit regulations using MRIP data from 2013 to 2015. MRIP measured and imputed lengths were used for this analysis. CT Volunteer Angler Survey (> 16") and NY Headboat Survey (> 16") lengths were included in the pool of MRIP lengths to assign lengths to the unmeasured MRIP fish. Illegal harvests (out of season and over bag limit) were ignored. Alterations in size and possession limits were investigated using R in a script built by Jeffery Brust at NJ DEP. Alterations in season length were evaluated by converting percent of annual harvest by wave to percent of annual harvest by day in each wave. Data are scant for the CT spring

Note: The LIS harvest reduction options will be included in Draft Amendment 1 using a different format and numbering scheme.

fishery (Waves 2 and 4) because harvest for this period is minimal. We did not project harvest reductions that would be realized from changes in season length for Wave 2, and projected only harvest reductions realized for changes in bag limit and minimum size at current season length for Wave 4. Below are some possible alternative management measures based on the analytical method. Spawning closures in May, June and July are incorporated in all scenarios.

Option 1: Under status quo management strategy (managing CT and NY as separate units), five harvest scenarios were developed that meet the target harvest reduction (Table 2)

Table 2. Status quo management harvest reduction scenarios

CT options Apr. 1-30, Aug. 1-31, Oct. 10-Dec. 6: 1 fish at 16" (53.0%) Apr. 1-30, Aug. 1-31, Oct. 10-Dec. 6: 2 fish at 17" (46.6%) Apr. 1-30, Aug. 1-31, Oct. 5-Nov. 30: 1 fish at 16.5" (52.5%) Apr. 1-30, Aug. 1-31: 1 fish at 17" & Oct 10-Nov 30: 2 fish at 17" (48.1%) NY options Oct. 5-Dec. 14: 1 fish at 16" (49.5%) or 1 fish at 16.5" (53.1%) Oct. 5-31: 2 fish at 16" (53.2%) Oct. 5-31: 3 fish at 16.5" (49.6%) Oct. 1-Nov. 30: 1 fish at 16" (51.7%) Oct. 15-Oct. 31: 2 fish at 16.5" & Nov 1-Nov 30: 4 fish at 16.5" (47.9%)

Recreational Regional Management Measures

Options were developed to achieve harvest reductions under LIS regional scenarios. To achieve this, state specific (CT or NY Long Island North) harvest reductions were combined by a weighted means approach using the mean number of fish harvested in each region.

Option 2: This option is for regional management measures with consistent minimum size (16") and bag limit (1 fish) but allowing different seasonal closures (Table 3).

Table 3. Regional management harvest reduction scenarios. Blue indicates NY regulations and green indicates CT regulations.

LIS Option, 1 fish at 16" (53%)		
NY: Oct. 5-Dec. 14		
CT: Apr. 1-30, Oct. 10-Dec. 6		
LIS Option, 1 fish at 16" (47%)		
NY: Oct. 1-Dec. 14		
CT: Apr. 1-30, Oct. 6-Dec. 6		

Option 3: This option is for regional management measures with a consistent minimum size (>16"), various bag limits, and allows different seasonal closures (Table 4).

Table 4. Regional management harvest reduction scenarios. Blue indicates NY regulations and green indicates CT regulations.

LIS Option, 2 fish at 17" (48.9%)	
NY: Oct. 10-Nov. 30	
CT: Apr. 1-30, Aug. 1-31, Oct. 10-Nov. 30,	
17" minimum size (52.8%)	
NY: Oct. 10-31: 3 fish , Nov. 1-Dec. 11: 1 fish	
CT: Apr. 1-30, Oct. 15-31: 3 fish , Nov. 1-Dec. 3: 1 fish	

Option 4: This option is for regional management measures with a consistent minimum size, bag limits, and seasonal closures (Table 5).

Table 5. Regional management harvest reduction scenarios. Blue indicates NY regulations and green indicates CT regulations.

LIS 1 fish
Oct. 1-Nov. 30: 1 fish at 16.5" (47.6%)
Oct. 1-Nov. 9: 1 fish at 16" (47.1%)
Oct. 1-Nov. 9: 1 fish at 16.5" (52.5%)

Slot limit options

Harvest slot scenarios were calculated for Long Island Sound for recreational and commercial fisheries, combined. These calculations were based on the same catch and harvest length distributions used in the Long Island Sound stock assessment update (ASMFC, 2016) for the years 2013-2015. Catch and harvest lengths were scaled by the mean number of fish caught and harvested in LIS in the given years. The proportion of catch in a size class (P_L) was calculated (catch in length/total catch). As the proportion harvested in legal size classes was nearly 1, the proportion harvested was set to 1 for all subsequent calculations. Given that, the yield (Y_L) in a size class was calculated:

$$Y_L = C \times P_L$$

The sum of Y_L for all the lengths of interest in a slot results in the yield (Y, number of fish harvested).

$$Y = \sum_{i=\text{slot min}}^{n=\text{slot max}} Y_i + Y_{i+1} + \dots + Y_n$$

The number of dead discards was estimated by the product of the discard mortality (2.5%) and the sum of all Y_L outside of the harvest slot and was included in the percent reduction. Y_L was also calculated based on the biomass by converting length to mean weight.

$$Y_L = C \times P_L \times W_L$$

3

Note: The LIS harvest reduction options will be included in Draft Amendment 1 using a different format and numbering scheme.

Yield in biomass (Yb) was calculated as above.

All harvest reductions for slot limits include spawning season closures from May to July.

Harvest slots provide the opportunity to protect the large female spawners which produce exponentially more eggs (which are potentially of higher quality) than smaller females (LaPlante and Schultz, 2007). As Tautog have a relatively low discard mortality rate (2.5%) harvest slots provide an opportunity for implementing harvest reductions without increasing the minimum size.

Option 5: There are no viable harvest reduction options for slot limit for recreation and commercial fishery, with a size range of 14"- X" using status quo bag and seasonal closures. This is largely because of a high proportion of fish under 16" in the current size structure of the population. Reducing bag size and additional seasonal closures would be required to achieve these harvest reductions with such a slot limit.

Option 6: This option is for slot limits for both recreational and commercial fishery. A harvest slot between 16" and 18" is possible with no reductions in bag size. This option includes a spawning closure in July for the CT recreational and commercial fisheries, and closing the New York commercial fishery for May, June and July. It would have no significant impact on these harvest reductions if bonus fish (recreational sector) within one inch of the state record (34" for CT and 32" for NY) were allowed. Reductions are shown in number of individuals and biomass (Table 6).

Table 6. Regional management harvest reduction scenarios with harvest slot limits for commercial and recreational fisheries. Blue indicates NY regulations and green indicates CT regulations. (Bonus harvest of state record fish are allowed in this scenario from the recreational sector).

Harvest Slot 16"-18" harvest slot, status quo bag (51.3%)

NY Commercial: Jan. 1-Feb 28, Apr. 8-30, Aug. 1-Dec. 31

NY Recreational: Oct. 5-Dec. 14

CT Commercial: Apr. 1-30, Aug. 1-31, Oct. 8-Dec. 24 CT Recreational: Apr. 1-30, Aug. 1-31, Oct. 10-Dec 6

Commercial

Commercial options were developed based on seasonal closures. Connecticut's current commercial fishery has three open seasons and New York's commercial fishery has two open seasons. Total reported harvest from trip level reporting in 2013-2015 was calculated for each open season and converted to percent of total annual harvest. This was divided by the number of days in the season to provide an average daily percent of total annual harvest. It was then possible to look at seasonal closures that would reduce cumulative harvest by the required amount. All scenarios presented include spawning closures in May, June and July (NY) and July for CT.

Option 1: Status quo management options with seasonal spawning closures. Given that NY is open to Tautog fishing for most of the year (March 1 – April 7 is the only closure) there are limited options for opening new seasons once the spawning closure is in effect. By closing April 8 – July 31, a 52.6% reduction is realized (Table 7).

Table 7. Status quo management harvest reduction scenarios the NY and CT commercial fisheries.

NY options include:	
Jan. 1-Feb. 28, Aug. 1-Dec. 31: 15" min (52.6%)	
Jan. 1-Feb. 28, Apr. 1-30, Aug. 1-Dec. 31: 15" min (51.2%)	
CT options include:	
Apr. 1-30, Aug. 1-31, Oct. 5-Dec 24: 16" min (52.8%)	
Apr. 1-30, Aug. 1-31, Oct. 1-Dec 24: 16" min (48.1%)	

By liberating seven days in April the estimated harvest reduction is reduced (Table 7). This is the smallest harvest reduction available for NY LIS with proposed spawning closures.

For the Connecticut commercial fishery, two management options are presented under status quo management which include spawning season closures. A higher harvest reduction (Table 7) and a lower harvest reduction (Table 7) are presented. Both options include liberating some days in October.

Option 2: This option presents consistent minimum size (16") for all commercial harvest in LIS. NY LIS commercial harvest with a minimum size of 16" and spawning season closures results in a 60.6% harvest reduction (Table 8). Seven days are liberated in April to reduce the harvest reductions. For CT options, please see above (Tables 7).

Table 8. Harvest reduction scenarios the NY commercial fishery with a minimum size of 16" and spawning season closures.

NY options:
Jan. 1-Feb. 28, Apr. 1-30, Aug. 1-Dec. 31: 16" min (60.6%)

Option 3: This option provides harvest quotas for LIS. It is broken down by state and regionally (Table 9).

Table 9. Harvest quotas for NY LIS, CT and the LIS region.

	47.2% reductions	
CT 2489 lbs		
NY 34883 lbs		
	52.6% reduction	
CT 2774 lbs		
NY 38873 lbs		

Literature Cited

ASMFC (2016) 2016 Tautog Stock Assessment Update http://www.asmfc.org/uploads/file/589e1d3f2016TautogAssessmentUpdate Oct2016.pdf

LaPlante L.H., Schultz E.T (2007) Annual Fecundity of Tautog in Long Island Sound:
Size Effects and Long-Term Changes in a Harvested Population. Transactions of the American Fisheries Society 136:1520–1533.

Note: The LIS harvest reduction options will be included in Draft Amendment 1 using a different format and numbering scheme.

Tautog Regional Analysis for the DelMarVa Region

Executive Summary

DelMarVa does not have to take a harvest reduction, however consistent recreational management measures for the region are desirable. No action is expected with respect to commercial fishery due to its relatively small contribution to the total harvest.

Recreational Management Options

- Option 1. Status Quo (current measures because a reduction is not required)
- Option 2.
 - Consistent bag (4 fish) and seasonal closure (May/June)
 - Status quo minimum size (DE at 15" and MD/VA at 16")
 - Consistent bag of 4 fish will require DE to increase bag limit from 3 to 4 fish in April and reduce from 5 to 4 fish in January March and July December.
 Maryland will have to increase bag limit form 2 to 4 fish in July October.
 Virginia will increase its bag limit from 3 to 4 fish for the entire season. All states will be closed in May-June (wave 3) for spawning protection.
 - Estimated combined effect of season and bag changes for the region is 8.5 % increase in the harvest.
- Option 3.
 - Consistent minimum size (16") and seasonal closures (May/June)
 - This option will require DE to raise minimum size from 15" to 16". MD and VA are already at 16 inches minimum size. Status quo bag limit no adjustment.
 - All states will have spawning closures in May June.
 - Estimated combined effect of season and bag changes for the region is 11.9 % reduction in the harvest.
- Option 4.
 - Consistent regulations for all states (16"; 4 fish; May/June seasonal closures)
 - Consistent bag of 4 fish will require DE to increase bag limit from 3 to 4 fish in April and reduce from 5 to 4 fish in January March and July December.
 Maryland will have to increase bag limit form 2 to 4 fish in July October.
 Virginia will increase its bag limit from 3 to 4 fish for the entire season.
 - o All states will be closed in May-June (wave 3) for spawning protection.
 - This option will require DE to raise minimum size from 15" to 16". MD and VA are already at 16 inches minimum size.
 - Estimated combined effect of season and bag changes for the region is 11.6 % reduction in the harvest.

Note: The DelMarVa regional options will be included in Draft Amendment 1 using a different format and numbering scheme.



Atlantic States Marine Fisheries Commission

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MEMORANDUM

March 28, 2017

To: Tautog Management Board

From: Law Enforcement Committee

RE: Different Management Measures within one state

The Law Enforcement Committee (LEC) of the Atlantic States Marine Fisheries Commission (ASMFC) was asked for comments on a possible splitting of regulations in New York during a teleconference meeting on March 17, 2017.

The following were in attendance:

LEC: Capt. Steve Anthony (NC); Dep. Chief Kurt Blanchard (RI); Capt. Grant Burton (FL); Maj. Rene Cloutier (ME); Lt. Mike Eastman (NH); Lt. Col. Larry Furlong (PA); Lt. Tom Gadomski (NY); Capt. Jamie Green (VA); Maj. Rob Kersey (MD); Capt. Bob Lynn (GA); Capt. Doug Messeck (DE); Katie Moore (USCG); Asst. SAC Jeff Ray (NOAA OLE); Capt. Jason Snellbaker (NJ) STAFF: Ashton Harp; Megan Ware; Mark Robson

LEC members were briefed on the possibility of two sets of management measures for tautog in the state of New York. A split would provide for different management measures between Long Island Sound and the south (ocean) shore of Long Island. The LEC discussed a number of concerns and difficulties in enforcing such a management split.

Defining a boundary line between areas

A proposed boundary line between the sound and the ocean would be hard to determine on the water as there are no clear buoys to reference. This would make enforcement difficult, especially if land reference points are used to define the boundary line. A boundary line over the water without clearly visible landmarks or demarcations is almost completely unenforceable. At the very least, making strong cases for violations of such a line presents numerous enforcement challenges such as verifying position data of the patrol vessel and the fishing vessel in question, and determining a vessel operator's intent to violate the boundary vs. an accident of navigation.

Enforcing different regulations in close proximity

LEC members with knowledge of the waters in question or similar situations elsewhere expressed strong sentiment that fishermen shift their fishing activity back and forth between the sound and the ocean side depending on where regulations were more liberal. It is believed that many fishermen in the eastern end of Long Island Sound are already landing their catch on the south shore, via Orient Point.

Vision: Sustainably Managing Atlantic Coastal Fisheries

If there are different regulations in close proximity, and a pattern of fishermen easily moving between areas, effective enforcement once fish reach the dock will be limited to the most liberal regulation. Strict-possession enforcement would not be feasible.

Similarly, if there are different closed seasons in close proximity the LEC believes it is highly likely that tautog fishermen will shift effort significantly. This belief is based on field observations that fishermen are already doing this to a degree. Several LEC members reported that fishermen from other states move their fishing activity to take advantage of more liberal limits or open seasons.

Establishing a Buffer Zone

When presented with information about a possible buffer zone along a boundary line separating Long Island Sound from the ocean, LEC members questioned the value of such a zone as a "safe zone" from enforcement actions. A primary consideration was that such a zone would simply add to the confusion for fishermen and enforcement officers on the water as to where the boundary line is, where the buffer zone lines are, whether all other species regulations would still apply to the exclusion of tautog regulations, and whether egregious violations of a particular state's tautog regulations inside the buffer zone by a vessel from that state would be enforceable. It was also pointed out that since many fishermen in the eastern end of the sound currently come around Orient Point and land fish on the south shore, a buffer zone would not provide a significant benefit.

Consistency of Management Measures

The LEC felt strongly that tautog measures should be consistent among and within states. Even though this is primarily a recreational fishery, there clearly is a strong commercial aspect that requires careful monitoring and enforcement of landing points and markets. The more variation that occurs in regulations, the less likely there can be effective enforcement of minimum sizes, bag limits or possession once fish reach shore. The LEC particularly stresses the importance of a uniform minimum size limit.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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April 12, 2017

Capt. Adam Nowalsky Chair, Tautog Management Board Atlantic States Marine Fisheries Commission 1050 N. Highland Street, Suite 200 A-N Arlington, VA 22201

Dear Captain Nowalsky,

I am writing to provide the Board with some comment as we move forward with Draft Tautog Amendment 1.

New York firmly supports ASMFC and the Fisheries Management Plan process. We strive to be cooperative and a good partner in fishery management. We recognize and accept that the Tautog Board voted to move forward with a 4-region approach for tautog management without our support. Recently, we were contacted by the Plan Development Team about "where to draw the line" in New York that would separate the Long Island Sound measures from the New York Bight measures. We feel compelled to remind the Board that we have objected at previous meetings about adopting two different sets of rules for the State of New York. We attempted that approach in the past with winter flounder and were forced to abandon our efforts after only one year due to significant problems. We had difficulty with enforcement, the public was confused, and we saw a shift in effort from the Long Island Sound to other areas of the state, defeating the purpose of the rule. We envision a similar outcome with tautog if we use that approach. Additionally, I understand the ASMFC Law Enforcement Committee has recently expressed significant concerns on enforcing separate tautog measures within New York especially on the east end of Long Island.

Our previous bad experience aside, it appears problematic to be using Marine Recreational Information Program (MRIP) data to calculate regional recreational management measures for tautog for a number of reasons. The most troubling is the use of partial state data in order to calculate measure for both the LI Sound Region and the NY-NJ Bight Region. The Commission continues to struggle with the recreational management of summer flounder and black sea bass using MRIP data. These two species are relatively well sampled in NY, averaging 1,156 and 734 intercepts with landings per year respectively, over the last 3 years. By comparison, tautog only generates an average of 144 intercepts with landings per year over the last 3 years for the entire state. We know we have issues with the recreational estimates for tautog within New York (repeatedly see-sawing from under 100,000 fish to triple that number under consistent measures) and they are likely present in other individual states. Using



partial state data appears to be an even more questionable use of the data. We would have no confidence in any measure calculated using these data.

We are asking that the Board focus the amendment on the development of new approaches identified in the work group, specifically spawning closures for both recreational and commercial fisheries and consistent size and possession limits in the recreational fishery. We are particularly interested in the concept of slot limits, though these would have to be developed under a completely new management philosophy, one that does not rely on the recreational data to calculate the measures.

Our overarching concern is that the goals of Amendment 1 will not be realized without our compliance with the splitting of New York. This should be of paramount concern for the Board. Our hope is that the Board would reconsider its decision and not force New York into a situation we find problematic and simply will not work.

Sincerely,

James J. Gilmore,

Director

cc Toni Kerns Ashton Harp