



New England Fishery Management Council

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## MEETING SUMMARY

### Scallop PDT Meeting

John W. McCormack Post Office and Courthouse, Boston, MA

July 15, 2015

The Scallop PDT met on July 15, 2015 in Boston, MA to: 1) review final Council recommendations for Omnibus Habitat Amendment 2 (OHA2) and brainstorm potential modifications to scallop access areas on GB; 2) discuss Council motion on monitoring discard mortality; 3) discuss analysis needs for Amendment 19; 4) review preliminary FY2015 fishery data; and 5) review progress on making the Scallop Area Management Simulator (SAMS model) more accessible.

**MEETING ATTENDANCE:** Deirdre Boelke (Chair), Lt. Josh Boyle, Matthew Camisa, Trish Cheney, Dr. Bill DuPaul, Travis Ford, Ben Galuardi, Dr. Dvora Hart, Chad Keith, Emily Keiley, Kevin Kelly, Dr. Min-Yang Lee, and Dr. David Rudders. MaryBeth Tooley Chair of the Scallop Committee attended as well as six members of the public.

#### **KEY OUTCOMES:**

- The PDT identified how and when final analyses will be prepared and incorporated into the FEIS for OHA2.
- The PDT had an initial discussion of how access areas on GB could be modified and the potential timing of that process.
- The PDT reviewed current information on discard mortality due to poor meat quality (grey meats) from the observer program and discussed potential ways to improve data collection.
- The PDT briefly reviewed the alternatives in Amendment 19; a handful of PDT members will continue to develop and analyze the alternatives under consideration.
- The PDT briefly discussed progress on making the SAMS model more transparent.
- The PDT scheduled the next meeting for August 25 and 26 in Falmouth, MA to review 2015 survey data and discuss specifications for FY2016.

#### **AGENDA ITEM #1: REVIEW FINAL COUNCIL ACTION FOR OMNIBUS HABITAT AMENDMENT 2 AND**

Staff reviewed final measures recommended by the Council for OHA2 including general rationale. PDT members asked clarifying questions and discussed how final analyses can be completed. One question came up that staff will look into further related to what the specific gear restrictions are for Cox's Ledge HMAs. There was an exemption for the scallop fishery included in the proposed action for those areas, but the question came up if that includes scallop dredges only, or would vessels on a scallop trip with "approved" scallop trawl gear be permitted to fish in the area on DAS or IFQ vessels (approved gear would be no ground cable gear). It is not clear how this process would work in terms

of getting a gear approved, but it will be further clarified as the document is finalized. Another point was clarified that the seasonal closure for lobster north of 41 30 only applies to areas within CA2, thus the small area that extends to the west would not be subject to that restriction automatically.

The PDT went through a handful of topics that additional analyses will be prepared for to include in the FEIS. First, the Scallop PDT discussed providing additional input on the potential impacts of the GOM spawning closures on the scallop resource and fishery (existing Whaleback closure from Apr1-June30 and proposed closure of Mass Bay Area from Nov1-Jan31). There is some analysis of VTR data already in the DEIS completed by the Habitat PDT, and the Scallop PDT will try to update that with more recent fishery data and NGOM scallop biomass survey data. There is not enough observer data in the GOM by season to get a detailed analysis of seasonal meat weight variation, but the PDT will rely on overall variations on GB when discussing the potential impacts of these seasonal closures. In general they are not expected to have major impacts on the resource or fishery.

Second, the PDT discussed that it would be beneficial to include a SAMS run for the final combination of year-round habitat management areas. If approved, these areas will need to be modified in future runs regardless; therefore, the PDT will complete this run earlier for the FEIS. Specifically, the current habitat closed areas on GB would be modified to include Alternative 10 and Alternative in the SNE region.

Third, the Council included an area in the final measures that was not fully analyzed in the DEIS, a “reduced impact” area that would allow scallop fishing under area rotation. The general impacts of this type of area needs to be analyzed, and this will fall out from analysis of the final preferred alternative from above (final SAMS run). Certain assumptions of the level of fishing effort will need to be assigned to this area and modeled. It is possible that after the areas are reconfigured the PDT could evaluate one or two different assumptions of effort in this area to capture a range of potential effects. For example, the area could be fished under the standard area rotation principles, or the area could be fished at a lower level of effort to evaluate the effects of different allocations in this area.

One PDT member asked about the principle of time and intensity in terms of how fishing patterns relate to habitat impacts. If there is a goal or minimum amount of fishing time or intensity in mind for the reduced impact area it may be more possible for the Scallop PDT to design an access area with those standards in mind when setting allocations. Staff explained that the Habitat PDT did not identify intermediate levels of fishing in terms of impacts on habitat yet because the DEIS only included areas that were either open or closed to fishing, not open to limited levels of fishing such as a scallop access area. The PDT did discuss that the FEIS should clarify that impacts may only be in certain years, and the area would not likely be open every year so the analysis needs to cover a longer time series.

Fourth, the PDT plans to update analysis of seasonal closures to evaluate the effects of the June 15 – Oct 31 seasonal closure in CA2 north of 41 30 to reduce impacts on lobster. The general impacts on scallop meat weight will be described using results from an RSA project that evaluated seasonal trends in CA1 and CA2. The PDT discussed that previous effort distributions in CA2 South could be used to estimate seasonal fishing activity, but chances are the patterns will not be the same. The PDT also discussed that fishing patterns in the open areas just west of the northern edge could be used, but observer coverage in that area is also limited. Since predicting seasonal fishing patterns in this area is complicated the PDT decided that these analyses should primarily be qualitative. Based on what is known about seasonal meat weight variation on GB, about half of the proposed seasonal closure has relatively good meat weights, and the second part of the season has poor meat yield. The PDT also discussed that the impacts will depend on the level of effort allocated to the area, other allocations in

different areas, and the timing of the opening. Since all of these are uncertain the PDT plans to include a qualitative discussion about the general range of potential impacts under various scenarios. The PDT also recommended that the Habitat PDT consider adding an evaluation about whether the seasonal closure is expected to have impacts on cod. The measure in the action is specific to scallop dredge gear, but there is also an industry agreement that exists for the groundfish fishery that prohibits those gears in the same area and season.

**PDT Follow-ups – All due for August 25 PDT meeting**

1. Kevin – Map NGOM biomass survey with GOM spawning areas – any overlap of major biomass areas? What do we know about seasonal fishing patterns in these areas?
2. Deirdre – Review recent VTR data for the spawning areas in GOM – anything to add to VTR analysis already prepared through 2012?
3. Dvora – modify SAMS to be consistent with proposed HMAs and complete one run under normal fishing target principles – forward to Deirdre and Demet by August 10 for write up of ST and LT biological and economic impacts.
4. Dvora and Deirdre – discuss one or two variations of effort levels for the “reduced impact” area to evaluate range of impacts from different levels of allocation in that area.
5. Dave – update seasonal meat weight analysis for June15 – Oct 31 from RSA project.
6. Deirdre/Demet – draft qualitative text about general impacts on fishery from seasonal closures – some in DEIS already.

***AGENDA ITEM #2: INITIAL DISCUSSION ON HOW GB ACCESS AREAS COULD BE MODIFIED UNDER THE SCALLOP FMP***

The PDT discussed how and when the GB access areas could be modified under the Scallop FMP, assuming proposed EFH areas are approved. Timing is very complex and the PDT reviewed what is going to happen on Day 1 after the EFH action is implemented, assuming it is adopted as the Council recommends. For many of the new proposed areas they do not cover primary scallop resource areas; therefore, closing these areas is not expected to impact target catches and allocations, except for the relatively small extension to the west of the existing habitat closure on the northern edge of GB. There are several areas that will open to the scallop fishery that are within current habitat closures, but most of those areas do not contain large scallop biomass, except for an area just north of the current scallop access area in CA1.

The PDT discussed that even though OHA2 could be effective in the middle of FY2016, the Agency will not be able to consider and approve modifications to boundaries or allocations in areas that are currently habitat closures. While the Council has approved modifications under OHA2 they are still under review; therefore, Framework 27 would not be able to consider actions based on measures that have not been approved, that qualifies as pre-decisional. Therefore, it seems that Framework 27 needs to consider specifications for FY2016 based on the current EFH closures only, and cannot include any assumptions about the outcome of OHA2.

If the new closures are in place mid-year (June 2016) most of them would not impact scallop allocations because they do not overlap major biomass areas, except for the bump out west of the current closure on the northern edge. If that area is left open in projections used to set allocations in FY2016 DAS would likely be slightly higher than if the area was assumed to be closed in FY2016. The PDT discussed that it does not currently seem feasible to consider access in the area on the northern edge in FY2016 because the proposed seasonal closure for the lobster fishery is June15-

October 31; therefore, the majority of fishing would likely take place Nov-Feb, which is not ideal for optimizing yield from that area of for safety issues. A trailing framework could be initiated to address the access area on the northern edge separate from FY2016 allocations, but in light of the seasonal closure through October 31, it may be more effective to consider modifications and access allocations in the action that sets FY2017 allocations (initiated in 2016 with final action in November 2016 and implementation in March/April 2017). Staff will continue to discuss timing of these actions with the Regional Office and present these issues to the Scallop AP and Committee in September.

After the PDT discussed the timing issues it reviewed the boundaries of each access area on GB starting with Nantucket Lightship. Because there is currently a relatively large set of small scallops in and around NL it seems that an access area should continue in this general region. It may make sense to expand the overall area east and west and potentially subdivide access in the future so that access is first allocated in the northern part of the area (the traditional access area) and then access the southern portion the following year to allow those small scallops to grow.

The PDT next discussed Closed Area I. Compared to the access area in NL the area in CA1 is not as consistent in terms of recruitment success. There have been years with larger sets of recruitment, but overall it may not need to be a long term access area. There are unused CA1 trips from 2012 and 2013 that have been set aside to be available for vessels when the area to the north of CA1 is reopened (approved in Framework 25). After that access is granted there may not be an immediate need to maintain that area as an access area. When access is granted it may also make sense to modify the boundaries so they are more regular for enforcement purposes.

The PDT discussed the northern edge next. There was some support for expanding the area primarily for logistical reasons since it is relatively small and far from shore. The PDT looked at recent effort and survey data around the area proposed in OHA2. Some vessels do fish open area DAS in this region routinely so it will be important to get industry input about preferences for the management strategy in this area since is relatively far from shore.

The PDT did not specifically discuss the current access area in CA2 (south of 41 30) at this meeting. But in the past the PDT has recommended an extension of that area to the south and west to encompass a large set of small scallops that were observed in 2014. That expansion was not approved in Framework 26, but if small scallops are still observed in that larger area again it may be advantageous to consider that expansion again.

The PDT briefly discussed the Channel as well. That is an area that does have large recruitment events and may be more suitable for successful results. There has not been industry support to date for access areas in the past. Potentially because there have been many other closures on GB and/or some vessels do not like to fish in the Channel. It would meet the criteria and guidelines of a new closure but to date the industry has preferred to leave that area as an open area.

Overall the PDT had a more philosophical discussion about what the primary drivers should be in identifying access areas on GB. For example, in the near term the driver may be to harvest scallops from areas that have been closed. But in the longer term the driver may be similar to how access areas are defined in the Mid-Atlantic, primarily driven by sets of small scallops. The access areas on GB have been dominated by boundaries of GF mortality and habitat closed areas, but it may be more effective to reevaluate all the access areas on GB and reexamine the principles used to define them. The PDT discussed that in the near future if the landscape of closures are different on GB it may be a good time for the Council to revisit the area rotation principles developed under Amendment 10.

Specifically, how large should areas be, how many should be closed in a particular year or area. The PDT is not recommending that any guidelines should be set in stone, but the program has been in place for over ten years and there may be important lessons learned to take advantage of. Even the access areas in the Mid-Atlantic have become quasi long-term closures and that may not be the most beneficial approach for those areas either.

Finally, the PDT also discussed that there may be a need to develop other measures to reduce effort in an access area, specifically to reduce discard mortality. Specifically, for the northern edge it may be necessary to consider specific operational restrictions to reduce the incentive to highgrade. Since there is no time penalty in access areas and there is a large price premium for larger scallops there are built in incentives to target larger scallops on access area trips. This may be increasing discard mortality beyond current estimates and reducing optimum yield in these areas. There was also a suggestion about leaving a sliver along the Hague Line as a “control area” to provide a research area to evaluate the impacts of fishing. There have been studies that have looked at the potential impacts of fishing on benthic communities, but once this area opens as a scallop access area there may not be a control area left with the same benthic characteristics and depth for control studies to occur.

#### **PDT Follow-ups (#2 and #3 for August PDT meeting)**

1. Dvora – SAMS run for FW27 should maintain current closures and access areas. Still undecided about what assumption should be made about bump out west of HAPC – leave it open or close it for FW27. Can we estimate impact on ACT/DAS if considered closed in FY2016 versus open? Seems that vessels will have incentive to fish in that area before it becomes an access area so should consider it open if vessels will fish in that area March-June.
2. Deirdre/Emily/Travis – Discuss timing of specifications and access area schedules for AP and Cmte to consider in September – layout timing options
3. Deirdre/Emily/Travis – Confirm current regulations about unused CA1 trips and whether they can be moved somewhere else or confined to CA1 and expansion area.
4. Ben – continue work on attaining VMS data to help identify impacts of modifying access areas boundaries on open area fishing activity.

#### ***AGENDA ITEM #3: REVIEW AND DISCUSS MONITORING OF DISCARD MORTALITY IN THE SCALLOP FISHERY***

The Council passed a motion requesting the Scallop PDT to investigate how to potentially improve the information collected by observers on discard mortality and highgrading. Chad Keith from the Observer Program gave a presentation on current monitoring of grey meats including a summary of disposition codes used in the scallop observer program. Overall the PDT had a few specific suggestions for the Observer Program to consider, but more discussion may be needed with the PDT and AP to further brainstorm if there are better ways to monitor discards and highgrading.

Mr. Kieth explained that there are currently over 40 separate disposition codes for kept and discarded catch. Observers consult with the Captain for the specific reason for discarded catch, and for the scallop fishery most catch falls under about a dozen different disposition codes including: no market too small, regulations prohibit retention too small, poor quality gear damage, and upgrading. The PDT discussed that for the scallop fishery there is no minimum size so the category of regulations prohibit because too small is not accurate and should potentially be removed for scallop discards or coded as upgraded instead. The PDT recommended that the Observer Program consider a different approach for coding discards described this way by Captains.

Monitoring of grey meats is primarily only observed on a small fraction of hauls because it requires the crew to shuck meats. From 2010-2014 only 68 trips even reported observations of grey meats, and most of those were in CA1 in 2012. Since that time a specific protocol was developed to monitor grey meats. On all observed scallops trips there is a requirement that a crew member shuck one basket of kept scallops on each watch, and an additional basket each time the vessel moves to a new area during the same watch. The shell height frequencies of both kept and discarded scallops are recorded including the disposition codes of kept and discarded scallops. Separate meat weights and volumetric measurements are taken for kept catch as well as discarded catch, and a ratio of grey meats to kept catch is calculated and expanded over the entire watch. Observers also include notes in the comment field if the crew notes grey meats.

Some questions and concerns came up about the expansion step in terms of whether there are standards for distances between tows and whether the data would be improved if more than one basket was shucked for an observer per watch. Mr. Kieth explained that under the current protocol it is already difficult getting crew to shuck one basket per watch; therefore, increasing that frequency could be problematic. The PDT discussed that it may be possible to include a minimum steam distance in the protocol to provide clear direction to observers when a second basket is required. Some industry in the audience commented that it may even be beneficial to have one basket observed per haul to improve monitoring commenting that more data on the scallop catch and not just bycatch would be beneficial for the scallop fishery. Some education and outreach about the importance of crew shucking scallops for observers may be warranted, especially if more detailed information about meat quality is desired by the Council and industry.

Another suggestion was that rather than one basket per haul it may be more realistic to just get a sense of presence/absence of grey meats per haul. The observer could ask the Captain/crew if any grey meats were observed on each haul – a simple yes/no question per haul. Another PDT member suggested that similar info on gonad color per haul would be very useful as well to get more information about time and location of spawning scallops. Mr. Kieth explained that it is difficult to modify and add new codes, but if there are specific ideas this may be the time to do it because the scallop observer log is being modified in the near future. It was pointed out that if scallops have shell disease on the outside they may not even make it in a basket if they are shoveled over from deck, thus may be unobserved.

The PDT had a brief discussion about whether the observer program can be modified to get a better handle on how prevalent highgrading is. There is a code for this practice (“upgraded” and “vessel retaining only certain size for best price due to trip quota in effect”) and it is used in the fishery, but not that often, about 12-50 hauls per year. It was recommended that the PDT could look at current observer data to see if the ratio of kept scallops is close to the ratio of discarded scallops by time and space. If the ratio is higher, then highgrading is probably more prevalent.

Dr. Rudders explained that on their survey in the Mid-Atlantic this year they observed scallops with a parasitic nematode. They have developed a protocol for observing the parasite as well as a scale of shell damage that can be used to quantify and extrapolate discard mortality for different reasons. He suggested that something like this could be developed for observers as well for observations of grey meat or other sources of discards, and used to extrapolate.

One industry member present explained that grey meats are an issue but there are ways to address scallops with lighter grey color on the processing end. However, it is not clear what the causes of grey meats are, how they spread, and what percent of scallops observed have grey meats. It is possible the

AP could have additional input on this issue as well as recommendations for modifications to the observer program if there is time to consider other ideas.

**PDT Follow-ups**

1. Chad – Bring discussion ideas back to Observer Program and provide feedback to PDT
2. Chad/Deirdre – Is there time and interest to bring this issue to AP for more input? Any next steps needed to further flesh out ideas discussed at this meeting?
3. Chad/Deirdre – pull observer data and calculate ratio of kept and discarded scallops to get sense of highgrading

***AGENDA ITEM #4: BRIEF REVIEW OF AMENDMENT 19 ALTERNATIVES AND ANALYSIS NEEDS***

Staff summarized status of Amendment 19 alternatives and analyses. A handful of PDT members will keep working on this action.

***AGENDA ITEM #5: PRELIMINARY DATA ON FY2015 TO DATE***

Staff summarized DAS usage, estimates of LPUE in open areas, and landings by size for the first few months of the fishing year. Overall, average LPUE is about 1,800 in open areas based on landings and DAS charged between March and June. Average LPUE for the same time period last year was almost 2,300 pounds per day. Projected LPUEs for open areas in 2015 were expected to be higher. Average size of scallops landed is lower this year compared to last year as well. Last year over 25% of landings were under 10 count (from all areas combined), and this year the fraction of under 10 is lower and there has been a large increase in 21-30 count scallops compared to last year.

It was discussed that some of this could be driven by lower yields per animal than expected. In addition, the estimate of fishing selectivity used in the model is rather basic and does not take steaming time into account directly. The estimates of fishing selectivity used in the recent assessment are based on fishing patterns from 2005-2013. During those years vessels may have been fishing closer to shore (shorter steam time) and targeting larger scallops so the selectivity shifted to the right. If vessels are fishing farther from shore now (longer steam times) and there are fewer large scallops available, the selectivity may need to shift back to the left. The selectivity is not constant and a more dynamic approach is needed to accurately model LPUE, including a more automated process. The PDT will continue to look into these trends as specifications for next year are considered, but it is unlikely that there will be time to modify the assumptions of fishery selectivity.

**PDT Follow-ups**

1. Demet – summarize more info on LPUE, and landings by size by area and farther back in time
2. Dvora – consider modifications to fishing selectivity or sensitivity analysis for that variable to inform future fishery specification discussions

***AGENDA ITEM #6: BRIEF UPDATE ON MAKING SAMS ONLINE***

Dr. Dvora Hart explained that the programmer the Center had working on this left for a different job. A new staff member is getting up to speed and the hope is that a version will be available for the PDT and public to use for the specification process later this summer/fall.

THE NEXT MEETING IS SCHEDULED FOR AUGUST 25 AND 26 IN FALMOUTH, MA.