New England Fishery Management Council
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MEETING SUMMARY

Habitat Plan Development Team

December 20, 2018
1:00 p.m.-2:00 p.m.

The Habitat PDT met via conference call to discuss research planning for the Great South Channel Habitat Management Area. Clam industry, mussel industry, and research community members were made aware of the call and many listened in or participated in the discussion.

Meeting attendance

PDT members included Michelle Bachman (Chair), Doug Potts, Jessica Coakley, Rachel Feeney, Dave Packer, Geret DePiper, David Stevenson, Marianne Ferguson, Julia Livermore, and Kathryn Ford.

Audience members included Louis Legace, Bill Silkes, Roger Mann, Eric Heupel, Jonathon Peros, Andrew Minkiewicz, Sam Martin, Domenic Santoro, Ron Smolowitz, Guy Simmons, David Bethoney, Eric Powell, David Wallace, Catherine Kramer, and George Maynard. Others may have called in without logging into the webinar.

Introduction

Ms. Bachman introduced herself as the chair of Plan Development Team and opened the meeting. She explained the call was intended to be a brief introduction to where we are going with a research plan for the Great South Channel Habitat Management Area (GSC HMA). The agenda for the call included an introduction with (1) a summary on the Council's final action, (2) the PDT chair's vision for next steps, and (3) a short explanation of exempted fishing permits. She next planned to open the floor for questions, then allow the PDT time to have a short initial discussion of possible research ideas, and close with any additional questions, ideas, or suggestions from attendees, adjourning at around 2 p.m.

The Council recommended a final set of exemption areas during their meeting on December 4. This final alternative was adapted was from a range of alternatives identified by the Habitat Committee in early November. The final recommendation included three exemption areas where mussel and clam dredging will be allowed: McBlair, East Door/Old South, and an area near Fishing Rip (Area AB in the December draft of the framework). East Door/Old South will be seasonal, open from May 1-October 31, and the others year-round. Rose and Crown and Davis Bank East (the latter was identified as Area D in the December draft of the framework) were recommended as areas where research can be conducted, and where exemptions might be

identified in a future action, pending the outcomes of that research. Other alternatives considered included Alternative 2, which would have designated all five of the areas in the Council's preferred final alternatives as exemptions. Alternative 3 included just Rose and Crown as an exemption, and Alternative 4 included McBlair, East Door/Old South, Fishing Rip, and Davis Bank East as exemption areas.

In terms of process, the PDT will work on developing this research agenda in parallel with preparation of the final draft of framework and the rulemaking process (proposed rule, comment period, final rule). An important near-term step will be an in-person meeting between the PDT and any interested stakeholders including fishing industry participants. This will be most productive after we have at least a rough sense of the path forward – range of possible questions, research techniques and approaches, cost, details of EFP process, etc.

Ms. Bachman commented that she has had some limited discussions with the Executive Director about the potential role of the Habitat Committee and Council in the process of developing and executing a research program. The clam industry for its part has asked how they can be assured that the Council will be responsive to research results, and what they will do with them. Most likely as part of this planning effort we will want to at a minimum check in with the Habitat Committee (if not with the Council as a whole) so they understand what to expect in terms of results, and to discuss the sorts of evidence that they would view as sufficient to support additional exemptions. We will also want to NMFS to weigh in on these issues.

In terms of EFPs, we can get additional details for a later meeting, but for now it's important to consider the general types of research that would require one, vs. not. For example, habitat mapping with remote sensing and ground truthing (e.g. multibeam plus drop camera) would not require an EFP, because this type of study would not be using commercial gear or doing any fishing. A dredge impact experiment (clam or mussel) would require an EFP because the research would be using fishing gear in an area where it would otherwise be prohibited.

Questions

Kathryn Ford (PDT) – Is the expectation that we will generate a list of questions that the Habitat Committee will agree to? Not sure yet. Based on past interactions between the PDT and Committee on technical topics, expect that we would get feedback, start a dialogue, and create awareness, but not sure if formal approval of the plan would be needed. During final action the Council didn't really say what they wanted their role to be – but assume they were envisioning some sort of participation.

Louis Legace – So we haven't determined the list of studies that we are looking at? Not yet – we started this conversation informally as part of the framework, and PDT members have discussed a bit further in recent weeks. It seems there are three things to consider – what are the questions we want to have answered, what are the techniques (likely multiple approaches) that could be used to get these answers (embedded here are questions of scale and cost), and finally how will the Council use the information. Today we can start with what the questions are.

Bill Silkes – It seems that NMFS has some specific idea of what they want to see – why not ask them to generate a list of issues as a starting point? Ms. Bachman responded that certainly we will continue to check in with them. This framework has not been entirely typical of our back and forth with NMFS. But going forward on this research issue, we have representatives from both the science and management sides of NMFS on the PDT, and from the management side on the Committee and Council. These groups are the mechanism for NMFS to provide feedback. Mr. Silkes acknowledged that this might be the usual process, but given the way NMFS involvement played out in this action, rather than repeat a process that wasn't working well, why not simply ask them for a list of ideas they would entertain?

Dave Stevenson (PDT) – Ms. Bachman's description is correct. We don't want to intercede too much – but will work closely with Council and industry here. NMFS will have a larger role in the EFP process because the agency issues EFPs. Mr. Silkes commented that he would hate to see a lot more time and money developing proposals through the Council process, only to have NMFS identify an alternate agenda. Ms. Bachman noted that she appreciated these concerns, and that she agreed we would want be sure the NMFS' vision for what is needed is incorporated in the plan that is developed.

Roger Mann – have followed this debate for 2.5 years. We are in a habitat management area. What habitat, and for what? What I cannot find is which species are being supported by this HMA. For example, with the Mid-Atlantic coral amendment, identified habitat for corals, being managed to protect corals. What species are being protected by these exclusionary areas? Are we looking for complex stable rock habitats, sand habitats, something else? Ms. Bachman explained that we used a regional approach to identify this area as an HMA, combining a sediment map, the benthic features likely to be associated with that sediment type, the fishing gears used in the region, and how gears and benthic features interact. From this we estimated where are the most vulnerable locations in the region, and these vulnerable areas became the nexus for a draft set of habitat management areas. The Great South Channel/Nantucket Shoals region, among other locations, was noted as having vulnerable features, including pebble-cobble habitats with attached epifauna. The PDT then went through an iterative process with the Habitat and Groundfish Committees and the Council to identify specific management area boundaries. As part of this discussion we overlaid our essential fish habitat designation maps over the various candidate management areas, using these designations and other information about fish distribution and abundance to assess the importance of the areas to at the species level. One species that sticks out for the Great South Channel HMA is Atlantic cod (based on geographic distribution, depth, occurrence of hard bottom habitats), but there are other species that occur in the area as well (certain flatfish and skates, etc.).

Ron Smolowitz – so we are going to talk next about what type of research might be valuable in terms of figuring out where clammers might fish? Broad scale, the Council defines a large area for HMA protection, and the goal of the framework was to define a subset where clammers can work without adverse effect or affecting purpose of HMA. One difficulty of this area (and I have been a strong advocate for importance of this habitat on the western side of the Channel) is that we did not have surveys in a lot of this area so had problems with data. Seems it was closed based on level 1 EFH data, and SASI model outputs – not so much based on oceanographic considerations. If we identify sections of the HMA with primarily mobile sand, and occasional

cobble, is that an area that would be up for consideration for clamming? Ms. Bachman agreed that, she thought generally, yes, areas with that habitat type could be candidates for exemption. Mr. Smolowitz continued to say that he had concerns about closing an area to fishing based on one level of data, and then requiring much more evidence to open it. I believe that many of the important attributes of this area are not disrupted by fishing. As much as we would like to do research related to understanding productivity, edge effect influences, value of currents/nutrients, etc., is that needed here? What we can answer now is what is the substrate and what is its vulnerability. Are some folks thinking we need to do level 4 research before the area could be opened?

Ms. Bachman reviewed what was meant by levels of data as background for others on the call. Level 1 is occurrence of species in an area. Level 2 is relative abundance in an area. In the GSC HMA we are likely between Level 1 and 2. Level 4 would be what are production rates of species X in an area (this is sort of the holy grail of habitat research, and rarely achieved). With level 3 data, we have some sense of the relationship between species and habitat types and where these things occur, but don't have habitat-specific production rates. She commented that it seems unlikely the council is looking for level 4 data (although it would be nice). It would be good to get to level 2 or perhaps past level 2, with better sampling especially for juvenile fishes and for area of HMA not previously sampled. Not sure if this sort of fish sampling will be essential here, or just nice to have, but should consider the cost/benefits of such a survey. Dave reminded the group that levels 1-4 only refers to quality of information to inform EFH designations. HMAs were defined based on data about substrates; he suggested that research should focus on distribution of habitat types in the HMA.

Ms. Bachman suggested that it would be helpful at this point to discuss what elements of the research program might be. Primary issue is that we need a better sense of the distribution of habitat types in these sections of the HMA (depth, sediments, epifauna), potentially sampling for these things over time to assess how dynamic the areas might be. The PDT has discussed that sand shoal features that are charted are well established and stable, while smaller bedforms that move across these features are changeable. Similarly, areas of cobble are stable on certain scales, but dynamic on other scales. How do tidal, storm currents influence this environment? She noted that various PDT members are coming around to having a better foundational habitat map would help. Next question is how does fishing gear affect these habitats? Ideally, we would use a Before-After-Control-Impact design, looking at repeated disturbance and at recovery. For this component, there are lots of questions to answer about sampling design, scale, etc. Finally, answering the question of what do we mean by a minimal impact, temporary impact, in this context?

If these are the questions, then what are the appropriate research methods? One thing that is challenging about this location (came up at September 2018 PDT meeting) is that towed cameras are challenging to use here. In terms of imaging the seafloor, we are likely looking at something flown with dynamic positioning, or drop camera. For acoustic data, preference would be a hull-mounted system like multibeam, vs. a system that is towed. In terms of fish distributions, PDT has discussed that side-view images would be most useful, but plan-view cameras are best for habitat characterization (from SMAST and MADMF experience). Experimental fishing would obviously involve commercial vessels. Kathryn Ford noted that it would be important to make

sure that question we are trying to answer is very clearly defined so we use the best methods to answer the question. Once we know what we are asking, we can figure out the best approach.

Ron Smolowitz – have a good idea what occurs around a clam dredge. Let's say we instrumented the dredge and towed it over the bottom during the month of March, found out what was going on with seabed. Fish are in front of dredge, behind the dredge fish feed in the track, and shortly following the cessation of dredging, fishing tracks are not visible. Is this type of work sufficient to determine that the dredge does or doesn't have an adverse impact? Ms. Bachman guessed that this would be a good quick and dirty way to see habitat and gear effects; but can we revisit this specific area later? I.e. does vessel have ability to get back on the tow track? To play this out further, what does this all look like in different sediment types? Are all sediment types equally good fishing grounds? Are they all affected by gear in the same way? Dave Stevenson noted that another thing that is important for a BACI study is to replicate commercial fishing intensity sufficiently; e.g. towing back and forth repeatedly in the same spot.

A question that has been raised is what prior information can we build on, vs. starting from scratch. Kathryn Ford commented that multibeam came into the discussion because we have biological and substrate feature changes – it would be possible to measure substrate feature changes with multibeam technology.

Ms. Bachman asked if we are trying to answer same set of questions for mussel dredges as for clam dredges? As a first step, we don't have a good sense of where mussel beds are – a basic research question that would be an element of any habitat mapping. Do we want to ask the same questions otherwise? Dave Stevenson noted that Domenic Santoro had some good questions identified. Perhaps a good step is to map one or more beds, get a sense of scale, mussel abundance/density, then can think about how bed would be affected by dredging. Habitat mapping element would be the same whether we are considering clam or mussel grounds. Not sure if all questions are the same across clams and mussels but research plan should include both.

Ms. Bachman concluded the call, noting that the near-term focus will be on finalizing the framework document so the rulemaking process can proceed. In parallel, PDT will start writing up the research program, fleshing out pros/cons, tradeoffs, costs, also figuring out a plan for council feedback, how NMFS can be involved, and how EFP process fits in. Once we are further along with these things then we can organize an in-person meeting, but don't want to get too far ahead or have that planning come at expense of the framework, and want to give sufficient notice to potential participants.

The call concluded around 2:15 p.m.