



New England Fishery Management Council

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E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

MEETING SUMMARY

Habitat Committee

DoubleTree by Hilton, Danvers, MA

February 24, 2017

The Habitat Committee met to discuss ongoing habitat-related management actions, primarily the Deep-Sea Coral Amendment but also the framework adjustment to evaluate clam dredge access to two OHA2 habitat management areas. The Committee also received updates on OHA2 and EFH consultations.

MEETING ATTENDANCE

Committee: John Quinn (chair), Doug Grout (vice chair), Peter Christopher, Mitch MacDonald, Mathew Mackenzie, David Borden, Terry Alexander, Elizabeth Etrie, Terry Stockwell

Staff: Michelle Bachman, Rachel Feeney

Approximately 20 members of the public attended.

KEY OUTCOMES

- The Committee recommended some adjustments to the coral management zones under consideration, but decided to wait to hear feedback from the workshops and from the PDT before forwarding specific recommendations on to the Council.
 - These included variations on broad zone depths for the canyon/slope region (additions of 550m and 700m options). Depths of 300, 400, 500, 600, and 900 are currently under consideration.
 - This also included refinements of the Jordan Basin, Lindenkohl, and Mt. Desert Rock zones.
- The Committee recommended that the Council task the Monkfish Committee with reconsideration of the Lydonia and Oceanographer Canyon closures, pending final decisions on the coral amendment.

BRIEFINGS/UPDATES OF GENERAL INTEREST

Ms. Bachman noted that the coral workshop was coming up, and that the Committee should discuss their objectives for the discussion. April 14 looks best for next Habitat Committee meeting to identify preferred alternatives for the coral amendment, assuming the goal is to have

the Council identify preferred alternatives in April, hold hearings in May, and take final action in June. The Plan Development Team is planning to have the coral amendment document ready for the April meetings. She noted that staff are working on deeming the habitat amendment regulations consistent with Council intent, and that the proposed rule/amendment have not been published yet, for various reasons.

Alison Verkade (GARFO) gave a short update on EFH consultation work. They are working with the U.S. Army Corps of Engineers on a programmatic review process for smaller scale projects. A major upcoming project is the Boston Harbor deepening, which is being done to improve navigation. The project involves dredging 12 million cubic yards from Boston Harbor, including large amounts of hard substrate, some of which will require blasting. Rock. A technical working group has been formed. New Haven harbor in CT is also looking to do a deepening project, which got original approval in the 1980s, but was never funded. Now they are looking at alternatives, including blasting some areas. Beneficial reuse of removed substrate is being explored. At the New Haven site, there is not a lot of juvenile fish habitat, but winter flounder spawn there. In terms of offshore, wind, there was recently a kickoff meeting for Bay State Wind, to discuss site assessment plans and introduce interested parties.

CLAM DREDGE EXEMPTION FRAMEWORK

Ms. Bachman and Ms. Verkade gave an update on PDT image analysis and habitat mapping to support the clam dredge exemption framework (see document 2a, image analysis slides). The analysis includes digital images taken between 2006 and 2015. The chairman asked about the area covered by each image, which is 1.13 m² per image or 4.52 m² per station. Ms. Bachman noted that the PDT decided to use the digital imagery for this analysis because the spatial coverage of the digital images, although less than the video-extracted images, was reasonably high in these areas, and more information about the seafloor can be extracted from the higher resolution digital images.

For each image, Ms. Verkade noted presence of sediments of different size classes (sand/fine gravel, pebble, cobble, and rock/boulder), presence of epifauna, and percent cover of pebbles/cobbles/boulders combined. The PDT recently discussed how to use these results to identify areas of high vs. low complexity habitat. The PDT plans to map low vs. high complexity as follows:

Low complexity habitat	Highly complex habitat
All quadrats have < 10% coverage of pebble/cobble/boulder substrate	At least one of the four quadrats has > 10% coverage of pebble/cobble/boulder substrate, OR cobble is present at the station, OR boulder is present at the station

The PDT can also develop map layers to indicate presence of cobble at each station, presence of boulder at each station, presence of > 30% percent gravel cover at each station, and presence of long-lived epifauna at each station. All images have been scored. Once final quality control and data entry are complete, the PDT will meet to look at the results, including maps, and consider options for closure vs. exemption. An in-person meeting would allow for clam industry input.

FINAL

Mr. Stockwell was pleased to hear that the clam industry has been helpful, and asked whether the PDT has data on fishing locations. Ms. Bachman confirmed that tow tracks for some vessels were provided as part of the data prepared for the Science Center for Marine Fisheries Study conducted by Eric Powell and others. This study also includes data from the clam survey, which is undergoing a redesign at present. Ms. Coakley (Mid-Atlantic Council staff) followed up that the clam survey redesign will take time, and that there won't be sampling this summer. The survey team is also evaluating VMS data as a way to map fishing effort.

Mr. Borden asked if the imagery could be used to compare habitat attributes at a station over time. Ms. Verkade and Ms. Bachman responded that unfortunately the data were not collected to support this type of evaluation. While some general station locations were sampled during more than one year, the exact same area of seafloor was not photographed over time to allow for longitudinal analysis.

DEEP-SEA CORAL AMENDMENT

AP REPORT

Ms. Bachman briefed the Committee on the January 30 Advisory Panel meeting (see document 1b, AP meeting summary). The AP had a robust discussion of the coral amendment, including some discussion of the PDT's analysis. Bigger picture, the AP wanted clarification on where the Council is going with the action, i.e. the specific objectives related to the degree of coral conservation desired and the Council's willingness to tolerate negative fishery impacts. The AP made some specific motions about the relationship between the Northeast Canyons and Seamounts Marine National Monument and redesign of the offshore Gulf of Maine coral zones. The AP encouraged the Committee to simplify the broad zone boundaries, and recommended an option between 600-900 meters minimum depth. They also made some suggestions about how to design the coral workshop.

Megan Lapp (AP member, Seafreeze Ltd.) noted that in the Mid-Atlantic's amendment, fishing activity occurred right up to their deepest alternative, such that the workshop was helpful for refining this alternative and determining how to freeze the footprint of fishing. She also stated that the boundaries, due to the shape of the shelf break, are simply more complex in New England, but that trying to draw simpler, straighter lines would be helpful for industry.

Mr. Alexander asked about Mr. Marten's motion (2a) to split the AP's recommendation about the Jordan Basin coral zones into smaller parts. What are they saying? Do they want more dives to see if there is coral? Ms. Bachman indicated that the desire to split the discussion was related to the two different approaches suggested with the two parts of the motion. One part of the original motion (2.1) eliminated zones with fewer scientific survey dives entirely, retaining only the largest Jordan Basin zone, while another part (2.2) kept the number and general locations of the zones, but made them smaller to focus on the locations of the dive sites.

She noted that the PDT agrees that we don't have as much information for some sites as others, but that the team didn't want to rank areas the way the first part of the AP motion implies.

In terms of the canyon/slope zones, Mr. Alexander indicated that he was reviewing the scientific dive depths this week, and that many are in deep water, beyond where fishing occurs. The chair acknowledged this observation and agreed it should be discussed during the afternoon session.

PDT REPORT

Ms. Bachman then reported out on the February 16 PDT call (see document 1c, PDT meeting summary). The PDT agreed that additional seafloor maps would help refine zones. MEDMR owns some OLEX systems, which can be used to construct high resolution (~10 meter) maps of the seafloor to understand changes in depth and slope in specific areas. They are hoping to map the Mt. Desert Rock area in the near term. There may be some NOAA ship time this summer that can be used to map offshore areas. While these data may not be useful for this action, they will facilitate continued research on the distribution of corals in the Gulf of Maine. She noted that the PDT and partners at ASMFC partners discussed the Lobster Technical Committee's analysis of impacts to that fishery, and the goal was to integrate their work into the environmental assessment. The PDT is also working with VTR data, which are fairly good for the offshore (Area 3) lobster fishery and only require a small amount of scaling, but very limited for the inshore (Area 1) fishery. The PDT agreed it was best to focus on the ASMFC analysis in Area 1. The EA will also reflect the results of a survey conducted by ASMFC last spring to understand patterns of lobster/Jonah crab trap effort in the canyons and slope.

Mr. Stockwell noted that MEDMR is surveying industry members to better understand where they fish and what the economic impacts of the coral zones might be.

Dr. McKenzie asked about the dates covered by the ASMFC Area 3 survey. Ms. Bachman responded that the survey asked about 2014 and 2015, but that respondents noted they expected their activity to be similar in future years. He wondered if there has been any change in effort since the Council began discussing the coral amendment. Mr. Borden asked how many surveys were returned, and whether we can expect them to be representative. This information is detailed on pages 2-4 of the survey report (ASMFC 2016)¹, but overall the response rate was 23% (19 of 82) for vessels fishing in the canyon/slope area of interest, and 35% overall including vessels not fishing in the areas.

Mr. Grout followed up on a prior conversation about the boundaries of the Mt. Desert Rock zone, noting that they extend beyond the sites where corals have been found. He asked if the PDT had done any further work on the issue. Ms. Bachman noted that the existing boundaries represent a portion of an original, larger zone, which included steep areas south of Mt. Desert Rock in addition to areas west of the rock, plus the flatter, presumably softer bottom areas in between. The original zone was developed prior to some of the recent survey effort. Certainly it would be possible to limit the boundary to areas of steeper slope around the dive sites where corals have been found. This process could be informed by any Olex data collected by MEDMR, although a fairly high resolution digital elevation model for the area exists already and could be used for this work. The Olex project has been delayed, and the PDT had been waiting for those results to develop a new set of boundaries.

Audience member Erica Fuller asked how steep of a slope can be trawled. Mr. Alexander responded that areas of over ten degrees slope can be fished. He had some experience fishing around this area during the industry-based trawl survey for cod. It hadn't been fished for years but is very hard bottom. Using 16 inch rockhoppers they could fish basically everywhere.

¹ Whitmore, K. A., E. Morrissey, et al. (2016). Characterization of the offshore American lobster and Jonah crab trap fishery in Lobster Conservation Management Area 3 in and around the Southern New England and Georges Bank canyons. 17pp.

FINAL

Dr. McKenzie asked to have numeric percentages added to the bar charts of revenue/trips/permits in the amendment document. Ms. Bachman agreed this could be done; the reason for showing just the bars was to avoid ascribing too much certainty to the results.

Mr. Alexander commented that even though some of the areas in the Gulf of Maine are small, they could represent a significant amount of revenue at the level of an individual fishermen or port, especially given that lobstermen are territorial. Ms. Bachman noted that different assumptions about displacement of effort due to closures might be appropriate here, as opposed to in the habitat amendment, where it was generally assumed that revenue in a closure could be made up elsewhere, unless a particular closure represented a large fraction of the area fished for a particular species. In this case, given the territoriality of lobstermen, where does effort go if an individual's customary fishing grounds are closed?

Mr. Stockwell responded that fishermen will put their traps somewhere. I'm concerned about the interest of the PDT to get the multibeam data to redefine the Mt. Desert Rock area. Are you suggesting we will have another alternative for this zone? Ms. Bachman responded that ideally we would end up with a single, smaller alternative that is based on the best available data.

After a break, Ms. Bachman reviewed the range of alternatives. She noted that the AP had suggested aligning the monkfish and tilefish areas with the coral zones, so this issue was worth a brief Committee discussion. Perhaps the monkfish areas which were originally intended for coral conservation could be eliminated depending on the outcomes of the coral amendment. She also emphasized the transit provisions which required gear on deck but not fully stowed, and presented some information on revenues in the various zones.

Eventually the social and economic discussions will be integrated. The social impacts analysis will include information about the magnitude of impacts at the port (or regional/state level in some cases) plus a discussion of the existence values of corals.

Mr. Borden asked whether the expectation is that the workshops will generate other alternatives. To avoid having an overly ponderous document going into hearings/final action, he suggested paring down alternatives after the workshop. The chairman stated that the Committee will work through these issues at its next meeting.

COMMITTEE MOTIONS

Motion 1 (Alexander/Stockwell): Recommend to the Council the following options to refine the offshore Gulf of Maine coral zones based on the following coordinates (see Figures 1 and 2):

<i>Lindenkohl</i>			
<u>Western box</u>	<u>Middle box</u>	<u>Eastern box</u>	
42.30, 67.44.50	42.30, 67.38.50	42.32, 67.35	
42.30, 67.42.50	42.30, 67.36.50	42.32, 67.32.50	
42.28.50,67.42.50	42.28.50,67.36.50	42.30.50,67.32.50	
42.28.50,67.44.50	42.28.50,67.38.50	42.30.50, 67.35	
<i>Jordan Basin</i>			
<u>Central (along the EEZ), northern box</u>	<u>Central (along the EEZ), southern box</u>	<u>96 Fathom Bump</u>	<u>118 Fathom Bump</u>
43.20 67.36	43.17.50, 67.38	43.17, 67.57 43.17, 67.55.50	43.34.50, 67.51.50 43.34.50, 67.50

FINAL

43.20 EEZ 43.19 EEZ 43.19, 67.36	43.17.50 EEZ 43.16.50 EEZ 43.16.50, 67.38	43.15, 67.55.50 43.15, 67.57	43.33.50, 67.50 43.33.50, 67.51.50
<u>114 Bump, northern box</u> 43.27, 67.50 43.27, 67.47.50 43.21.50, 67.47.50 43.21.50, 67.51 43.23, 67.51 43.23, 67.50 then back to 43.27, 67.50	<u>114 Bump, middle box</u> 43.20.50, 67.49 43.20.50, 67.47.50 43.19, 67.47.50 43.19, 67.49	<u>114 Bump, southern box</u> 43.18, 67.50.50 43.18, 67.49 43.17, 67.49 43.17, 67.50.50	

The rationale was to take in all the dives sites where corals have been sampled, while allowing fishing around the dive sites. The largest zone, 114 Fathom Bump, is divided into three, with one minute (approximately 1.2 mile) alleyways between the sites. This would allow vessels transit and fish between the zones across that part of Jordan Basin. The original 114 Fathom Bump zones is approximately 12 miles north to south.

Mr. McDonald asked if this would be a new alternative; Mr. Alexander viewed it as a potential replacement for the existing Jordan Basin and Lindenkohl areas. Dr. McKenzie asked how large the modified boundaries were; Ms. Bachman estimated about 2 miles across for the smallest areas. (Measuring after the meeting, the smallest sites are approximately 1.25 miles across, the 96 Fathom Bump site is about 2.3 miles north to south, and the largest 114 Fathom Bump site is about 6.3 miles north to south and 3 miles east to west at the widest part.) Dr. McKenzie then asked how either these or the existing areas lined up with the habitat suitability model; Ms. Bachman responded that the suitability model isn't all that useful in the Gulf of Maine (see PDT summary document 1c). A better approach would be to use high resolution bathymetry to understand where higher slope areas occur, when such data are available (not the case for all of these sites).

Motion 1 carried 7/0/0

Motion 2 (Borden/Alexander): Move to include an option for a single coral management protection zone in New England waters with minimum depth of 700 meters (approx. 383 fathoms) extending out to the boundary of the EEZ.

Part of the reason for putting this forward is to get the reaction of the workshop participants. He noted that the during his time on the Committee, the Mid-Atlantic Council coral areas went into effect, as well as the National Monument, and there are existing gear restrictions for tilefish, monkfish, and squid in certain canyons. In addition, there are operational realities when fishing in the canyons that should be accounted for in specifying any management areas. When offshore lobster gear is sets in canyons, it takes half an hour to get gear on the bottom. This makes a series of small areas impractical. There was no coral protection when we started this amendment.

Erica Fuller asked whether there would be anything in the GOM, or any discrete zones? Mr. Borden clarified that this would not include any areas in the Gulf of Maine, nor any shallower discrete zones in the canyons.

Dr. McKenzie stated that he did not feel this option was supported by the best available science.

Motion 2 carried 5/1/1

Motion 3 (Borden/Stockwell): Move to include an option for a single coral management protection zone in New England waters with minimum depth of 550 meters (approx. 300 fathoms) extending out to the boundary of the EEZ with an exemption for two red crab vessels to fish in the area between 550 meters and 750 meters. The red crab vessels could be designated annually.

The problem is that the red crab industry operates pretty much exclusively between 350-375 fathoms. He noted that they are authorized to use floating line which reduces bottom contact.

Mr. Stockwell asked for clarification on the Mid-Atlantic action with respect to red crab. Ms. Bachman responded that they were exempted entirely from bottom-tending gear restrictions associated with the coral zones, and the Council said they would not revisit this decision for at least two years.

Ms. Etrie supported the intent, but wondered if the motion could be split, with the red crab exemption as a separate option. Ms. Bachman noted that currently the alternatives are organized as management areas and then gear restrictions, so it would be easy to insert the elements of this motion into the document in this way. She felt that the combined motion as presented above effectively signaled intent, i.e. to designate a zone in relatively deep water that applies to a broad range of gear types, on the condition that red crab is exempt.

Motion 3 carried 5/1/1

Motion 4 (Grout/Borden): Move to direct the PDT to modify the current boundaries of the MDR Coral zone to more closely bound the coral observations and high slope habitat in Map 30 of the draft Coral Amendment document using the following coordinates for guidance (see Figure 3):

Point	Name	POINT_X	POINT_Y
1	Mount Desert Rock	-68.2036	43.8771
2	Mount Desert Rock	-68.2387	43.8685
3	Mount Desert Rock	-68.2194	43.9498
4	Mount Desert Rock	-68.2000	43.9500
5	Mount Desert Rock	-68.1909	43.9361

Mr. Grout agreed that the earlier explanation of how we got to the current Mt. Desert Rock boundaries made sense, but that given where we are now, it doesn't make sense to include the southeastern portion of the area. He emphasized that the coordinates were intended to serve as a guide and that the PDT should rely on the available data to develop the boundaries.

Motion 4 carried 5/1/1

CORAL WORKSHOP PLANNING

Ms. Bachman gave an update on workshop plans. People should pre-register; as of February 23 we had about 35 registrants in New Bedford and about 25 in Portsmouth. We can accommodate last-minute registrants, but would like to distribute materials in advance.

The Mid-Atlantic provided information and datasets in advance of their workshop; we can do the same, both GIS data of management boundaries and overlays on charts. MAFMC workshop proposals were brought to the meeting. Squid industry and ENGOs developed their own boundaries. MAFMC workshop compared the three sets of boundaries and modified them during the meeting. They did not consider the lobster fishery and we have whiting, not just squid, so our workshop will be a little more complex. We discussed a break out group approach for part of the workshops here, with an introduction first, then breakouts, then a large group session. The hope would be that groups would come to the workshop with a good idea about their recommendations pre-formulated.

From my standpoint it would be good to get a finer scale sense of fishing by location and depth. Currently fishing effort data area coarse – we know what types of gear are used in and around each zone, but we couldn't draw the footprint of fishing. We need to be cognizant of sensitivity around sharing confidential information.

Mr. Stockwell – I didn't attend the Mid-Atlantic workshop. Will someone attend from the enforcement community, so we get a realistic sense of what's realistic?

Dr. McKenzie expressed concern about the breakout session. During the herring workshops, it was valuable to foster connections and understanding, but here it might be better to have the whole group discuss at once would be better to generate more ideas and have everyone hear everyone else's perspectives.

Mr. Borden commented that they suggested breakout groups to allow some time during the meetings for confidential discussions among members of a single fishery. He also commented that at future meetings, NOAA GC should be prepared to address the basis for the Council's authority to regulate lobster gear. The Mid-Atlantic Council coral areas do not regulate lobster gear, and ASMFC has raised concerns in the past about consistency of regulations across the geographic range of a fishery.

Mr. Grout felt that this is a difficult situation. For the Mid-Atlantic, weren't they basically considering one fishery? Ms. Coakley responded that yes, it was predominantly the squid fishery engaging in the Mid-Atlantic process. We did have a Coast Guard representative and it was useful.

Megan Lapp (Seafreeze) commented that there were representatives from the whiting, fluke, and monkfish fisheries at the Mid-Atlantic workshop as well. They weren't providing tow lines at workshop, but industry had come together beforehand to develop areas and brought the results of that effort. Mr. Grout agreed it would be helpful for industry to work on their proposals prior to the workshop.

The chairman asked if we could include the questions to address at the workshop in the materials distributed beforehand. He asked if there were any additional suggestions from audience

FINAL

members about how to format the workshop or what information the Council should be soliciting, and there were none.

OTHER BUSINESS

Mr. Grout noted that his impression was that any coral amendment measures would replace the monkfish areas, not add to them, but wondered if it would be helpful to clarify the issue. Ms. Bachman noted that it would be possible to reconsider these areas, but this is complicated because the monkfish areas are part of a joint New England/Mid-Atlantic plan, and the Lydonia and Oceanographer closures are also in the Mackerel/Squid/Butterfish plan. The tilefish closures are Mid-Atlantic areas.

In response to a question, Mr. MacDonald indicated that the two for one guidance on removing old regulations when new ones are implemented was still being interpreted. Mr. Grout made the following motion, and asked if it was possible for the monkfish areas to be removed via this amendment. Mr. MacDonald noted that since the monkfish plan is joint, both Councils would need to agree.

Motion 5 (Grout /not seconded): The Habitat Committee's intent is that the action alternatives for the omnibus deep-sea coral amendment would replace the monkfish fishery closures in Lydonia and Oceanographer Canyons.

Mr. Borden felt it would be good to get some feedback from the Mid-Atlantic on both the monkfish and tilefish closures. Dr. McKenzie asked how the existence of the monument influenced these particular areas. Ms. Bachman noted that the monkfish areas are entirely within the monument, such that the areas are moot if the monument remains in effect. The tilefish closures additionally include Veatch Canyon (and Norfolk Canyon further south) and are located in shallower waters given the depths at which tilefish burrows are typically found. So, it seems possible given the original rationale for the monkfish areas that they could be removed following implementation of the coral amendment, but that the tilefish areas might be retained in addition to any coral areas overlapping Veatch Canyon.

By consensus, the Committee referred this issue to the monkfish committee.

The meeting adjourned at 12:50 p.m.

Figure 1 – Jordan Basin coral zones, original (red) vs. Committee motion (blue)

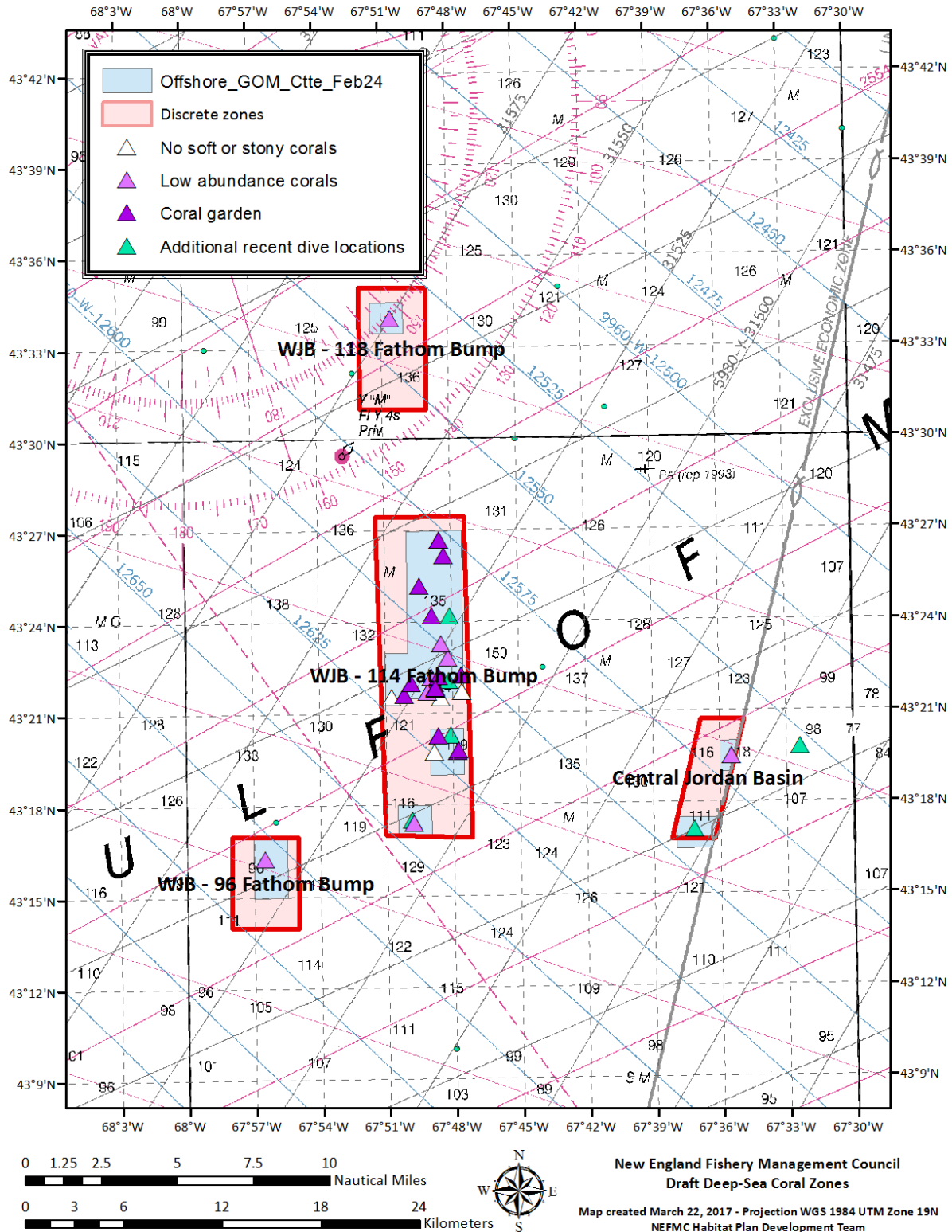


Figure 2 – Lindenkohl Knoll coral zones, original (red) vs. Committee motion (blue)

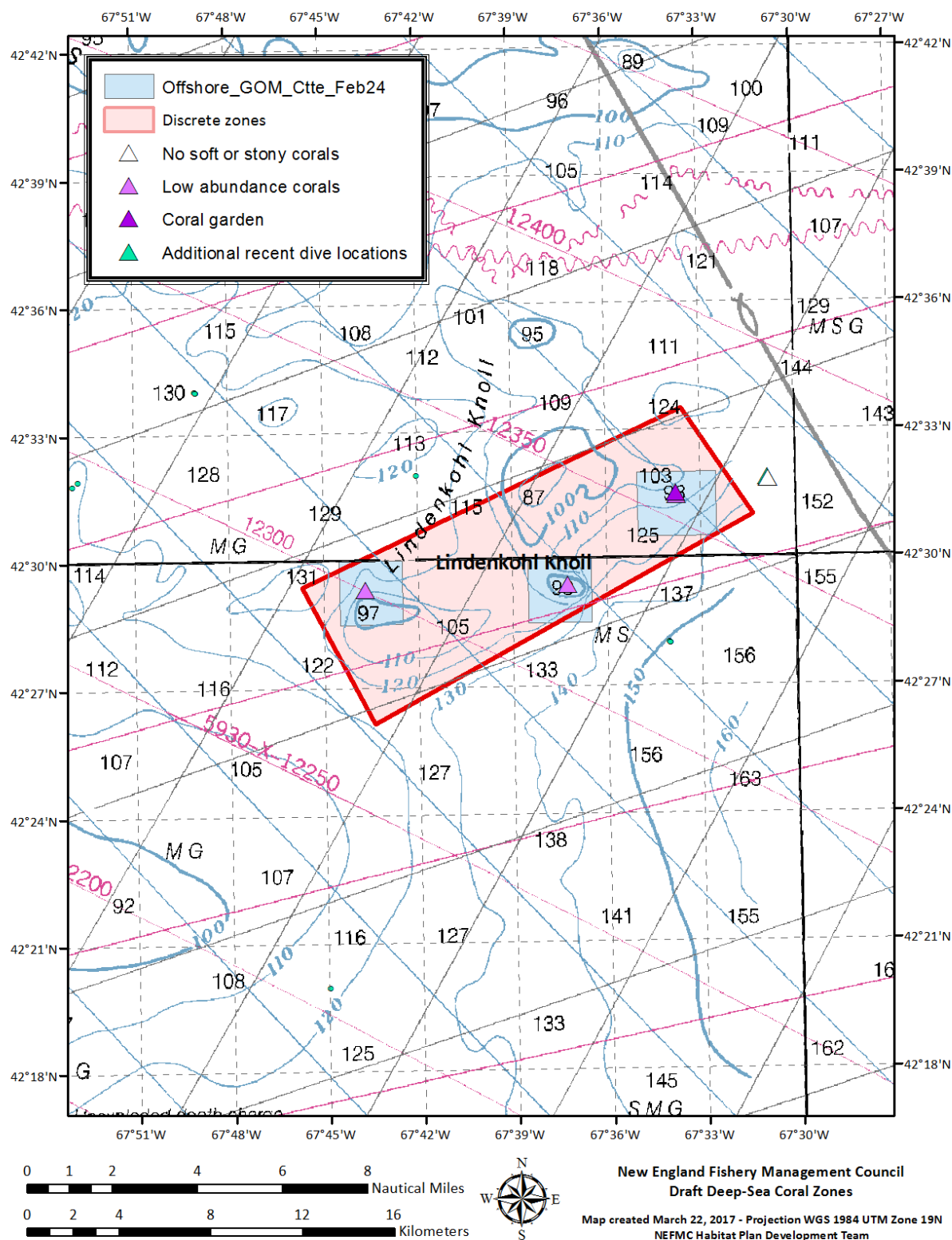


Figure 3 – Mt Desert Rock coral zone - original (red) vs. Committee motion (blue)

