

## Summaries from recent Habitat Meetings

July 20, 2011 Advisory Panel Meeting

July 21, 2011 Habitat Oversight Committee Meeting

August 15, 2011 Habitat PDT Meeting



**New England Fishery Management Council  
Habitat/MPA/Ecosystems Advisory Panel Meeting Summary**

**July 20, 2011  
Mansfield, MA**

**Committee members:** David Wallace (chair), Gib Brogan, Greg Cunningham, Ben Cowie-Haskell, Heather Deese, Jeff Kaelin, Maggie Raymond, Geoff Smith, Ron Smolowitz, John Williamson

**Council staff:** Michelle Bachman (PDT chair)

**NMFS staff:** Moira Kelly (PDT)

**Others:** additional audience members

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The meeting commenced at 9:00 a.m. The purpose of the meeting was to discuss options to minimize adverse effects of fishing on Essential Fish Habitat and options to protect deep-sea corals, and to provide advice on these options to the Habitat Committee. The Advisory Panel reviewed the decision document provided by the Plan Development Team and made the following recommendations to the PDT and Committee. A figure showing the different vulnerable areas, in addition to current closures, is provided on the last page of this document.

1. (Raymond/Kaelin): Eliminate CAII habitat closure and create a gear modification area based on the areas west of (outside of) CAII identified on Map 7 in the discussion document. (5/4/1) (chair voted to break tie)

The group discussed that gear modifications might be preferable to complete closures, and that gear modifications are only practically implemented in large areas.

*The AP recommends that a gear modification area, based on LISA cluster 5, be developed that has a comparable magnitude of habitat benefits to the existing CAII habitat closure. (not seconded)*

2. (Smith/Cunningham): Modify CAII habitat closure to remove areas not included in the LISA cluster, and in areas of the LISA cluster, outside of the existing closed area, investigate gear modifications or restrictions (closures) to mobile bottom tending gear. (6/3/0)

The Georges Shoal vulnerable areas were recommended by the PDT as a refinement of the raw LISA cluster outputs. It was noted that the purpose of habitat protection measures is to enhance fishery production, unless habitats are very unique such that they merit protection in their own right. Northern CAII is flat and gravelly. One advisor asked what fishing opportunities would open up if CAII were eliminated, and another responded haddock and winter flounder. The need to characterize the fisheries that occur in and around CAII was noted.

Motions 3, 4, and 5 below relate to establishment of dedicated habitat research areas in locations in and around existing habitat closed areas. The conceptual/generic research area presented in

the discussion document included a combination of the following: (1) maintain fishing restrictions in an area that is currently closed, (2) allow fishing (perhaps in a controlled fashion) in an area newly opened, (3) include an adjacent open area to serve as a control. Implementation of this concept within the existing habitat closed areas (CAII, CAI, NLCA) was generally supported by the AP.

3. (Deese/Williamson) In considering changes to CAII, recommend development of clear habitat research priorities, an associated dedicated habitat research area, and timelines (see schematic in 1.2.3.1 of decision document as an example). (8/1/0)
4. (Smolowitz/Raymond) Eliminate existing habitat closures in CAI and replace them with a habitat research area near the SMAST survey stations as shown on the map, and any additional areas that may be appropriate for consideration, including development of clear habitat research priorities and timelines for any areas developed. (9/0/0)
5. (Smolowitz/Cowie-Haskell) Eliminate existing habitat closure in NLCA and substitute a more beneficial habitat research area, closed to fishing, to the north, on the western side of the GSC. (4/0/4).
6. Implement a habitat management area in the vulnerable habitat areas identified in Map 8 (Great South Channel) of the decision document; measures might include gear modifications, restrictions, and/or closures. (5/2/0).
7. (Raymond/Kaelin) With respect to options proposed by the habitat AP that include potential closures, the AP recommends an analysis of the reduction in swept area by the groundfish fleet, resulting from a 38% reduction in days absent from 2007-2010<sup>1</sup>, as well as reduction in area swept by scallop fleet resulting from rotational management. (7/0/1)

The purpose of motion 7 is to compare the magnitude of any expected benefits to EFH that might result from new area closures with those benefits that have been previously generated by area swept reductions that resulted from the scallop area rotation program and the reduction in groundfish days absent.

8. (Brogan/Cunningham) Implement a single habitat management area in the GSC that is bound by LISA cluster 6 at the 0.01 level; measures might include gear modifications, restrictions, and/or closures. (4/3/2)

This LISA cluster-based area was suggested as a specific option for a habitat area in the Great South Channel.

9. (Raymond/Smolowitz) To exempt shrimp vessels from restrictions in the portion of the WGOM habitat closure that is north of the SBNMS sanctuary boundaries. (6/1/2)

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<sup>1</sup> See social science sector report

10. (Smith/Cunningham) Motion to exempt shrimp vessels from trawl gear restrictions in the northwest portion of the WGOM habitat closure, as identified in the decision document. (6/0/2)

The AP proposed two options for defining a shrimp fishery exemption to trawl restrictions in the WGOM habitat closed area. The first option suggested would maintain the restrictions in the SNBMS portion of the WGOM only, and the second would maintain restrictions over a larger portion of the WGOM area, only allowing shrimping in the northwest corner previously identified as the preferred shrimping area by industry. It was noted that shrimping in the WGOM occurs only during a narrow temporal window each year, in April and May.

11. Raymond/Smith That a habitat management area be recommended on Jeffreys Bank; with two options: (1) the existing Jeffreys Bank habitat closure and (2) the 100 meter Jeffreys Bank vulnerable area; measures might include gear modifications, restrictions, and/or closures. (8/0/1)
12. (Raymond/Cowie-Haskell) Develop a more discrete area on Cashes Ledge that is centered around Ammen Rock that could then be considered as a closure to all fishing, and includes designation as a habitat research area, including development of clear habitat research priorities and timelines for any areas developed. (6/1/2)

The AP discussed the potential importance of developing habitat closures in some areas that restrict all types of fishing, not just mobile bottom tending gear, as has been previously implemented. Given the unique character of Ammen Rock and its surrounds, this was thought to be an appropriate location for broader restrictions. Note that currently, this area is designated as both a multispecies closure, with restrictions on all gear capable of catching groundfish, and as a habitat closure, with mobile bottom tending gear restrictions.

13. (Smith/Williamson) Develop an option to maintain the existing habitat closure on Cashes Ledge. (8/0/1)

As compared to the previous motion, this option would maintain the larger existing habitat closure on Cashes Ledge.

14. (Cunningham/) Develop a habitat management area on Fippennies Ledge, in the area depicted in Map 3 of the decision document; measures might include gear modifications, restrictions, and/or closures. (6/3/0)
15. (Cunningham/Brogan) Develop a habitat management area on Platts Bank, in the area depicted in Map 4 of the decision document; measures might include gear modifications, restrictions, and/or closures. (3/3/3)
16. (Raymond/Smith) More fully develop a range of options for Jeffreys Ledge, including development of an area that better encompasses the ledge (as shown in orange on Map 5); measures might include gear modifications, restrictions, and/or closures. (amended)

17. Motion to amend (Williamson/Cowie-Haskell) More fully develop options for Jeffreys Ledge, including the range of options outlined in the decision document, also including development of an area that better encompasses the ledge (as shown in orange on Map 5); measures might include gear modifications, restrictions, and/or closures. (5/4/0)

*Motion to amend motion 16 carried (5/4/0)*

*Motion 17 (motion 16 as amended) carried (8/1/0)*

The AP supported developing options for an area that better encompasses the Jeffreys Ledge feature, in contrast to the current WGOM closure which only includes a portion of the Ledge as well as other areas. The group discussed the potential use of the WGOM habitat closed area by the shrimp fishery, and it was noted that it would be limited in both season and area.

18. (Deese/Raymond) In considering changes to habitat management areas in the WGOM/Jeffreys Ledge area, recommend development of clear habitat research priorities, an associated dedicated habitat research area, and timelines (see schematic in 1.2.3.1 of decision document as an example). (8/0/1)

A research area option for the WGOM area is consistent with the research areas proposed in the Georges Bank habitat closed areas, should they reopen.

19. (Kaelin/Raymond) No recommendations to the Committee from the AP regarding the Stellwagen/Tillies/Wildcat area until additional recommendations are made by the PDT. (8/0/1)

The Stellwagen/Tillies/Wildcat area encompasses a variety of disparate areas; the PDT has not done much work on this area pending rollout of the SBNMS Sanctuary Ecological Research Area (SERA) proposal, which may overlap the vulnerable area identified by the PDT.

20. (Deese/Williamson) Recommend prioritization of research needs around changes to habitat with changes to fishing in the region, including prioritization of a system of DHRAs, with appropriate timelines and with overarching research objectives. (6/0/2)

Given the range of research area options discussed, this motion was intended to encourage the PDT to develop an overarching vision statement and integrated plan for research areas that might be implemented throughout the region.

### **Deep sea corals**

21. (Brogan/Cunningham) Management alternatives related to deep sea coral should be specific to gear categories (bottom tending mobile gears vs. bottom tending fixed gears). Also that the PDT should provide overlays of fishing effort and potential coral areas. (7/0/1)

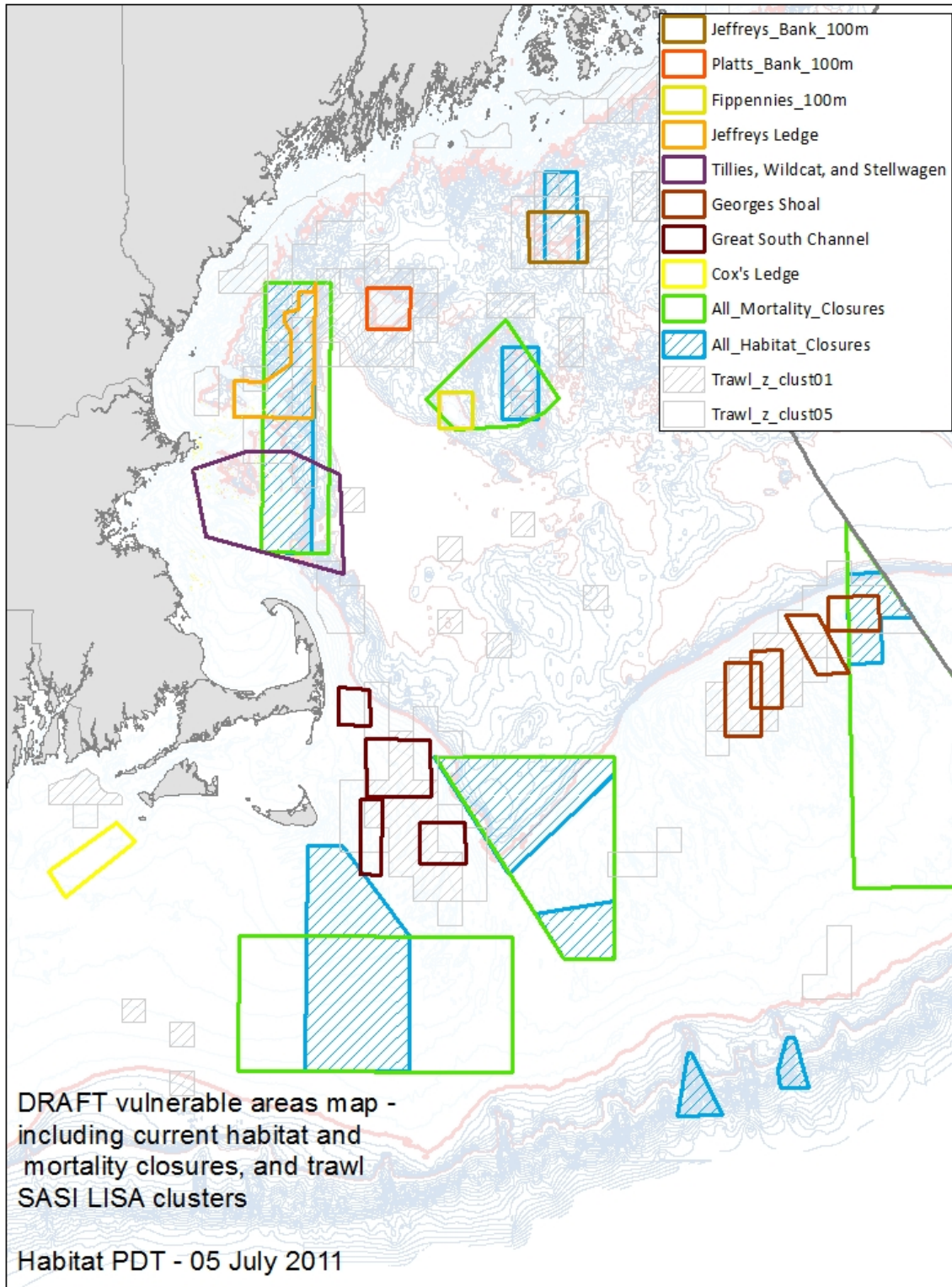
In order to narrow down the range of options related to deep-sea corals, the AP suggested that the committee consider mobile vs. fixed bottom tending gears separately.

22. (Kaelin/Raymond) Ask the PDT to analyze the extent of coral protection that would occur in the canyon areas if the protection zones were established at 200 m and 400 m. (8/0/0)

23. (Deese/Kaelin) With respect to the proposed Western Jordan Basin and Mt Desert Rock Deep Sea Coral Zones, conduct an analysis of the fishing gear types that are currently in active use (known fisheries include hagfish and lobsters). (8/0/0)

The AP discussed that fishing uses of various areas should be considered when developing alternatives to protect deep sea corals. They also asked what fishery resource benefits are achieved by protecting corals.

24. (Deese/Raymond) Request that the PDT develop advice based on the best available science about the potential interactions and impacts between fisheries and EFH and offshore wind, as a secondary priority to efforts related to the Omnibus Amendment. (8/0/0)





**New England Fishery Management Council  
Habitat/MPA/Ecosystems Oversight Committee Meeting Summary**

**July 21, 2011  
Mansfield, MA**

**Committee members:** David Preble (chair), David Goethel (vice chair), Lou Chiarella, Jim Fair, Mark Gibson, Doug Grout, Sally McGee, Terry Stockwell  
**Council staff:** Michelle Bachman (PDT chair)  
**NMFS staff:** David Stevenson (PDT), Moira Kelly (PDT), Chad Demarest (PDT)  
**Others:** Peter Auster (PDT), additional audience members

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The meeting commenced at 9:00 a.m. The purpose of the meeting was to continue development of options to minimize the adverse effects of fishing on Essential Fish Habitat (EFH), and options to protect deep-sea corals.

Staff noted the availability of comments on the Notice of Intent prepared to inform the public of the expansion of scope of the Omnibus Amendment to consider the groundfish rebuilding closures. There were no significant comments from the Committee on this issue.

**Adverse effects options**

The Committee discussed options to minimize the adverse effects of fishing on Essential Fish Habitat (EFH) within both the ‘vulnerable habitat areas’ identified by the Plan Development Team (PDT), and within existing areas.

On Georges Shoal, the PDT identified four gravel outcrop areas as vulnerable to fishing. The Committee identified a range of options for the CAII/Georges Shoal area, as follows, for further development by the PDT:

**Options for CAII/Georges Shoal Areas:**

1. (Stockwell/) Maintain status quo in CAII habitat closed area. (7/0/0)
2. (Goethel/Stockwell) Eliminate CAII habitat closed area (5/2/0)
3. (Goethel/McGee) Have the PDT provide management options for the Council for the Georges Shoal vulnerable areas identified in Map 7 of the decision document. (7/0/0)
4. (Goethel/Stockwell) Have the PDT provide management options for the Council for the two western boxes in the Georges Shoal vulnerable areas map. (6/1/0)
5. (Grout/Goethel) Restrict range of management options as follows:
  - Status quo gear restrictions (1.2.1.1)
  - Restrictions on all mobile tending bottom gear (1.2.1.3)
  - Status quo gear modifications (1.2.2.1)
  - Gear modifications, but reduce options to three cable lengths (1.2.2.3) (7/0/0)



*Committee consensus: analyze above as if Closed Areas re-open.*

The Committee discussed these areas in the context of maximizing catch per unit of effort; members asked whether this issue had been analyzed by the PDT. One committee member noted that complete removal of an existing closed area (in this case the CAII habitat closed area) was inconsistent with research area implementation (assuming that an important aspect of a research area was to maintain as unfished some portion of an existing closure).

Audience members also raised the issue of increasing CPUE in this area by changing the current area management, particularly in regards to scallops. One suggested focusing on the western ‘vulnerable areas’ for habitat management so that the eastern portions could be fished. He also noted the use of the area by herring for spawning purposes, and wondered if a seasonal closure might be appropriate in this regard. A PDT member reminded the group that in terms of estimating impacts, it was important to remember that the linear fishing/habitat impact function in the Swept Area Seabed Impact (SASI) model remains untested, which is an argument for careful, and possibly cautious, interpretation of the results. Another audience member stated his support for changes to the existing CAII habitat closure, and noted that a specialized flounder fishery exists on Georges Shoal.

Finally, an audience member supported the idea of packaging options into alternatives, and urged the Committee to exercise caution when evaluating SASI practicability analyses. The PDT responded to this, noting that the Peer Review Panel’s concern about these analyses was the assumptions made regarding the redistribution of fishing effort giving a changing suite of area management measures.

The Committee discussed which of the options (various gear restrictions or modifications) outlined in the document would be appropriate for this area, and there was some discussion of seasonal closures but no motions were made to this effect.

One audience member encouraged the Committee to consider relying on reductions in effort/days absent that have already occurred in the groundfish fishery in order to demonstrate a reduction in adverse effects. She was concerned about the application of gear modification requirements in general, specifically about applying them on a universal basis and recommended that they be considered within specific areas only. In regards to roller gear sizes appropriate for this region, an audience member noted that larger (24-28 in) roller gear was necessary.

A Committee member noted that it was possible to circumvent gear modifications by making other alternations to the vessel, for example, changes to engine horsepower, tonnage, use of net floats. Another Committee member noted that the only ground gear option likely to have a large influence on behavior was a 12 inch roller gear restriction. Given these concerns, the Committee decided to keep ground cable restriction options on the table for Georges Shoals, but remove roller gear restrictions from consideration.

**Options for CAI areas:**

6. (Stockwell/Grout) With respect to CAI develop the following options for analysis:
  - Eliminate CAI habitat closed areas
  - Maintain CAI habitat closed areas (status quo)
  - Maintain CAI habitat boundaries, but evaluate habitat effects of changes to gear use, specifically analyze 3 cable lengths (1.2.2.3) (6/0/0)
7. (Stockwell/Grout) With respect to CAI, implement a habitat research area in and around the SMAST survey stations as shown on the map provided by R. Smolowitz. (7/0/0)

**Options for NLCA:**

8. (Stockwell/Grout) With respect to NLCA, develop the following options for analysis:
  - Maintain NLCA habitat closed area (status quo)
  - Eliminate NLCA habitat closed area (6/0/1)

**Options for the Great South Channel:**

9. (Goethel/Grout) Analyze possible gear restrictions, including no gear restrictions, in the four polygons identified in the Great South Channel on Map 8 (7/0/0)

*Note that this is intended to include all gear restrictions in sections 1.2.1 and 1.2.2 of the document, for each of the four areas separately and combined.*

The Committee discussed that current catches might not be a good basis for evaluating the potential impacts of implementing some type of habitat area in the GSC. They were advised of advisory panel concerns about creating a very large area in the channel, and the AP's recommendation to focus on the core of the original LISA cluster in that area.

**Options for research areas:**

10. (Stockwell/Grout) Develop criteria for habitat research areas as part of and/or adjacent to the habitat management areas. (7/0/0)

The issue of research areas was raised repeatedly and the Committee asked the PDT to consider research areas for habitat in an holistic way and develop an overarching set of criteria for these areas.

**Options for Cox Ledge:**

11. (McGee/Gibson) Analyze possible gear restrictions, including no gear restrictions, in and around the Cox Ledge box identified on Map 9. (6/0/0)

*Note RI SAMP analyses*

The Committee discussed that Cox Ledge is somewhat analogous to nearshore habitats in the Gulf of Maine, but that there are additional pressures such as wind energy development to consider. At least one Committee member encouraged the Council to stay engaged in term of wind energy development and how it relates to fisheries.

**Options for Jeffreys Bank:**

12. (Stockwell/Goethel) Maintain existing habitat closure on Jeffreys Bank. (7/0/0)

**Options for Cashes Ledge:**

13. (Goethel/Stockwell) Maintain existing habitat closure on Cashes Ledge. (7/0/0)

**Options for Fippennies Ledge:**

14. (Stockwell/McGee) Analyze possible gear restrictions, including no gear restrictions, in the Fippennies Ledge area identified on Map 3. (7/0/0)

**Options for Platts Bank:**

15. (Stockwell/Grout) Analyze possible gear restrictions, including no gear restrictions, in the Platts Bank area identified on Map 4. (7/0/0)

The Committee passed a series of motions in relation to offshore banks and ledges in the Gulf of Maine; Jeffreys, Cashes, Fippennies, and Platts.

**Options for the Western Gulf of Maine:**

16. (Goethel/Grout) With respect to the WGOM, analyze:
  - Status quo
  - Elimination of WGOM habitat closed area
  - Analyze areas within the current WGOM habitat closure area (see Maps 5 and 6 in decision document) for possible gear restrictions. This will include a specific separate analysis for shrimp trawls. (5/0/1)

An audience member noted that he was supportive of the WGOM habitat area during the Amendment 13 process because it was a reasonable option given other limitations and issues, but that he welcomed a renewed consideration of what habitat areas might be appropriate in the western Gulf of Maine region.

Stellwagen Bank National Marine Sanctuary staff encouraged the Committee to consider their research area proposal as an approach to managing the southern part of the WGOM area, once the proposal is made available. The PDT noted that the area currently identified in and around Stellwagen was intended to highlight a broad area, encompassing smaller sub areas of hard bottom gravel and boulder habitats, and that it was a placeholder until the Sanctuary research area proposal can be reviewed.

Finally, the Committee briefly discussed how to bring these options to the Council, and how to package them into alternatives. The Chair noted that goals for each alternative package would be to open the wrong areas, protect the right areas, and provide some mechanism for monitoring. It was noted that the intention was for all alternatives to be geographically comprehensive (i.e. containing options from various regions in a single alternative).

**Coral alternatives**

**Broad-scale deep sea coral zone options:**

17. (Fair/Goethel) Analyze two deep-sea coral zones along the shelf slope, beginning at 200 m and 300 m and extending to the limit of the EEZ. Restrictions associated with the zone would not apply to the red crab pot fishery or to other fisheries exempted by framework action. The goal of this analysis is to identify the footprint of current fishing, on a gear-type by gear-type basis. (7/0/0)

Notes:

- *PDT will work on GOM deep sea coral zones*
- *PDT will examine data available on canyon/seamount coral zones*

**Other business**

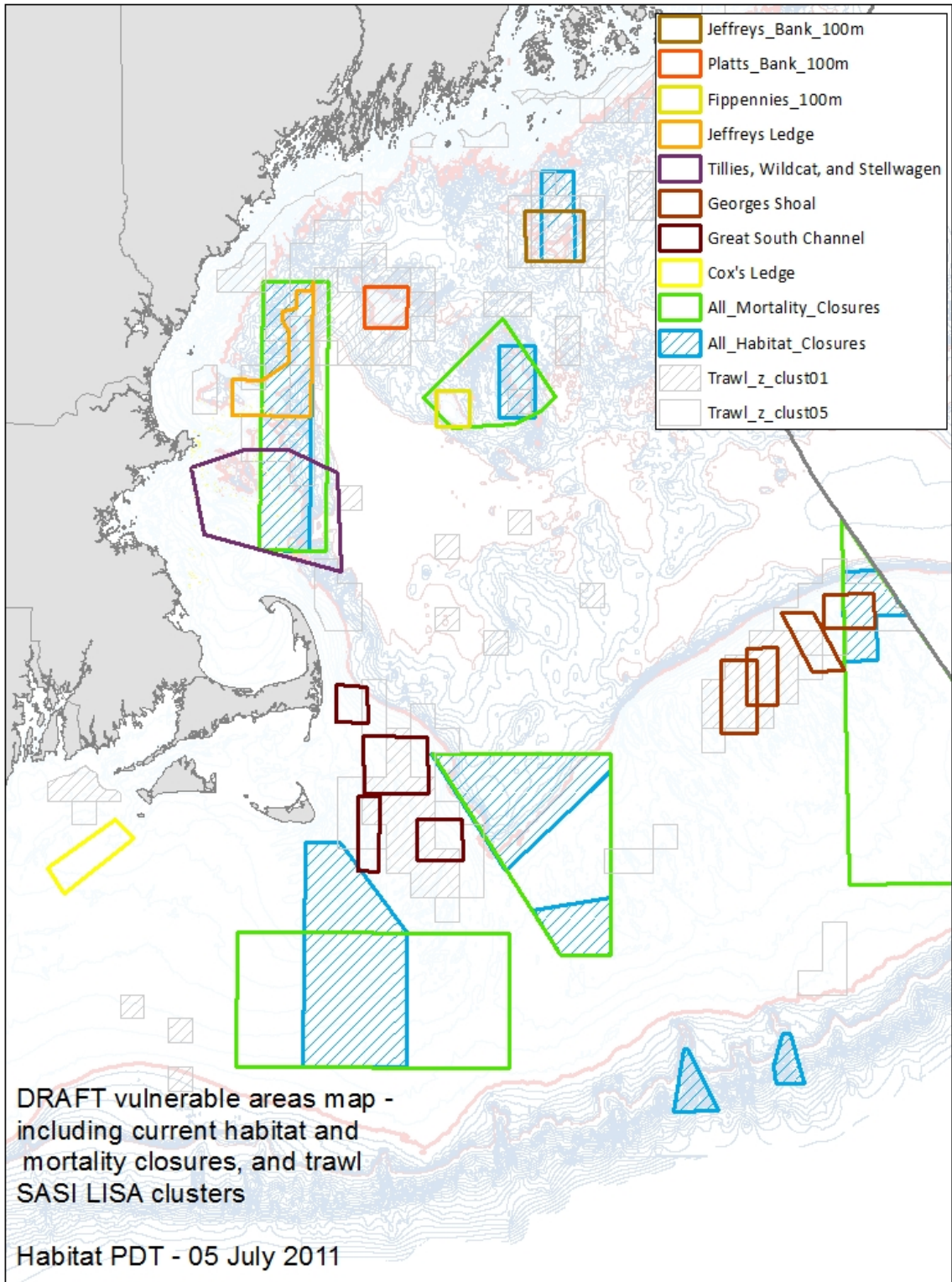
18. Motion to untable the following motion from the March Committee meeting:  
“Goethel/Kray. For Atlantic sea scallop EFH (all lifestages), use the map based on 100% dredge and trawl survey data, with no depth limit (Map 17).”
19. (Grout/Stockwell) Motion to substitute: That the PDT examine other sources of data in addition to the trawl and dredge survey data, including the ME scallop survey data, MA inshore trawl survey data, and NH/ME trawl survey data, for analysis in determining the spatial extent of scallop EFH.

Motion to substitute approved 7/0/0

Main motion approved 7/0/0

20. Motion to untable the following motion from the January Committee meeting: Move Cluster 5 (Georges Shoal) closure options and Cluster 7 (Browns Ledge) closure options to considered but rejected section. (7/0/0)

Motion withdrawn by its maker/seconded.





## New England Fishery Management Council

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### Habitat Plan Development Team Meeting Summary

August 15, 2011  
Boston, MA

The PDT met on Monday August 15, 2011, to discuss issues related to alternatives development for the Omnibus EFH Amendment, specifically, new habitat areas and possible measures for those areas. Team members in attendance included Michelle Bachman (NEFMC staff, chair), Chad Demarest, Kathryn Ford, Jon Grabowski, David Stevenson, Tom Hoff, Page Valentine, Peter Auster, Katie Richardson, Moira Kelly, and Mark Lazzari. Committee members in attendance included David Preble (chair). Also in attendance were advisory panel members Ben Cowie-Haskell, Maggie Raymond, and Greg Cunningham, as well as three additional audience members.

#### ***Packaging and analyzing alternatives***

The PDT discussed how to package options into alternatives and how to analyze alternatives throughout the day; these discussions are summarized here. Following this section, individual options are presented on an area-by-area basis.

#### Consideration for analysis:

- Alternatives should be developed to meet some objective, and will require criteria for analysis and cross-comparison.
  - Metrics that can be used to compare between areas are mean  $Z_{\infty}$ , area size, and  $Z_{\infty}$  per unit area.
  - $Z_{\infty}$  values will be reported as levels/bands rather than as raw numbers, to facilitate interpretation of the results
  - Revenue estimates for current EFH management areas will be estimated based on the adjacent representative areas scheme developed previously
- The status quo alternative should include the current suite of habitat closures, and the impacts of any given alternative will be compared to the impacts of the current habitat closures.
  - The habitat benefits or impacts associated with the mortality closures will be ignored, for now, until groundfish closure alternatives and habitat alternatives are combined and cumulative effects are evaluated. This is consistent with the Committee's 7/21 advice to assume elimination of the mortality closures when conducting habitat analyses.
  - In terms of NEPA document preparation (Affected Environment section in particular), the baseline status of the environment is the baseline status, regardless of whether habitat benefits or impacts have accrued because of the habitat closures or the mortality closures
    - Related to this, the PDT discussed how to separate the performance of groundfish areas in terms of any habitat and groundfish mortality benefits, but did not reach any conclusions

- The PDT noted that across all gear types, area swept and  $Z_{\text{realized}}$  estimates decreased in 2010 as compared to previous years.
- The PDT also discussed that it will be important to understand the limitations of the SASI model when presenting results and using those results to evaluate specific options, for example:
  - Since energy/depth are used as a proxy for feature/epifaunal vulnerability differences, the model outputs may be underestimating impacts in the low energy GOM, overestimating impacts on high energy Georges Bank. This assumes that features that occur in high energy areas are more resilient to disturbance than was accounted for when the vulnerability assessment, and features occurring in low energy environments are less resilient than assumed.

Broad goals for packaging alternatives are:

- To allow fishing to be conducted as efficiently as possible/to increase fishing opportunities
  - Related to this, to minimize effort redistribution - assuming that areas where the density of fishing effort is high are this way because they are preferred fishing locations where catch can be harvested efficiently
- To protect most vulnerable (most important?) habitat areas
  - The PDT discussed how to prioritize protection of one area relative to another. It was noted that, all else being equal (or at least very similar), if one new and one modified habitat area were proposed, it might be better to recommend maintaining a current area as opposed to creating a new area. (Of course, the situation of ‘all else being equal’ may or may not apply to any particular pair of proposed areas.)

### ***Jeffreys Bank***

*Recommendation for analysis:* The PDT recommends that the Committee consider the new area on Jeffreys Bank defined by the 100 m contour, as this area better covers the hard bottom, more vulnerable bank features. It was noted that although substrate data for Jeffreys Bank, and other GOM features, is somewhat incomplete, the sampling we do have of the top of the banks validates what we would expect to see on the banks and ledges in terms of vulnerable substrate.

Specifically, three options would be considered:

1. Status quo – current area, closed to mobile bottom tending gear, open to all other gears
2. New area – closed to mobile bottom tending gear, but open to fixed gear
3. New area – closed to mobile bottom tending gear and closed to fixed gear

Note that use of lobster fishing gear cannot be managed by the Council, so here fixed gear refers to demersal longlines and sink gillnets. The objective is to minimize to the extent practicable the adverse effects of fishing on habitat, adverse effects being those that are more than minimal and not temporary. The PDT wondered whether some level of fixed gear adverse effect in a habitat area is tolerable from an adverse effects standpoint, and, if so, what is the threshold of fixed gear use that becomes problematic? The PDT discussed that a higher threshold of information would be required to adequately defend the exclusion of fixed gear, and that it is likely that we have not reached that threshold.

*To do:* (1) Related to new vs. current area: Chad will calculate Z values for both areas. (2) Related to fixed gear use/exclusion: Chad will provide SASI outputs for fixed gears, Peter will provide discussion of any literature related to the specific likely impacts of fixed gears on the seabed structures found on Jeffreys Bank. Questions to address:

- What are attributes of closure that indicate whether or not fixed gears should be allowed?
- What is now on Jeffreys Bank in terms of seabed features? What used to be on Jeffreys Bank?
- What are differences in fixed gear impacts between different seabed types?

### ***Cashes Ledge***

*Recommendation for analysis:* Adjust the western boundary to 69 degrees W and the edge of the shallow feature. Evaluate adjustment of the northern and southern boundaries to better encompass feature.

Specifically, four options would be considered:

1. Status quo - current area, closed to mobile bottom tending gear, open to all other gears (Note that in terms of considering what currently occurs in the CL habitat closure, if the groundfish closure regulations are layered onto the habitat closure regulations, additional gears capable of catching groundfish are currently excluded from the area, but not on the basis of habitat protection.)
2. New area – closed to mobile bottom tending gear, open to fixed gear
3. New area – closed to mobile bottom tending gear, closed to fixed gear (but see fixed gear discussion above)
4. Recommend a smaller area (see McGonigle et al 2010) as a no-fishing zone in order to protect rare and vulnerable kelp forest habitat. This would include a recommendation to ASMFC to exclude lobster gear.

The PDT with audience input discussed the types of fisheries that occur or would be likely to occur on the margins of the new area. Fishing on the western boundary would be challenging to estimate as the area has been part of a mortality closure for years – but on the western side there would likely be flounders and monkfish, on the eastern side, cod, and to the north, cod and pollock, as well as redfish. The area is designated as an HAPC in addition to being a habitat area – the PDT discussed that any revision to the area should review the information that was used to justify the original HAPC designation.

To do: (1) Related to new vs. current area: Chad will calculate Z values for both areas. (2) Related to fixed gear use/exclusion: Chad will provide SASI outputs for fixed gears, Peter will provide discussion of any literature related to the specific likely impacts of fixed gears on the seabed structures found on Cashes Ledge. (3) Related to designation as HAPC – Michelle will evaluate original rationale for both habitat closed area and HAPC – note unique currents, waves, internal features.

### ***Fippennies Ledge***

*Recommendation for analysis:* Single option: Define a gear restricted area based on the 100 m boundary previously drawn by PDT that would be closed to mobile bottom tending gear, open to fixed gear. (Note that fixed gears capable of catching groundfish are currently excluded from this area as it is within the Cashes Ledge groundfish closure.)

### ***Platts Bank***

*Recommendation for analysis:* Single option: Define a gear restricted area based on the 100 m boundary previously drawn by PDT that would be closed to mobile bottom tending gear, open to fixed gear.

The audience commented that Platts Bank is an important area for medium sized vessels that fish closer to shore. The PDT discussed whether, on this basis, a gear modification area was a better option, but decided that a better way to proceed was to add the Platts Bank gear restricted area option to one or more of the packaged alternatives, but not to others.



### ***Jeffreys Ledge***

*Recommendation for analysis:* Define a gear restricted area that would be closed to mobile bottom tending gear, open to fixed gear.

Specifically, two sub-options would be considered:

1. One smaller, L shaped area that lies entirely within the current WGOM habitat closure
2. One larger area that includes the above in addition to additional boulder ridge habitats that occur to the southwest, towards Cape Ann

The group was reminded of research evaluating whether or not there are differences evident between habitats inside and outside of the current WGOM closure – evidence suggests that there are differences in hard-bottom habitats, but not for deep mud habitats, although there were some methodological concerns with the studies available. Further south, studies of deep mud do show a difference between mud habitats inside and outside of current closures. However, sampling in these southern studies occurred at irregular intervals, such that they may be showing inter-annual variation rather than changes related to status as closed/open.

*\*\*Note that in general, the PDT did not recommend any gear modifications for the GOM because the sizes of the GOM areas was small relative to some of the Georges Bank/Great South Channel areas, thus making them impracticable to implement.*

### ***Georges Shoal***

*Recommendation for analysis:* Define three separate areas on Georges Shoal as follows:

1. Small area based on the location of the “pristine area” that incorporates the northern portion of the current habitat closure and is closed to all gear types, including a recommendation on lobster gear.
2. Large area outside the current Closed Area where gear modifications (specifically ground cable length restrictions) for trawls would be required.
3. Smaller area outside the current Closed Area that would be closed to mobile bottom tending gear.

The PDT discussed the juvenile cod HAPC in the area, acknowledging that opening some or all of this area will involve tradeoffs between negative habitat impacts on juvenile cod and other managed species in the area and positive fishery benefits, specifically for sea scallops, which are highly abundant in the middle and southern portion of the closed area. Apparently there is a unique age distribution of cod in this area, with close linkages demonstrated for very young (<1 year old) fish and certain habitat types; this association is more tenuous as the cod age. The PDT discussed that just because the right type of habitat is available doesn't mean that the fish will have good recruitment – but that if they do have good recruitment, protection of their preferred habitats is expected to be beneficial.

There are some unique features in and around the “pristine area” – there is over 50% coverage (relatively high compared to other locations) of emergent epifauna, and a unique (?) tidal mixing front. A very rapid transition into this area from pebble/gravel pavement to larger substrates (cobble) was noted. Similar to Cashes Ledge, the original rationales for both the HAPC and the habitat closed area designations should be carefully reviewed.

### ***Great South Channel***

*Recommendation for analysis:* Define two separate areas in the Great South Channel/Nantucket Shoals as follows:

1. Large area with two options:

- a. Gear modifications (specifically ground cable length restrictions) for trawls
  - b. Closed to mobile bottom tending gear
2. Retain the portion of the existing NLCA habitat closed area that is outside of the NLCA mortality closure (i.e. the portion on Nantucket Shoals).

***Cox Ledge***

*Recommendation for analysis:* Single option: Define a gear restricted area based that would be closed to mobile bottom tending gear, open to fixed gear.

The meeting concluded at approximately 6 p.m.