



**New England Fishery Management Council
Habitat Plan Development Team Meeting Summary**

**August 15, 2011
Boston, MA**

PDT members: 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: Dave Preble (chair)
Others: Advisors Ben Cowie-Haskell, Maggie Raymond, and Greg Cunningham, as well as three additional audience members

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.

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_{∞} , area size, and Z_{∞} per unit area.
 - Z_{∞} 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

- The PDT noted that across all gear types, area swept and Z_{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 differences between, the model outputs may be underestimating impacts in the low energy GOM, and overestimating impacts on high energy Georges Bank if the seabed features found in low energy areas have longer/slower recoveries than estimated and those found in high energy areas are better adapted to natural disturbance and have faster recovery than estimated.

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: 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: 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: 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: 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. The PDT discussed that in general, gear modification options were more appropriate for larger areas, and that gear restriction options were more appropriate for smaller areas, including those in the GOM.

Jeffreys Ledge

Recommendation: 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.

Georges Shoal

Recommendation: 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: 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

- 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: 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.

Habitat management areas developed at August 15 PDT meeting

