



New England Fishery Management Council

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Habitat PDT Conference Call Summary

September 30, 2008

The PDT met on September 30, 2008 via conference call to continue work on the Vulnerability Analysis portion of Phase 2 of the Omnibus Habitat Amendment.

Omnibus Phase 2 – Vulnerability Analysis (VA), Data consolidation and evaluation

The PDT reviewed the timeline for the Omnibus Amendment, with a focus on the independent review of the PDT's Vulnerability Assessment. *Note: Since the PDT meeting, the Council determined that it wanted to delay the independent review until the VA is complete, and to expand the scope of the review to include the VA's output as well as its methods. We are now looking at a March, 2009 review. Additionally, ad hoc members of the SSC will likely be requested, though this request will have to emanate from the Council's Executive Committee.*

A question arose about the completeness of Phase I. Phase I is complete with the exception of the final maps for all 68 species/life stages and a few smaller editorial corrections. Timelines for completing these maps are unclear, but it is hoped that Phase I will be entirely wrapped up by mid-December, 2008.

Omnibus Phase 2 – Vulnerability Analysis (VA), Data consolidation and evaluation

Prey Species

The primary issue of concern on the Prey Species matrix is the relative abundance condition factor. We have not yet come up with a systematic way to treat this. There was some discussion of work being done by The Nature Conservancy using the Wigley and Theroux data that could be applicable here, but there seems to be an issue with W&T in that they don't break out polychaetes and other groups. Concern was raised about utilizing disparate data sources, and the difficulties that this creates. The mantra "keep it simple" is getting more and more difficult to say with a straight face. In the end, the group determined that dropping the relative abundance condition factor was superior to keeping it with insufficient data to underlie the cell values. The group may chose to identify it as a future goal or research need, but not include it in the analysis at this time. The consequence of this is that relative abundance condition factor was critical for differentiating between generalist and specialist feeders. It's unclear if we will need to

remedy this with additional metrics or not. The W&T data, in combination with any ongoing work by TNC, may change the PDT's mind on this issue.

There was discussion on treating structured habitats differently in the spreadsheets. For the sake of consistency between the assessment and modeling phases, we should probably refer to depth-based energy proxies by "depth" rather than "energy," given that we will try to quantitatively define energy in the modeling phase using metrics other than depth.

After much discussion, the following prey species were selected, validated, re-checked and confirmed:

1. Amphipods
2. Anemones
3. Brittle stars
4. Decapod crabs
5. Decapod shrimp
6. Fish
7. Isopods
8. Molluscs
9. Mysids
10. Polychaetes
11. Sea urchins/Sand dollars
12. Starfish
13. Fish
14. Krill
15. Squid

These will aggregate into benthic (the first 12) and pelagic (the last three) prey, but will be evaluated individually.

Geological structure

The group discussed patchiness probably referred better to habitat patchiness in a biological sense (patchy critter locations) rather than geological sense (patchy distribution of various grain sizes). There was no resolution to this debate, but rather a segue into the larger issue of metrics and substrates. The PDT determined that different substrate types (our five categories of substrate) are likely to be impacted in different ways by fishing gears, and therefore metrics should be specific to the five substrate classes. For example, fishing gear impacts to not alter the topography/relief, patchiness and bio-excavation aspects of all five substrates in a similar manner (or even at all). A new set of metrics will need to be devised.

There was extensive discussion on how to treat shell hash, as a biological component or physical (geological) component that is impacted by fishing gears. This issue was left dangling until the issue above (metrics specific to substrate classes) was resolved.

Finally, the PDT determined that “physical habitats” was a better category name than “geological structure.” So it is said, and so it is done.

Biological structure

The following structure was approved for these matrices:

Species	Morphology
Sponges	Erect Encrusting
Mussels	All
Bryozoans/hydrozoans	Erect Encrusting
Tunicates	Erect Encrusting
Brachiopods	All
Tube-building polychaetes	All
Tube-building amphipods	All
Algae	Leafy Encrusting
Anemones	Attached Burrowing

Each row of data (that is, each metric) will have a corresponding Susceptibility and Recovery value, along with a Data Quality evaluation.

Document outline

Based on discussions during the conference call, the document outline is amended as follows:

1	Executive Summary	3
2	Table of Contents	4
3	Regulatory background	5
4	History of adverse effects determinations in NEFMC Fishery Management Plans ...	6
5	Analyzing the adverse effects on habitats caused by fishing.....	7
5.1	Objective	7
5.2	The vulnerability assessment as an analytic tool	7
5.3	Data consolidation for assessment	7
5.3.1	Fishing gears in New England	7
5.3.2	New England habitats and substrates.....	7
5.3.3	The use of habitats by managed species	7
5.3.4	Disturbance of habitats by natural processes	7
5.3.5	Disturbance of habitats by fishing gears	7
5.4	Assessing vulnerability	7
5.4.1	Physical habitats.....	7
5.4.2	Biological habitats	7
5.4.3	Prey species.....	7
5.4.4	Deep sea corals	7
5.5	Habitat vulnerability and fishery production	7
5.6	Summary and conclusions	7
6	Modeling the adverse effects of fishing on habitats	8
6.1	Objective	8
6.2	Methods.....	8
6.2.1	Mapping	8
6.2.1.1	Physical habitats.....	8
6.2.1.2	Biological habitats	8
6.2.1.3	Prey species.....	8
6.2.1.4	Deep sea corals	8
6.2.2	Modeling.....	8
6.2.2.1	Swept Area Seabed Impact model	8
6.2.2.2	Critical Sheer Stress model	8
6.2.2.3	Habitat Reduction model	8
6.3	A spatial model of the vulnerability of habitats to fishing.....	8
6.4	Reconciling the vulnerability assessment and the spatial model	8
6.5	Summary and conclusions	8
7	Considerations for minimizing the adverse effects of fishing on habitats to the extent practicable	9

Next steps

We need to complete the background papers that flesh out fishing gear descriptions, adverse impacts determinations, natural disturbance and the supporting documentation for our matrices. This alone is a herculean task. The matrices need to be finalized and populated. The literature reviews need to be cataloged appropriately to support the determinations made with in the matrices.