

Case Study:

## Balancing Deep-Sea Coral Protection and Commercial Fisheries

### Northeast Ocean Data Portal User:

New England Fishery Management Council

### In Consultation with:

- Fishermen
- Fishing industry organizations
- Environmental non-government organizations
- Other stakeholders

### Objective:

To facilitate public review of proposed fishery management areas intended to reduce impacts on deep-sea corals.

### Related Ocean Uses:



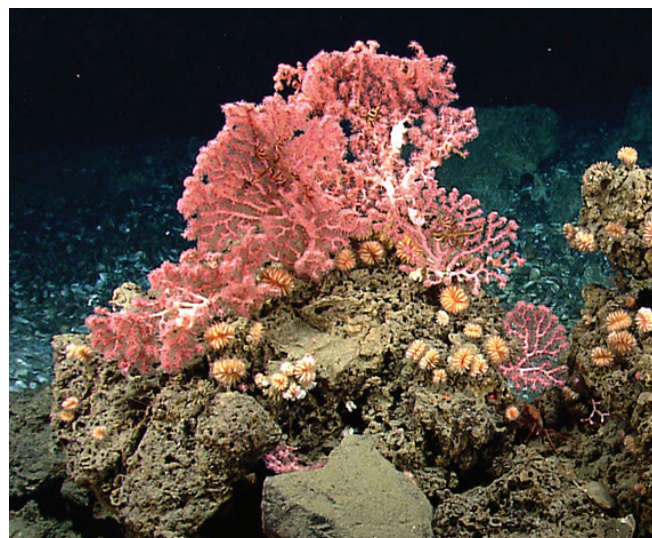
Commercial  
Fishing



Marine Life

“The real power of having the data on the Northeast Ocean Data Portal is that it allows the people involved in our process to view the data on their own terms, during their own time, at the spatial resolution that they need, in combination with other datasets that are of interest to them.”

~ Michelle Bachman  
New England Fishery Management Council



NOAA Fisheries/NEFSC/UCOMM-NURTEC/UMaine 2014

Many types of deep-sea coral live in the waters off New England. The New England Fishery Management Council is taking action to reduce impacts of fishing gear on the fragile, slow-growing corals, which provide habitat for fish and invertebrates.



NOAA Okeanos Explorer Program

The New England Fishery Management Council is in the process of developing an amendment to protect deep-sea corals in the Gulf of Maine and in the slope/canyon region south of Georges Bank. As part of this process, the Council is considering several alternatives for new management areas that could be established to protect concentrations of deep-sea corals.

**To support the decision-making process, the Council and the Northeast Ocean Data Portal Working Group collaborated to make interactive maps of the draft management areas publicly available on the Portal.** There are numerous proposed management areas, and each area has complex boundaries. Making the interactive maps available on the Portal enables fishermen, other stakeholders, and Council members, committees, and staff to review the maps in detail and to overlay the management area alternatives with any data on ocean uses and the ecosystem in which they are interested, such as maps showing fishing vessel activity and predicted coral habitat.

“I can’t anticipate all of the relationships people want to look for in the data and prepare a comprehensive set of static maps to cover what they are trying to visualize,” said Michelle Bachman, fishery analyst and habitat lead for the Council. Providing the interactive maps on the Portal enables the Council to address those diverse needs.

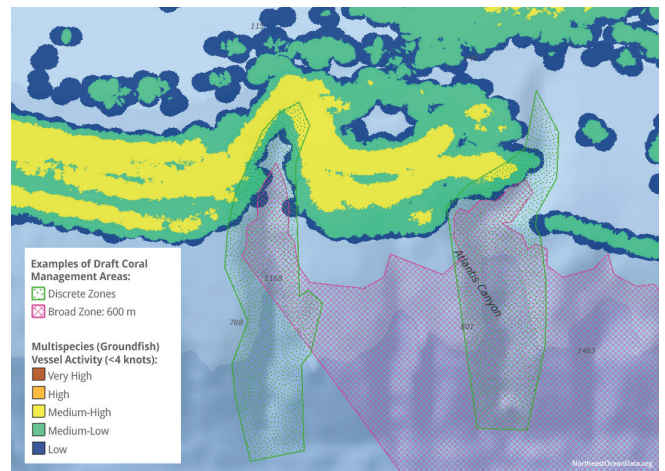
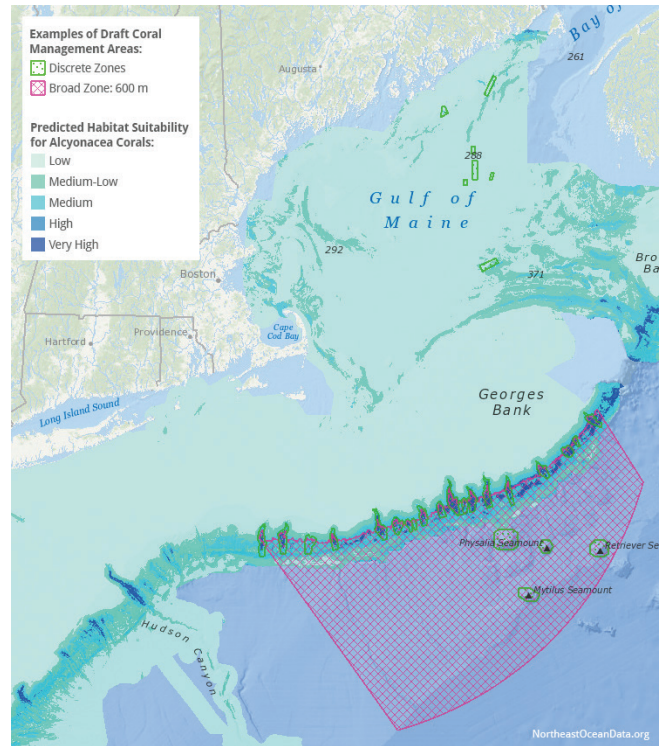
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The Council’s staff provided digital spatial data for the management area alternatives to the Portal Working Group in March 2017, and the Working Group began by incorporating the data into the Data Explorer map viewer on the Portal’s password-protected development site. Through iterative discussions with the Council staff, the cartography, metadata, and associated information were refined and finalized on the development site. Then, in advance of the Council’s April meetings, the maps were released publicly on the Portal website.

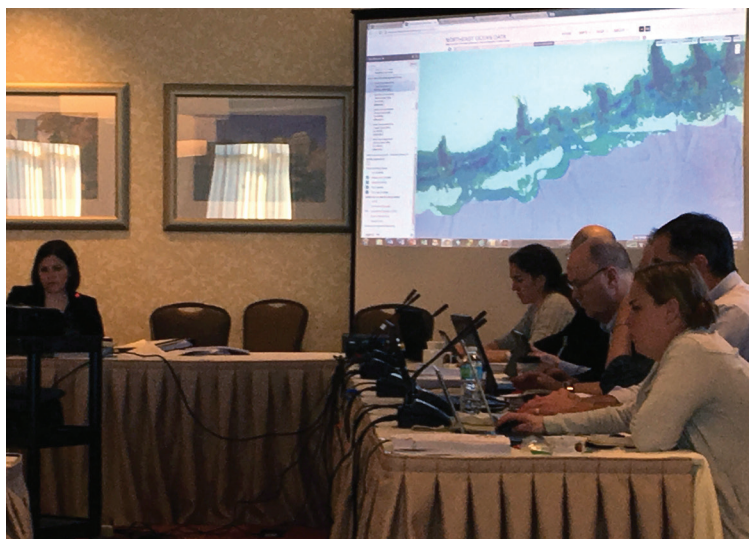
**Traffic on the Data Explorer spiked in April as stakeholders visited the coral management area maps online to obtain information and to prepare formal comments on the proposed coral amendment.** The Portal “is a 24-7 instant source of data, which is great,” said Bachman. “I’ve been using the Portal myself as a quick, on-the-go tool. For any serious analysis, I use ArcGIS at the office, but if I’m traveling and want to explore some datasets, the Portal is fast and easy.”

The maps of draft coral management areas continue to be available on the Portal during the public comment period. Following the April meeting, the Council provided the Portal Working Group with updated geospatial data on the zones and boundaries to reflect revisions made by the Council, and the updates are now viewable in the Data Explorer. The Council intends to take final action on the deep-sea coral amendment in June.

**This is the first time that the Council has used web-based, interactive mapping to engage and inform the public regarding proposed fishery management actions and to support the Council’s decision-making process.**



Upper: Screenshot of map showing some draft coral management area alternatives, along with with predicted habitat for Alcyonacea corals. Lower: Screenshot of zoomed-in map showing fishing vessel activity in the vicinity of some of the draft coral management area alternatives.



Fishery analyst Michelle Bachman of the New England Fishery Management Council demonstrates the Northeast Ocean Data Portal maps of draft coral management areas at a NEFMC Habitat Committee meeting.

### About the Northeast Ocean Data Portal:

The Northeast Ocean Data Portal is an information resource and decision support tool for ocean planning, management, and decision making in the northeastern United States from Long Island Sound to the Gulf of Maine.

Used by a wide range of government agencies, non-government entities, and ocean stakeholders, the Portal offers user-friendly access to maps and data on many types of ocean uses and the ecosystem.

Questions? Email us at [contact@northeastoceandata.org](mailto:contact@northeastoceandata.org).

More case studies of Data Portal uses are available at [NortheastOceanData.org/casestudies](http://NortheastOceanData.org/casestudies)