Deep Sea Coral Alternatives Development Workshop

April 18, 2013, 9 a.m. – 5 p.m.
Hilton Garden Inn Arundel Mills, Hanover, MD
Agenda

9:00-9:10 **Welcome and Introductions**

9:10-9:30 **Overview of workshop purpose and goals**

- Context: Amendment 16 to the Mackerel, Squid, and Butterfish FMP
- Workshop goals

9:30-10:45 **Deep sea coral data and distribution**

- Overview of available deep sea coral data and preliminary findings of 2012 Atlantic Canyons Undersea Mapping Expeditions (ACUMEN) surveys – David Packer (NOAA/NMFS/NEFSC James J. Howard Marine Sciences Laboratory)
- Preliminary findings of 2012 Bureau of Ocean Energy Management (BOEM) surveys – Dr. Sandra Brooke (Florida State Marine Laboratory) and Dr. Steve Ross (University of North Carolina Wilmington)
- Overview of deep sea coral predictive modeling – Brian Kinlan (National Ocean Service)
- Q&A; Discussion of deep sea coral data quality and limitations

10:45-11:00 **Break**

11:00-12:00 **Fishing effort data and distribution**

- Fishing effort data overview
- Q&A; Discussion of fishing effort data quality and limitations

12:00-1:00 **Lunch (on your own)**

1:00-4:00 **Discrete deep sea coral zone options**

- Overview of basis for initial discrete zone recommendations
- Participatory mapping technology overview
- Participatory mapping facilitated development of discrete deep sea coral zone options , using those developed by New England Fishery Management Council Habitat PDT, and recommended by the Mid-Atlantic Council FMAT, as a starting point for discussion

4:00-4:45 **Broad deep sea coral zone options**

- Discussion and development of potential broad zone boundary options

4:45-5:00 **Wrap-up**

- Review of alternatives, closing remarks, and next steps

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Workshop Overview and Purpose

This workshop is intended to facilitate the development of alternatives for the Mid-Atlantic Fishery Management Council's Amendment 16 to the Squid, Mackerel, and Butterfish Fishery Management Plan (Protections for Deep Sea Corals). As part of Amendment 16, the Council will consider designating areas to which management measures may be applied to protect deep sea corals. The Council has recognized the need to refine the initial options for these areas, by incorporating the input of fishing industry participants and considering recent updates to the best available science on deep sea coral distribution. This workshop will facilitate discussions of priority areas for coral protections in the context of fishing effort in these areas. Using participatory mapping technology, participants can draw, onto an electronic map, important areas for both fishing activity and deep sea coral presence (observed and predicted).

Workshop Goals and Products

This workshop is NOT intended to develop final designations for deep sea coral protection zones. The expected products of the workshop include a set of spatial options for inclusion in a broader set of alternatives under Amendment 16, to be put forth for Council consideration and public hearings.

Workshop Goals:

- Review available data on deep sea coral distribution and abundance, enhancing understanding of the scientific basis for prioritizing areas for deep sea coral protections. Update the best available science for mid-Atlantic deep sea corals with preliminary results of 2012 research surveys.

- Review available fishing effort distribution data. Discuss the utility of this information for analyzing the impacts of potential deep sea coral zones. Identify data weaknesses and areas where industry input is needed to provide supplemental information and context.

- Review specific areas under consideration for deep sea coral protections, identifying where fishing effort occurs relative to known and predicted deep sea coral presence. To the extent possible, identify areas where there is little or no conflict, as well as areas of significant overlap between fishing effort and deep sea corals.

- Develop a set, or sets, of spatial area options for deep sea coral protection zones to be taken to the Council for approval for inclusion in a public hearing document.

Amendment 16 Context

Deep sea corals, also known as cold-water corals, are defined by the NOAA Strategic Plan for Deep Sea Coral and Sponge Ecosystems as corals occurring at depths greater than 50 meters that provide vertical structure above the seafloor that can be utilized by other species. Deep sea corals occur on the continental shelf and slopes, in offshore canyons, and near seamounts. Several types of deep sea corals are found in the northeast region of the United States, including hard or stony corals, black corals, gorgonians, soft corals, and sea pens. Although large, reef-building corals are rare in this region, many species form complex three-dimensional structures that enhance local biodiversity by providing important habitat for many species of fish and invertebrates.

Deep sea corals are fragile and slow-growing, and as such are highly vulnerable to disturbance by bottom-tending fishing gear. Bottom trawls pose a particular threat to deep sea coral communities, and may cause negative impacts ranging from scarring and damage to crushing or complete removal. Other gear types may have a lower potential for disturbance, although mid-water trawls may impact corals during periodic contact with the bottom, and passive gear types such as pots and longlines may cause localized damage to corals.

The NOAA Strategic Plan for Deep Sea Corals contains conservation and management objectives to be achieved in cooperation with the Regional Fishery Management Councils and other federal partners. Several objectives of this plan are directly relevant to Mid-Atlantic Council activities, including:

1. Protect areas containing known deep-sea coral or sponge communities from impacts of bottom-tending fishing gear.
2. Protect areas that may support deep-sea coral and sponge communities where mobile bottom-tending fishing gear has not been used recently, as a precautionary measure.
3. Develop regional approaches to further reduce interactions between fishing gear and deep-sea corals and sponges.

The Mid-Atlantic Fishery Management Council has initiated Amendment 16 to address these issues, and to complement the deep sea coral protection measures currently being developed by the New England Fishery Management Council (see below).

The current timeline for development, review, and implementation of Amendment 16 is as follows:

Action	Timeline, based on current Council meeting schedule
Council initiates amendment	August 2012
Initial Fishery Management Action Team (FMAT) meeting	December 2012
FMAT develops initial alternatives, draft Environmental Impact Statement (or Environmental Assessment) writing begins	January/February 2013
Scoping hearings and scoping comment period	February 2013
Ecosystems and Ocean Planning Committee reviews alternatives	February 2013
Coral Zone Alternatives Development Workshop/Joint Advisory Panel Meeting	April 2013
FMAT continues development of alternatives	May 2013
Council approves range of alternatives/public hearing document	June 2013
Public hearings and summarization of comments (30-day comment period for public hearings)	July 2013
Council approves/adopts amendment	October 2013
Staff submits to NMFS for secretarial approval	November/December 2013
Final rule effective	June/July 2014

A Memorandum of Understanding (MOU) has been developed between the Mid-Atlantic Fishery Management Council, the New England Fishery Management Council, and the South Atlantic Fishery Management Council, clarifying areas of jurisdiction and identifying areas of consensus and common strategy related to deep sea coral management and conservation. As per the terms of this MOU, the Mid-Atlantic Council will develop alternatives applicable only to areas within the Mid-Atlantic Council boundaries[1], with the understanding that the New England Council will develop and implement coral-related measures in their region.

The Mid-Atlantic Council will consider a range of spatial areas and management measures to minimize the impacts of fishing gear on deep sea corals. These options are being developed by the Amendment 16 Fishery Management Action Team (FMAT), as well as at this workshop. Options for spatial areas, management measures, and possible modifications to management measures will be packaged as sets of alternatives for the Council to review and approve for public hearings.

[1] Council boundaries are defined in the Code of Federal Regulations (CFR), in 50 C.F.R. §§ 600.105(a) and (b), available at http://www.gpo.gov/fdsys/granule/CFR-2001-title50-vol3/CFR-2001-title50-vol3-sec600-105/content-detail.html.

Discretionary provisions of the Magnuson-Stevens Fishery Conservation and Management Act, as amended through 2007, related to deep sea corals:

Deep Sea Coral Protection Zones

303(b)—Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, may—

(2)(A) designate zones where, and periods when, fishing shall be limited, or shall not be permitted, or shall be permitted only by specified types of fishing vessels or with specified types and quantities of fishing gear;

(B) designate such zones in areas where deep sea corals are identified under section 408, to protect deep sea corals from physical damage from fishing gear or to prevent loss or damage to such fishing gear from interactions with deep sea corals, after considering long-term sustainable uses of fishery resources in such areas; and

(C) with respect to any closure of an area under this Act that prohibits all fishing, ensure that such closure—

(i) is based on the best scientific information available;

(ii) includes criteria to assess the conservation benefit of the closed area;

(iii) establishes a timetable for review of the closed area's performance that is consistent with the purposes of the closed area; and

(iv) is based on an assessment of the benefits and impacts of the closure, including its size, in relation to other management measures (either alone or in combination with such measures), including the benefits and impacts of limiting access to: users of the area, overall fishing activity, fishery science, and fishery and marine conservation;

Deep Sea Coral Research and Technology Program

(a) IN GENERAL.—The Secretary, in consultation with appropriate regional fishery management councils and in coordination with other federal agencies and educational institutions, shall, subject to the availability of appropriations, establish a program—

(1) to identify existing research on, and known locations of, deep sea corals and submit such information to the appropriate Councils;

(2) to locate and map locations of deep sea corals and submit such information to the Councils;

(3) to monitor activity in locations where deep sea corals are known or likely to occur, based on best scientific information available, including through underwater or remote sensing technologies and submit such information to the appropriate Councils;

(4) to conduct research, including cooperative research with fishing industry participants, on deep sea corals and related species, and on survey methods;

(5) to develop technologies or methods designed to assist fishing industry participants in reducing interactions between fishing gear and deep sea corals; and

(6) to prioritize program activities in areas where deep sea corals are known to occur, and in areas where scientific modeling or other methods predict deep sea corals are likely to be present.

(b) REPORTING.—Beginning 1 year after the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, the Secretary, in consultation with the Councils, shall submit biennial reports to Congress and the public on steps taken by the Secretary to identify, monitor, and protect deep sea coral areas, including summaries of the results of mapping, research, and data collection performed under the program.

Meters to Fathoms Conversion Chart

Meters	Fathoms
50	27.34
100	54.68
150	82.02
200	109.36
250	136.70
300	164.04
350	191.38
400	218.72
450	246.06
500	273.40
550	300.74
600	328.08
650	355.42
700	382.76
750	410.10