

An underwater photograph of a coral reef. The scene is filled with various types of coral, including branching and table corals, in shades of orange, red, and yellow. The water is clear and blue, with some light filtering through from above. The overall atmosphere is serene and natural.

7. Habitat (June 19 – 2012)

#2

Review of deep-sea coral management authority and guidance

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June 19, 2012 · Portland, ME

Deep-sea coral protection under EFH authority

Section 305(b)

- Corals considered a component of essential fish habitat; restrictions enacted in the context of minimizing, to the extent practicable, the effects of fishing on EFH
- Options for minimizing the adverse effects of fishing on EFH include fishing equipment restrictions, time/area closures, and harvest limits
- Any action taken under the EFH authority must occur within areas that are designated as EFH
- Used in Monkfish A2 to protect deep-sea corals and associated habitat features in Lydonia and Oceanographer Canyons from fishing activity occurring under a monkfish day at sea

Deep-sea coral protection under MSA

Discretionary Provisions

Section 303(b)

Any FMP prepared by any Council, or the Secretary, with respect to any fishery, may:

- 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;
- 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
- with respect to any closure of an area under this Act that prohibits all fishing, ensure that such closure—
 - Is based on the best scientific information available;
 - includes criteria to assess the conservation benefit of the closed area;
 - establishes a timetable for review of the closed area's performance that is consistent with the purposes of the closed area; and
 - 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;

NOAA's Deep Sea Coral Research and Technology Program

Section 408

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—

- to identify existing research on, and known locations of, deep sea corals and submit such information to the appropriate Councils;
- to locate and map locations of deep sea corals and submit such information to the Councils;
- 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;
- to conduct research, including cooperative research with fishing industry participants, on deep sea corals and related species, and on survey methods;
- to develop technologies or methods designed to assist fishing industry participants in reducing interactions between fishing gear and deep sea corals; and
- 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.

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.

Discretionary provisions vs. EFH authority

- In the Northeast Region, coral distributions (both documented and inferred) extend beyond the bounds of designated EFH into deeper areas
- Discretionary provisions offer more flexibility in terms of defining spatial areas for coral protection because no link to EFH designations is required
 - Maximum depths associated with proposed NEFMC EFH designations are 1500 m on the slope and 2000 m on the seamounts
 - DSC do provide structural habitat for some species of fish, but implementing coral protection measures via discretionary provisions does not rely on making this case explicitly

NOAA Strategic Plan for Deep-Sea Coral and Sponge Ecosystems

- Provides guidance on selection of coral conservation measures.
- Plan has six conservation and management objectives. The first three are most relevant to the Council's decisions.
 - Protect areas containing known deep-sea coral or sponge communities from impacts of bottom-tending fishing gear
 - 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
 - Develop regional approaches to further reduce interactions between fishing gear and deep-sea corals and sponges

NERO Guidance (May 2010)

- Coral areas must have a nexus to a fishery managed by the Council under an FMP.
- Coral zones can include additional area beyond the locations of deep-sea corals if necessary to ensure the effectiveness of protection measures
- Measures may include the following:
 - Restrictions on time/location of fishing within zones,
 - Limiting fishing to specific vessel types or vessels fishing with specific gear types/quantities of gear, and
 - Closure of zones to fishing.
- Protective measures can apply to any MSA regulated fishing activity, even if that activity or gear type is not managed by the FMP that includes the measures.
- Long-term sustainable use of fishery resources must be considered prior to designating DSC protection zones.

NERO Guidance cont.

- Action taken under the discretionary authority may be used to complement action taken under the EFH authority.
- Unlike the EFH authority, the discretionary authority does not carry a consultation requirement.
- Councils may adopt gear restrictions via an omnibus amendment that applies to several FMPs, and can include in such an amendment measures that apply to fisheries under the jurisdiction of other Councils. Environmental, economic, and social analyses must be conducted, and consultation with the other affected Council will almost certainly be required.
- For coral management provisions to apply to fisheries managed under the Atlantic Coastal Cooperative Fisheries Management Act (ACA), either the ASMFC must take complementary action in their FMP, or there must be a Council FMP for the same resource. The relevant example in our region is the offshore component of the American lobster fishery, which would not be subject to coral protection measures enacted in an MSA FMP.

Two management frameworks

(based on MSA discretionary provisions)

Broad areas

- **Objectives:** protect corals from fishing impacts while preserving fishing opportunities and managing expansion of fishing into new areas
- **Data:** Bathymetry data to define shelf/slope boundary and minimum depth for area; fishing effort data from VTRs, VMS, observers
- **Design:** a large area along the shelf/slope boundary extending to the EEZ, developed based on a selected depth contour (300, 400, or 500 m)
- **Fishing restrictions:** either no mobile bottom tending gears or no bottom tending gears, with exemptions via LOA or EFP

Discrete areas

- **Objectives:** Identify smaller areas with known corals or likely to contain suitable coral habitats and minimize possible interactions between corals and fishing gear in those locations
- **Data:** Literature review of coral surveys and geological information; examination of coral presence records (Cold Water Coral Geographic database); quantitative analysis of bathymetry data to infer areas of suitable habitat.
- **Design:** Area boundaries based on bathymetry, slope, and coral distributions
- **Fishing restrictions:** either no mobile bottom tending gears or no bottom tending gears, with exemptions via LOA or EFP

Both frameworks could be implemented simultaneously