



NOAA Habitat Conservation
Conserving Habitat for Future Generations

Habitat Protection in the Magnuson-Stevens Act:

*Opportunities and requirements for essential fish habitat
conservation and deep-sea coral protection*

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NOAA FISHERIES SERVICE



Learning objectives for today:

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- ✓ Habitat conservation and regulatory features of the Magnuson-Stevens Act (MSFCMA)
 - ✓ Council opportunities to drive habitat protection
 - ✓ Authorities for conserving deep-sea coral habitats
 - ✓ NOAA efforts and tools to integrate habitat conservation into ecosystem-based fisheries management

Habitat and Fisheries Management in the Magnuson-Stevens Act



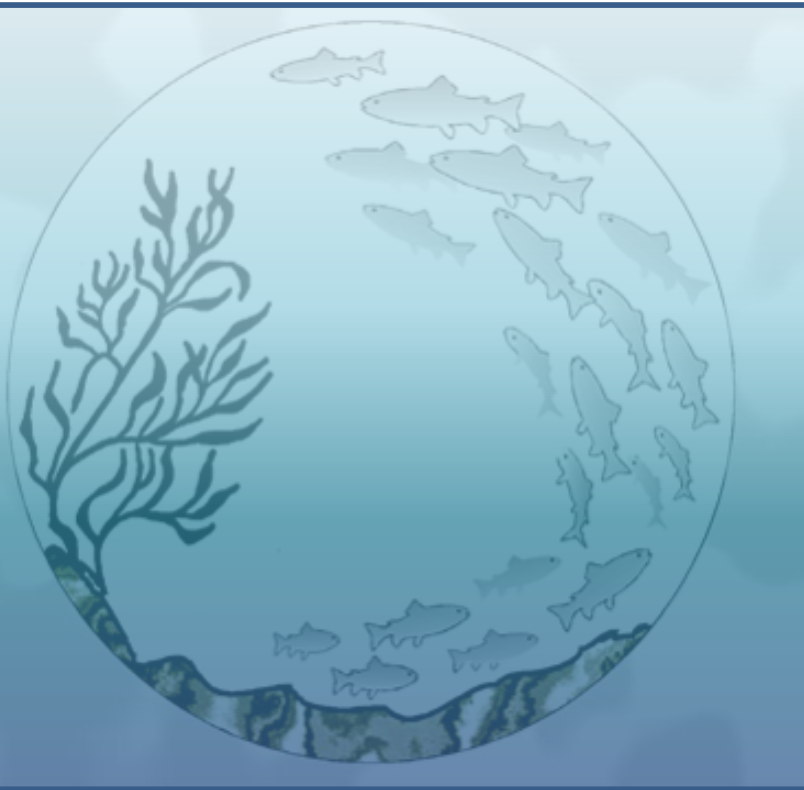
“...direct and indirect habitat losses... have resulted in a diminished capacity to support existing fishing levels.”

- MSA § (2)(a)(2)

“One of the greatest long-term threats to the viability of... fisheries is the continuing loss of marine, estuarine, and other aquatic habitats.”

- MSA § (2)(a)(9)

Habitat and Fisheries Management in the Magnuson-Stevens Act (cont'd)



1996 Sustainable Fisheries Act

- Bycatch
- Rebuilding
- Essential Fish Habitat

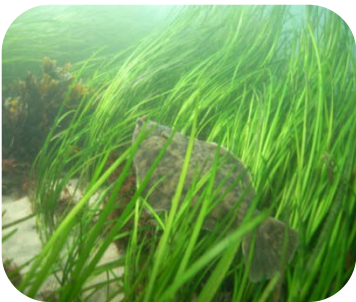
2007 MSA Reauthorization Act

- Community-Based Restoration Program
- Deep Sea Coral Research & Technology Program
- Deep-sea coral protection

Essential Fish Habitat

“Essential fish habitat means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.”

- MSA §3 (10)



Key points to remember:

- Habitat = more than the bottom
- Federally managed species only



POP QUIZ!

Question: Can EFH be designated in state waters?

Joint responsibility to conserve EFH



Designation responsibilities (Council-led)

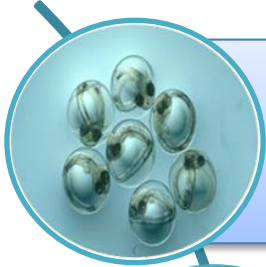
1. Describe and identify EFH by life stage
2. Develop maps to display geographic locations of EFH
3. Designate Habitat Areas of Particular Concern (HAPCs)
4. Minimize adverse effects of fishing on EFH
5. Review new information and update EFH descriptions

Consultation responsibilities (joint)

6. NOAA **must** consult on non-fishing actions that may adversely affect EFH
7. Councils **may** consult on non-fishing actions, and **must** consult on impacts to diadromous fish habitat

1. Describe & identify EFH by lifestage

Atlantic cod EFH



Eggs: Surface waters around the perimeter of the Gulf of Maine, Georges Bank, and eastern continental shelf off southern New England. SST below 12°C, water depths <110 meters, and salinity 32-33‰. Cod eggs are most often observed beginning in the fall, with peaks in the winter and spring.



Larvae: Pelagic waters of the Gulf of Maine, Georges Bank, and eastern continental shelf off southern New England. SST <10°C, water depths 30-70 meters, and salinity 32-33‰. Cod larvae are most often observed in the spring.



Juveniles: Bottom habitats with a substrate of cobble or gravel in the Gulf of Maine, Georges Bank, and eastern continental shelf off southern New England. Water temperatures below 20°C, depths 25 - 75 meters, and salinity 30 - 35‰.



Adults: Bottom habitats with a substrate of rocks, pebbles, or gravel in the Gulf of Maine, Georges Bank, southern New England, and the middle Atlantic south to Delaware Bay. Water temperatures <10°C, depths 10 - 150 meters, and a wide range of oceanic salinities.

<https://www.habitat.noaa.gov/application/efhmapper/>



3. Designate HAPCs

Habitat types or geographic areas that have been identified as priorities for habitat conservation, management, and research.



HAPCs communicate habitat conservation and management priorities, and encourage increased scrutiny and more rigorous conservation recommendations for reducing adverse.

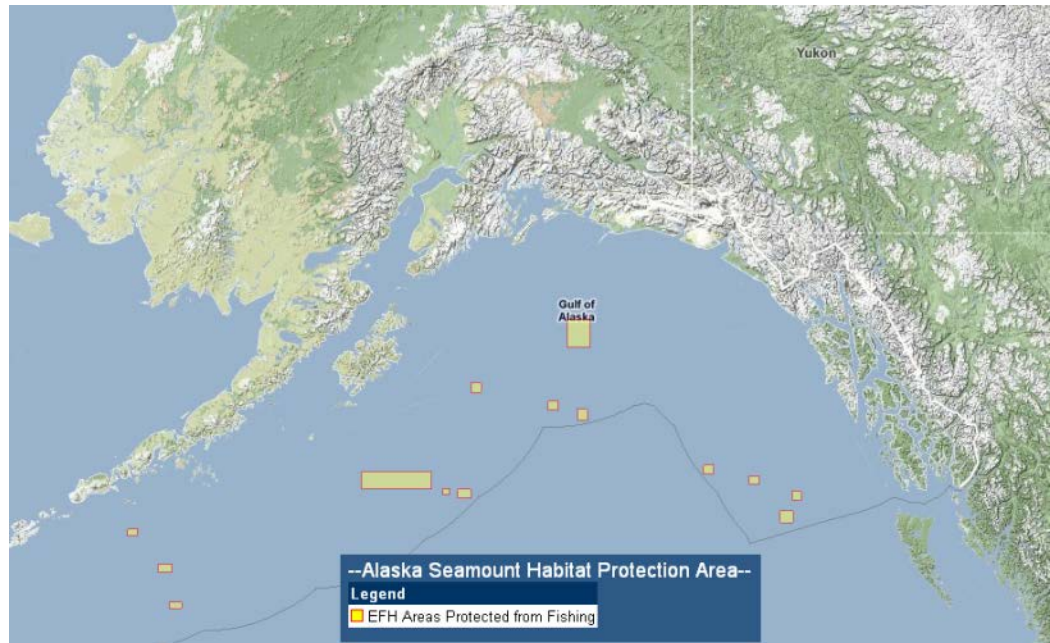
4. Minimize fishing impacts on EFH

Councils are required to minimize, *to the extent practicable*, adverse effects caused by fishing

- MSA § 303(a)(7)

Alaska Seamount Habitat Protection Area

Fishing with bottom contact gear prohibited to protect deep-sea corals and EFH for groundfish, king crab, and Pacific salmon



Since 2004, NOAA and the Councils have protected more than 1 billion acres of EFH from harmful fishing practices.

5. Review and update every 5 years

- ✓ EFH descriptions
- ✓ EFH maps
- ✓ Impacts of fishing on EFH
- ✓ Non-fishing related threats to EFH



6. NOAA consults on non-fishing activities

Federal action agencies **must** consult with NOAA on actions that may adversely affect EFH

Dept. of Defense



Dept. of Transportation



Dept. of Agriculture



Dept. of Interior



7. Councils **comment** on non-fishing activities

Councils **may** comment on actions that may affect the habitat of a fishery resource under its authority - MSA §305 (b)(3)(A)

Councils **must** comment on actions that are likely to substantially affect the habitat of anadromous fish - MSA §305 (b)(3)(B)



Winthrop Beach Restoration

Mass. sought permit to mine offshore sand & gravel

NEFMC weighed in on impacts to juvenile cod EFH

Result: Army Corps denied permit; alternative source of substrate identified.

(2006-2008)



See **50 CFR §600.30** Council comments and recommendations to Federal and state agencies

EFH Conservation Recommendations

Dept. of Energy --
Construction, operation and
maintenance of a 336-mile
transmission cable.



NOAA's EFH Conservation Recommendation:

No in-water work from January 15 to May 31 to minimize impacts to spawning and early life stages of winter flounder.

CCC Habitat Working Group

EFH Consultation and Regional Innovations Workshop Portland August 2019

- Mic
- Jess
- Chi
- Rog
- Gra
- Joh
- Mo
- Ker
- Dia
- Ste
- Jos



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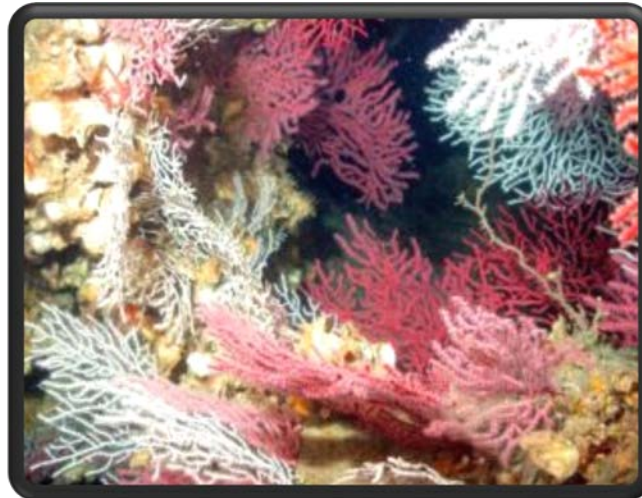
EFH Key Points:

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- ✓ EFH conservation = key fishery management tool
 - ✓ EFH “5-Year Review” provides key opportunities to:
 - Update EFH descriptions (the more descriptive the better!)
 - Highlight priority habitat areas as HAPCs, including inshore and coastal nursery areas
 - Learn from other Councils
 - ✓ Councils have ability to influence non-fishing activities

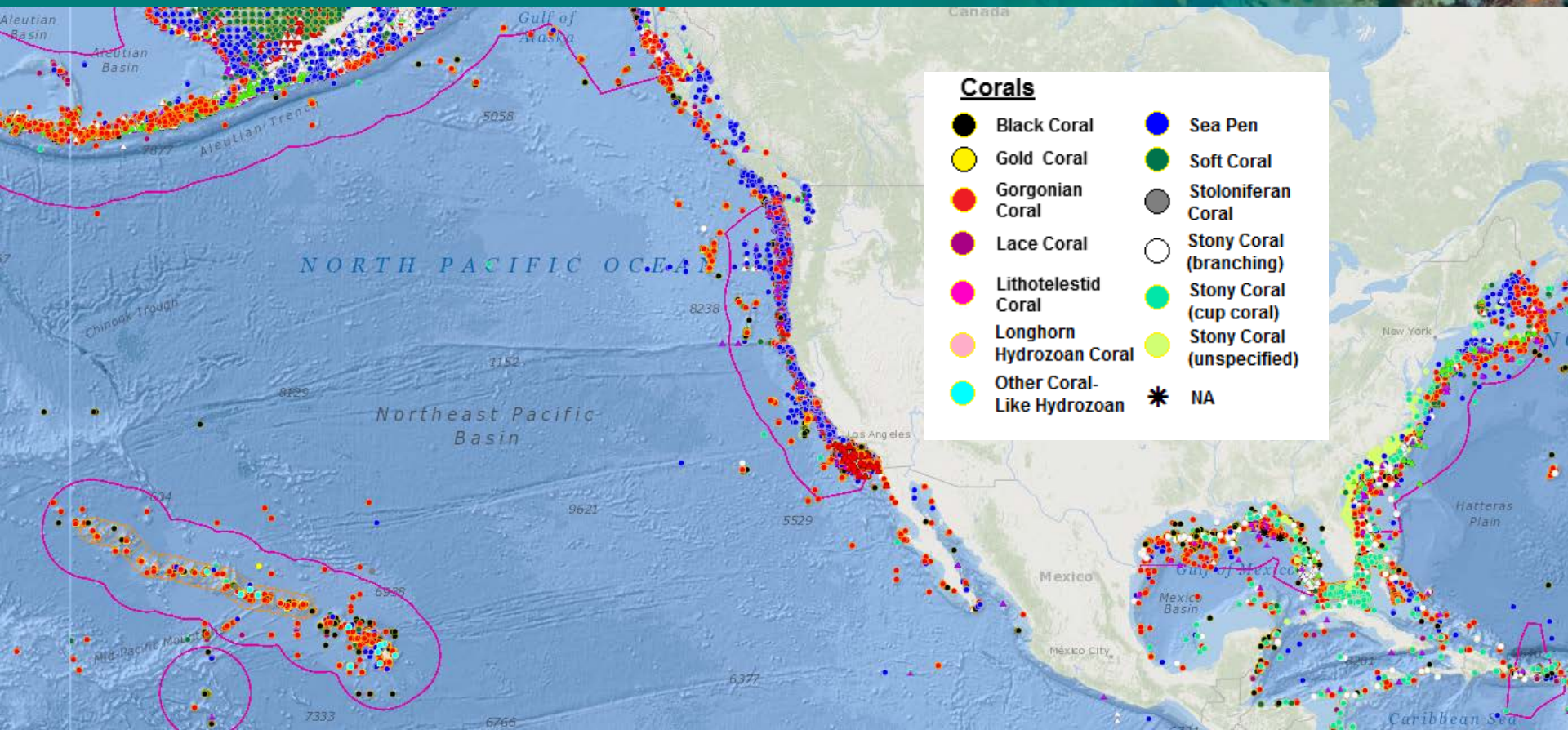
Deep-Sea Corals

Structure-forming deep-sea corals: coral taxa with complex branching structures that provide habitat for other species. Unlike shallow corals, deep-sea corals are generally found deeper than 50m and do not require sunlight.

- Hotspots of biological diversity
- May be essential fish habitat
- Targets for biomedical research
- Vulnerable to human impacts



Where Are Deep-Sea Corals?



Stony Coral

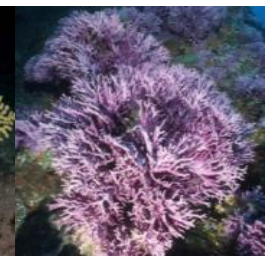
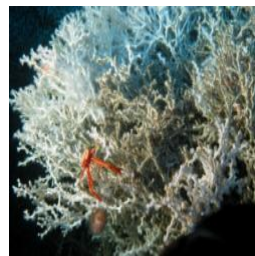
Gorgonian

Black Coral

Gold Coral

Lace Coral

Structure-Forming
Deep-Sea Corals
of the U.S.



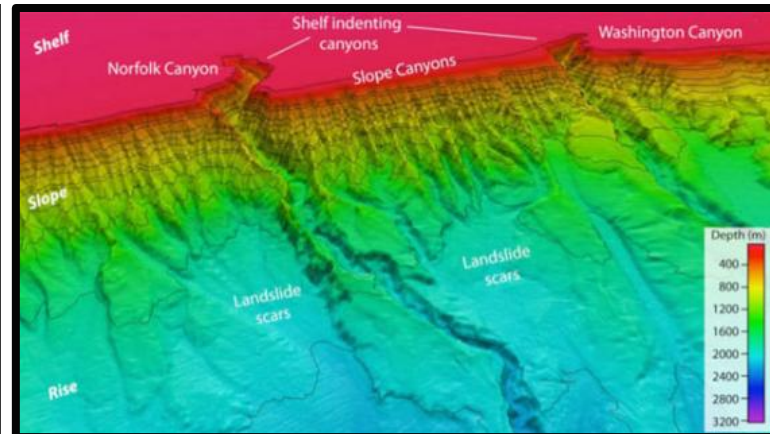
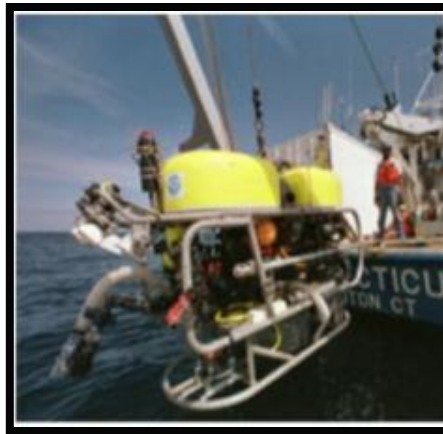
Deep-Sea Coral Research and MSA

Magnuson-Stevens Act (2007) Established Deep Sea Coral Research and Technology Program (DSCRTP)

NOAA, in consultation with Councils, established a program to

- Identify existing research on, and known locations of, deep-sea corals;
- Monitor activity in deep-sea coral locations; and
- Conduct research on and locate and map locations of deep-sea corals.

- MSA §408



EFH Resources:

EFH essentials:

- National website: <https://www.fisheries.noaa.gov/national/habitat-conservation/essential-fish-habitat>
- Magnuson-Stevens Fishery Conservation & Management Act: <https://www.fisheries.noaa.gov/topic/laws-policies>
- EFH Final Rule: <https://www.federalregister.gov/documents/2002/01/17/02-885/magnuson-stevens-act-provisions-essential-fish-habitat-efh>
- EFH Mapper and Data Inventory: <https://www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper>
- EFH Consultation Tracking: <https://www.fisheries.noaa.gov/resource/tool-app/environmental-consultation-organizer-eco>

Guidance documents:

- Refining the description and identification of EFH: <https://www.fisheries.noaa.gov/webdam/download/64681961>
- National Consultation Guidance: <https://repository.library.noaa.gov/view/noaa/4187>

Contact info:

<https://www.fisheries.noaa.gov/contact-directory/regional-essential-fish-habitat-coordinators>

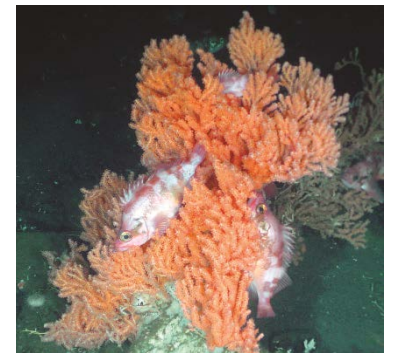
Magnuson-Stevens Act **requires** Councils to minimize the impacts of fishing to essential fish habitat

- MSA §303(a)(7)

If described as EFH, Councils must protect deep-sea corals from fishing

Examples:

- Late juvenile and adult yelloweye rockfish (NPFMC)
- Snapper grouper species (SAFMC)
- Coral species in Coral FMP (SAFMC)



Conservation and management measures shall, to the extent practicable, **minimize bycatch**

- MSA §301(a)(9)



Credit: Greenpeace

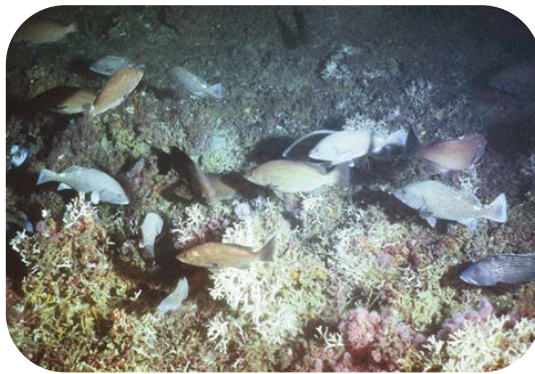


POP QUIZ!

Question: Do Councils have the authority to protect deep-sea corals outside the EFH mandate?

Magnuson-Stevens Act (2007) gave Councils **discretionary** authority to protect deep-sea corals from fishing
MSA 303(b)(2)(B)

- Councils may designate deep-sea coral zones
- Councils may protect deep-sea corals from physical damage from fishing gear within zones
- Councils may establish measures to limit damage



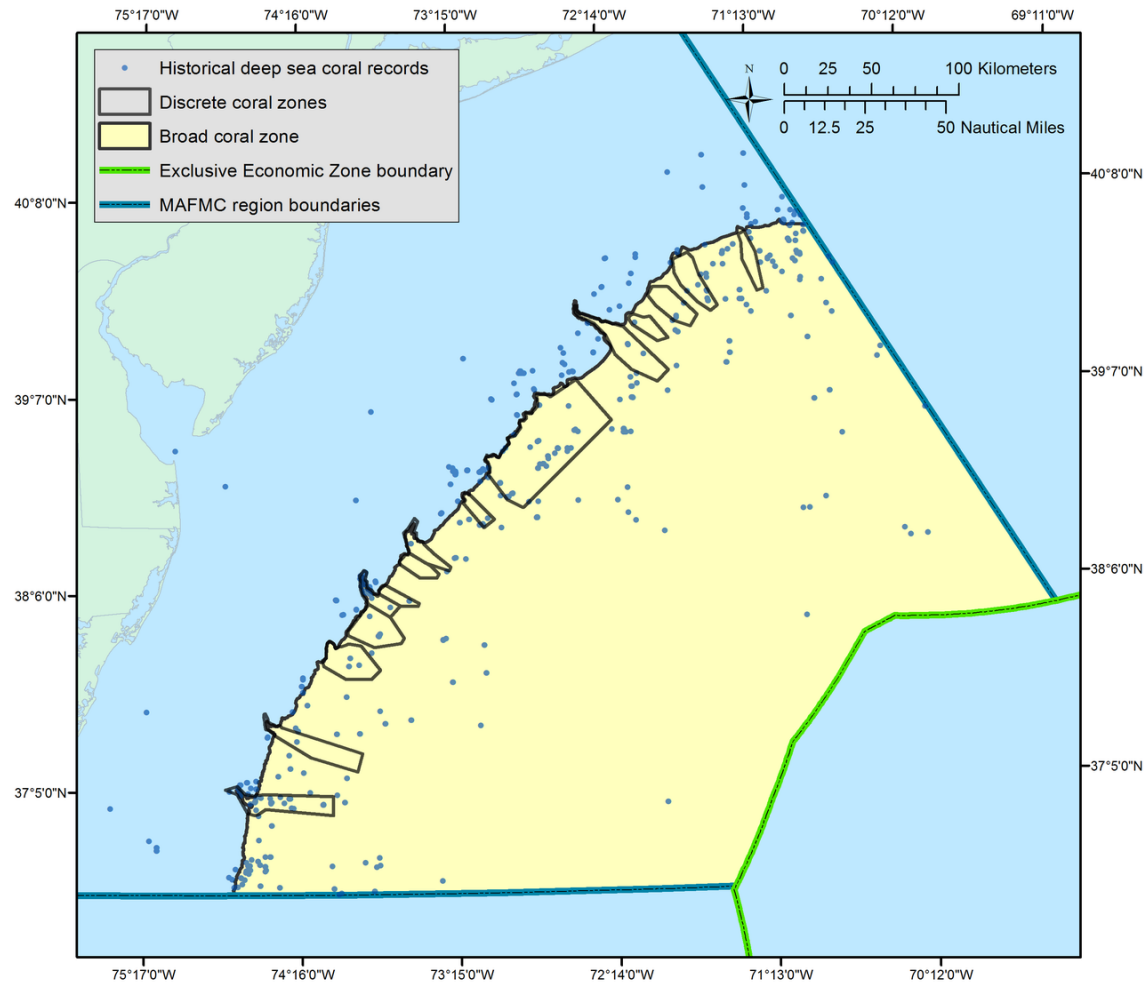
Un-trawled



Trawled


Deep-Sea Coral Conservation and MSA

Mid-Atlantic deep-sea coral zones



Map source: MAFMC

Deep-Sea Coral Key Points:

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- A photograph of a deep-sea coral reef. The scene is dimly lit, showing various types of corals in shades of orange, yellow, and white. Several fish are visible, including a large, light-colored fish in the foreground and smaller, darker fish swimming around the coral.
- ✓ DSC provide valuable habitat, but are vulnerable to fishing gear and recover slowly
 - ✓ The Deep Sea Coral Research and Technology Program funds research and provides results to Councils to conserve and manage ecosystems
 - ✓ DSC can be protected through EFH designation, discretionary authority, FMP, and/or bycatch authority

Deep-sea Coral Resources

A close-up photograph of deep-sea coral, showing various species with green, yellow, and brown hues, growing in a dark, underwater environment.

- NOAA Strategic Plan for DSC and Sponge Ecosystems:
http://coris.noaa.gov/activities/deepsea_coral
- Deep Sea Research and Technology Program:
<https://www.fisheries.noaa.gov/national/habitat-conservation/deep-sea-coral-habitat#what-is-deep-sea-coral-habitat>
- The State of DSC Ecosystems in the US:
<https://deepseacoraldata.noaa.gov/library/2015-state-of-deep-sea-corals-report>
- Deep Sea Research and Technology Program 2016 Report to Congress:
<https://deepseacoraldata.noaa.gov/library/2016-dsc-report-to-congress>
- Deep-Sea Coral Data Portal:
<https://deepseacoraldata.noaa.gov/>

Next Steps: Integrating habitat conservation into ecosystem-based fisheries management



- Fill gaps in habitat science
- Implement a more strategic approach to habitat conservation
- Integrate habitat conservation into fishery management decisions
- Share habitat and ecosystem strategies across fishery management councils

Thanks!

A vibrant underwater photograph featuring a large, dark-colored fish with a prominent blue eye in the center. Below it, a smaller, lighter-colored fish with a similar blue eye is visible. The background is filled with numerous small, silvery fish swimming in clear, turquoise water. The foreground is dominated by a diverse coral reef, including branching corals and large, rounded, pinkish-white coral structures. The overall scene is bright and colorful, showcasing marine biodiversity.

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<https://www.fisheries.noaa.gov>