NOAA Habitat Conservation

Conserving Habitat for Future Generations

Habitat Protection in the Magnuson-Stevens Act:

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

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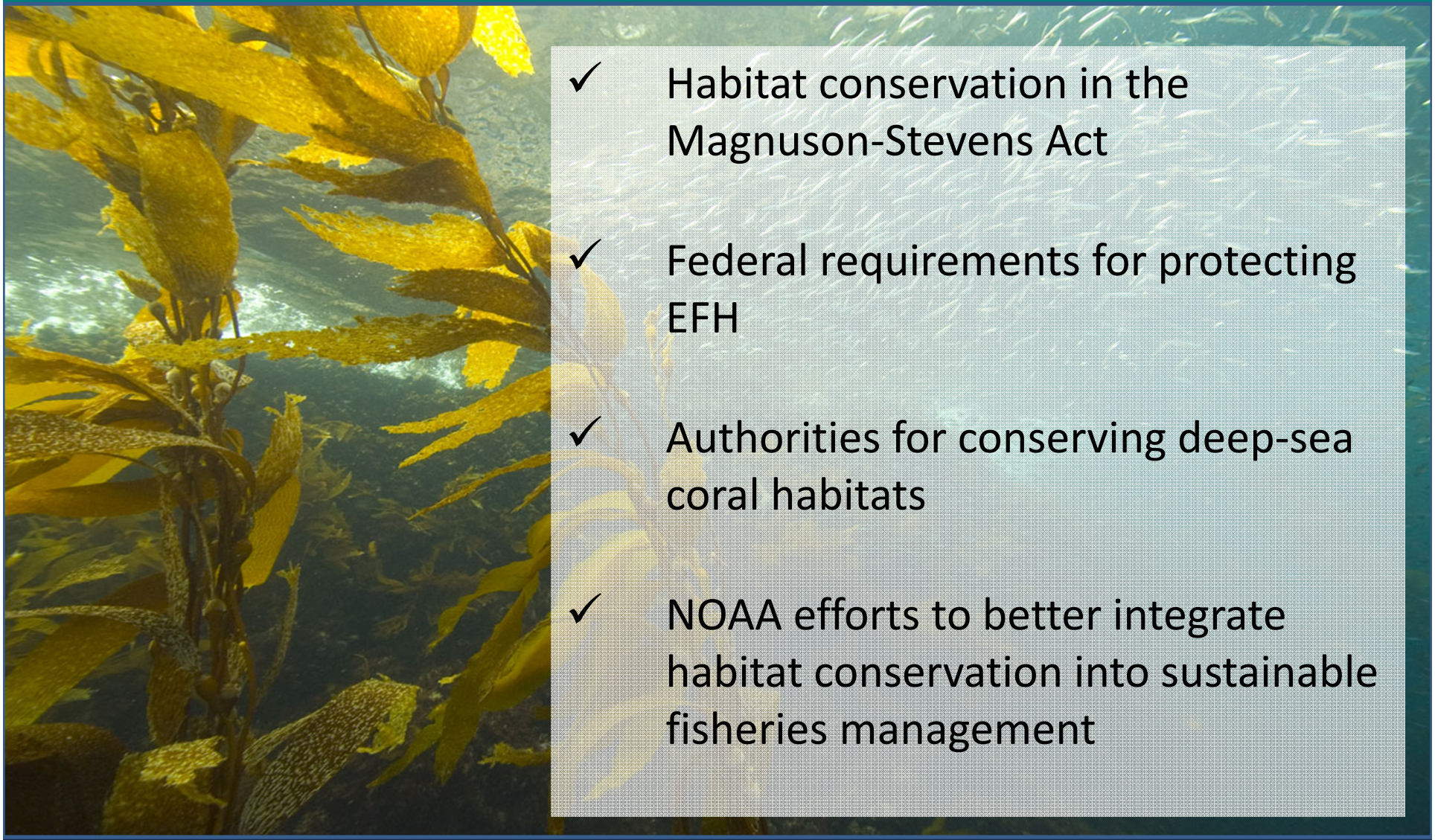
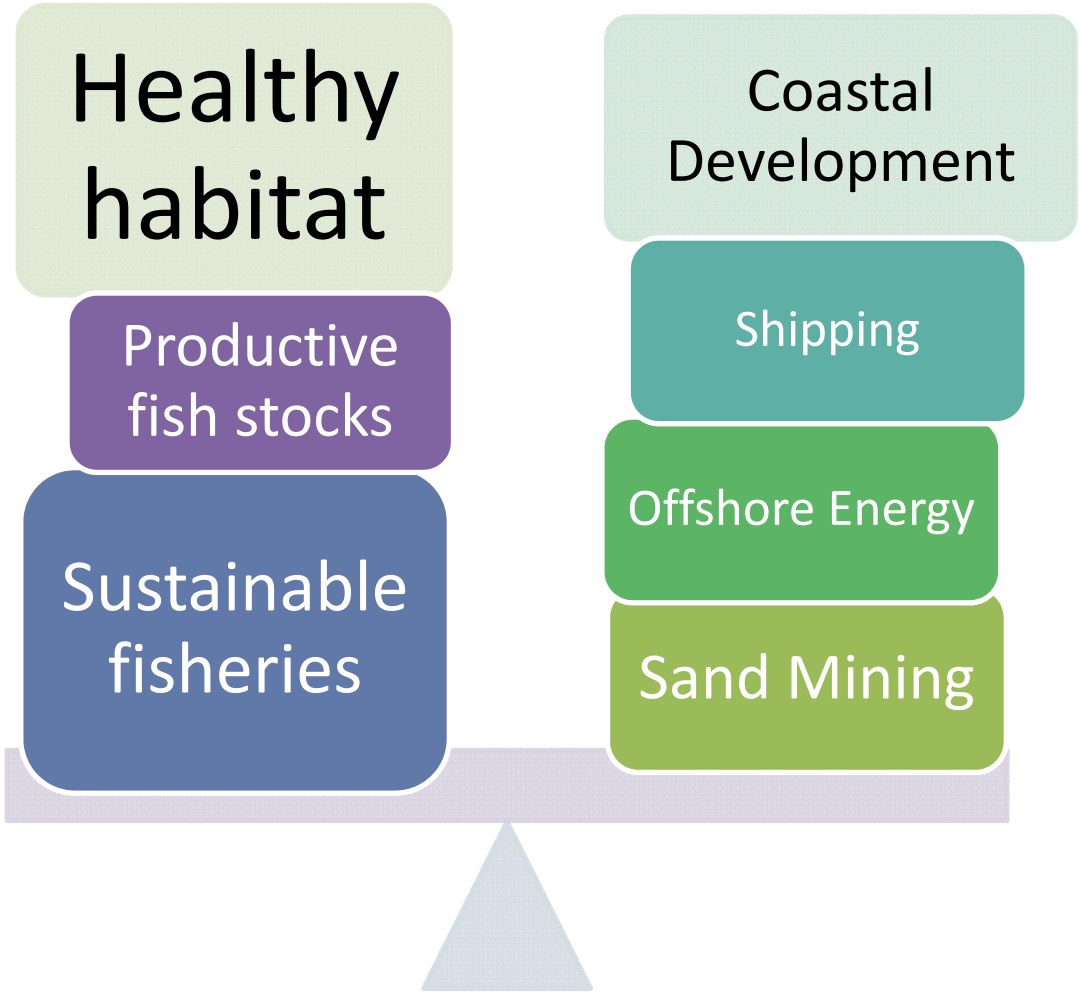
NOAA FISHERIES SERVICE

Topics covered today:



- ✓ Habitat conservation in the Magnuson-Stevens Act
- ✓ Federal requirements for protecting EFH
- ✓ Authorities for conserving deep-sea coral habitats
- ✓ NOAA efforts to better integrate habitat conservation into sustainable fisheries management

Competing uses for marine resources



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 commercial and recreational 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

1996 Sustainable Fisheries Act

- Bycatch
- Rebuilding
- Essential Fish Habitat

2006 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
- Can be within state waters
- Federally managed species only

Joint responsibility to conserve EFH

Council responsibilities *(with help from NOAA)*:

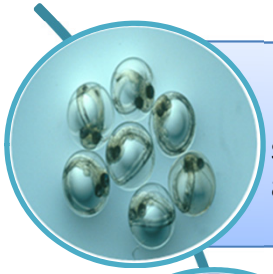
1. Describe and identify EFH by life stage
2. Develop maps to display geographic locations of EFH
3. Designate Habitat Areas of Particular Concern (HAPCs)
4. Minimize adverse effects of fishing on EFH
5. Review new information and update EFH descriptions at least every 5 years

NOAA & Council responsibilities:

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.

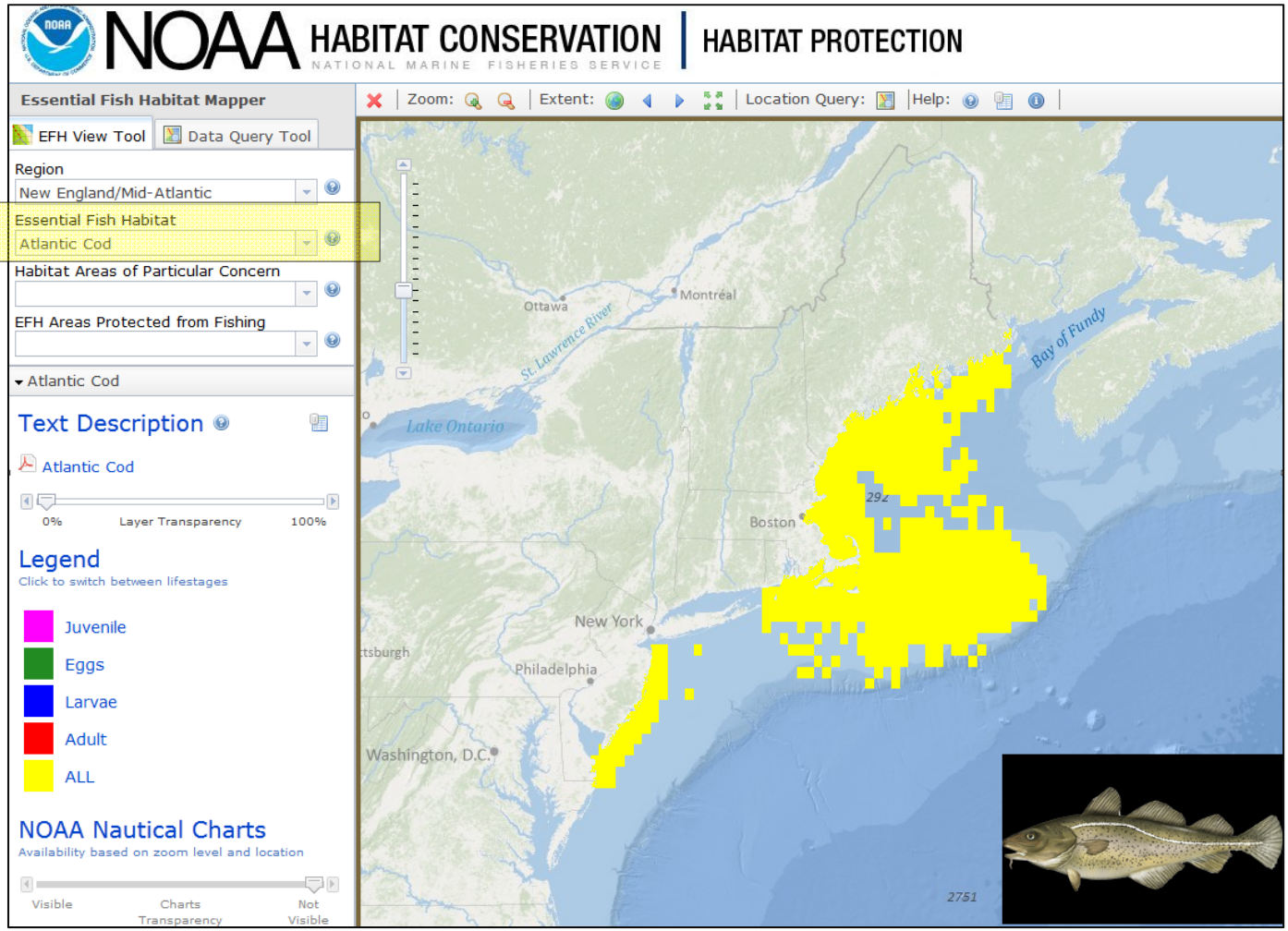
Larvae: Pelagic waters of the Gulf of Maine, Georges Bank, and eastern continental shelf off southern New England. SST <10°C, water depths 30-70 meters, and salinity 32-33‰. Cod larvae are most often observed in the spring.

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.

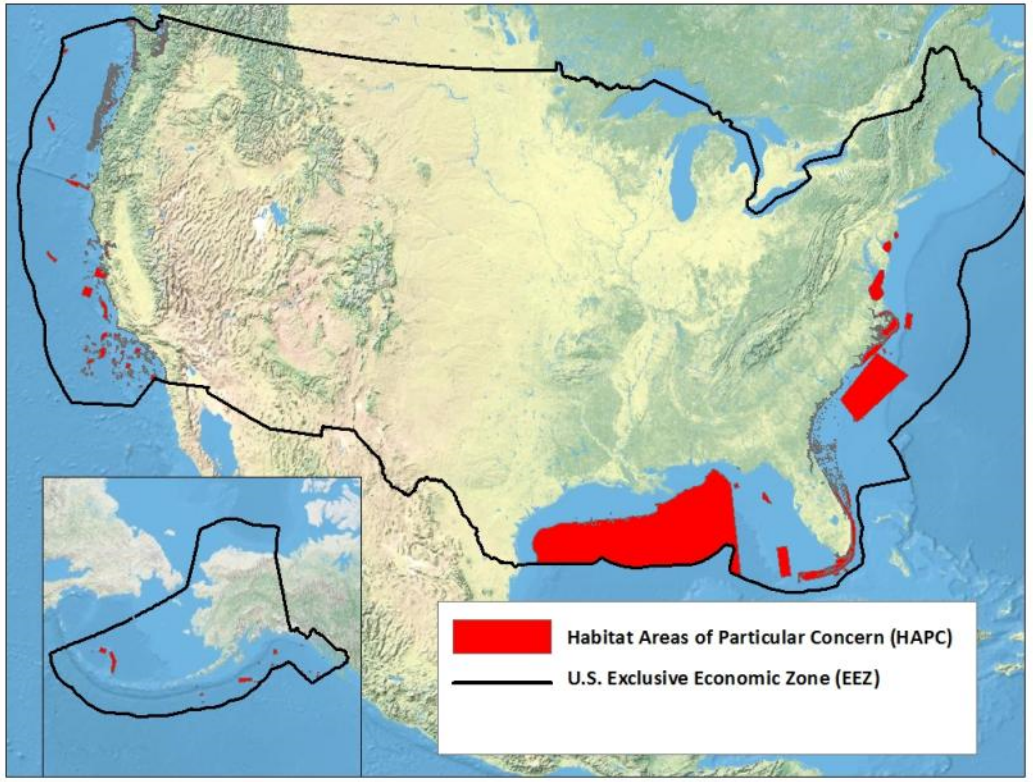
Water temperatures <10°C, depths 10 - 150 meters, and a wide range of oceanic salinities.

2. Map geographic location of EFH



3. Designate HAPCs

- Habitat Areas of Particular Concern (HAPCs) are subsets of EFH
- Purpose is to focus conservation efforts
- HAPC Criteria
  - Ecological functions provided
  - Sensitivity to human-induced degradation
  - Rarity of habitat type
  - Stress from development activities
- Increased scrutiny in consultation process



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

- 5,000+ federal actions every year
- Non-binding conservation recommendations
- Federal agencies required to respond

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.

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

EFH Consultation process

1) **Action agency (AA) provides notification to NOAA**
   Early coordination important

2) **AA submits EFH Assessment to NOAA**
   At least 90 days prior to a final decision on action

3) **NOAA provides EFH Conservation Recommendations, if necessary**
   Within 30-60 days of receiving the completed EFH Assessment
   - **Avoid** impact to EFH
   - **Minimize** impact to EFH
   - **Offset** unavoidable impact to EFH

4) **AA Responds to NOAA**
   Within 30 days of receiving EFH CRs, at least 10 days prior to final approval

EFH Consultation: Adverse Effect

Adverse effect:

Any impact reducing EFH quality and/or quantity

- Direct impacts (e.g. contamination, physical damage caused by anchors, construction)
- Indirect impacts (loss of prey, reduction in species' fecundity, etc.)
- Site-specific impacts
- Habitat-wide impacts (including individual, cumulative, or synergistic)
- Actions occurring within or outside of EFH

See **50 CFR §600.810**

EFH Conservation Recommendations

Maintenance dredging at USCG Station Fortescue.

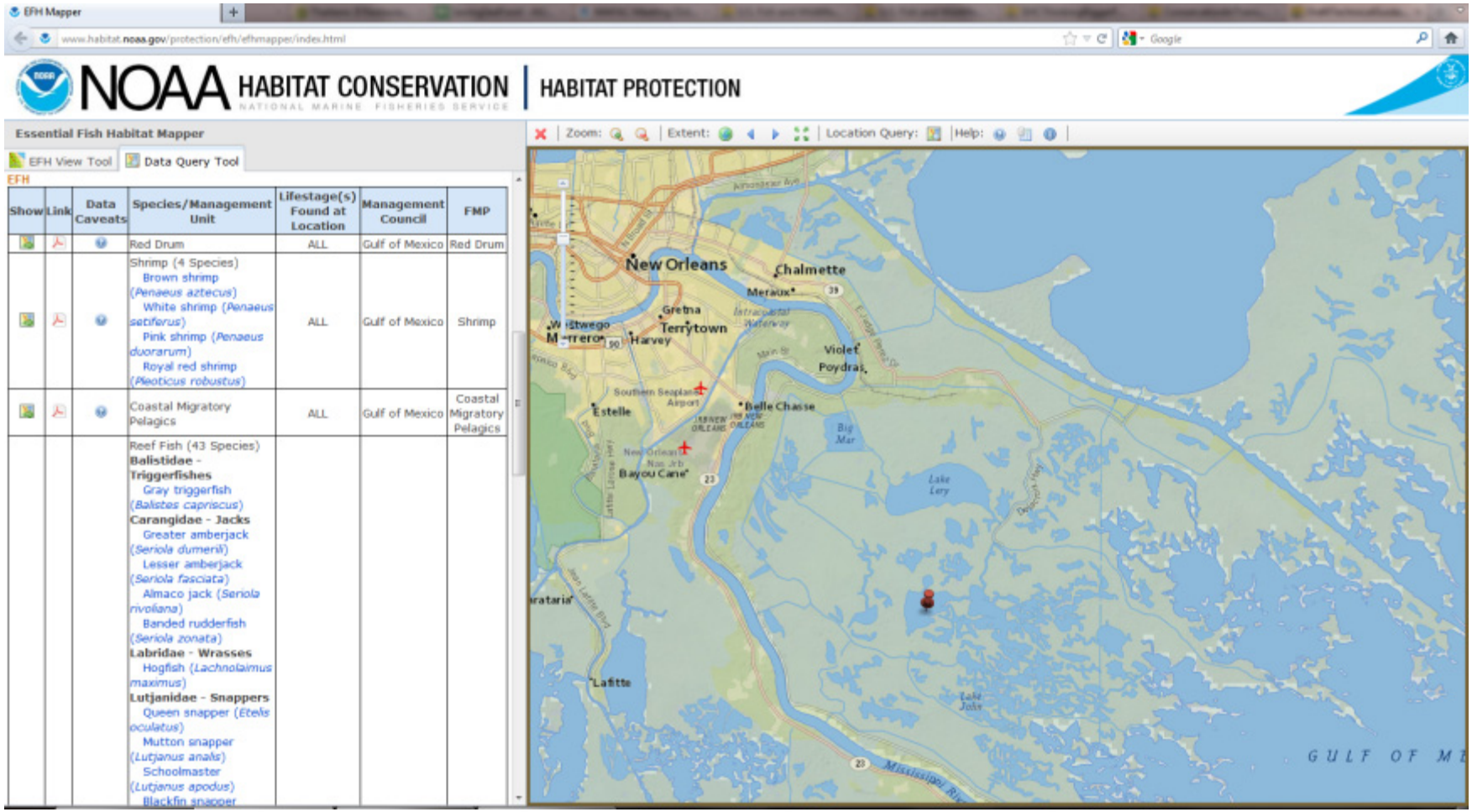
Upland disposal of dredge spoils.

NOAA's EFH Conservation Recommendation:

No dredging January 1 to May 31 to protect winter flounder spawning and egg habitat.

EFH Mapper

www.habitat.noaa.gov/efhmapper



Show	Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
			Red Drum	ALL	Gulf of Mexico	Red Drum
			Shrimp (4 Species) Brown shrimp (*Penaeus aztecus*) White shrimp (*Penaeus setiferus*) Pink shrimp (*Penaeus duorarum*) Royal red shrimp (*Pleoticus robustus*)	ALL	Gulf of Mexico	Shrimp
			Coastal Migratory Pelagics	ALL	Gulf of Mexico	Coastal Migratory Pelagics
			Reef Fish (43 Species) **Balistidae - Triggerfishes** Gray triggerfish (*Balistes capriscus*) **Carangidae - Jacks** Greater amberjack (*Seriola dumerili*) Lesser amberjack (*Seriola fasciata*) Almaco jack (*Seriola rivoliana*) Banded rudderfish (*Seriola zonata*) **Labridae - Wrasses** Hogfish (*Lachnolaimus maximus*) **Lutjanidae - Snappers** Queen snapper (*Etelis oculatus*) Mutton snapper (*Lutjanus analis*) Schoolmaster (*Lutjanus apodus*) Blackfin snapper			

EFH Resources:

EFH essentials:

- EFH website: http://www.habitat.noaa.gov/efh
- EFH Final Rule: http://www.greateratlantic.fisheries.noaa.gov/hcd/efhfinalrule.pdf
- Magnuson-Stevens Fishery Conservation & Management Act: http://www.nmfs.noaa.gov/sfa/magact/MSA_Amended_2007%20.pdf
- EFH Mapper and Data Inventory: http://www.habitat.noaa.gov/efhmapper

Guidance documents:

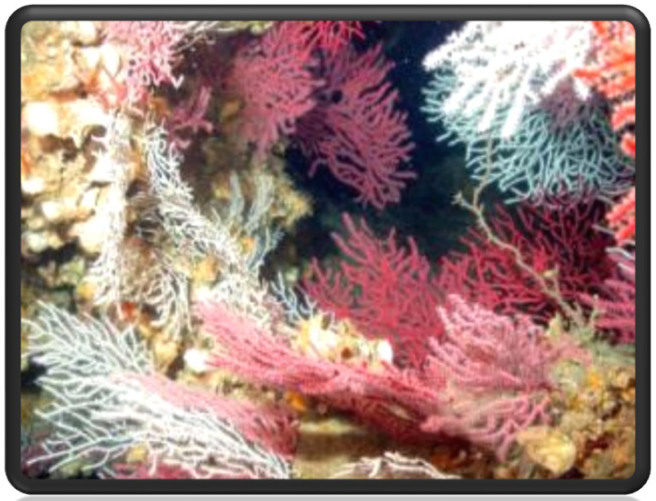
- Refining the description and identification of EFH: http://www.nmfs.noaa.gov/op/pds/documents/03/201/03-201-15.pdf

Contact info: http://www.habitat.noaa.gov/protection/efh/regionalcontacts.html

Deep-Sea Corals

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

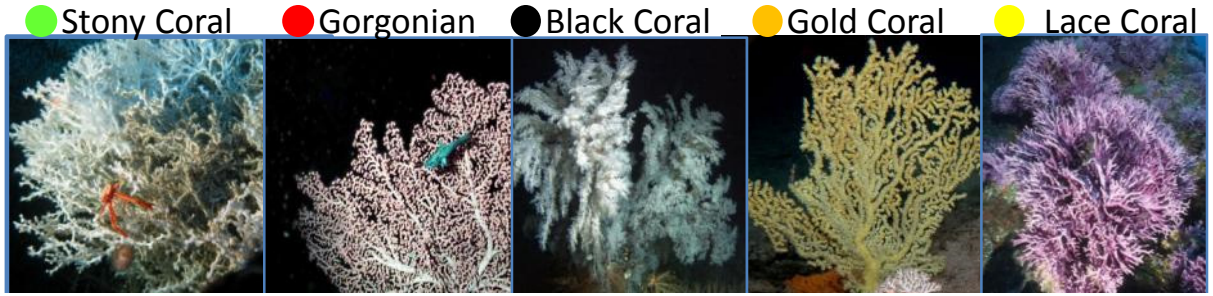
- Hotspots of biological diversity
- May be Essential Fish Habitat
- Targets for biomedical research
- Vulnerable to human impacts



Where are deep-sea corals?

The data represent recorded locations of structure-forming deep corals. Data do not represent density of coral cover and may reflect fishing or research effort. The origin of data varies: e.g., NMFS bottom trawl surveys and observer programs; literature citations; museum collections and research surveys.

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



- 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.

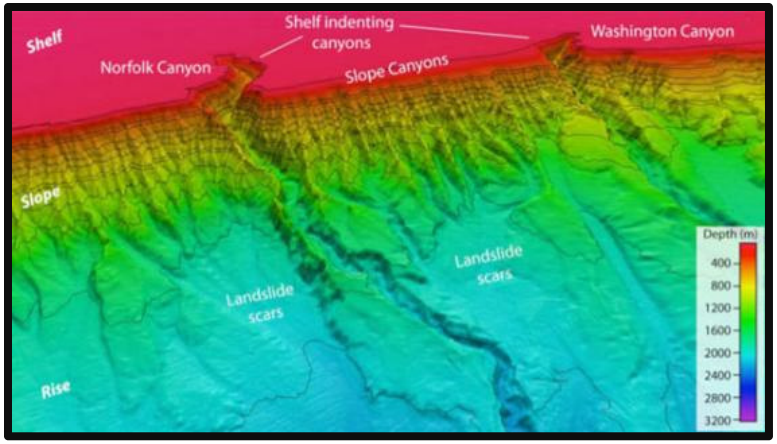
Deep-Sea Coral Research and MSA

Magnuson-Stevens Act (2006) Established Deep Sea Coral Research and Technology Program (DSCRTP)

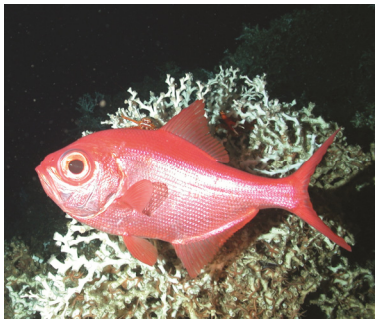
NOAA, in consultation with Councils, established a program to

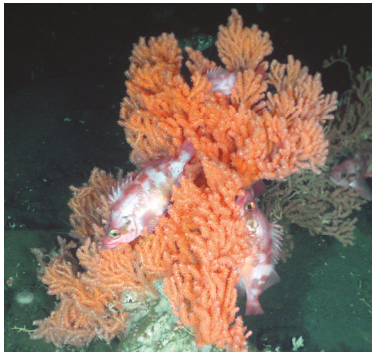
- Identify existing research on, and known locations of, deep-sea corals;
- Monitor activity in deep-sea coral locations; and
- Conduct research on and locate and map locations of deep-sea corals.

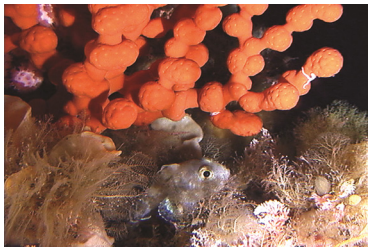
- MSA §408



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)

Bycatch

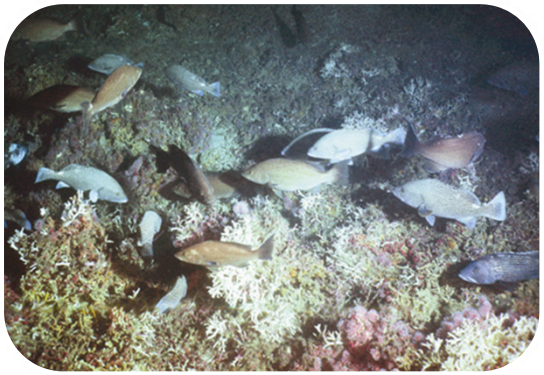
Conservation and management measures shall, to the extent practicable, **minimize bycatch**

- MSA §301(a)(9)

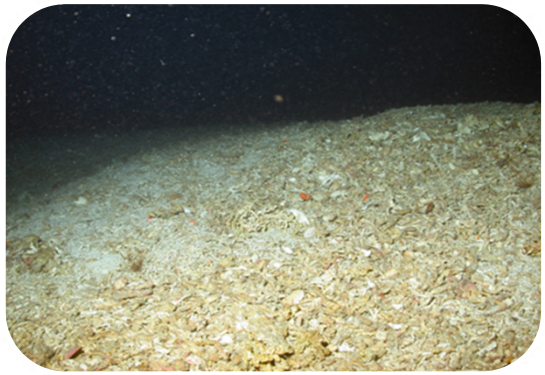
Deep-sea coral zones

Magnuson-Stevens Act (2006) 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 to fishing gear from interactions with deep-sea corals



Un-trawled



Trawled

Deep-sea Coral Resources

- NOAA Strategic Plan for DSC and Sponge Ecosystems
  http://coris.noaa.gov/activities/deepsea_coral

- The State of DSC Ecosystems in the U.S.
  http://coris.noaa.gov/activities/deepcoral_rpt

- Deep Sea Research and Technology Program 2014 Report to Congress
  http://www.habitat.noaa.gov/pdf/FINAL_DSCRtC_4_17_2014_Interactive.pdf

Next Steps: Integrating habitat conservation into sustainable 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!

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