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Habitat Protection in the Magnuson-Stevens Act

Provisions councils can use to conserve & protect our fisheries' habitat and ensure long-term sustainability

A Presentation by NOAA Fisheries,
Office of Habitat Conservation, for
New Council Members



Ian Lundgren, Habitat Protection Division: ian.lundgren@noaa.gov

Key Learning Objective

Councils can drive habitat protection & conservation using provisions of the Magnuson-Stevens Act to:

- **Define & refine essential fish habitat regulatory designations**
- **Exercise Deep-sea coral habitat conservation authority**
- **Integrate habitat conservation into management decision (i.e., EBFM)**



Habitat is a Congressional Priority



The Magnuson-Stevens Act was amended & reauthorized to prioritize habitat conservation and protection

- 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**

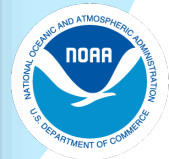


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Ignoring Habitat is a Big Risk

The MSA makes the stakes clear:

- “...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)]



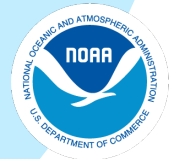
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The Role of EFH for Fisheries



Essential fish habitat means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” [MSA §3 (10)]

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) establishes a national program for the **conservation and management** of the fishery resources to prevent overfishing, rebuild overfished stocks, ensure conservation, **facilitate long-term protection of essential fish habitats**, and realize the full potential of the Nation’s fisheries.



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What was that?

Congressional concern for habitat and the foundational role it plays in EBFM

Created EFH Program

Establishes roles for Councils and NOAA Fisheries

[Next]

EFH Roles & Responsibilities

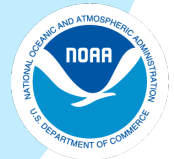


EFH Designations (Council-led)

- Describe & identify EFH by life stage
- Designate Habitat Areas of Particular Concern
- Produce maps to display designations
- Minimize adverse effects of fishing on EFH

EFH Consultations (NOAA Fisheries-led)

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

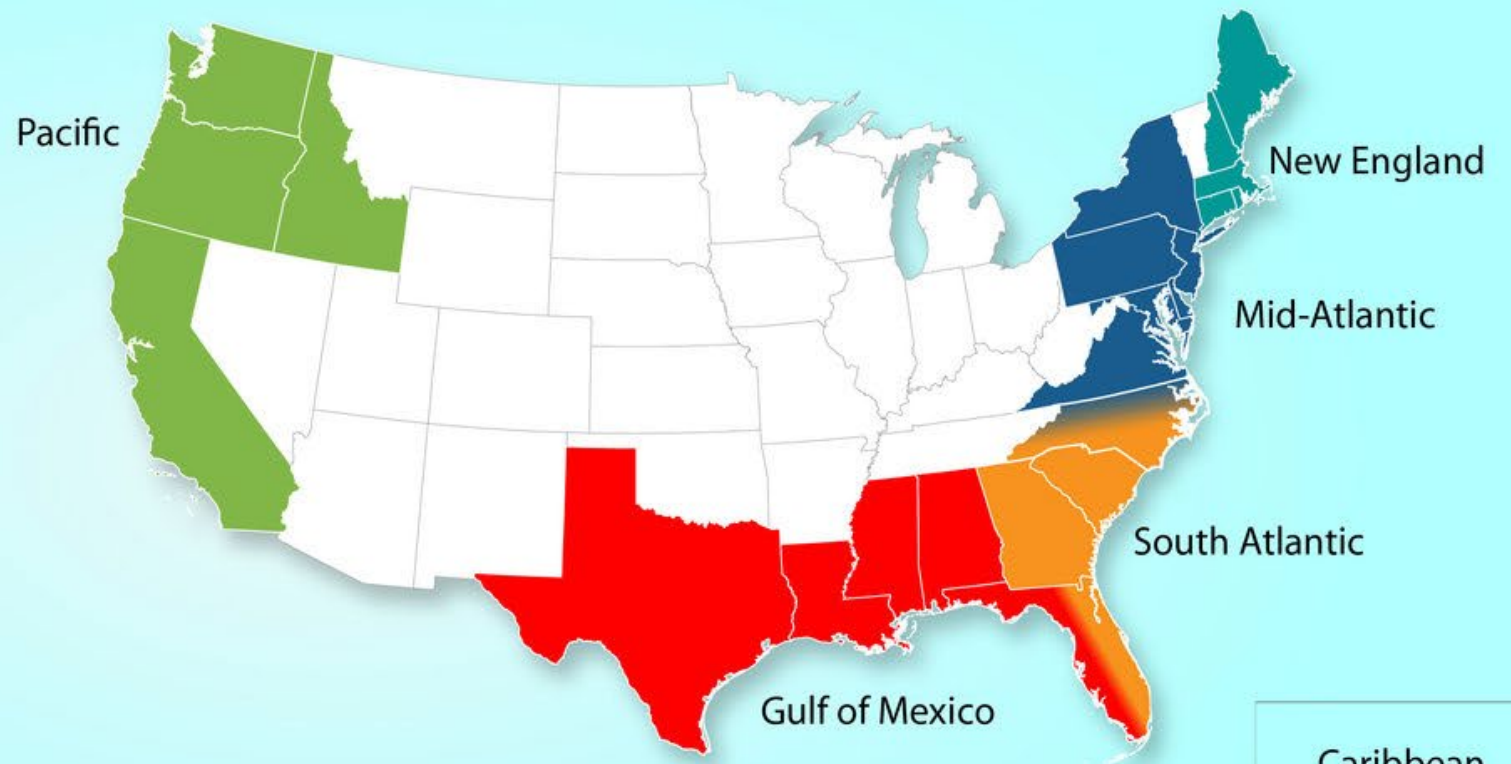


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Council-led EFH Responsibilities: EFH Designations



1. Guam; 2. Commonwealth of the Northern Mariana Islands (CNMI);
3. Wake Island; 4. Midway Atoll; 5. Johnston Island; 6. Hawaiian Islands;
7. Palmyra Atoll and Kingman Reef; 8. Jarvis Island; 9. Baker and Howland Islands; 10. American Samoa.



NOTES:

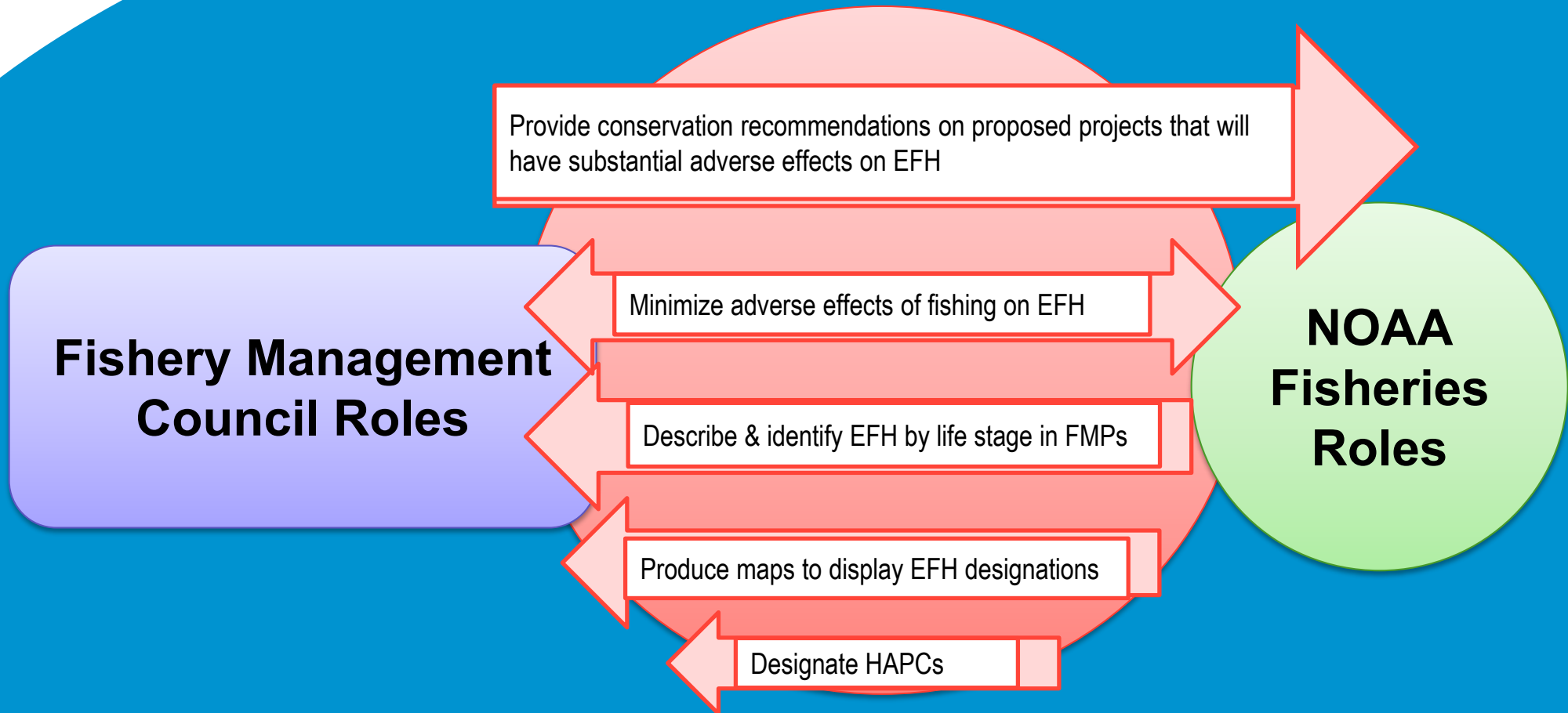
- **Washington** and **Oregon** have representatives on both the Pacific and North Pacific Fishery Management Councils.
- **North Carolina** has representatives on both the South Atlantic and Mid-Atlantic Councils. The jurisdictional boundaries for managed species are generally at the North Carolina/Virginia border, with a few exceptions.
- **Florida** has representatives on the South Atlantic and Gulf of Mexico Fishery Management Councils.

U.S. VIRGIN ISLANDS
PUERTO RICO



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Who leads that?



An Example of EFH Description: Atlantic Cod



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.

An Example of EFH Description: UKU

- Eggs EFH: water column from mean low-tide line out to 50 miles
- Larvae EFH: water column shore to the outer boundary of the EEZ
- Juvenile & adult EFH: all bottoms and water column to a depth of 240 m, almost 800 feet



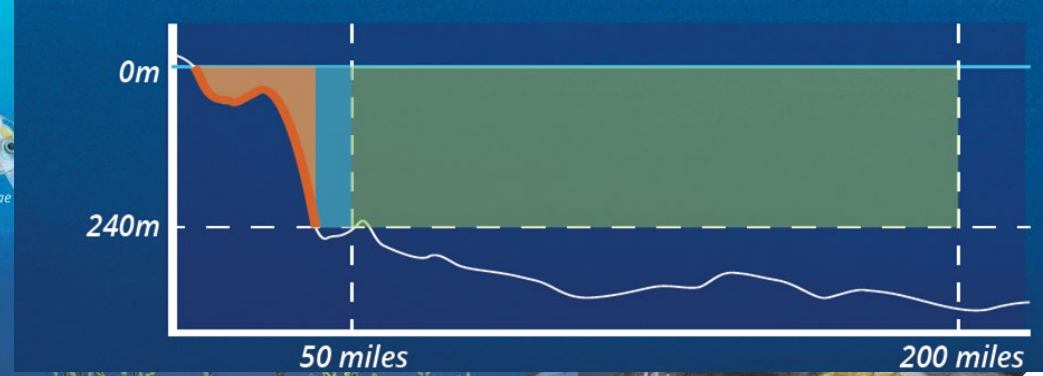
Essential Fish Habitat
An Example for a Shallow-Water Bottomfish
Grey Snapper or UKU (Apogon niger)

Essential Fish Habitat (EFH) includes ocean areas where federally managed fish and invertebrates live and reproduce across their entire life cycle. These habitats

Shallow-Water Bottomfish EFH From Above



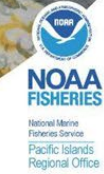
Shallow-Water Bottomfish EFH From the Side

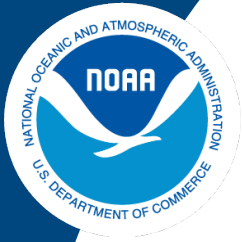


The extent of the EFH footprint for uku varies by life history stage. EFH for eggs (BLUE) is bounded by the mean low tide line out to 50 miles. For larvae in the post-hatch pelagic life stage (GREEN), EFH runs all the way from the shore to the outer boundary of the 200 mile Exclusive Economic Zone. For juveniles and adults (ORANGE), EFH is designated to a line where the ocean bottom is a depth of 787.4 ft (240 m).

EFH can change over time as scientists learn more or as conditions change; this example is from March 2020.

FOR MORE INFORMATION, VISIT:
<https://go.usa.gov/xfDdY>





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Which Info?

Depth limitations

Food web
relationships

Substrate
associations

The extent of the species
entire range

Migration
patterns

Designating EFH is Iterative



Levels of EFH Information

- EFH is identified using the BSIA
- Levels of information are categorized 1-4
- Most EFH designations are based on low levels of information, often resulting in broad designations
- Often levels can be and should be increased through investment in filling information gaps (i.e., scientific research)

Improve
EFH
Definitions

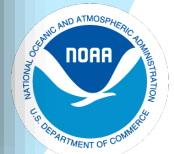


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HAPCs – a Focused EFH Designation

Habitat Areas of Particular Concern

- Are a subset EFH designation for particularly sensitive, vulnerable, and rare habitats designated as EFH.
- Communicate habitat conservation and management priorities, and encourage increased scrutiny.



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Not for HAPC?

The importance of the ecological function provided by the habitat

Whether, and to what extent, development activities are, or will be, stressing the habitat type

The rarity of the habitat type

The extent to which the habitat is sensitive to human-induced environmental degradation

~~The importance of cultural resources at that site~~

EFH is Foundational for EBFM



Defining & Refining EFH

- Non-fishing consultations to ensure the habitat baseline does not shift
- EFH 5 year reviews to incorporate new information
- Productivity estimates from level 4 designations can be used with stock assessments to inform decisions

Minimizing adverse fishing effects*

- **Councils are required to minimize adverse effects caused by fishing [MSA § 303(a)(7)]**

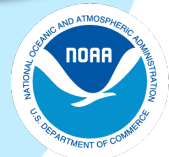
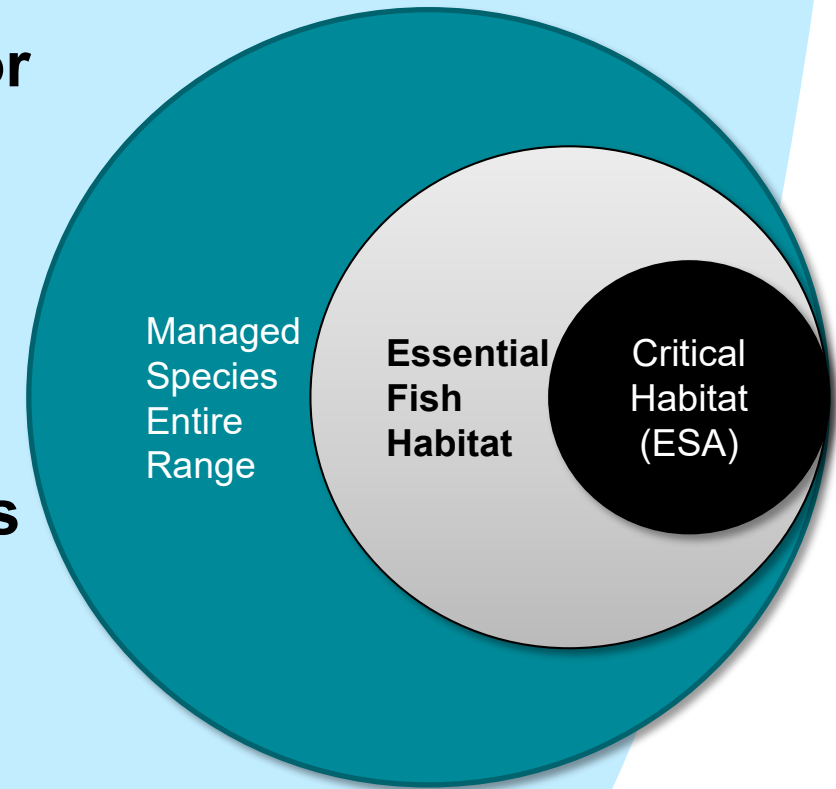
*over 1 billion acres of EFH have been protected from harmful fishing practices since 2004



Key Takeaways – EFH designations

Defining & Refining EFH

- Identified, described and mapped in FMPs for each life-stage of each managed species
- Can be the water column & bottom habitats, and their associated features (e.g., prey)
- Designations should be smaller than the species' entire range, but enough to serve as a buffer in an uncertain future
- Investment in increasing the “levels of information” improves the specificity of designations and can inform catch limits.



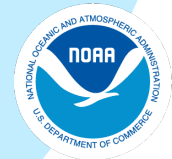
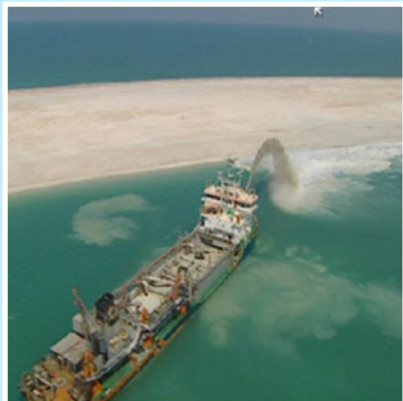
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NOAA-led EFH Consultations

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



~5,000+ federal actions every year across many Federal agencies



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Councils' Consultation Role

According to the MSA [§305 (b)(3)] and the CFR (50 §600.30):

- **Councils may comment** on actions that may affect the habitat of a fishery resource under its authority
- **Councils must comment** on actions that are likely to substantially affect the habitat of anadromous fish

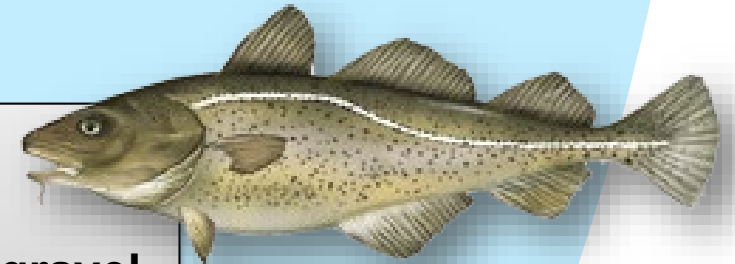


Winthrop Beach Restoration

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.



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Developing Recommendations

- May include ways to **avoid**, **minimize** or **compensate** for unavoidable adverse effects.
- Must be a **clear** measure the action agency can take using its existing authority.
- Should be **transparent** and address a specific concern or issue (i.e., stressor).
- Must be provided **in writing** and be clearly identified.



Example: Department of Energy Construction, operation and maintenance of a 336-mile transmission cable.

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.



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Comment When?

Any proposed federal action that may have adverse effects on EFH

Actions when adverse effects may be substantial on EFH in Federal waters

Actions where adverse effects may be substantial on anadromous EFH

EFH Tools

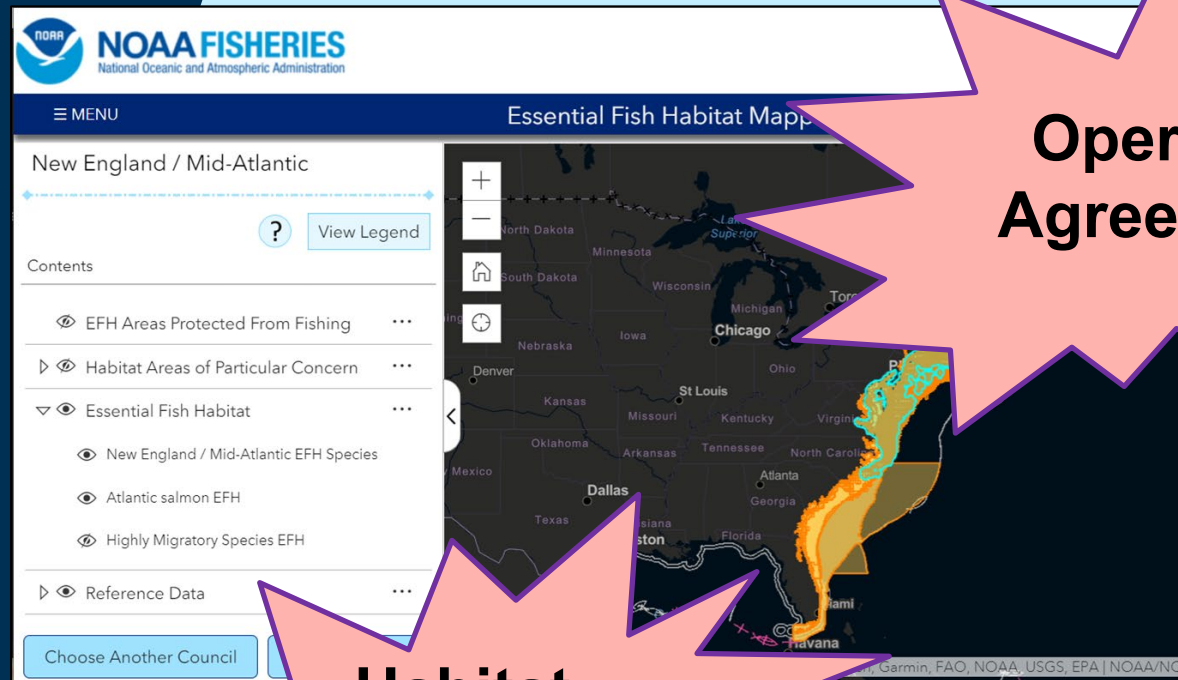
EFH Mapper

Habitat
Policy
Statements

Operating
Agreements

ECO Tracker

Habitat
goals and
Priorities



RESOURCES

Environmental Consultation Organizer (ECO)

September 17, 2019

ECO is an information management application covering NOAA Fisheries consultations under the Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation and Management Act sections 305(b)(2) & 305(b)(4) Essential Fish Habitat (EFH).

[ECO Public Portal Login](#)

EFH Guidance Updates

2022 Revisions & Climate Change Guidance

fisheries.noaa.gov/national/laws-and-policies/habitat-conservation-and-restoration-policy-directives

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LAWS AND POLICIES

Habitat Conservation and Restoration Policy Directives

NOAA Fisheries Policy Directive System

- 03-101 [Habitat Conservation Policy \(PDF, 10 pages\)](#)
- 03-201 [Essential Fish Habitat \(PDF, 2 pages\)](#)
 - 03-201-01 [Assessment of Impacts of Fishery Management Actions on Essential Fish Habitat \(PDF, 3 pages\)](#)
 - 03-201-05 [Guidance for Combining MSFCMA EFH Consultations with ESA Section 7 Consultations \(PDF, 10 pages\)](#)
 - 03-201-11 [Guide to EFH Consultations \(PDF, 23 pages\)](#)
 - 03-201-15 [Guidance to Refine Description and Identification of EFH \(PDF, 6 pages\)](#)
 - 03-201-16 [Essential Fish Habitat Consultations for Army Corps of Engineers Channel Maintenance Dredging \(PDF, 4 pages\)](#)
- 03-401 [Anadromous Fish Policy \(PDF, 2 pages\)](#)

Revised

FEATURE STORY
Scientists Consider More Adaptive Approaches to Atlantic Dolphinfish Management Southeast

FEATURE STORY
NOAA Announces 5-Year Strategic Plan for Aquaculture National

- **Guide to EFH Consultations was revised**
- **Combining EFH & ESA Consultations was revised**
- **Climate change guidance was recently completed**

EFH Resources

Regional EFH Coordinators:

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

Guidance documents:

NMFS Habitat Directives (i.e., Policy/Guidance):

<https://www.fisheries.noaa.gov/national/laws-and-policies/habitat-conservation-and-restoration-policy-directives>

Refining the description and identification of EFH:

<https://www.fisheries.noaa.gov/webdam/download/64681961>

EFH essentials:

National website:

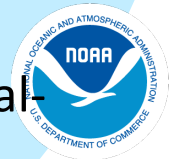
<https://www.fisheries.noaa.gov/national/habitat-conservation/essential-fish-habitat>

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>



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Key Takeaways – EFH Consultations

Addressing non-fishing effects

- EFH conservation recommendations developed through consultation are **a key mechanism** to improve the ecosystem's ability to support catch levels
- Councils have **a vital role** to play in consultation, but it requires close coordination with NOAA Fisheries to be most effective.
- There are **numerous tools** and habitat initiatives that are available that can help with consultations.

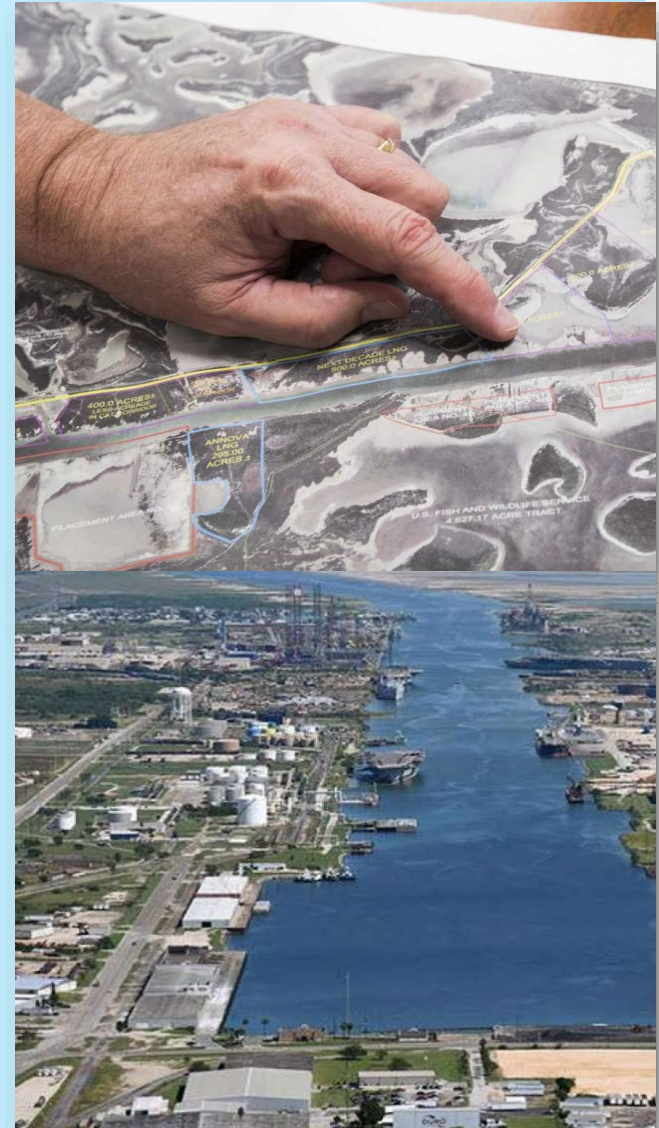


photo credit: Houston Chronicle

Deep-sea Corals

Fragile, long-lived animals that often form complex structures

- Provide habitat for many commercial species
- Hotspots of biological diversity
- May be essential fish habitat
- Vulnerable to human impacts
- Generally found deeper than 50m
- Targets for biomedical research





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Why Take Action?

Targets for biomedical
research

Hotspots of
biological
diversity

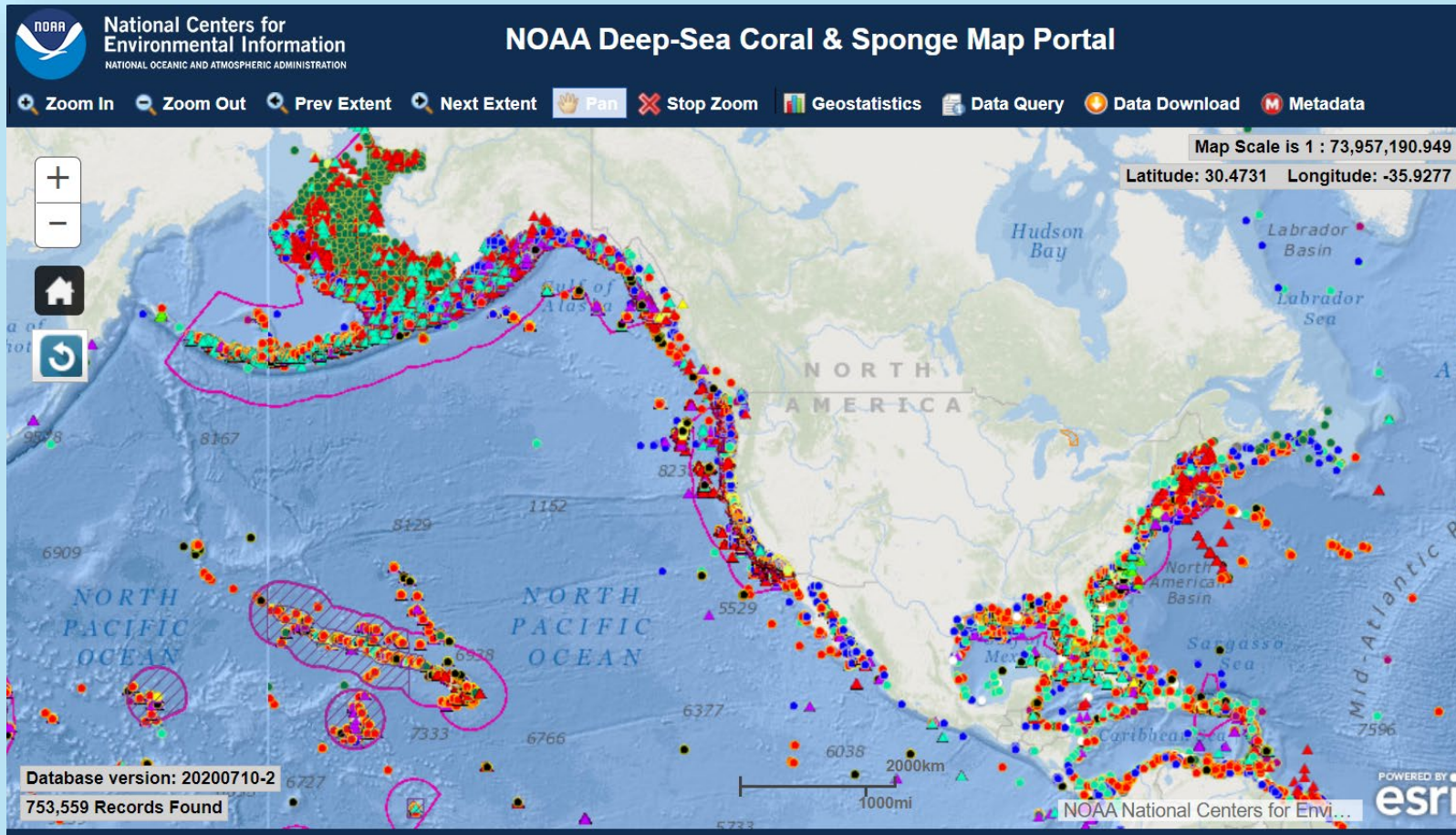
Vulnerable to
human impacts

They are
Essential Fish
Habitat

Provide habitat for other
species

Where are Deep-sea Corals?

Structure-Forming Deep-Sea Corals



Stony coral



Gorgonian



Black coral



Gold coral



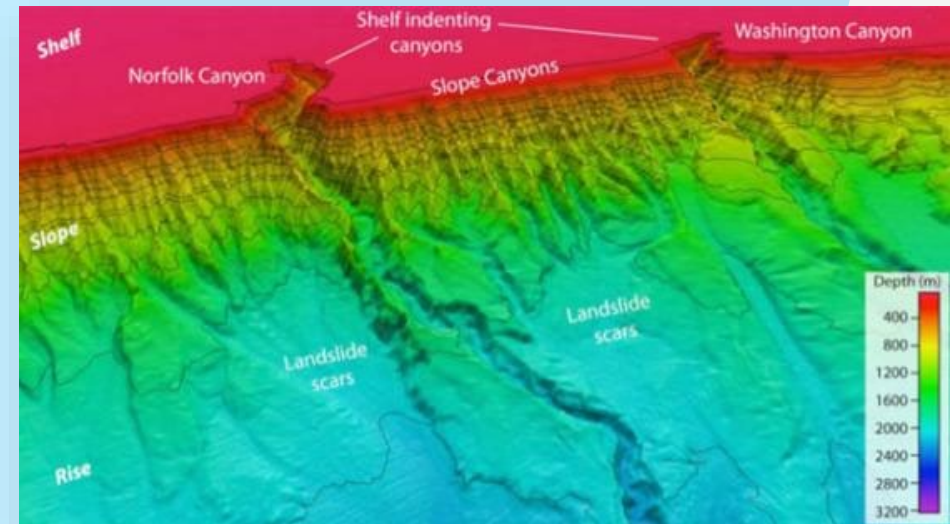
Lace coral



Deep-sea Coral Research & MSA

MSA re-authorization (2007) established Deep Sea Coral Research and Technology Program (MSA §408) to:

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



Deep-sea Coral & EFH

MSA 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 & adult yelloweye rockfish (NPFMC)
- Coral species in Coral FMP (SAFMC)
- Deep water coral HAPCs (GMFMC)





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DSCs as EFH?

Councils may designate DSCs as EFH in their own FMP

~~Councils may designate DSCs as HAPC without designating EFH~~

Councils may designate DSCs as EFH for another managed species

However there are two other ways to protect DSCs!!!

Deep-sea Coral & Bycatch

Conservation and management measures shall, to the extent practicable, minimize bycatch [MSA §301(a)(9)]



Deep-sea Coral Zones

MSA gives Councils discretionary authority to protect deep-sea corals from fishing [MSA 303(b)(2)(B)]

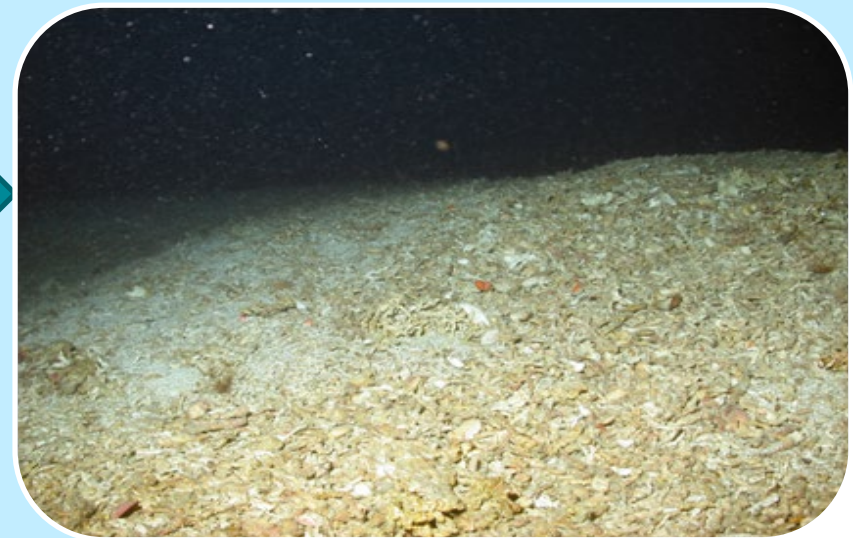
- Councils may designate deep-sea coral zones in areas identified by the Deep Sea Coral Research & Technology Program
- Councils may protect corals from physical damage from fishing gear within zones
- Councils may establish measures to limit damage



Trawled



Un-trawled



Key Takeaways – Deep-sea Corals

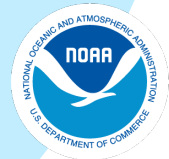
The DSCRTP was created to gather and provide scientific info needed by Councils to conserve and manage DSC ecosystems

- DSC are vulnerable to fishing gear and recover slowly, if they recover at all
- The DSCRTP funds research and provides results to Councils to conserve and manage ecosystems
- DSC can be protected through EFH designation plus related regulations, discretionary authority, a specific FMP, and/or bycatch authority



Deep-sea Coral Resources

- Deep Sea Research and Technology Program and Data Portal:
<https://deepseacoraldata.noaa.gov/>
- 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 2022 Report to Congress:
<https://repository.library.noaa.gov/view/noaa/48863> (also can link from first website listed on this page, under publications)
- NOAA Strategic Plan for DSC and Sponge Ecosystems:
http://coris.noaa.gov/activities/deepsea_coral
- Email heather.coleman@noaa.gov for more information

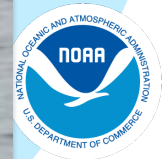


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Taking Habitat Home: Next Steps



- Invest in habitat science
- Implement a more strategic approach to habitat conservation
- Integrate habitat conservation into fishery management decisions



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Thank you for your attention!

See you next year!

