Seagrass Habitat Matters to Fish, and People Too

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NOAA Fisheries Mission

Stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems
NOAA National Marine Fisheries Service
Southeast Region – Habitat Conservation Division

South Atlantic Branch
- Charleston, SC
- Beaufort, NC
- West Palm Beach, FL
- San Juan, PR
- St. Croix, USVI

Gulf of Mexico Branch
- Galveston, TX
- Baton Rouge, LA
- St. Petersburg, FL

Regional Office
- St. Petersburg, Florida
Federal Permitting Authorities

Permits

Federal Authorization
U.S. Army Corps of Engineers

- U.S. Environmental Protection Agency
  - Water Quality
  - Clean Water Act
- National Marine Fisheries Service
  - Threatened and Endangered Species
  - Magnuson-Stevens Act
- U.S. Fish and Wildlife Service
  - Fish and Wildlife
  - Wetlands
  - Endangered Species Act
  - Marine Mammal Protection Act

State Authorization
State Agencies

- State Natural Resource Agency
- State Water Quality Agency
- State Coastal Zone Program

Water Quality Certification
Coastal Zone Certification

“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.”
What is Essential Fish Habitat?

“...waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.”
Important Coastal Habitats

ESTUARY

SALT MARSH

OYSTERS

SEAGRASS
# EFH Levels of Habitat Importance

<table>
<thead>
<tr>
<th>Available Information</th>
<th>Presence/Absence</th>
<th>Density</th>
<th>Growth, Reproduction, Survival</th>
<th>Production Rate</th>
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<tbody>
<tr>
<td>Level 1</td>
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<td>Level 4</td>
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**Level 1**: Distribution data are available for some or all portions of the geographic range.

**Level 2**: Habitat-related densities are available.

**Level 3**: Growth, reproduction, or survival rates within habitats are available.

**Level 4**: Production rates by habitat type are available.
Coastal Development and Projects

- Transportation
- Dredging / Mining / Disposal
- Beach Nourishment
- Piers, Docks, Bulkheads
- Shoreline Stabilization
- Dam Removal
- Fish Passage
- Aquaculture

NOAA Fisheries
Focus Areas

1) Efficient permitting
Focus Areas

1) Efficient permitting

Triage by Acres?

- 26,453 acres!
- 10% of projects account for 94% of acres
  - Beach nourishment
  - Port expansions
  - Large commercial/residential developments
  - Highways
Focus Areas

2) Research on environmental effects

Shellfish aquaculture interactions with seagrass habitat

Effects of piers and docks on seagrass habitat
Focus Areas

3) Mapping and restoration practices

Seagrass mapping and restoration with NC Department of Transportation
Focus Areas

3) Mapping and restoration practices

Seagrass mapping technology workshop with NC Division of Marine Fisheries
Partner with us:

Contact: Dr. Ken Riley – Fishery Biologist
NMFS Habitat Conservation Division
Email: ken.riley@noaa.gov
Phone: (252) 728-8750

Cape Lookout, North Carolina
SAFMC Users Guide to EFH Designations

http://safmc.net/ecosystem-management/essential-fish-habitat-2/

NOAA FISHERIES
Where to get more information...

SAFMC Provides EFH Guidance & Shows HCD Consultations

http://ocean.floridamarine.org/SA_EFH/
EFH Resources:

**EFH essentials:**
- EFH website: [http://www.habitat.noaa.gov/efh](http://www.habitat.noaa.gov/efh)

**Guidance documents:**
- EFH Consultation Guidance: [http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1_1.pdf](http://www.habitat.noaa.gov/pdf/efhconsultationguidancev1_1.pdf)

**Regional contact information:** [http://sero.nmfs.noaa.gov/habitat_conservation/faqs/hcd_contact_us.html](http://sero.nmfs.noaa.gov/habitat_conservation/faqs/hcd_contact_us.html)