

Essential Fish Habitat and Living Shorelines: Balancing Ecological Tradeoffs



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NOAA Beaufort lab
Photo: J. Harris



NOAA Fisheries

Our Mission: Stewardship of living marine resources through science-based conservation and management and the promotion of healthy ecosystems

Goal: To conserve, protect and manage living marine resources for the benefit of the American people.

NOAA Fisheries Habitat Staff

What do we do?

- Habitat staff review federal and state actions (public notices, EA/EIS, etc.), perform field inspections, attend meetings and public hearings, and provide conservation recommendations under our authorities (e.g., Magnuson-Stevens Act, FWCA, Section 404 CWA, NEPA, etc.)
- Provides technical assistance and advice to federal, state and local agencies on habitat issues.
- Stewardship activities – Habitat Blueprint areas, participate in NEPs, watershed planning groups, technical advisory groups.

Why are we involved in living shoreline projects?

- Most in-water activities including living shorelines projects require federal and state permits.
- A federal action such as a permit generally triggers our consultation requirements under the MSA, FWCA and sometimes the ESA.
- Regional Habitat staff and Restoration Center staff have local knowledge and technical expertise to assist in the development of living shoreline projects.

What is the MSA?

MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (MSA)

amended 1996 Sustainable Fisheries Act

- Describe and identify EFH for each federally- managed fishery (through FMC's)
- Consultation requirements for Federal agencies; USACOE, BOEM, FHWA and others
- Encourage protection, conservation and enhancement of EFH

EFH Designations for Northeast Region Managed Species

New England Fishery Management Council

- American plaice
- Atlantic cod
- Atlantic halibut
- Atlantic herring
- Atlantic salmon
- Atlantic sea scallop
- Haddock
- Monkfish (goosefish)
- Ocean pout
- Offshore hake
- Pollock
- Red hake
- Redfish
- Windowpane
- Winter flounder
- Witch flounder
- Yellowtail flounder
- Skates – 7 species (little, winter and clearnose)

Mid-Atlantic Fishery Management Council

- Atlantic mackerel
- Black sea bass
- Bluefish
- Butterfish
- Illex squid (short finned squid)
- Loligo squid (long finned squid)
- Ocean quahog
- Scup
- Spiny dogfish
- Summer flounder
- Surf clams
- Tilefish

South Atlantic Fishery Management Council

- Spanish mackerel
- King mackerel
- Cobia

What is Essential Fish Habitat (EFH)?

MSA PL 104-297

Sec. 3. Definitions

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

More on EFH

NMFS Consultation Guidance
50 CFR Part 600

- “Waters” include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and *aquatic areas historically used by fish*, where appropriate (e.g. potential utilization areas).
- “Substrate” includes sediment, hard bottom, structures underlying waters and associated biological communities.

Agency Consultation

Federal agencies are required to consult with NOAA Fisheries on all actions or proposed actions that they authorize, fund or undertake that *may adversely affect* EFH.

State agencies are not required to consult, but NOAA Fisheries can provide EFH conservation recommendations on state actions through existing or new coordination procedures.

What is an “adverse effect” ?

NMFS Consultation Guidance
50 CFR Part 600

“adverse affect”

“...any impact which reduces quality and/or quantity of EFH.”

1. Direct (e.g. contamination or physical disruption)
2. Indirect (e.g. loss of prey, reduction in fecundity)
3. Individual, cumulative, or synergistic

Habitat Areas of Particular Concern

Habitat Area of Particular Concern (HAPC) is a subset of EFH that:

1. provide important ecological functions;
2. are sensitive to human-induced environmental degradation;
3. are rare; and,
4. development activities must represent a current or potential stress for the habitat.

Example: SAV for summer flounder



Photo: R. Takas

It is not just about EFH

- Other Authorities
 - Fish and Wildlife Coordination Act
 - National Environmental Policy Act
 - Federal Power Act



Striped bass
Photo: NE Aquarium

What this means:

The needs of numerous species have to be considered - diadromous species, shellfish, reefs, forage species, etc.



Alewives
Photo: ifc.org



Hard clam
Photo: NY DEC



Bay anchovy
Photo: panix.com

What does all this mean to a living shoreline project?

- General support for softer, living shorelines.
- Recognize the value of wetlands, as forage, refuge, spawning and nursery habitats.
- When sited properly, a living shoreline can limit the amount of erosion, and (to the extent practicable) maximizes the value of the habitat restored

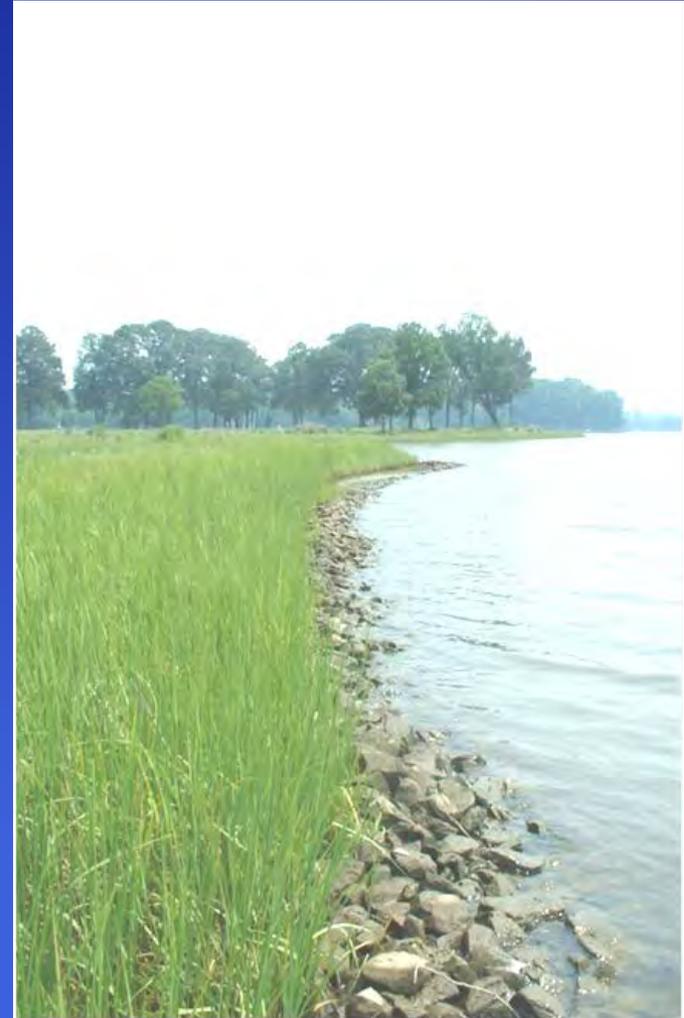


Photo: R. Takas

Trade-offs and balancing

Considerations:

- Existing habitat at the project site.
 - Is it a Special Aquatic Site, HAPC?
 - SAV, shellfish, gravel and cobble, spawning area?
 - Who is using this site now?
- What type of habitat is being proposed?
 - What are the functions and values of the proposed habitat?
 - Does this increase the area's value as fishery habitat?



Trade-offs and balancing

- The NOAA Fisheries Habitat Program is this for the habitat benefits.
- EFH is important, but it not a roadblock.
- This is not an acre for acre balancing act.
- Value judgment based upon the specifics of the site.
- Applies to everyone equally – Corps projects, NOAA projects, USFWS projects.
- Because each project site presents its own unique issues, sometimes case-by case review provides the most effective means of achieving our mandated resource protection requirements, but.....



There are ways to make the process easier:

- NOAA Fisheries Habitat staff has worked with many of our federal and state partners to streamline permits and consultations.
- Coordination and consultation is upfront on a programmatic level.
- Includes Nationwide Permits, Regional General Permits, Statewide General Permits.
- Design projects to meet the conditions of these and the process is faster.

Making life easier

Some examples of permits developed for living shoreline projects:

- USACOE's Nationwide Permit 13 – encourages vegetative stabilization
- Nationwide Permit 27 – habitat enhancement activities
- Regional General Permits (RGPs):
 - Norfolk District – VA
 - Alabama/Mobile District – ALG09-2011 and ALG10-2011
- State General Permits (SPGPs) – Joint federal/State authorization
 - Maryland/ Baltimore District - MDSPGP-4
- State General Permits (GPs)
 - NJ General Permit 29
 - Several states considering GPs

More Ways NOAA Can Help

- Early coordination with NOAA Fisheries Habitat and Restoration Center staff can speed consultations and permitting
- Can provide advice on design, timing, information needs, sensitive habitats.
- NOAA is developing a document to assist entities interested in living shorelines and to clarify NOAA's position on these types of activities

Thank You



Photos: J. Harris
NOAA Oxford and Beaufort labs