

DEEPWATER HORIZON OIL SPILL NATURAL RESOURCE DAMAGE ASSESSMENT OVERVIEW

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Questions to Panelists

- ◎ What is your big picture goal/funding portfolio
- ◎ What specific aspects of your funding may relate to marine mammals
- ◎ Share some specifics: funding opportunities/constraints, funding levels/cycles, etc.

Natural Resource Damage Assessment (NRDA)

- Oil Pollution Act, 15 CFR 990

- Who: Trustees

- Responsibilities:

- Determine amount of injury to natural resources and lost services
- Develop and oversee implementation of restoration plan(s) to compensate the public for injuries and lost services
- Ensure the polluters pay for restoration



Trustees

- NOAA
- DOI
- EPA
- USDA

- Alabama
- Florida
- Louisiana
- Mississippi
- Texas



Question #1: Big Picture Goal/Funding Portfolio

OPA Requirements:

- Trustees mandated to restore, rehabilitate, replace, or acquire the equivalent of the injured natural resources and services; restore to baseline conditions (if not for spill); compensate the public for interim losses that occur during the time it takes those resources to recover
- Trustees must implement monitoring that allows for the evaluation of success (meeting performance criteria) and / or the need for corrective actions
- The amount and type of restoration will be dependent upon the amount and type of injury that is ultimately quantified



Trial date not set; injury assessment not complete; amount/type of restoration not yet determined

NRDA Injury Categories

SUBMERGED AQUATIC VEGETATION

Rooted vascular plants such as seagrasses and freshwater/brackish species grow in the intertidal and subtidal zones. They provide food and habitat for birds, shellfish and invertebrates.

OYSTERS

American or eastern oysters found in the Gulf are the building blocks of oyster reefs. Oysters are a valuable ecological and economic resource for the Gulf.

SHORELINES

Salt- and brackish marsh, tidal mudflats, mangroves and sandy beaches provide biological nurseries, storm surge protection, recreation and nutrient control.

TERRESTRIAL SPECIES

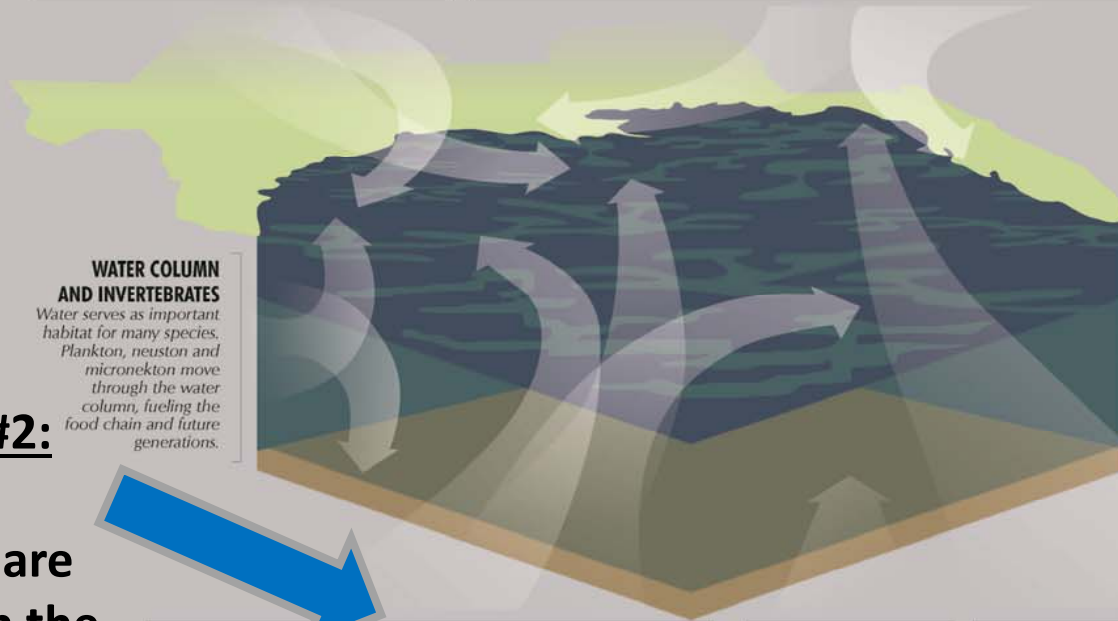
Species that use the habitats above the mean high-tide line include birds, crabs, turtles, crocodiles, alligators and small mammals.

BIRDS

Many types of shorebirds, colonial seabirds, open-water (pelagic) seabirds and marsh (secretive) birds rely heavily on the Gulf Coast.

HUMAN USE

People rely on the bounty of the Gulf for fishing, sunbathing, bird watching and other recreational activities. Tourism and recreation are major regional economic drivers.



WATER COLUMN AND INVERTEBRATES

Water serves as important habitat for many species. Plankton, neuston and micronekton move through the water column, fueling the food chain and future generations.

NEARSHORE SEDIMENT AND ASSOCIATED RESOURCES

Soil near the shore and the fish, shrimp, crabs and invertebrates that live in the waters from the low-tide line to the edge of the continental shelf at a depth of 656 feet are of particular concern.

Question #2:
Marine Mammals are included in the NRDA Assessment

MARINE FISH

The Gulf's diverse species include red snapper, red and black drum, anchovy, grouper, cobia, bass, menhaden, mullet, mackerel, jacks, killish, Gulf sturgeon, whale shark, sharks, Atlantic bluefin tuna and groundfish.

MARINE MAMMALS

Marine mammals in the Gulf of Mexico include 28 species of whales and dolphins, and the Florida manatee.

SEA TURTLES

There are five sea turtle species occurring in the Gulf listed as threatened or endangered under the Endangered Species Act: Kemp's ridley, green, leatherback, loggerhead, and hawksbill.

DEEPWATER COMMUNITIES

Hard- and soft-bottomed communities at depths of more than 200 feet include resources such as corals, tube worms and sponges.

SHALLOW CORALS

Healthy coral reefs provide a source of food for plants and animals. They protect coastlines from storms and erosion and provide habitat, spawning and nursery grounds for fish.

A Sample of Marine Mammal Restoration Options

- ◉ Habitat enhancement – e.g., debris removal, noise reduction, habitat restoration
- ◉ Direct resource response – e.g., stranding network, disentanglement
- ◉ Bycatch reduction – e.g., collaborative partnerships to reduce bycatch, observers
- ◉ Other threat reduction – e.g., hook and line interactions, illegal feeding
- ◉ Restoration science – to support restoration decision-making



Question #3: Funding Opportunities/Constraints

Restoration Monitoring is required to:

- Meet requirements under OPA (Section 990.55) to implement monitoring to evaluate project success and / or the need for corrective actions
 - Reasonable monitoring and oversight costs cover those activities necessary to gauge the progress, performance, and success of the restoration actions
- Illustrate restoration outcomes to the public
- Demonstrate regulatory compliance (e.g., NEPA, ESA)

Monitoring also supports restoration decision-making by:

- Assessing overall restoration progress
- Addressing information needs to improve restoration project selection, design and implementation
- Informing science-based adaptive management approach to reduce risk associated with less well understood options

NRDA Summary

- Trustees responsible for selecting and implementing restoration that will demonstrably restore for injuries, and managing funds from case resolution
 - Draft DARP will be released for public comment
- Timing and scale of full resolution uncertain, but will focus on injury compensation
- Science must support restoration implementation and evaluation decisions (i.e. adaptive management)

