



Deepwater Horizon Natural Resource Damage Assessment

Damage Assessment

On April 20, 2010, the *Deepwater Horizon* oil spill set into motion the largest Natural Resource Damage Assessment (NRDA) in history. A NRDA is the process used by natural resource trustees to develop the public's claim for natural resource damages against the party or parties responsible for the spill and to seek compensation for the harm done to natural resources and services. It also provides for the development of a restoration plan or series of plans to restore or replace those resources.

Technical Working Groups

Fundamental to the NRDA process is a comprehensive assessment of a diverse range of resources. From the early days of the spill, NRDA teams have been collecting data related to a wide range of natural resources and the services they provide. Scores of field teams are conducting research around the Gulf Coast, and more than 100 research cruises have been launched to assess the spill's offshore impacts. Work of this type continues today and likely will continue for several years. **Technical Working Groups** are comprised of subject matter experts and scientists from state and federal resource agencies, universities and other institutions. They have developed workplans to guide the damage assessment process and direct data collection efforts. Once samples are collected, they are sent to specific labs approved by the trustees and BP for analysis. For additional information on workplans and data, please visit www.gulfspillrestoration.noaa.gov. The diagram below illustrates the various types of resources being evaluated as part of the *Deepwater Horizon* oil spill NRDA and provides a sense of the three-dimensional scope of investigations under way to evaluate the impacts of oil, dispersants and other response actions on the resources.

NRDA TECHNICAL WORKING GROUPS

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.

MARINE FISH

The Gulf's diverse species include red snapper, red and black drum, anchovy, grouper, cobia, bass, menhaden, mullet, mackerel, jacks, killifish, 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.

