Deepwater Horizon Oil Spill: NOAA Assessment and Restoration

On April 20, an explosion on the Deepwater Horizon MC252 drilling platform in the Gulf of Mexico caused the rig to sink and oil began leaking into the Gulf. This significant spill poses a serious threat to wildlife and the fishing community along the large coastal areas of Louisiana, Mississippi, Texas, Alabama, and Florida. Although it will be months before the full extent of the damage will be known, the spill is impacting the Gulf coastline, and NOAA is acting quickly to begin preliminary assessments and plan for restoration along the coast.

NOAA's Role

To help determine the type and amount of restoration needed to compensate the public for harm to natural resources as a result of the spill, a Natural Resource Damage Assessment will be conducted by NOAA. Although many agencies are involved in this process, NOAA is a lead federal trustee for coastal and marine natural resources, including marine and migratory fish, endangered species, marine mammals and their habitats.

Key Facts

- NOAA responds to as many as 150 oil spills every year.
- In response to oil spills, NOAA has restored thousands of acres of coastal habitat in the past 18 years.
- NOAA and the other trustees involved hold the responsible party accountable for assessment and restoration costs.



Vessel skimming oil from the Deepwater Horizon.



Early response to the explosion (photo courtesy U.S. Coast Guard).

Potential Impacts of the Deepwater Horizon Spill

The oil spill is impacting Louisiana's shoreline habitats and fisheries, as well as current and completed restoration projects on the coast.

- Fisheries: During past oil spills in the Gulf of Mexico, NOAA has documented direct toxic impacts to commercially important aquatic life including blue crabs, squid, shrimp and a variety fish species. Toxins in the oil can kill these species or have other harmful effects such as: genetic damage, liver disease, cancer, and reproductive, developmental, and immune system impairment in fish and other organisms.
- Habitat: The presence of discharged oil in the environment may cause decreased habitat use in the area, altered migration patterns, altered food availability, and disrupted life cycles. Oiled plants could die, eliminating the roots that help bind and stabilize soil, leading to erosion.
- Restoration: There are many NOAA restoration projects that could be affected by the spill, including two large-scale American Recovery and Reinvestment Act projects.

NOAA acts as a trustee on behalf of the public to restore coastal and marine resources injured by oil spills and hazardous substance releases, and vessel groundings.



Oil in Louisiana wetlands during the Deepwater Horizon Oil Spill, May 2010. Although it will take months to understand the full extent of the impact, NOAA staff are working through preliminary assessments as part of its efforts as a Natural Resource Damage Assessment trustee.

Who are the Trustees?

Trustees protect, manage, and restore the natural resources that are held in trust for current and future generations. Trustees include the U.S. Departments of Commerce, Interior, Defense, Agriculture, and Energy; state agencies; and Native American tribes.

What Happens Now?

During and after an oil spill, there are three main steps to restore impacted areas:

- Preassessment: Determine whether injury to natural resources has occurred. Work includes collecting time-sensitive data, reviewing scientific literature about the oil and its impact on coastal resources, and determining the extent and severity of injury.
- Injury Assessment and Planning: Scientific and economic studies assess and quantify the injuries and the loss of services. A restoration plan is developed to identify restoration projects.
- Restoration: Work with the public and responsible parties to select, implement, and monitor restoration projects. The responsible parties pay for assessment and restoration costs.

Assessing Impacts to Gulf of Mexico Fisheries and Coastal Wetlands



NOAA Administrator Dr. Jane Lubchenco, NOAA Fisheries Assistant Administrator Eric Schwaab, and Council on Environmental Quality Chair Nancy Sutley assess how the sample is processed aboard the Research Vessel Caretta and the chain of custody protocol used when handling specimens associated with the oil spill

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