

Responding to the Deepwater Horizon Oil Spill

Background

Many units of the National Park System along the Gulf of Mexico are threatened by an oil spill that began on April 20, 2010. The Deepwater Horizon oil spill has been elevated to a "Spill of National Significance" by the Department of Homeland Security. The National Park Service (NPS) is part of the Unified Command responding to the oil spill, and NPS involvement is critical to protecting natural and cultural resources in parks during both the initial response and recovery periods. Throughout the process, the NPS will work to ensure that actions taken to protect park resources ultimately return them to their baseline conditions, consistent with NPS management policies.

Natural and Cultural Resources at Risk

National parks along the Gulf of Mexico and nearby are home to many amazing animals and habitats, as well as cultural resources. Here are just a few of the sensitive resources that could be affected by the oil spill:

- Seagrass beds are important nursery habitat for sea turtles, young fish, crabs, shrimp, and many other crustaceans. They also provide an important food source for manatees. Oil will kill seagrasses on contact, and this community is slow to recover.
- Salt marshes, which occur in back bays, provide a buffer that protects the mainland during storm events. They also offer foraging sites for all kinds of birds. If oil kills the plants in the marsh, the soil will destabilize and erode.
- Mangroves are similar to salt marshes in that they provide a buffer between the sea and the mainland, as well as providing wildlife habitat.
- About 30 federally listed species are found in the NPS units in the area of immediate threat, not including delisted species such as the brown pelican or bald eagle. This figure includes five sea turtles, six species of shorebirds, and two coral species.
- Shipwrecks, archeological sites, Civil War defenses, historic structures, and other cultural resources tell the stories of past inhabitants and key moments in our nation's history. Damage from oil and clean-up operations is a concern for these treasures.

Of additional concern are the effects of the oil spill on the services the affected habitats provide. This includes both ecological services (such as maintenance of biodiversity) and human use services (such as recreation or appreciation).



Booms in place around Cat Island, Gulf Islands National Seashore, in an attempt to keep oil from reaching the shoreline

In the long-term, we don't know what the impacts will be. Using past incidents as a guide, the oil spill could affect fisheries, marine and terrestrial habitats, and other natural resources, as well as human use of affected areas, in the future. For example, herring, clams, mussels, pigeon guillemot, black oystercatchers, and sea otter populations in Alaska have not fully recovered twenty years after the Exxon Valdez oil spill. (For an analysis of the Exxon Valdez spill, see www.nps.gov/kefj/naturescience/upload/KEFJ_EVOS_1989-2009_qa.pdf.) In California, tarballs from the *S.S. Jacob Luckenbach*, a ship that sank off the coast in 1953, started washing up on the beaches of Point Reyes National Seashore in 2001, nearly 50 years later (www.ceres.ca.gov/htdocs/coast&ocean/summer2002/pages/ five.htm). While we can't predict the future, we know that the work we do now will aid in our ability to restore the ecosystems affected by the oil spill.

More Information

NPS Oil Spill Response www.nps.gov/aboutus/oil-spill-response.htm

Deepwater Horizon Response and Recovery www.restorethegulf.gov www.deepwaterhorizonresponse.com

Department of the Interior Deepwater Horizon Response www.doi.gov/deepwaterhorizon

NOAA Damage Assessment, Remediation, and Restoration Program www.darrp.noaa.gov



Oil spill response activities on West Ship Island, Gulf Islands National Seashore: crews conducting shoreline clean-up and oiled northern gannet being taken for cleaning

Parks at Risk

As oil continues to accumulate, parks in the immediate vicinity as well as in coastal areas farther from the spill (such as southern Florida) are being or may be affected:

Parks in the Gulf

- Big Cypress National Preserve, Florida
- Big Thicket National Preserve, Texas
- De Soto National Memorial, Florida
- Dry Tortugas National Park, Florida
- Everglades National Park, Florida
- Gulf Islands National Seashore, Florida and Mississippi
- Jean Lafitte National Historical Park & Preserve, Louisiana
- · Padre Island National Seashore, Texas

Atlantic Coast Parks That Could Be Affected

- Biscayne National Park, Florida
- · Canaveral National Seashore, Florida

NPS Actions

The NPS is working alongside other federal and state agencies to measure, protect, and eventually restore natural resources in parks and other areas along the Gulf of Mexico. At this time, two major activities are underway: initial response and damage assessment.

The initial response, led by the U.S. Coast Guard through an incident management structure, aims to eliminate or reduce risks to human

health and the environment, including controlling the spill. The NPS is involved in the following response activities:

- Participating in the crafting of response plans used to guide shoreline protection (e.g., placement of booms), wildlife response, and clean-up actions throughout the Gulf region
- Monitoring clean-up crews on NPS lands through the use of resource advisors to assure minimal damage from clean-up activities
- · Wildlife recovery

To perform the damage assessment, natural resource "trustees" for this oil spill—including the NPS, National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, states, and other agencies—follow the Natural Resource Damage Assessment process, which has three phases. During the pre-assessment phase, which determines whether injury to public trust resources has occurred, scientists collect information about the baseline condition of natural resources—the condition resources would be in without the spill. In the second phase, injury assessment/restoration planning, they assess the injury to resources and then select the restoration strategy. After phase two, they move on to restoration implementation to put the strategy into action.

Looking Ahead

The Deepwater Horizon oil spill will test the National Park Service's ability to perform our mandate—to protect natural and cultural resources and to provide for the enjoyment of these very same resources—in the areas affected by the spill. Hundreds of NPS employees from across the country are demonstrating their commitment to the mission and to the American public by working in the Gulf region to protect the parks' critical natural and cultural resources—including wildlife, birds, and historic structures—and serve the visiting public so that generations to come can continue to enjoy their national parks.