## Deepwater Horizon Natural Resource Damage Assessment and Restoration

## **Sea Turtles Restoration Type**

**Open Ocean Restoration Area** 



Sea turtles in the Gulf of Mexico are widely distributed and cross state, federal, and international boundaries. They rely on a system

of interconnected beach, nearshore, and offshore habitats for their survival. Five of the world's seven sea turtle species (green, loggerhead, hawksbill, leatherback, and Kemp's ridley) live in the Gulf and are listed as threatened or endangered under the U.S. Endangered Species Act. The Gulf of Mexico provides important habitats for sea turtle reproduction, feeding, migration, and refuge.

All five sea turtle species and their habitats throughout the northern Gulf of Mexico were exposed to the *Deepwater Horizon* (DWH) oil spill. Sea turtles were exposed to, and injured by, oil in the open ocean, in continental shelf waters, and on beaches. Spill response activities also directly injured sea turtles and disrupted or deterred sea turtle nesting.

The sea turtle restoration projects proposed for implementation support the following restoration approaches identified in the DWH Oil Spill Final Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement:

- Enhance sea turtle hatchling productivity and restore and conserve nesting beach habitat.
- Reduce sea turtle bycatch in commercial fisheries through identification and implementation of conservation measures.

## **Sea Turtles Restoration Goals**

- Implement a portfolio of restoration approaches to address all injured species and life stages.
- Address primary threats to sea turtles both on land and at sea.
- Restore sea turtles in areas that are relevant to each injured species and life stage.
- Support existing conservation efforts by ensuring consistency with recovery plans.

The Open Ocean Trustee Implementation Group is seeking public comments on the Draft Open Ocean Restoration Plan 2 and Environmental Assessment. For more information, please visit https://www.gulfspillrestoration.noaa.gov/restoration-areas/open-ocean. You can submit your comments online via the comment portal at https://parkplanning.nps.gov/OOTIGRP2 or by U.S. mail to U.S. Fish and Wildlife Service, P.O. Box 29649, Atlanta, GA 30345.





## Sea Turtles Restoration Type Proposed Projects

| PROJECT NAME  | PROJECT DESCRIPTION   | EST. COST AND<br>TIMEFRAME |
|---|---|----------------------------|
| REPLENISH AND PROTECT LIVING COASTAL AND MARINE RESOURCES   |   |                            |
| Gulf of Mexico Sea<br>Turtle Atlas  | Knowledge of sea turtle distribution migratory movements, preferred habitats, and threats is needed to inform restoration planning. This project would develop a central platform to access and view existing and future sea turtle data that are currently dispersed across various entities. It would provide a public, web-based interface that is available to stakeholders, restoration planners, and restoration managers to inform restoration planning and facilitate prioritization of restoration needs and activities. This would be accomplished by supporting a collaborative community of data providers and efficient means to share data. | \$5,700,000<br>15 Years    |
| Identifying Methods<br>to Reduce Sea Turtle<br>Bycatch in the Reef<br>Fish Bottom Longline<br>Fishery                     | Sea turtle bycatch in the Gulf of Mexico reef fish bottom longline (BLL) fishery has been documented by NOAA's Observer Program since 2005. This project would work to identify the factors contributing to sea turtle bycatch and identify opportunities for conservation measures through future restoration actions. NOAA data would be thoroughly analyzed to identify environmental factors and/or fishing practices that are associated with sea turtle bycatch. This project would inform future restoration to reduce bycatch in this fishery.  | \$290,000<br>2 Years       |
| Developing a Gulf-<br>wide Comprehensive<br>Plan for In-water Sea<br>Turtle Data Collection                               | Assessing the status of sea turtle populations across broad areas and multiple life stages is difficult, and as a result, data gaps exist. This project would develop a statistically sound plan for a coordinated, Gulf-wide network for the in-water data collection and compilation of critical information on sea turtle abundance, demographics, and biology on all sizes and life stages of sea turtles.  | \$655,000<br>2 Years       |
| Developing Methods<br>to Observe Sea<br>Turtle Interactions in<br>the Gulf of Mexico<br>Menhaden Purse<br>Seine Fishery   | Fisheries observers help to characterize bycatch by observing where, when, and how many<br>protected species are impacted by fishing gear so that bycatch reduction measures can<br>be developed. The menhaden purse seine fishery currently lacks an effective observer<br>methodology. The project would work with the Gulf of Mexico menhaden industry to<br>develop an effective methodology for observing sea turtle interactions in the fishery and<br>would fill knowledge gaps to inform future restoration to reduce interactions in this fishery.   | \$3,000,000<br>4 Years     |
| Reducing Juvenile<br>Sea Turtle Bycatch<br>Through Development<br>of Reduced Bar<br>Spacing in Turtle<br>Excluder Devices | Turtle excluder devices (TEDs) are installed on otter trawls to reduce sea turtle mortality, but<br>unfortunately, small juvenile turtles are still susceptible to capture due to their small size.<br>This project would develop new TED prototype configurations, with smaller bar spacing, that<br>would be evaluated and certified via the National Marine Fisheries Service small sea turtle<br>TED testing protocol and tested aboard commercial fishing vessels. Collectively, these results<br>could inform future restoration projects that may seek to implement new bycatch reduction<br>technology.   | \$2,153,000<br>4 Years     |
| Long-term Nesting<br>Beach Habitat<br>Protection for Sea<br>Turtles   | Nesting female turtles and their hatchlings are impacted by artificial lighting, coastal armoring, and other habitat loss. This project would protect valuable, high-density sea turtle nesting habitat through acquisition of land from willing sellers near the Archie Carr National Wildlife Refuge on the Florida Atlantic coast. The project would seek to protect approximately 20 miles of essential nesting habitat in perpetuity; reduce future land-based threats from development; and enhance sea turtle hatchling productivity.  | \$7,000,000<br>3 Years     |

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