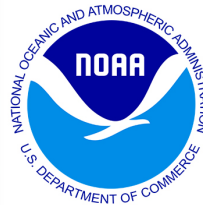


DEEPWATER HORIZON OIL SPILL

EXECUTIVE SUMMARY FOR THE LOUISIANA TRUSTEE IMPLEMENTATION GROUP FINAL RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT #4: NUTRIENT REDUCTION (NONPOINT SOURCE) AND RECREATIONAL USE

JULY 2018



Cover photographs courtesy of USDA Agricultural Research Service and the
Deepwater Horizon NRDA Trustee Council.

EXECUTIVE SUMMARY

On April 20, 2010, the Deepwater Horizon (DWH) mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from BP Exploration and Production's (BP's) Macondo well and causing loss of life and extensive natural resources injuries. Initial efforts to cap the well following the explosion were unsuccessful, and for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean (U.S. District Court for the Eastern District of Louisiana 2016). Oil spread from the deep ocean to the ocean surface and nearshore environment from Texas to Florida. The oil came into contact with, and injured, diverse natural resources such as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment and on natural resource services. The oil and other substances released from the well in combination with the extensive response actions together make up the DWH Oil Spill.

As an oil pollution incident, the DWH Oil Spill is subject to the provisions of the Oil Pollution Act (OPA) of 1990, which makes parties responsible for an oil spill liable for the costs of responding to and cleaning up the spill, as well as the costs of assessment and restoration needed to compensate for injuries to natural resources and the services they provide. OPA specifies that trustees responsible for representing the public's interest (in this case, state and federal agencies) must be designated to act on behalf of the public to assess the injuries and to address those injuries.

As required under OPA, the DWH Oil Spill Trustees (DWH Trustees) conducted a natural resource damage assessment (NRDA) and prepared the *Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement* (Final PDARP/PEIS) (DWH Trustees 2016). The DWH Trustees conducted a NRDA to

- assess the impacts of the DWH Oil Spill on natural resources in the Gulf of Mexico and the services those resources provide, and
- determine the type and amount of restoration needed to compensate the public for these impacts.

Following the NRDA, the DWH Trustees determined that the injuries caused by the DWH Oil Spill could not be fully described at the level of a single species, a single habitat type, or a single region. Rather, the injuries affected such a wide array of linked resources over such an enormous area that the effects of the DWH Oil Spill must be described as constituting an ecosystem-level injury. Consequently, the DWH Trustees proposed a comprehensive, integrated ecosystem restoration plan with a portfolio of restoration types that addresses the diverse suite of injuries that occurred at both regional and local scales, based on the following five overarching goals:

1. Restore and conserve habitat
2. Restore water quality
3. Replenish and protect living coastal and marine resources
4. Provide and enhance recreational opportunities
5. Provide for monitoring, adaptive management, and administrative oversight to support restoration implementation

These five goals work both independently and together to restore injured resources and services, as demonstrated in the following two excerpts from the Final PDARP/PEIS (DWH Trustees 2016):

- The goal of restoring water quality recognizes the intricate linkages between improving water quality, the health and resilience of coastal and marine habitats and resources, and the public's use of those resources.
- The goal of providing and enhancing recreational opportunities takes into account the myriad ways that the human community interacts with the natural environment. This goal involves improving on those experiences by maintaining healthy coastal and marine habitats and resources, increasing public access, and enhancing the quality of recreational activities.

Final Restoration Plan and Environmental Assessment

This document, herein referred to as the *Louisiana Trustee Implementation Group Final Restoration Plan/ Environmental Assessment #4: Nutrient Reduction (Nonpoint Source) and Recreational Use* and abbreviated as RP/EA, was prepared by the Louisiana Trustee Implementation Group (LA TIG) pursuant to OPA and is consistent with the DWH Trustees' findings in the Final PDARP/PEIS. The LA TIG comprises five Louisiana state trustee agencies and four federal trustee agencies:

- Louisiana Coastal Protection and Restoration Authority (CPRA)
- Louisiana Department of Natural Resources (LDNR)
- Louisiana Department of Environmental Quality (LDEQ)
- Louisiana Oil Spill Coordinator's Office (LOSCO)
- Louisiana Department of Wildlife and Fisheries (LDWF)
- U.S. Department of Commerce, represented by the National Oceanic and Atmospheric Administration (NOAA)
- U.S. Department of the Interior (DOI), represented by the U.S. Fish and Wildlife Service (USFWS) and National Park Service (NPS)
- U.S. Department of Agriculture (USDA)
- U.S. Environmental Protection Agency (EPA)

In accordance with 40 Code of Federal Regulations (CFR) 1508.12, the LA TIG designated EPA as the lead federal agency responsible for National Environmental Policy Act (NEPA) compliance for this RP/EA. The federal and state agencies of the LA TIG are acting as cooperating agencies for the purposes of compliance with NEPA in the development of this RP/EA. Each federal cooperating agency on the LA TIG intends to adopt, if appropriate, the NEPA analyses in this RP/EA. In accordance with 40 CFR 1506.3(a), each of the three federal cooperating agencies (DOI, NOAA, and USDA) participating on the LA TIG will review this RP/EA for adequacy in meeting the standards set forth in each agency's specific NEPA implementing procedures and decide whether to adopt the analysis in this RP/EA. Adoption of this RP/EA would be completed via signature on the relevant NEPA decision document.

The LA TIG has an allocation of \$5 billion for restoration activities in the Louisiana Restoration Area, which includes Early Restoration projects approved prior to the settlement with BP in 2016. Because of the significant injury to recreational use services as a result of the DWH Oil Spill, \$20 million of these funds are dedicated to the Nutrient Reduction (Nonpoint Source) restoration type, and \$60 million of these total funds are dedicated to the Provide and Enhance Recreational Opportunities restoration type.

One focus of this RP/EA is implementation of the Final PDARP/PEIS restoration type, Nutrient Reduction (Nonpoint Source). This restoration type is intended to reduce nutrient pollution and provide ecosystem-scale benefits to coastal habitats and resources chronically threatened by nutrients and co-pollutants causing water quality degradation. Excess nutrient inputs to Louisiana's coastal estuaries are associated

with harmful algal blooms and oxygen depleted waters, i.e., hypoxic zones. Algal blooms and hypoxic zones in turn negatively impact the spawning habitats and food sources on which the region's economically valuable fisheries rely (Mississippi River/Gulf of Mexico Watershed Nutrient Task Force 2015).

Another focus of this RP/EA is implementation of the PDARP/PEIS restoration type, Provide and Enhance Recreational Opportunities. This restoration type is intended to address recreational use loss as a result of the DWH Oil Spill, including restricted and decreased access to recreational fishing and camping opportunities among other outdoor recreational activities. Impacts from the DWH Oil Spill include oiled shorelines, the closure of fishing and recreational areas, and the cancellation of recreational trips. These impacts resulted in losses to the public's use of natural resources for outdoor recreation, including fishing, boating, vacationing, camping, beach going, and other recreational activities. These impacts affected the entire Louisiana shoreline (DWH Trustees 2016:Chapter 4).

In developing this RP/EA's reasonable range of alternatives, the LA TIG considered the following:

- OPA screening criteria
- Specific goals identified in the Final PDARP/PEIS under the Provide and Enhance Recreational Opportunities and Nutrient Reduction (Nonpoint Source) Restoration Types
- Other criteria identified by the DWH Trustees
- Input from the public
- The current and future availability of funds under the DWH Oil Spill NRDA settlement payment schedule

In total, the LA TIG identified 31 projects in the range of reasonable alternatives in addition to the No Action Alternative. These projects are intended to provide nutrient reduction benefits and address recreational use loss in the Louisiana Restoration Area.

Nutrient reduction projects considered in this RP/EA would help restore and enhance the ecological and hydrological integrity of the state's coastal watersheds by reducing rural nonpoint source pollution through the implementation of conservation practices (CPs) on agricultural lands. Projects restoring lost recreational use emphasize the creation and enhancement of recreational infrastructure, enhanced recreational access or opportunity, and educational and outreach components that promote use of the natural resources and encourage conservation and stewardship for them, consistent with the injuries caused by the DWH Oil Spill. After evaluating all 31 projects included in the reasonable range of alternatives, the LA TIG is proposing 23 of these projects (four of eight nutrient reduction projects and 19 of 23 recreational use projects) as preferred alternatives for implementation.

Tables ES-1 and ES-2 identify the projects evaluated in this RP/EA and which of those projects are being proposed as preferred alternatives for implementation.

Table ES-1. Nutrient Reduction Alternatives

Alternative Name	Location (Parish)	Preferred Alternative
Nutrient Reduction on Dairy Farms in St. Helena and Tangipahoa Parishes	St. Helena and Tangipahoa	Yes
Nutrient Reduction on Dairy Farms in Washington Parish	Washington	Yes
Nutrient Reduction on Cropland and Grazing Land in Bayou Folse	Lafourche and Terrebonne	Yes
Nutrient Reduction on Cropland and Grazing Land in Concordia, Catahoula, and Tensas Parishes	Concordia, Catahoula, and Tensas	No
Nutrient Reduction on Cropland and Grazing Land in Iberia, St. Mary, and Vermilion Parishes	Iberia, St. Mary, and Vermilion	No

Alternative Name	Location (Parish)	Preferred Alternative
Winter Water Holding on Cropland in Vermilion and Cameron Parishes Plus Agricultural Best Management Practices	Vermilion and Cameron	Yes
Winter Water Holding on Cropland in St. Mary, St. Martin, Iberia, Lafayette, Acadia, and Jefferson Davis Parishes	St. Mary, St. Martin, Iberia, Lafayette, Acadia, and Jefferson Davis	No
Winter Water Holding on Cropland in Concordia, Tensas, and Catahoula Parishes	Concordia, Tensas, and Catahoula	No

Table ES-2. Recreational Use Alternatives

Alternative Name	Location (Parish)	Preferred Alternative
Pass-a-Loutre Wildlife Management Area Crevasse Access	Plaquemines	Yes
Pass-a-Loutre Wildlife Management Area Campgrounds	Plaquemines	Yes
Grand Isle State Park Improvements	Jefferson	Yes
Chitimacha Boat Launch	St. Mary	Yes
Sam Houston Jones State Park Improvements	Calcasieu	Yes
Pointe-aux-Chenes Wildlife Management Area Recreational Use Enhancement	Terrebonne	Yes
WHARF Phase 1	Jefferson	Yes
Bayou Segnette State Park Improvements	Jefferson	Yes
Atchafalaya Delta Wildlife Management Area Access	St. Mary	Yes
Atchafalaya Delta Wildlife Management Area Campgrounds	St. Mary	Yes
Rockefeller Piers and Rockefeller Signage	Cameron	Yes
St. Bernard State Park Improvements	St. Bernard	Yes
Cypremort Point State Park Improvements	St. Mary	Yes
The Wetlands Center	Jefferson	Yes
Recreational Use Improvements at Barataria Preserve in Jefferson Parish, Jean Lafitte National Historical Park and Preserve, Barataria Preserve Unit	Jefferson	Yes
Des Allemands Boat Launch	St. Charles	Yes
Middle Pearl	St. Tammany	Yes
Improvements to Grand Avoille Boat Launch	St. Mary	Yes
Belle Chasse	Plaquemines	Yes
Caminada Pass Bridge Fishing Pier Restoration, Jefferson Parish, Region 2, Barataria Basin	Jefferson	No
Palmetto Island State Park Improvements	Vermilion	No
Louisiana Swamp Exhibit at Audubon Zoo	Orleans	No
Louisiana Wetlands Gallery at Audubon Aquarium	Orleans	No

The LA TIG has evaluated the environmental consequences of the projects comprising the reasonable range of alternatives, and the preliminary findings indicate that no significant environmental impacts are anticipated within the context of NEPA. The LA TIG has prepared this RP/EA to inform the public about DWH NRDA restoration planning efforts and to seek public comment on the reasonable range of alternatives, including the 23 preferred alternatives and the preliminary finding of no significant impact.