# Deepwater Horizon Oil Spill Draft Phase I Early Restoration Plan and Environmental Assessment

Prepared by the Deepwater Horizon Natural Resource Trustees from

State of Alabama (Department of Conservation and Natural Resources; Geological Survey of Alabama)

State of Florida (Department of Environmental Protection; Fish and Wildlife Conservation Commission)

State of Louisiana (Coastal Protection and Restoration Authority; Department of Environmental Quality; Department of Wildlife and Fisheries; Department of Natural Resources; Oil Spill Coordinator's Office)

State of Mississippi (Department of Environmental Quality)

State of Texas (Texas Commission on Environmental Quality; Texas General Land Office; Texas Parks and Wildlife Department)

Department of the Interior

National Oceanic and Atmospheric Administration

# Executive Summary

## Introduction

The Gulf of Mexico is a priceless national treasure. Its natural resources – water, fish, beaches, reefs, marshes, oil and gas – are the economic engine of the region. The Gulf of Mexico is likewise vitally important to the entire nation as a bountiful source of food, energy and recreation. The Gulf Coast's unique culture and natural beauty are world-renowned. There is no place like it anywhere else on Earth.

On April 20, 2010 the eyes of the world focused on an oil platform in the Gulf, approximately 50 miles off shore, floating in very deep water. The mobile drilling unit *Deepwater Horizon*, which was being used to drill an exploratory well for BP Exploration and Production, Inc. (BP), violently exploded, then caught fire, and eventually sank, tragically killing 11 workers. But that was only the beginning of the tragedy. Oil and other substances from the rig and the well head immediately began flowing unabated approximately one mile below the surface. Initial efforts to cap the well were unsuccessful, and for 87 days oil spewed unabated into the Gulf. Oil eventually covered a vast area of thousands of square miles, and carried by the tides and currents reached the coast, polluting beaches, bays, estuaries and marshes from the Florida panhandle to west of the mouth of the Mississippi River. At the height of the spill, approximately 37% of the open water in the Gulf was closed to fishing. Before the well was finally capped, an estimated 5 million barrels (210 million gallons) escaped from the well over a period of approximately 3 months. In addition, approximately 771,000 gallons of dispersants were applied to the waters of the spill area, both on the surface and at the well head one mile below. It was an environmental disaster of unprecedented proportions. It also was a devastating blow to the resource-dependent economy of the region.

While we do not yet know the extent of the natural resources that were impacted by the spill, we do know that the impacts were widespread and extensive and will take years to assess completely. The full spectrum of the impacts from this spill, given its magnitude, duration, depth and complexity, will be difficult to determine but the Trustees are working hard to assess every aspect of the injury, both to individual resources and lost recreational use of them, as well as the cumulative impacts of spill. Affected natural resources include ecologically, recreationally, and commercially important species and their habitats across a wide swath of the coastal areas of Alabama, Florida, Louisiana, Mississippi, and Texas, and a huge area of open water in the Gulf of Mexico. When injuries to migratory species such as birds, whales, tuna and turtles are considered, the impacts of the spill could be felt across the United States and around the globe.

## The Role of the Trustees

The states and the federal government uniformly believe that restoration of the natural resources in the Gulf must begin as soon as possible. This proposed plan represents the first step on the road to a full recovery for the region, and these projects are being paid for by those responsible for the damages. Under the Oil Pollution Act (OPA), which became law after the Exxon Valdez oil spill, the federal government, impacted state governments (and federally recognized Indian tribes, and foreign governments) act as "trustees" on behalf of the general public. Trustees are

charged with recovering from the responsible parties damages to restore injuries to the public's natural resources. Trustees first must assess the nature and extent of natural resource injury, and then develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent of the injured natural resources and services those resources provide under their trusteeship.

This Draft Early Restoration Plan contains the initial plan for the first of a long series of restoration actions that will be undertaken by the Trustees. The ultimate goal of the Trustees is a comprehensive and long lasting repairs to the Gulf ecosystem, and the communities that depend on it, to the condition they would have been in if there had never been a spill, and to compensate the public for its lost use of the resources during the time they were damaged.

The federal and state natural resource Trustees for the *Deepwater Horizon* oil spill have been working together since the early days of the spill. This has been an unprecedented state-federal collaboration, with a unity of vision and purpose, and a strong desire by all the Trustees to act as quickly as possible to restore the Gulf. The *Deepwater Horizon* oil spill Trustees are:

- the United States Department of the Interior (DOI), as represented by the National Park Service, United States Fish and Wildlife Service, and Bureau of Land Management;
- the National Oceanic and Atmospheric Administration (NOAA), on behalf of the United States Department of Commerce;
- the State of Louisiana's Coastal Protection and Restoration Authority, Oil Spill Coordinator's Office, Department of Environmental Quality, Department of Wildlife and Fisheries and Department of Natural Resources;
- the State of Mississippi's Department of Environmental Quality;
- the State of Alabama's Department of Conservation and Natural Resources and Geological Survey of Alabama;
- the State of Florida's Department of Environmental Protection and Fish and Wildlife Conservation Commission; and
- for the State of Texas: Texas Parks and Wildlife Department, Texas General Land Office and Texas Commission on Environmental Quality.[1]

Trustee efforts to assess the injuries to natural resources began within hours of the explosion and continue to the present. From the outset, the Trustees expected that the restoration of resources injured by the spill would be a massive undertaking, and that during the assessment, injuries would continue to accrue. The Trustees decided that because of the pervasive and ongoing nature of the damages to natural resources in the region, it would be in the best interest of the public to accelerate restoration and begin implementing projects if possible even before the completion of the full damage assessment. The Trustees approached BP in the fall of 2010, and negotiations on an early restoration fund commenced. Exactly one year after the explosion on the *Deepwater Horizon* rig, the Trustees and BP entered into an unprecedented agreement whereby BP has set aside one billion dollars to fund early restoration projects agreed upon by BP and the Trustees.

[1] The Department of Defense (DOD) is also a trustee of natural resources associated with DOD-managed land on the Gulf Coast, which are included in the ongoing NRDA, but DOD is not a signatory of the Framework Agreement nor a participant in this Phase 1 Early Restoration Plan.

This early restoration agreement with BP, known as the "Framework Agreement"[2], represents the initial step toward the restoration of injured natural resources in the Gulf. It is a down payment against the ultimate claim for damages for the spill. The Trustees expect to be able to fund more rounds of early restoration projects in addition to this initial set. The Trustees continue to assess the injuries to natural resources and services resulting from the spill and pursue the ultimate claim for damages. Restoration work will take many years to complete, and long term monitoring and adaptive management of the Gulf ecosystem will likely continue for decades until the Trustees can be certain that the public has been fully compensated for its losses.

## How Early Restoration Will Work

Given that it has never been done at this scale this soon after an incident, the Trustees have approached the task of planning for early restoration with great care and forethought. Although these projects have been tentatively selected very early in the natural resource damage (NRD) assessment process, the Trustees will comply with the OPA and the National Environmental Policy Act, and are seeking the public's input on this initial set. Thus, this Draft Early Restoration Plan also serves as an Environmental Assessment (DERP/EA). It is intended to describe and evaluate this initial proposed set of projects and the "no action" alternative to early restoration that the Trustees considered. Most importantly, this proposed plan includes a description and quantification of the restoration benefits estimated to be provided by each project (referred to as "NRD Offsets") that have been agreed to by BP and the Trustees in advance of project implementation. The NRD Offsets have been estimated by methods reflecting the natural resources and/or services expected to result from the project. This plan does not attempt to quantify the injury to natural resources; instead it evaluates a set of projects proposed to expedite the restoration process while the full assessment and restoration planning process continues.

The proposed projects in this DERP/EA represent only the first phase of the early restoration process. The Trustees continue to evaluate additional projects already submitted by the public for consideration, as well as any new projects as they are received, with the intent of proposing additional projects in subsequent rounds of the early restoration process. At the end of the NRDA process, the Trustees will credit all the NRD Offsets identified for approved early restoration projects against their assessment of the **total** injury for the spill. Restoration beyond early restoration projects will be required to fully compensate the public for natural resource losses from the *Deepwater Horizon* oil spill.

## The Early Restoration Project Evaluation Criteria

Early restoration alternatives have been evaluated based on criteria included in the applicable damage assessment and restoration regulations and programs, the Framework Agreement, as well as factors that are otherwise key components in planning early restoration. Under the OPA regulations, restoration alternatives are evaluated with regard to:

- The cost to carry out the alternative;
- The extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or

[2] http://www.restorethegulf.gov/sites/default/files/documents/pdf/framework-for-early-restoration-04212011.pdf.

compensating for interim losses (the ability of the restoration project to provide comparable resources and services, that is, the nexus between the project and the injury);
- The likelihood of success of each alternative;
- The extent to which each alternative will prevent future injury as a result of the incident, and avoid collateral injury as a result of implementing the alternative;
- The extent to which each alternative benefits more than one natural resource and/or service; and
- The effect of each alternative on public health and safety.

Under the OPA regulations, if the Trustees conclude that two or more alternatives are equally preferable, the most cost-effective alternative must be chosen.

In addition, the Framework Agreement provides that projects:

- Contribute to making the environment and the public whole by restoring, rehabilitating, replacing, or acquiring the equivalent of natural resources or services injured as a result of the *Deepwater Horizon* Oil Spill or response (collectively, "incident"), or compensating for interim losses resulting from the incident;
- Address one or more specific injuries to natural resources or services associated with the incident;
- Seek to restore natural resources, habitats, or natural resource services of the same type, quality, and of comparable ecological and/or human-use value to compensate for identified resource and service losses resulting from the incident;
- Are not inconsistent with the anticipated long-term restoration needs and anticipated final restoration plan; and
- Are feasible and cost-effective.

The Trustees also took into account several practical considerations that, while not legally mandated, were useful and permissible to help screen the large number of potential qualifying projects. For example, Trustees:

- took into account how quickly a given project could begin producing environmental benefits;
- sought a diverse set of projects providing benefits to an array of greatly injured resources;
- focused on types of projects with which they have significant experience, allowing them to predict costs and likely success with a relatively high degree of confidence and making it easier to reach agreement with BP on the Offsets attributed to each project; and
- gave preference to projects that were closer to being ready to implement.

### The Early Restoration Project Selection Process

Once the Trustees secured the $1 billion from BP under the Framework Agreement, they each invited the public to provide restoration project ideas and proposals. As a result, the Trustees received hundreds of proposals, which were made publicly available on http://www.gulfspillrestoration.noaa.gov/restoration/give-us-your-ideas/view-submitted-projects/, so that the full range of proposals could be viewed by the public. The Trustees

designed a short project selection process in order to ensure that restoration would begin as soon as possible. Figure ES-1 depicts the general selection process. The steps in the process are: (1) project solicitation; (2) project screening and identification; (3) negotiation; (4) public review and comment; and (5) final selection.

Once the Trustees received public input on projects, they acted promptly to identify those project proposals that met the selection criteria, and then narrowed the projects down to an initial group to move forward into discussion on NRD Offsets with BP. BP has agreed to the NRD Offsets listed in this proposed plan, provided that they are ultimately selected by the Trustees after receiving and evaluating the public's comments. This draft plan covers only the initial set of projects proposed as part of the early restoration process. Multiple rounds of project identification, negotiation with BP, and public comment will continue until the entire $1 billion in funding is committed.

## Proposed Projects

This Draft restoration plan consists of 8 projects that are listed in Table ES-1, and more fully described in this document. They address an array of injuries and are located throughout the Gulf (Figure ES-2). Specifically, this proposed plan includes two oyster projects, two marsh projects, a nearshore artificial reef project, two dune projects, and a boat ramp enhancement project. These projects address injuries in 4 of the 5 impacted states, on the coast and offshore, to mammals and marine organisms, and/or compensate for lost recreational opportunities for the public. While this plan includes a suite of proposed projects, each project was viewed as independent from the others. This Phase I Early Restoration Plan will be finalized after consideration of public comment and may include some or all of these proposed projects.

The Trustees anticipate that additional projects will be proposed and approved in subsequent rounds of the early restoration process until funds made available under the Framework Agreement are exhausted. It is important to emphasize that restoration proposals developed pursuant to the Framework Agreement are not intended to provide the full extent of restoration needed to satisfy the Trustees' claims against BP. Restoration will continue until the public is fully compensated for the natural resources and services that were lost as a result of the spill.

## Next Steps

The public will have sixty (60) days to review and comment on this proposed plan. Comments on the DERP/EA can be submitted through February 14, 2012 by one of following methods:

- Via the Web:
    - http://www.gulfspillrestoration.noaa.gov
    - http://www.doi.gov/deepwaterhorizon
    - http://losco-dwh.com/EarlyRestorationPlanning.aspx
    - www.outdooralabama.com/nrdaprojects/
    - www.mdeqnrda.com
    - www.dep.state.fl.us/deepwaterhorizon

- To submit hard copy comments, write: U.S. Fish and Wildlife Service, P.O. Box 2099, Fairhope, AL 36533.

The Trustees will hold a series of public meetings across the Gulf Coast to facilitate the public review and comment process. After close of the public comment period, the Trustees will consider all input received during the public comment period and then finalize the Phase I Early Restoration Plan (ERP). A summary of comments received and the Trustees' responses will be included in the Final ERP/EA. **Please note that if you include your address, phone number, e-mail address, or other personal identifying information in your comment, your entire comment, including your personal identifying information, could be made publicly available.**

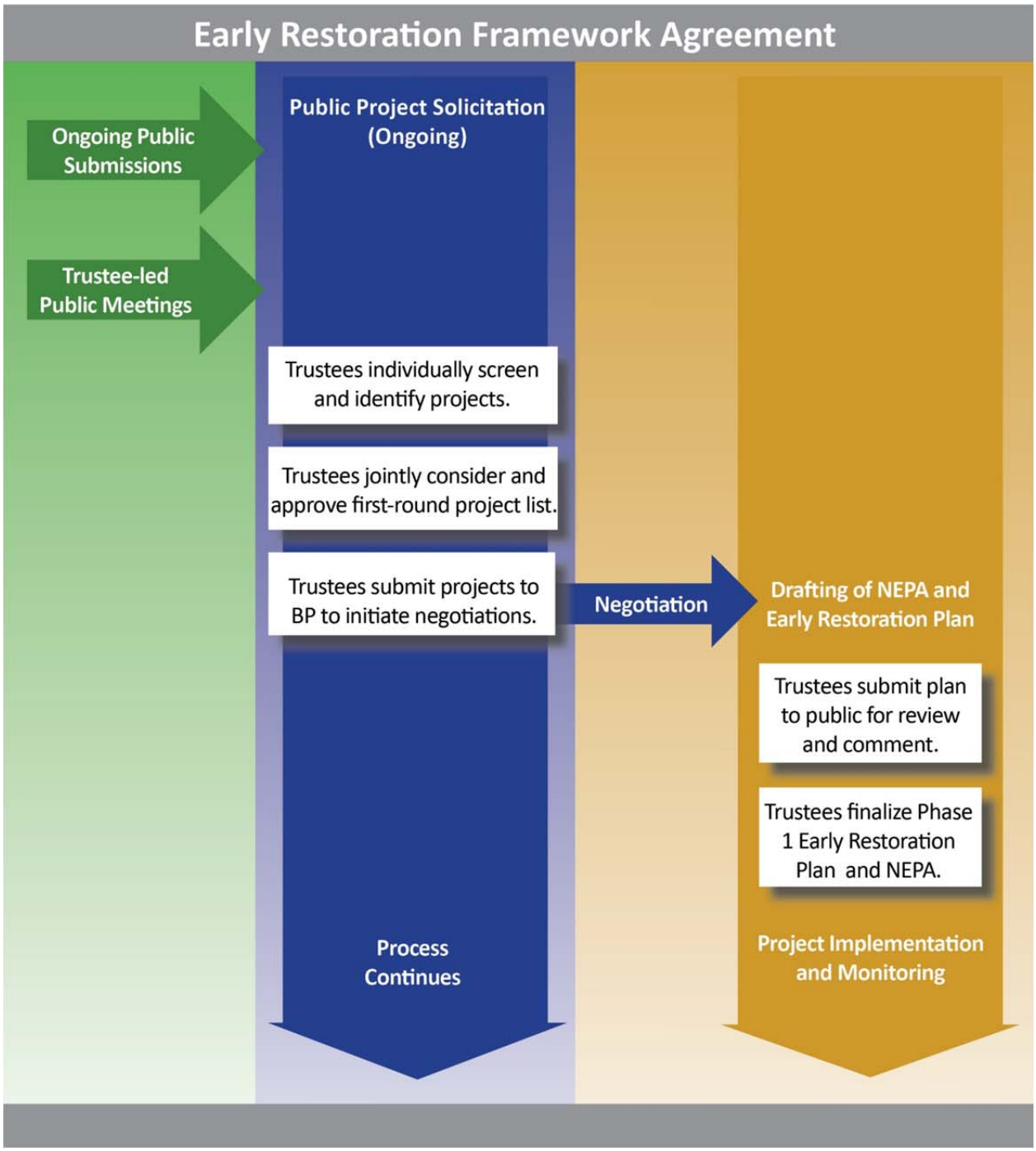


Figure ES-1. General Early Restoration project selection process.

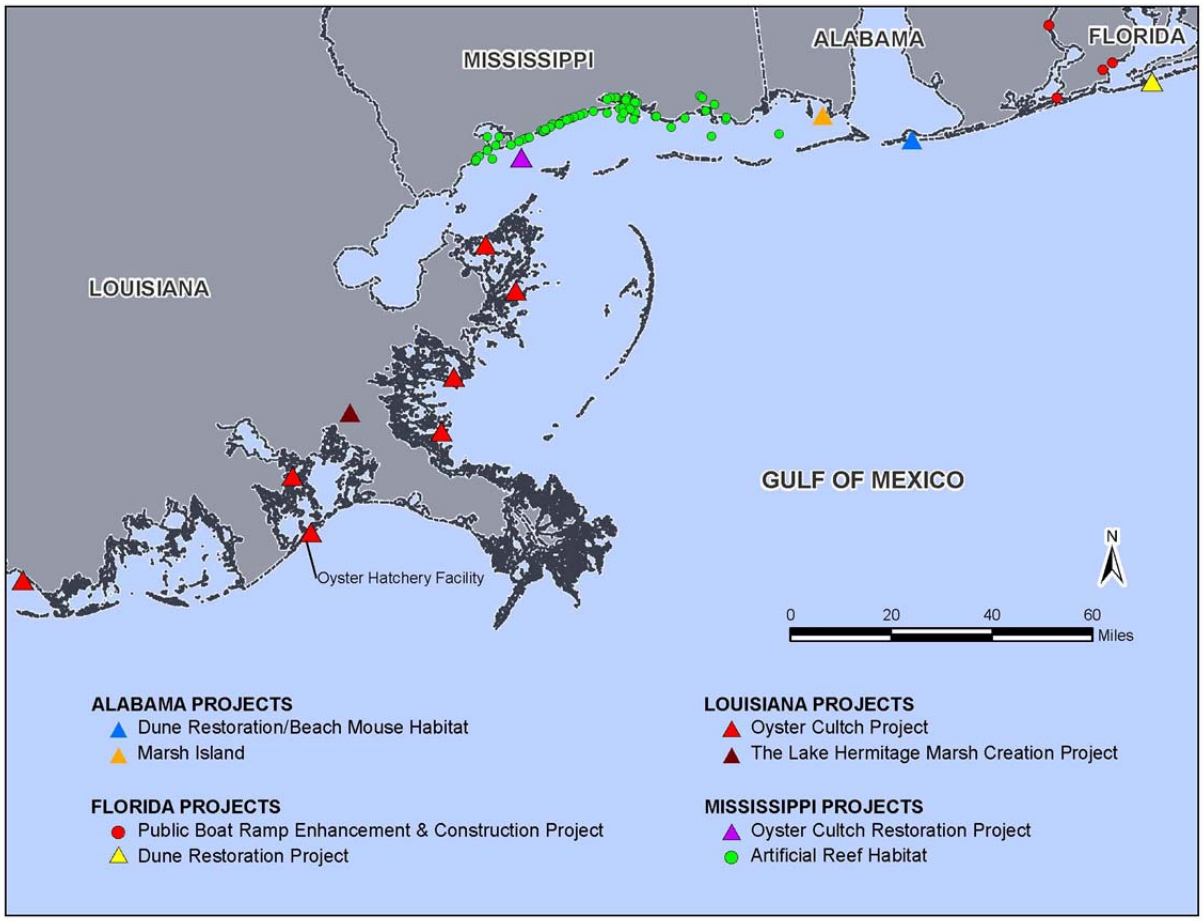


Figure ES-2: Location of Phase I Early Restoration proposed projects.

Table ES-1. Phase I Early Restoration projects included in the proposed action.

| Project Title | Location (Parish/County and State) | Proposed Restoration | Estimated Cost | Resources Benefitted |
|---|---|---|---|---|
| Lake Hermitage Marsh Creation – NRDA Early Restoration Project | Plaquemines Parish, Louisiana | Approximately 104 acres of marsh creation | $13,200,000 | Brackish Marsh in the Barataria Hydrologic Basin |
| Louisiana Oyster Cultch Project | St. Bernard, Plaquemines, Lafourche, Jefferson, and Terrebonne Parishes, Louisiana | Approximately 850 acres of cultch placement on public oyster seed grounds; construction of improvements to an existing oyster hatchery | $14,874,300 | Oysters in Coastal Louisiana |
| Mississippi Oyster Cultch Restoration | Hancock and Harrison Counties, Mississippi | 1,430 acres of cultch restoration | $11,000,000 | Oysters in Mississippi Sound |
| Mississippi Artificial Reef Habitat | Hancock, Harrison, and Jackson Counties, Mississippi | 100 acres of nearshore artificial reef | $2,600,000 | Nearshore Habitat in Mississippi Sound |
| Marsh Island (Portersville Bay) Marsh Creation | Mobile County, Alabama | protecting 24 existing acres of salt marsh; creating 50 acres of salt marsh; 5,000 linear feet of tidal creeks | $9,400,000 | Coastal Salt Marsh in Alabama |
| Alabama Dune Restoration Cooperative Project | Baldwin County, Alabama | 55 acres of primary dune habitat | $1,145,976 | Coastal Dune and Beach Mouse Habitat in Alabama |
| Florida Boat Ramp Enhancement and Construction | Escambia County, Florida | Four boat ramp facilities | $4,406,309 | Human Use in Escambia County, FL |
| Florida (Pensacola Beach) Dune Restoration | Escambia County, Florida | 20 acres of coastal dune habitat | $585,898 | Coastal Dune Habitat in Escambia County, FL |