



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard
Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/RD

October 14, 2010

Mr. Robert Reeves
Senior Vice President and General Counsel
ARCO Petroleum Corporation
Legal Department
1201 Lake Robbins Drive
The Woodlands, Texas 77380

Re: Emergency Restoration Projects for the *Deepwater Horizon* Oil Spill – Presentation to Responsible Parties pursuant to 33 U.S.C. §2713(a)

Dear Mr. Reeves:

This letter is written on behalf of the state and federal Natural Resource Trustee agencies charged with public trust responsibilities for natural resources injured and threatened by the *Deepwater Horizon* Oil Spill (the "Oil Spill"). The designated state and federal trustees (individually referred to as "Trustee" and collectively, the "Trustees") include the following state and federal agencies: the United States Department of the Interior (on behalf of the Fish and Wildlife Service, the National Park Service, the Bureau of Land Management, and the Bureau of Indian Affairs); the National Oceanic and Atmospheric Administration; the Louisiana Coastal Protection and Restoration Authority, (Louisiana's Lead Trustee), the Oil Spill Coordinator's Office, the Louisiana Department of Environmental Quality, the Louisiana Department of Wildlife and Fisheries, and the Louisiana Department of Natural Resources, for Louisiana; the Mississippi Department of Environmental Quality, for Mississippi; the Alabama Department of Conservation and Natural Resources and the Geological Survey of Alabama, for Alabama; the Florida Department of Environmental Protection, for Florida; and the Texas Parks and Wildlife Department, the Texas General Land Office and the Texas Commission on Environmental Quality, for Texas.

The Trustees have authority under the Oil Pollution Act ("OPA") (33 U.S.C. §§ 2701 et seq.), the Natural Resource Damage Assessment Regulations (15 C.F.R. Part 990) promulgated pursuant to OPA ("OPA NRDA Regulations"), and related state laws, to identify ongoing risks to resources resulting from the Oil Spill and/or related removal actions. The OPA NRDA regulations, at 15 C.F.R. 990.26, provide the Trustees with authority to implement emergency restoration actions that would prevent or reduce any continuing danger, and mitigate ongoing injury, to natural resources. Accordingly, as part of the Natural Resource Damage Assessment ("NRDA") process for the Oil Spill, the Trustees have identified, to date, three projects that address such ongoing risks and/or impacts to trust resources.¹ Enclosed are fact sheets briefly describing these emergency restoration actions, which the Trustees have determined will avoid

1. The State of Louisiana does not join in this request to BP but does not object to the proposed emergency restoration projects.

or reduce injuries to natural resources. These are not an exhaustive list of all potential emergency restoration projects, and the effort to identify preventive measures to avoid or reduce irreversible losses and continuing danger to natural resources is ongoing.

By this letter, and pursuant to 33 U.S.C. §2713(a) and 15 C.F.R. § 990.26(c), the Trustees present these projects to the Responsible Parties for the Oil Spill, and request that the Responsible Parties provide funding for them. We have directed this letter to you on behalf of the entities set forth in the address above. If this letter and enclosures should go to others, we ask that you kindly forward them to the appropriate persons and/or entities. Please be advised that the budgets for the proposed projects are estimates only and actual costs may vary once detailed planning, design, and implementation begin. Further, of course, the emergency restoration projects address only certain resources and potential injuries and do not represent the full scope or extent of actual natural resource injuries and losses that may have occurred and may be continuing to occur as a result of the Oil Spill and consequent removal actions.

In order to expedite these emergency restoration discussions, the Trustees request that you contact counsel for DOI (Holly Deal) or for NOAA (M.E. Rolle), to set up a meeting to fully discuss funding of the emergency restoration projects. Ms. Deal can be reached at [REDACTED]. Ms. Rolle can be reached at [REDACTED]. The Trustees request a response to this letter no later than one week from the date on which it is received. If you decide not to provide funding for these emergency restoration projects, the Trustees would appreciate being so informed at your earliest opportunity so that they may avoid unnecessary delay in filing a claim with the National Pollution Fund Center to obtain funding for these projects, should the Trustees opt to fund these projects through this mechanism.

Thank you for your consideration of this matter.

Sincerely,



Cynthia K. Dohner
Regional Director, FWS Southeast Region
Authorized Official for DOI
On behalf of the Trustees

Enclosures

cc: Troy Baker (NOAA)
Dr. Nick Tew (Geological Survey of Alabama)
M. Barnett Lawley (Alabama Department of Conservation and Natural Resources)
Lee Edminston (Florida Department of Environmental Quality)
Garret Graves (Louisiana Coastal Protection and Resource Authority)
Roland Guidry (Louisiana Oil Spill Coordinator's Office)
Peggy Hatch (Louisiana Department of Environmental Quality)
Robert Barham (Louisiana Department of Wildlife and Fisheries)
Bob Harper (Louisiana Department of Natural Resources)
Trudy D. Fisher (Mississippi Department of Environmental Quality)
Don Pitts (on behalf of Texas Trustees)
Harriet M. Deal (DOI)
Charles McKinley (DOI)
John Carlucci (DOI)
Christopher Plaisted (NOAA)
M. E. Rolle (NOAA)
Will Gunter (ALDCNR)
Bennett Bearden (GSA)
Stephanie Morris (LOSCO)
Drue Banta (LACP&R)
Lisa Ouzts (MSDEQ)
Christa McLintock (behalf of Texas Trustees)
Brian Israel (BP)
James Dragna (Anadarko and MOEX entities)
Kerry J. Miller (Transocean and Triton entities)

*Deepwater Horizon Oil Spill
Emergency Restoration Project Proposal
September, 2010*

Project Name: Mississippi Alluvial Valley WMA's Migrating and Wintering Waterfowl and Shorebird Project

Project Location: Howard Miller WMA in Issaquena County, Mississippi
Malmaison WMA in Leflore County, Mississippi

States Impacted: Mississippi

Lead and Supporting Agencies: DOI - USFWS

Agency Point of Contact:

Ed Penny
MDWFP Waterfowl Program Coordinator
edp@mdfwfp.state.ms.us
[REDACTED]

Sandy Tucker
U.S. Fish and Wildlife Service
FW4NRDALEAD@fws.gov
[REDACTED]

SECTION A: Project Description

The Mississippi Department of Wildlife, Fish, and Parks (MDWFP) Waterfowl Program staff proposes the following projects on state-owned Wildlife Management Areas (WMA) to attempt to modify overwinter and migratory behavior in wetland dependent birds. These projects are aimed at minimizing and/or preventing injury by reducing risk of exposure to birds that may use habitats affected by oil from the Deepwater Horizon event. Total cost of implementation is \$168,900.

Howard Miller WMA Wetland Enhancement Project (\$115,900): This project would improve water management of approximately 2,400 acres at Howard Miller WMA in Issaquena County, Mississippi. This project will install 4 water control structures, install 5 well power units on existing water wells and repair degraded levees. Once funds are received, work can be completed in 14-21 days. Immediate completion of this work will facilitate flooding of approximately 2,400 acres of moist soil units on the WMA. No permitting or engineering issues exist.

Malmaison WMA Wetland Enhancement Project (\$53,000): This project will improve 58 acres of moist soil units for shorebirds, wading birds, and waterfowl at Malmaison WMA in Leflore County, Mississippi. The project would repair levees, install 5 water control structures, and reset an existing water control structure. Once funds are received, work can be completed in 21-31 days. No permitting or engineering issues exist.

These projects will attempt to modify migratory and wintering behavior in wetland dependent birds by providing alternate habitat that will either quicken their migratory journey by improving body condition (certain shorebird species) or extend their overwintering stay by increasing food and shelter (certain waterfowl species and certain shorebird species). Furthermore, this project will ensure productive habitat independent of rainfall rate. If periods of drought occur, birds will use tidal areas and this increases their risk to oil if it is present. This project provides alternative habitat that can prevent additional injury should birds seek coastal areas that are oiled.

SECTION B: Estimated Project Cost:

Total Project Cost = \$168,900

SECTION C: Additional Material to Facilitate Environmental Project Consideration:

1. Permits/Consultations (if required):

All applicable federal, state, and local permits will be acquired prior to construction.

2. Time to Implementation:

30 days

*Deepwater Horizon Oil Spill
Emergency Restoration Project Proposal
September, 2010*

Project Name: Plant Material Collection, Storage, Propagation, and Planting – Gulf Coast

Project Location: All terrestrial vegetated areas, state and federal, that have been affected, or are highly likely to be affected, by the spill

States Impacted: TX, LA, MS, AL, FL

Lead Agency (and supporting agencies as appropriate): DOI – NPS
NOAA, supporting agency

Agency Point of Contact: Mark VanMouwerik, Sam Whittington, DOI-NPS
Cheryl Brodnax, NOAA

Contact Information – VanMouwerik: mark_vanmouwerik@nps.gov

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Whittington: Sam_Whittington@nps.gov

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Brodnax: Cheryl.Brodnax@noaa.gov

SECTION A: Project Description:

This project involves a centrally coordinated approach to replanting vegetated shorelines critically injured by the oil spill. Although the majority of the plant material will be transplanted from non-impacted areas or acquired from local nurseries, in some cases where local genotype is rare and important, this may involve collecting plant materials (e.g. seeds, cuttings) first, propagating them, and then distributing and planting the material. The project includes emergent vegetation within the gulf states and federal bureaus where vegetation has been moderately or heavily damaged because of the spill, or where response-related injuries to shoreline occurred. This project is intended to be a first-step at restoring those areas that are at significant risk of further erosion and is not proposed as a means of restoring for all injuries.

This project is being proposed as emergency restoration because of the trustee objective to prevent additional injury related to the spill. Vegetative mortality caused by oiling reduces above and below ground biomass which provides stability to underlying sediments. As root material deteriorates, sediment is more susceptible to erosion. Shoreline impacts may be exacerbated by accelerated erosion in areas that could otherwise be stabilized through the rapid planting of native vegetation. Failure to act quickly could result in unnecessary additional resource loss. Additionally, vegetative mortality negatively affects habitat and can have injurious indirect effects on resident fauna. Rapid planting of native vegetation here will minimize further injuries to fauna.

In order to streamline this effort and maximize efficiencies and minimize costs, the National Park Service' Denver Service Center (DSC) will manage this project. The DSC will use its project management and contracting expertise along with its technical capabilities and existing contractual agreements to implement the project. Supporting agencies such as NOAA and the state trustee agencies will partner with DSC, as may the Natural Resources Conservation Service (NRCS) Plant Material Centers. The DSC has existing indefinite-delivery-indefinite-quantity contracts that can be utilized in addition to various funding vehicles of supporting partners. Other DSC responsibilities will include establishing and maintaining communication with all federal and state Points of Contact, and to determine parameters of existing agreements with these entities and if needed, negotiate new agreements to accomplish the project goals as efficiently as possible.

Once the project begins, an inventory of injuries will be completed along with an Implementation Plan for all stakeholders, partners, and participants to refer to and to understand the process. This will explain the approach, methodology, roles and responsibilities of all participants, points of contact for the project, contracting procedures, etc.

SECTION B: Estimated Project Cost:

The project cost is broken down by shoreline mile, with a focus on shorelines that have been moderately to heavily impacted or damaged because of response activities. The cost was estimated on the assumption of 200 miles being re-vegetated gulf wide in those areas that are at the greatest risk of increased erosion and habitat destruction. The cost assumes that, on average, four rows of vegetation spaced on three-foot centers would be planted, yielding a total requirement of 1,400,000 plugs of multi-stem vegetation. In addition, seed collection is anticipated especially in ecologically sensitive areas where unique genotypes exist. A lump sum value is requested to cover collection, storage, propagation, and planting costs. Lastly, administrative, monitoring, travel, equipment, and supply costs have been factored in as a percent of total construction costs.

- 1) Plant acquisition and planting = \$3 per plant x 1,400,000 = \$4,224,000
- 2) Seed/stem collection, storage, and propagation = \$1,200,000
- 3) Equipment, travel, fuel, and supplies = \$540,000 (10 percent of construction)
Subtotal = \$5,964,000
- 4) Monitoring and Evaluation costs = \$1,192,800 (20 percent of subtotal)
- 5) Administration and contracting = \$1,073,520 (15 percent of subtotal + monitoring)

Total Project Costs = \$8,230,320

SECTION C: Additional Material to Facilitate Environmental Project Consideration:

1. Permits/Consultations (if required):

Permits/Consultations required for project implementation will be met, as well as NEPA compliance.

2. Time to Implementation:

The project can begin immediately and will involve the following activities: preparation of the Implementation Plan, identifying high-risk shorelines in each state, coordinating project partners, and scheduling acquisition of plant material and installation. In cases where rare or genetically important native plant material will be collected and used for grow-out, the following activities will occur: contacting stakeholders and partners; coordinating collections, storage, and propagation, and scheduling plant installation upon maturity.

*Deepwater Horizon Oil Spill
Emergency Restoration Project Proposal
September, 2010*

Project Name: Gulf-wide emergency restoration of propeller scarring and response vessel impacts to SAV Beds

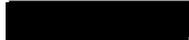
Project Location: Locations throughout the Gulf of Mexico coastal and estuarine waters where SAV beds have sustained injuries

States Impacted: Louisiana, Mississippi, Alabama, and Florida

Lead Agency (and supporting agencies as appropriate): NOAA (Lead), NPS, USFWS, and State Agencies

Agency Point of Contact: Sean Meehan

Contact Information: sean.meehan@noaa.gov, 263 13th Ave S, St. Petersburg, Fl 33701,



SECTION A: Project Description

There are an increasing number of observations of damage to seagrass and submerged aquatic vegetation (SAV) beds by motorized vessels either engaged in booming operations or recreational activities (attempting to avoid boomed areas). This project will provide immediate restoration of SAV habitat from vessels scarring beds during booming and other oil impact prevention activities. Working in coordination with the SAV Technical Work Group, confirmation of potential impact areas will occur via ground-truthing, which will identify sites to be included in the restoration plan. Emergency restoration methods will include, but are not limited to: mapping of recent propeller scars from response vessel activities, placement of fill into propeller scars to restore grade, installation of seagrass planting units, placement of bird stakes into injured areas, and monitoring of restoration activities to ensure successful habitat rehabilitation. This project is intended to provide emergency restoration to areas at risk of further injury, and is not proposed as a means to restore for all injuries. Furthermore, as this project proceeds, additional emergency restoration needs may be identified.

Relevancy for Emergency Restoration:

Progressive exacerbation of seagrass injuries from storm and hurricane force wave energy has been documented from SAV impacts caused by vessels (Whitfield et al., 2002). The increased movement of water and currents from such events causes scouring along the path of the propscar. This continued excavation of sediments not only prevents the seagrass from growing back into the scar, but the removal of sediments causes continual lateral erosion of the seagrass beds. This exposure results in increased mortality of the plants as well as tearing of entire sods within the SAV beds. It is a negative feedback loop that rarely heals by itself. Numerous examples exist to demonstrate that without quick and effective emergency restoration actions and with wave and wind energies not uncommon to the Gulf of Mexico, these propscars can expand dramatically. One example is a seagrass injury created in 2003 from a vessel's propellers where the initial seagrass impact was 141m². After Hurricane Wilma had passed through the area, the injury grew to over 450m².

Project Requirements:

- Identify and prioritize restoration within areas of impact
- Apply GIS and field data to help ground-truth location and number of restoration sites.
- Design and implement emergency restoration plan based on injury characteristics and features of the SAV habitat.
- Design and implement restoration monitoring plan.

SECTION B: Estimated Project Cost:

Restoration costs:

- 1) Site identification, mapping, and restoration plan development = \$310,000
- 2) Sediment placement into prop scars and other injuries that are greater than 20cm in excavated depth = \$1,200,000 (based on assumption of a 50,000 m prop scar total)
- 3) Planting and bird staking = \$100,000 (applicable in some SAV habitats found in the gulf)
- 4) Warning Signage = \$100,000
Subtotal = \$1,710,000
- 5) Monitoring = \$513,000 (30 percent of subtotal)
- 6) Administration and contracting costs = \$333,450 (15 percent of subtotal + monitoring)

Total Project Costs = \$2,556,450

SECTION C: Project Implementation

1. Permits/Consultations (if required):

All permits and NEPA requirements will be met. This project is expected to be covered under the USACE Nationwide 32 permit.

2. Time to Implementation:

This project could start immediately with the identification of restoration sites and subsequent contracting for restoration actions.