

Draft Phase 2 Restoration Plan/ Environmental Assessment #1.1: Queen Bess Island Restoration Project

Louisiana Trustee Implementation Group



PLAN DESCRIPTION

This draft Phase 2 Restoration Plan/Environmental Assessment #1.1 describes the Deepwater Horizon oil spill restoration planning process, considers design alternatives for the Queen Bess Island Restoration Project, and identifies a preferred design alternative that would best help compensate the public for injuries to birds caused by the Deepwater Horizon oil spill in the Louisiana Restoration Area. This project would help restore habitat for birds by providing suitable colonial waterbird nesting and brood-rearing habitat on Queen Bess Island.

ESTIMATED COSTS

The estimated total project cost for the Preferred Alternative is \$18,710,000. This includes an estimated \$2 million in engineering and design expended in line with the Phase 1 Final Restoration Plan, and \$16,710,000 being sought for construction, construction oversight, operations, maintenance, monitoring, adaptive management, and any future engineering and design costs.

Queen Bess Island Restoration Project

During the 2010 Deepwater Horizon oil spill, approximately 134 million barrels of oil and other substances were released into the Gulf of Mexico. This affected many coastal Louisiana islands, including Queen Bess Island, which provide important habitat for threatened and endangered bird species and species of concern (e.g., least tern [*Sternula antillarum*], black skimmer [*Rynchops niger*], and brown pelican [*Pelecanus occidentalis*]). Currently, Queen Bess Island has less than 5 acres of suitable nesting and brood-rearing bird habitat. Despite its limited size, the island supports the third largest and most productive brown pelican rookery in Louisiana and provides critical nesting and brood-rearing habitat for other colonial nesting species.

The Preferred Alternative (Design Alternative 2B) would create 30 acres of brown pelican habitat and 7 acres of tern and skimmer habitat. This would be accomplished by filling the southern cell (Cell 3) with river sand to 4-5 feet above sea level, and gradually sloping fill material downward through Cell 2 from

southwest to northeast. Cell 1 would receive the least sand fill material, leaving this cell immediately available for colonial waterbird nesting and brood-rearing habitat following construction.

The Preferred Alternative allows for a variety of vegetation growth and nesting substrate options, including a 7-acre unvegetated, upland tern/skimmer habitat platform topped with crushed limestone in Cell 3, scrub-shrub in Cells 2 and 3, and black mangrove and marsh grasses in Cell 1. A tidal exchange point in Cell 1 would promote or enhance fish access in this cell. Breakwaters would be installed on the island's northeast side to reduce potential scour at the tidal exchange point and the southwest side to dissipate wave energy, providing young birds with a calm water environment. Design Alternative 2B includes bird ramps along the rock containment dike to facilitate young birds' access to water around the island.

