

POTENTIAL DEEPWATER HORIZON OIL SPILL RESTORATION PROJECTS: PROVIDING INFORMATION TO ASSIST WITH PROJECT ASSESSMENT

To help you propose projects to the State of Florida's Department of Environmental Protection (DEP), we developed this project submission form. You are not required to complete this form to submit a project. However, completion of the form will help DEP gather the information required to completely and accurately evaluate a project against the selection and evaluation criteria. Where appropriate in the form, please provide references to any additional supporting information.

Project Name: *(Include project number from DEP's existing list of submitted projects, if applicable.)*

Western Destin Beach Restoration Project

Location for Project Implementation: *(For example, city and county, GIS coordinates if known.)*

Destin, FL Okaloosa County

Florida Department of Environmental Protection Range Monuments R17 to R25.5

Brief Project Narrative: *(Describe what the project will do.)*

The Western Destin Beach Restoration Project includes restoration of two shoreline reaches within Okaloosa County: Reach 1 extends from the east jetty of East Pass to approximately 700 feet east of FDEP reference monument R-20 (R-20.7) and Reach 2 extends approximately 500 feet east of R-23 (R-23.5) to R-25.5. The designed beach fill is comprised of a dune with a crest elevation at 14 feet (NAVD 88) and a width of 30 feet, a 30 foot wide back-berm at 8.5 feet (NAVD 88), and a variable berm width at 5.5 feet (NAVD 88). The proposed construction template will advance the existing MHW shoreline approximately 190 ft seaward on average. Initial construction requires placement of approximately 565,000 cubic yards (cy) of beach quality sand originating from a permitted borrow source, which provides an average beach fill volume of approximately 90 cy/ft. The existing dune will be enhanced by the construction of a new sand dune, planting of salt-tolerant vegetation, and installation of sand fencing and educational signage. The proposed construction template is designed to accomplish pre-Hurricane Opal beach widths for recreational use and storm protection, as well as habitat creation, enhancement, and protection.

The project is currently authorized by the FDEP and U.S. Army Corps of Engineers (USACE). The City of Destin (in partnership with Okaloosa County) has contracted Taylor Engineering to prepare construction drawings and specifications. Project construction is currently scheduled for the fall/winter of 2012.

Estimated Project Costs: *(Describe the costs of the project, including any assumptions for contingency and ongoing operations and maintenance. Identify other available funding sources such as matching funds, in kind contributions or state or federal dollars. If possible, attach a schedule of anticipated costs, by year, over the anticipated project life.)*

Total estimated cost of \$8 million includes construction and post-construction monitoring. To date, Okaloosa County has provided significant resources for feasibility studies, sand source investigations, project design and permitting.

Anticipated Project Outcome with Respect to Screening Criteria

S1. Technically and administratively feasible: *(Briefly describe the critical technologies involved and any relevant past experience with similar projects.)*

The proposed project is consistent with the FDEP's adopted Strategic Beach Management Plan and Rule 62B-41.005(4) F.A.C.

Okaloosa County's coastal engineering consultant (Taylor Engineering) investigated the historical shoreline changes and causes for erosion in support of the beach nourishment design. Taylor also performed investigations of beach fill performance due to various return interval storms and alongshore diffusion modeling to optimize the design. Conservative diffusion modeling showed that in the absence of major storms, approximately 40% of the placed fill material should remain in the project area 10 years after placement. The material in the proposed borrow area is compatible with the native beach material and is expected to maintain the general environmental character and functionality of the material on the native beach in accordance with Rule 62B-41.007(2)(j), F.A.C.

Taylor Engineering successfully completed the Walton/East Destin Beach Restoration project in 2007. Post construction monitoring reports indicate the project area has lost only approximately 10% of the placed fill volume since construction, exceeding project performance predictions.

S2. Provides environmental benefits: *(Briefly describe the nature, magnitude, and timing of any environmental benefits attributable to the project and any potential environmental costs associated with implementing or maintaining the project, e.g., loss of a habitat or conversion of habitat from one type to another during implementation.)*

The proposed restoration project will create a healthy and wide beach that provides significant environmental habitat to marine nesting turtles, terrestrial wildlife and shorebirds. The proposed dune feature with native vegetation will provide increased habitat for protected beach mice and will provide increased sand supply to the littoral system, further stabilizing the beach ecosystem. The proposed project will likely greatly increase the biodiversity along the restored project areas.

Environmental costs associated with the implementation or maintenance on the project is not anticipated.

S3. Does not conflict with any ongoing or planned response or remediation work: *(Briefly describe ongoing response activities in the project implementation area, if any, and why the project does or does not interfere with that work.)*

The FDEP's routine beach monitoring (which includes Okaloosa County) was reduced from Level IV STR with bi-weekly maintenance to Level V STR with event-driven sampling in August of 2011. Interference with shoreline evaluation and maintenance is not expected given the evolution of a beach restoration project and the decreasing amount of residue being collected. A detailed inspection of the project site will be requested prior to project construction to guarantee the project doesn't interfere with any response activities.

A borrow area sampling and visual observation was performed by E-Tech Environmental Consulting in January of 2012. The sampling was pre-approved by the FDEP for NRDA reimbursement and was performed in accordance with approved FDEP operating and quality control procedures. Forty surface grab samples were collected from the permitted borrow site, visually inspected, and analyzed for polycyclic aromatic hydrocarbons (PAHs). E-Tech concluded the borrow site was free from the targeted analytes during the sampling event. The report has been reviewed by the FDEP and NRDA sampling reimbursement is anticipated in August, 2012.

S4. Complies with applicable and relevant federal, state, local, and tribal laws and regulations: *(No information is needed for this screening criteria.)*

The project is currently authorized by the FDEP (Permit number 0286575-004-JC) and the USACE (Permit number SAJ-2008-00895). This project is in compliance with state and local strategic plans. The project would further beach mouse, sea turtle and shorebird recovery plan strategies which include restoring beach habitat.

Anticipated Project Outcome with Respect to Evaluation Criteria

E1. Will restore, rehabilitate, or replace a natural resource or service¹ believed/demonstrated to have been injured as a result of the Deepwater Horizon oil spill or associated response activities: *(Briefly describe the nature of any relationship between the new/improved resources or services and those adversely impacted by the oil spill.)*

The ecological and human service of the beach was damaged during the oil spill due to the presence of tar balls and response vehicles/personnel. This impact and the related response prohibited endangered shorebirds from foraging and nesting, beach mice from foraging and nesting, and sea turtles from nesting (all turtle nests were removed). A significant loss of human service also resulted from the presence of oil and response vehicles/personnel on the beach. The proposed project will immediately restore the natural habitat of these endangered species by reestablishing the natural beach resource and will provide a more stable, wider beach for recreation.

E2. Is located in, or nearby, resources or services injured by the deepwater horizon spill: *(Briefly describe where the project would be implemented with respect to past/ongoing remediation work.)*

The Western Destin Beach Restoration Project is intended to be constructed within the area that was directly injured by the Deepwater Horizon Spill. Injuries from both oil and response activities include oiling of the beach, tar balls, removal of marine turtle eggs, and impacts to federally-listed shorebirds and beach mice.

¹ In this form, "Services" (or "natural resource services") refers to the functions performed by a natural resource for the benefit of another natural resource and/or the public. Services can be "ecological services" – physical, chemical or biological functions that one natural resource provides for another (such as provision of food) – or "human services" – the use of natural resources used by humans that provide value to the public (such as hunting and fishing).

E3. Is ready for implementation, e.g., design, permitting, and necessary impacts assessments have been completed: *(Briefly describe where in the permitting process the project stands along with an estimated date of when the project can be implemented if it is not currently ready.)*

The project is currently authorized by the FDEP (Permit number 0286575-004-JC) and the USACE (Permit number SAJ-2008-00895). This project is in compliance with state and local strategic plans. The project is ready for implementation. Taylor Engineering is currently under contract with the City of Destin to prepare construction drawings and specifications. Project construction is scheduled for the Fall/Winter of 2012.

E4. Is cost effective: *(Briefly describe why you think the project is cost effective. Discuss whether this project is more cost effective than alternative projects which would provide similar resource or service benefits.)*

This restoration project will offer a healthy, wide-ranging beach with an enriched vegetated dune system and is more beneficial to plant and animal life, as well as human recreation. Smaller beach nourishment projects or other projects that only include dune enhancement or native vegetation plantings are not as beneficial, cost effective, or stable. The proposed project will provide a longer project life than smaller nourishment projects, will offer a larger nesting habitat for endangered shorebirds, sea turtles, and beach mice than other smaller projects, and will be less susceptible to damage or erosion in the occurrence of large storm events.

E5. Has a high potential for long-term success as demonstrated by incorporating established/reliable methods and technologies: *(Briefly describe if/how critical methods and technologies that will be used to implement the project could be considered reliable or proven.)*

Okaloosa County's coastal engineering consultant (Taylor Engineering, Inc.) investigated the historical shoreline changes and causes for erosion in support of the beach nourishment design. Taylor also performed investigations of beach fill performance due to various return interval storms and alongshore diffusion modeling to optimize the design. The material in the proposed borrow area is compatible with the native beach material and is expected to maintain the general environmental character and functionality of the material on the native beach in accordance with Rule 62B-41.007(2)(j), F.A.C.

Taylor Engineering also successfully completed the Walton/East Destin Beach Restoration project in 2007. Post construction monitoring reports indicate the project area has lost only approximately 10% of the placed fill volume since construction, exceeding project performance predictions.

E6. Is likely to provide benefits rapidly following implementation: *(Briefly describe the anticipated change in benefits anticipated over time.)*

Instant environmental service will be provided following project construction to offset ecological service loss. Healthy, wide beaches with enhanced plant life will promote a thriving ecological habitat for animals such as the endangered beach mouse, endangered shorebirds, and native sea turtles in the project area. Because the beach will be vastly widened, there will be an increased opportunity for human recreation to offset human service loss.

E7. Has a high likelihood of public acceptance: *(Briefly describe evidence to support the given answer based on surveys or results and assessments from past projects. Known or likely opposition to a project should be recognized.)*

Prior to permit issuance, FDEP advertised the project to the public and received a petition for Formal Administrative Proceedings from a property owner on West Destin beaches. An administrative hearing was held for the West Destin permit to determine final agency action on the permit application. The Judge's final orders for the Western Destin project recommended issuance of the permit. Furthermore, the City of Destin recently requested a permit modification to remove any objecting property owners from the project area. The request was granted July 25, 2012.

The County has received numerous letters in support of the beach nourishment projects from local citizens and property owners along the project beaches. Additionally, property owners within the proposed project area have provided temporary easements for construction.

WE WANT YOUR INPUT!

Submit this form via email to Rebecca Wintering at Rebecca.Wintering@dep.state.fl.us . If you have any questions or concerns about the process for submitting a project, please contact Rebecca Wintering at:

Rebecca Wintering
Environmental Specialist III
3900 Commonwealth Boulevard, MS 235
Tallahassee, FL 32399
Rebecca.Wintering@dep.state.fl.us

A current summary of projects is accessible through the Florida DEP's website at <http://www.dep.state.fl.us/deepwaterhorizon/projects.htm> (click on "View the list of restoration project ideas").