



## MORRIS J. BERMAN GROUNDING AND OIL SPILL SAN JUAN, PUERTO RICO

### Environmental Restoration Projects Selected

#### Background

On January 7, 1994, the barge Morris J. Berman grounded on a reef off Punta Escambrón, releasing about 800,000 gallons of fuel oil into waters near San Juan. About one week later, another spill, of nearly 125,000 gallons, of an oil/water mixture occurred during and after removal operations and scuttling. The oil spread along the northern coast of Puerto Rico, injuring resources along the shoreline and impairing their use for an extended time.

The National Oceanic and Atmospheric Administration, National Park Service, and Puerto Rico Department of Natural and Environmental Resources are the natural resource Trustees for this spill.

A settlement agreement reached on December 28, 2000, among the Trustees and the parties responsible for the spill resolved claims for natural resource damages. The settlement included payment of nearly \$10 million to the Trustees for compensatory restoration projects in three injury categories: grounding-related reef injuries, lost recreational beach use, and lost visitor use of national historic site resources.

To meet their responsibilities to plan and implement restoration using settlement funds, the Trustees prepared a Restoration Plan / Environmental Assessment, proposing restoration projects to address the injuries. After receiving input during a public comment period and two public meetings, several restoration projects were selected.

The Barge Berman Trustees evaluated numerous restoration projects intended to provide equitable compensation for the three types of injury caused by the spill. After considering input from the public and the scientific community, the Trustees selected the restoration projects described below.

#### *Projects to Restore Reef Resources*

About \$5.9 million dollars of the settlement funds are available for the three projects selected to restore reef habitat and other reef resources injured by the barge grounding and subsequent oil spill.



Taino reef module to be used for coral trail

#### *Modular Reef Construction*

The Trustees selected a Coral Reef Trail Project in Condado Lagoon to provide compensation for lost resources associated with the injured eolianite reef. This project consists of placing prefabricated cement reef-replication modules (known as Taino reef modules) in a shallow area near the shore to create new habitat similar to the reef impacted by the grounding. The Condado Coral Reef Trail will consist of three structures placed in front of the public beach between the Dos Hermanos Bridge and the breakwater that separates the Condado Lagoon from the Atlantic Ocean. It will provide an opportunity for students and the public to learn about coral reefs and the restoration process.

#### *Seagrass Restoration*

This project involves the beneficial use of dredged marine sediments from San Juan Harbor to fill dredge holes in Condado Lagoon, approximately 1 mile southeast of the barge grounding site. Once these depressions are filled to grade and leveled, sunlight will be able to reach the seafloor and seagrass recovery can proceed naturally.



# Morris J. Berman Grounding and Oil Spill

San Juan, Puerto Rico

## *Acquisition of Equivalent Lost Services*

This project entails acquisition of shoreline property within the boundaries of Puerto Rico's proposed Northeast Ecological Corridor (NEC) and is intended to provide resource services comparable to those lost as a result of the oil spill and grounding. For this acquisition, the Trustees identified a 270-acre privately-owned shoreline property with a willing seller. This parcel provides habitat for over 40 rare species of plants and animals including a major nesting beach for the endangered Leatherback Sea Turtle. This acquisition project was also selected as compensation for lost recreational beach use (see below).



270 Acre San Miguel parcel

## *Projects to Restore*

### *Lost Recreational Beach Use*

About \$2.6 million in settlement funds are available for projects to address lost recreational beach use. These funds, combined with funds from the Lost Reef Services, will be used to purchase the San Miguel parcel in the NEC. After evaluating several alternatives, the Trustees determined that acquiring lands for conservation purposes would best address lost beach use. Several potential sites were evaluated, after which the Trustees selected the 270-acre privately-owned shoreline property. The land will be managed as a Natural Reserve under the Puerto Rico Department of Natural and Environmental Resources and the public will have access for low impact recreational activities. This acquisition was also selected as one of the projects intended as compensation for reef injury under acquisition of equivalent lost services (details above).

## **Projects to Compensate for Lost Visitor Use at the San Juan National Historic Site**

The oil spill and grounding caused a reduction in visitor services at the National Historic Site for approximately six weeks. More than 123,000 visitors to the El Morro and San Cristobal forts were affected. About \$1.8 million in settlement funds are available for projects to address lost use of the historic site. The three restoration projects selected are described below.

### *Improve and Extend the Coastal Promenade*

This project at El Morro involves (1) applying a non-slip treatment to the existing walkway; (2) lengthening the overlook at the Water Battery; and (3) extending the Promenade from the Water Battery eastward along the base of the El Morro to connect with an existing stairway to the upper levels of the fort.

### *Restoration of El Morro Water Battery*

This project will stabilize and preserve the interior and exterior surfaces of the historic Water Battery area as well as adjacent exterior walls facing the shoreline. It will correct unsafe conditions resulting from hundreds of years of of the structures' deterioration due to the tropical climate and wind and wave erosion.



Restoration projects at El Morro

### *Clean and Stabilize Exterior Walls of Historic Site*

This project involves cleaning, stabilizing, and restoring approximately 25,000 square feet of the exterior walls of El Morro adjacent to the Water Battery

For more information on the projects, refer to the Berman Restoration Plan and Environmental Assessment at <http://www.darrp.noaa.gov/berman/>.