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DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A HAGOOD AVENUE
CHARLESTON, SOUTH CAROLINA 29403-5107

FINDING OF NO SIGNIFICANT IMPACT

Hunting Island Ecosystem Restoration Study
Beaufort County, South Carolina

September 22, 2004

The National Environmental Policy Act (NEPA) requires the U.S. Army Corps of Engineers, Charleston District (The Corps) to evaluate the effect of proposed projects on both the environment and human health and welfare. This Draft Finding of No Significant Impact (FONSI) summarizes the results of The Corps' evaluation and documents The Corps' preliminary conclusions.

The Corps is proposing an Ecosystem Restoration project at Hunting Island in Beaufort County, South Carolina. Hunting Island is located on the South Carolina coast in Beaufort County, approximately 16 miles east of the City of Beaufort, 9 miles southwest of Edisto Beach, and approximately 45 miles northeast of Savannah, GA (see Figure 1). This project is being conducted under authority of Section 206 of the Water Resources Development Act (WRDA) of 1996 (P.L. 104-303). The purpose of the proposed project is to protect the island's maritime forest from erosion and storm events, with a secondary benefit of providing additional sea turtle nesting habitat, as well as providing nesting and foraging habitat for shorebirds. Shoreline erosion along most of Hunting Island averages approximately 20 feet (~10 acres) per year. This erosion has not only placed roads, buildings, and public use facilities in jeopardy, but is continuously destroying the mature maritime forest and has eliminated the natural dune system and placed sea turtle nesting in jeopardy.

The proposed project consists of the nourishment of approximately 10,145 feet of beach beginning at the north terminal groin on Hunting Island and construction of six 450-foot long groins spaced approximately 1,250 feet apart with the first groin being placed approximately 1,250 feet south of the north terminal groin (see Figure 2). Construction of the project will be by either a hydraulic cutterhead dredge or a hopper dredge with the sand being transported to the beach via a submerged pipeline. Beach fill will be graded by land-based equipment, such as bulldozers, articulated front-end loaders, and other equipment as necessary to achieve the desired beach profile. It is anticipated construction will begin in late-2005 and will require approximately 6 to 8 months for completion. However, this schedule could change due to funding constraints, contractual issues, inclement weather, equipment failure, or other unforeseen difficulties.

Three possible borrow areas, totaling approximately 670 acres, have been identified for use. The primary borrow area (Area #1) for this project is a large rectangular area covering approximately 490 acres approximately 6000 feet offshore of the southern end of the island. The second area (approximately 40 acres) is approximately 1000 feet to the northeast of Area #1, and Area #3 (approximately 130 acres) is about 2,000 feet north of Area #2 (see Figure 3). None of the three areas are near any Coastal Barrier Resources Act (CBRA) zones, and all three are well within the 3-mile limit. The borrow areas have been surveyed by side-scan sonar, followed by the collection of numerous vibracore samples in each of the potential borrow sites. This was done in order to avoid hard/live bottom areas during dredging, and to ensure that adequate quantities of beach compatible sand were available in the three areas. Sand will be removed from the borrow areas to depths of 6 to 8 feet.

The Corps evaluated several alternatives before development of the proposed project. These alternatives included the following:

- No Action (i.e., erosion of the maritime forest would be allowed to continue) – this alternative was considered unacceptable because it would allow destruction of the maritime forest to continue and it would not improve sea turtle nesting habitat.
- Beach Nourishment Without Groins (i.e., similar level of beach nourishment as is being proposed without construction of any groins) – this alternative was considered unacceptable because beach nourishment without groins has proven to only be a temporary, short-term solution to the erosion problem at Hunting Island. The renourishment cycle for a project without groins is approximately every five years, while the renourishment cycle for a project with groins is approximately every 9 years.
- Beach Nourishment With Groins (i.e., the selected alternative) – this alternative was selected because it provided a longer-term solution to the erosion problem at Hunting Island than any other alternative. Although the construction of groins is contrary to the natural environment existing at Hunting Island, it was deemed to be the only viable solution for long-term protection of this valuable resource.

- Several variations of beach nourishment with groins (e.g., various lengths and spacing of groins, various quantities of sand fill, and various iterative combinations of the two) were evaluated before selecting the proposed alternative.
- Several other alternatives that were evaluated, but eliminated, included sand "bypassing" from Fripp Inlet, sand "bypassing" from St. Helena Sound, rock revetments, and breakwaters.

The Corps' criteria for evaluating the effect of the proposed project included the following:

- Water Quality – a short-term increase in turbidity at the borrow site and in the surf zone where sand placement is occurring are the only expected adverse affects on water quality. These effects will be temporary and were determined to be acceptable.
- Cultural Resources – no effects on cultural resources are expected as a result of implementing the proposed project.
- Threatened and Endangered Species – the proposed project may adversely affect the loggerhead sea turtle; however, the implementation of conservation measures will minimize and/or eliminate this effect. If there is an effect, it is not expected to jeopardize the continued existence of loggerhead sea turtles. The proposed project is not likely to adversely affect any other listed species.
- Biological Resources – the proposed project will have a negative impact on benthic marine invertebrates in the borrow area and in the intertidal and subtidal zones where sand placement occurs. However, given the vast acreages of benthic habitat in the area of the proposed project, this impact is small and was determined to be acceptable. The impacted benthic invertebrates are expected to recolonize the borrow site and the areas where sand placement occurred within six months of completion of the project. The proposed project is expected to have no negative effect on plant life and other fish and wildlife species.
- Socio-Economic – no effect on socio-economic conditions are expected as a result of implementing the proposed project.
- Air Quality – no effect on air quality is expected as a result of implementing the proposed project.
- Environmental Justice – no adverse effects on minority and low-income populations are expected as a result of implementing the proposed project.
- Essential Fish Habitat
- Cumulative Impacts – no significant adverse cumulative impacts are expected as a result of implementing the proposed project.
- Marine Protected Areas – no effects on Marine Protected Areas are expected as a result of implementing the proposed project.

The Corps' preliminary findings are that the proposed project does not significantly adversely affect the environment or human health and welfare and, therefore, preparation of an Environmental Impact Statement is not warranted. The full Environmental Assessment can be downloaded from the internet (in PDF format) at *www.sac.usace.army.mil/newinternet/what/index.html* or a copy may be obtained by contacting Mr. Alan Shirey by e-mail at *alan.d.shirey@usace.army.mil* or by telephone at (843) 329-8166.

Written comments supporting or disagreeing with the proposed Hunting Island Ecosystem Restoration project should be sent to:

Mr. Alan Shirey
U.S. Army Corps of Engineers,
Charleston District
69A Hagood Ave.
Charleston, SC 29403
Phone: (843) 329-8166
e-mail: *alan.d.shirey@usace.army.mil*

Comments received within thirty (30) days of the date of this FONSI will be evaluated before The Corps makes a final decision to proceed with the proposed Hunting Island Ecosystem Restoration project.

Date_____

ALVIN B. LEE
Lieutenant Colonel, EN
Commander, U.S. Army Engineer District,
Charleston

FIGURE 1: LOCATION OF HUNTING ISLAND

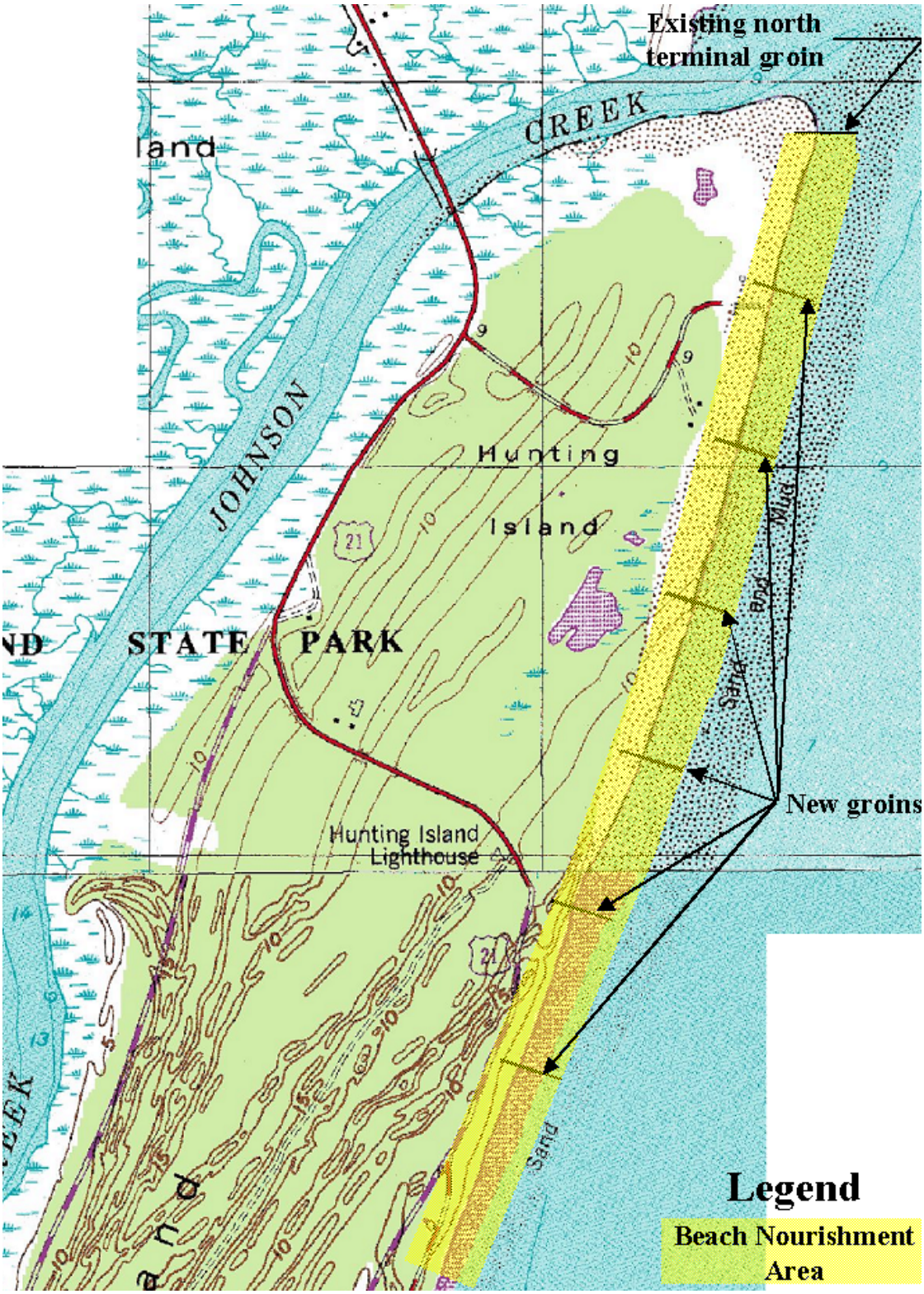

FIGURE 2: PROPOSED HUNTING ISLAND ECOSYSTEM RESTORATION PROJECT

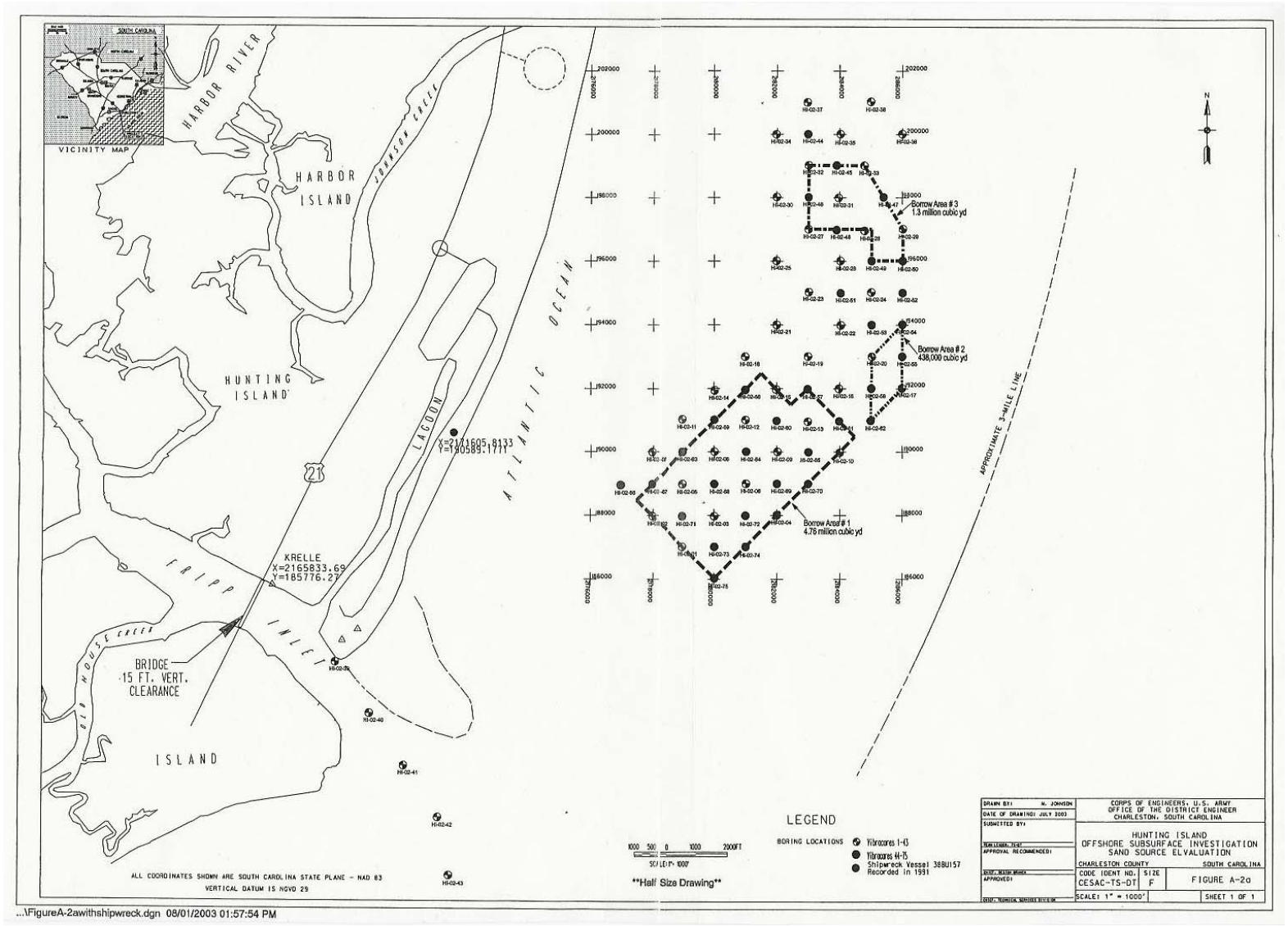

FIGURE 3: LOCATION OF PROPOSED BORROW AREAS