



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960



February 5, 2008

Colonel Paul L. Grosskruger
District Commander
U.S. Army Corps of Engineers
701 San Marco Boulevard, Room 372
Jacksonville, Florida 32207-8175

Service Federal Activity Code: 41420-2006-F-0018
Date Received: September 14, 2007
Formal Consultation Initiation Date: January 15, 2008
Project: Dune restoration
Applicant: Town of Palm Beach
County: Palm Beach

Dear Colonel Grosskruger:

The Fish and Wildlife Service (Service) has reviewed the September 14, 2007, request from the U.S. Army Corps of Engineers (Corps) to amend the Service's April 28, 2006, Biological Opinion for the Dune and Shoreline Nourishment project within Reach 8, Town of Palm Beach, Palm Beach County, Florida. The biological opinion addressed the effects of the action on the threatened loggerhead sea turtle (*Caretta caretta*), endangered green sea turtle (*Chelonia mydas*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), and the endangered leatherback sea turtle (*Dermochelys coriacea*). This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*).

The original project, which was completed in May 2006, was proposed to address erosion from Hurricanes Frances and Jeanne in 2004, and Hurricane Wilma in 2005. Specifically, the project involved placement of 505,700 cubic yards (cy) of beach compatible material between Florida Department of Environmental Protection (DEP) monument R-125 and 130 feet south of monument R-134, excluding a 1,650 foot section between monuments R-127 and R-129. In addition, approximately 75,000 cy of beach compatible material was placed above mean high water (MHW) from approximately 250 feet north of DEP monument R-129 to 130 feet south of DEP monument R-134 for dune restoration.

In May 2007, Subtropical Storm Andrea caused severe beach erosion along Reach 8, resulting in a loss of approximately 109,500 cy of material from the dry beach. In addition, much of the dune fill material placed in early 2006 was lost, despite the planting of dune vegetation.



To address the new erosion at the project site, the applicant is proposing to place approximately 639,500 cy of beach compatible material from DEP monument R-125 to DEP monument R-132, excluding 1,390 feet from 597 feet north of DEP monument R-127 and 954 feet south of DEP monument R-128. Approximately 84,700 cy of beach compatible material will be placed above MHW from DEP monument R-125 to 350 feet south of DEP monument R-134 (9,157 feet) for dune restoration, excluding 1,390 feet from 597 feet north of DEP monument R-127 and 954 feet south of DEP monument R-128.

Fill material will come from DEP approved borrow areas 5 and 6, and when completed, the beach design profile will attain a height of +9 feet National Geodetic Vertical Datum (NGVD) and a 1V:15H slope seaward from the construction berm crest to the toe of the fill. In addition, the dune template will have a crest elevation of +16 feet NGVD with a slope of 1V:3H. Proposed native salt-tolerant vegetation to be planted in the reconstructed dune will include sea oats (*Uniola paniculata*) and railroad vine (*Ipomoea pes-caprae*).

The Applicant will use a hydraulic cutter head dredge to excavate fill material from borrow areas 5 and 6. There will be a continuous placement of fill material as shoreline pipe is added and the discharge point relocated alongshore. The pipeline corridor along the beach will include the area seaward of the dune vegetation and landward of MHW. Bulldozers will maintain the dike and disposal area, and shape both the dune and beach fill. In the dune-only restoration area from DEP monument R-132 to 350 feet south of DEP monument R-134, fill material will be transported by truck or other similar upland method along the beach to the appropriate site. Completion of the dune restoration project is expected to take approximately 45 days; however, dune planting will take place outside sea turtle nesting season.

The action area is defined as all areas to be affected directly or indirectly by the action and not merely the immediate area involved in the action. The Service identifies the action area to include shoreline in Palm Beach County between DEP monument R-125 and 350 feet south of DEP monument R-134.

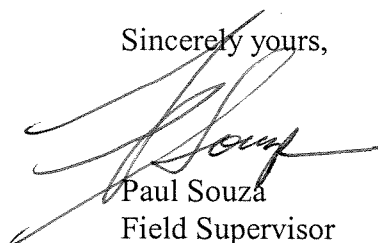
The April 28, 2006, Biological Opinion provided an incidental take statement for the aforementioned nesting sea turtles related to a one-time placement of sand along 2.17 miles of beach for sand placement and dune restoration. We have reviewed the proposed project modification, sea turtle nesting data for the project area, and considered the cumulative effects of the project. Based on our review, we believe the proposed modification will not appreciably increase the amount of incidental take of listed nesting sea turtles and we are amending the biological opinion as requested.

The amount or extent of incidental take for sea turtles will be considered exceeded if the proposed project results in more than a one-time placement of sand along 1.47 miles of beach identified for sand placement and dune restoration in the project modification. With the exception of the area to be impacted as referenced above, all parts of the April 28, 2006, Biological Opinion for this project remains as written.

This concludes formal consultation on the action outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

If you have any questions regarding this amended biological opinion, please contact Jeff Howe at 772-562-3909, extension 283.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Paul Souza', is written over the typed name.

Paul Souza

Field Supervisor

South Florida Ecological Services Office

cc:

Coastal Planning and Engineering, Incorporated, Boca Raton, Florida (Craig Kruempel)

Corps, Palm Beach Gardens, Florida (Leah Oberlin)

DEP, Tallahassee, Florida (Stephanie Gudeman)

EPA, West Palm Beach, Florida

FWC, Office of Protected Species Management, Tallahassee, Florida (Robbin Trindell)

NOAA Fisheries, West Palm Beach, Florida (Jocelyn Karazsia)

Service, Jacksonville, Florida (National Sea Turtle Coordinator)

Service, Atlanta, Georgia (Noreen Walsh) electronic copy only

USGS, Florida Integrated Science Center, Gainesville, Florida (Susan Walls)