United States Department of the Interior

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

February 10, 2012

Alfred A. Pantano, Jr., Colonel
District Commander
U.S. Army Corps of Engineers
Post Office Box 4970
Jacksonville, Florida 32232-0019

Service Federal Activity Code: 41420-2008-FA-0524
Date Received: November 17, 2011
Formal Consultation Initiation Date: January 11, 2012
Project: Palm Beach Harbor Operations and Maintenance
County: Palm Beach

Dear Colonel Pantano:

This document transmits the U.S. Fish and Wildlife Service's (Service) decision regarding the application of the proposed Palm Beach Harbor Operations and Maintenance project, Lake Worth Inlet, Palm Beach County, Florida to the August 22, 2011, Statewide Programmatic Biological Opinion (SPBO) concerning sand placement activities along the coast of Florida for the U.S. Army Corps of Engineers (Corps) (Service Log No. 41910-2011-F-0170; Service, 2011). The Corps determined on November 15, 2011, the proposed project "may affect" the threatened loggerhead sea turtle (*Caretta caretta*), endangered leatherback sea turtle (*Dermochelys coriacea*), endangered green sea turtle (*Chelonia mydas*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), and endangered Kemp's ridley sea turtle (*Lepidochelys kempii*), "may affect, but is not likely to adversely affect" the endangered West Indian manatee (*Trichechus manatus*) and the threatened piping plover (*Charadrius melodus*), and will have "no effect" on the threatened southeastern beach mouse (*Peromyscus polionotus niveiventris*). The Service concurs with these determinations. This document is provided in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*). Your November 15, 2011, request for formal consultation was received on November 17, 2011.

PROJECT DESCRIPTION

The Corps proposes to dredge approximately 100,000 cubic yards of material from Palm Beach Harbor (Lake Worth Inlet), Palm Beach County, Florida (Figure 1). Using a mechanical or hydraulic dredge with pump-out capability, material will be removed from the entrance channel to a depth of 39 feet between Stations 30+00 and 47+00; to a depth of 35 feet in the inner channel, turning basin, existing settling basin, and expanded settling basin north and west of the existing settling basin; and to a depth of 25 feet in the extended turning basin (Figure 2). Beach compatible dredge material will be pumped from the dredge onto the shoreline between the Florida Department of Environmental Protection (DEP) reference monuments R-76 to R-79

(Figure 3) through a temporary pipeline positioned over the south jetty. Bulldozers will move and grade the material to produce the authorized beach design. Non-beach compatible dredge material will be placed on Peanut Island (an approved dredge material management area located west of the entrance channel) or at the Palm Beach Harbor Ocean Dredged Material Disposal Site as described in the 1998 Operations and Maintenance, Maintenance Dredging Palm Beach Harbor Environmental Assessment (Corps, 1998). Vegetated upland habitat will be protected to the maximum extent possible to minimize disturbance; therefore, impacts associated with the beach access corridors and staging areas are not anticipated. If impacts are incurred, all impacted areas and vegetation will be restored to preconstruction condition and elevation.

The frequency of the proposed maintenance dredging and sand placement or disposal will not exceed more than two events annually. The intent of the project is to continue maintenance dredging of Palm Beach Harbor to maintain a safe environment for recreational and commercial vessels, and to maintain the recreational beach.

Maintenance dredging events and placement of non-beach compatible material at either dredge material disposal site may take place throughout any given year; however, beach compatible sand shall not be placed within the designated fill template during peak sea turtle nesting season (May 1 to October 31). Construction activities will take place during daylight and nighttime hours.

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 the entrance channel, inner channel, turning basin, extended turning basin, settling basin, Peanut Island, Palm Beach Harbor Ocean Dredged Material Disposal Site, pipeline corridors, staging areas, and approximately 3,450 feet of Palm Beach County shoreline between DEP monuments R-76 and R-79. The project is located along the Atlantic Ocean, Lake Worth Inlet, Palm Beach County, Florida at latitude 26.7724 and longitude -80.0322.

The Service has determined the proposed project is appropriate to apply to the SPBO. The minimization measures, Reasonable and Prudent Measures, and Terms and Conditions in the SPBO are applicable to the proposed project and must be followed for nesting sea turtles. Both the Corps and the Town of Palm Beach (Sponsor) have agreed to follow and implement the minimization measures, Reasonable and Prudent Measures, and the Terms and Conditions that apply to the proposed project.

In addition, the Standard Manatee Conditions for In-Water Work shall be implemented to avoid potential impacts on manatees (Florida Fish and Wildlife Conservation Commission [FWC] 2011). To reduce potential impacts on piping plovers, the commitments outlined in the SPBO shall be implemented. In order to comply with the Migratory Bird Treaty Act (16 U.S.C. 701 *et seq.*) and potential for the proposed project to impact nesting shorebirds, the Corps and Sponsor shall follow FWC standard guidelines to protect against impacts to nesting shorebirds during implementation of this project during the periods from February 15 to August 31. If any construction is performed from April 1 to August 31, the Corps' standard migratory bird protection policy will be implemented. In addition, surveys for shorebirds and other migratory bird species will be completed prior to construction activities. Surveys will begin on April 1 or

45 days prior to construction commencement, whichever is later, and will be conducted daily throughout the construction period.

The Service anticipates no more than 27.7 miles of highly eroded shoreline along the Florida coastline (no more than 8.8 miles within the Northern Gulf of Mexico Recovery Unit [NGMRU] and no more than 18.9 miles within the Peninsular Florida Recovery Unit [PFRU]) would receive sand per year during nonemergency years with a maximum of 102 miles of shoreline (38 miles within the NGMRU and 64 miles of shoreline within the PFRU) receiving sand during or following an emergency event (declared disaster or Congressional Order) as a result of the SPBO. The amount or extent of incidental take for nesting sea turtles will be considered exceeded if during the course of the proposed project, sand is placed on more shoreline per year than authorized in the SPBO as outlined above.

FISH AND WILDLIFE RESOURCES

This section is provided in accordance with the Fish and Wildlife Coordination Act of 1958, as amended (48 Stat. 401; 16 U.S.C. 661 *et seq.*) to address other fish and wildlife resources in the project area.

Hardbottom reef habitat and seagrasses

The expanded settling basin would impact an additional 6.3 acres of sandy bottom north and west of the existing settling basin (Figure 2) and cause a temporary loss of benthic organisms. The sea floor within the proposed settling basin expansion area lies primarily within the shallow sublittoral zone. This area is non-vegetated and has an extremely dynamic sandy substrate. There are no seagrass beds or vegetated shorelines located within the Federal navigation channel or the existing settling basin.

Hardbottom habitat does not occur immediately north of Lake Worth Inlet (Applied Technology and Management Inc., 1995); however, hardbottom habitat does occur along the limestone walls of the entrance channel. Sponges and soft corals can be found along these vertical wall faces (Corps, 1998; PBS & J, 2009). Surveys south of the Inlet, between DEP monuments R-76 and R-83 indicated that hardbottom communities are much more prevalent south of DEP monument R-79. Commonly encountered organisms included red boring sponge (*Cliona* sp.), red algae (*Meristiella echiocarpum*), and the tube building annelid *Phragmatopoma lapidosa*. Hardbottom habitat significantly declines between DEP monuments R-76 and R-79. The only hardbottom habitat observed within this area was directly associated with the south jetty, a small section (27 square feet) of uncolonized exposed rock north of DEP monument R-77, a small area of exposed rock in the intertidal region 350 feet north of DEP monument R-78, and a lone outcropping of rock located midway between DEP monuments R-78 and R-79 (Applied Technology and Management Inc., 1995).

Based on project design, no impacts are anticipated to nearshore seagrass beds and nearshore hardbottom habitat, therefore, no mitigation has been proposed. Nevertheless, the Corps will consult with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) whom will assess potential impacts to nearshore hardbottom habitat and seagrasses within the dredge template, sand placement fill template, shoreline downdrift

area, and both non-beach compatible dredge material disposal sites. In addition, the NOAA Fisheries will assess and consult with the Corps concerning potential impacts to foraging and swimming sea turtles, and all other marine species under their jurisdiction within the action area.

Please submit a report by July 31 of the following year of construction as described in the SPBO Term and Condition B19 following completion of the proposed work.

REINITIATION NOTICE

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 outlined in the SPBO is exceeded. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.
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.
4. A new species is listed or critical habitat designated that may be affected by the action.

Thank you for your cooperation in the effort to conserve fish and wildlife resources. Should you have additional questions or require clarification regarding this letter, please contact Jeff Howe at 772-469-4283.

Sincerely yours,

for Larry Williams
Field Supervisor
South Florida Ecological Services Office

cc: electronic only
Corps, Jacksonville, Florida (Patrick Griffin)
DEP, Tallahassee, Florida (Lanie Edwards)
EPA, West Palm Beach, Florida (Ron Miedema)
FWC, Imperiled Species Management Section, Tallahassee, Florida (Robbin Trindell)
NOAA Fisheries, West Palm Beach, Florida (Jocelyn Karazsia)
NOAA Fisheries, Fort Lauderdale, Florida (Audra Livergood)
Service, Atlanta, Georgia (David Flemming)
Service, St. Petersburg, Florida (Anne Marie Lauritsen)
Service, Panama City, Florida (Patty Kelly)
USGS, Florida Integrated Science Center, Gainesville, Florida (Susan Walls)

LITERATURE CITED

Applied Technology and Management Inc. 1995. Lake Worth Inlet Management Plan, Phase III Environmental Evaluations prepared for the Town of Palm Beach.

Florida Fish and Wildlife Conservation Commission (FWC). 2011. Standard Manatee Conditions for In-Water Work 2011. Tallahassee, Florida [Internet]. [cited October 26, 2011]. Available from: http://myfwc.com/media/415448/Manatee_StdCondln_waterWork.pdf

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U.S. Army Corps of Engineers (USACE). 1998. Environmental Assessment and Finding of No Significant Impact (EA/FONSI), Maintenance Dredging of Palm Beach Harbor, Palm Beach County, Florida.

U.S. Fish and Wildlife Service (Service). 2011. Statewide programmatic biological opinion to the U.S. Army Corps of Engineers (FWS Log No. 41910-2011-F-0170) for shore protection activities along the coast of Florida (August 22, 2011). Jacksonville, Panama City, and Vero Beach Field Offices, Florida.

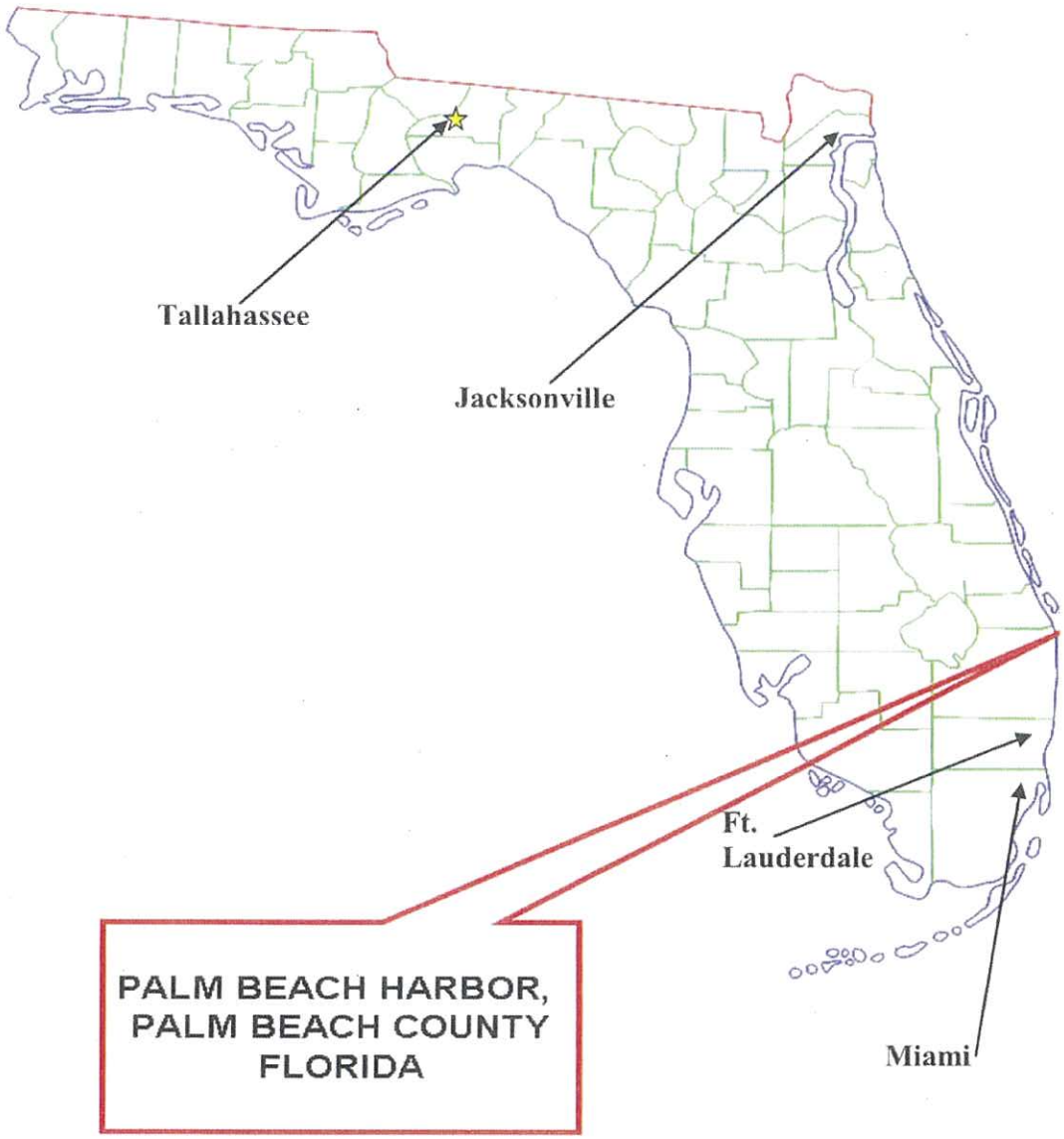

Figure 1. Location of the proposed dredging and sand placement project, Lake Worth Inlet, Palm Beach County, Florida.

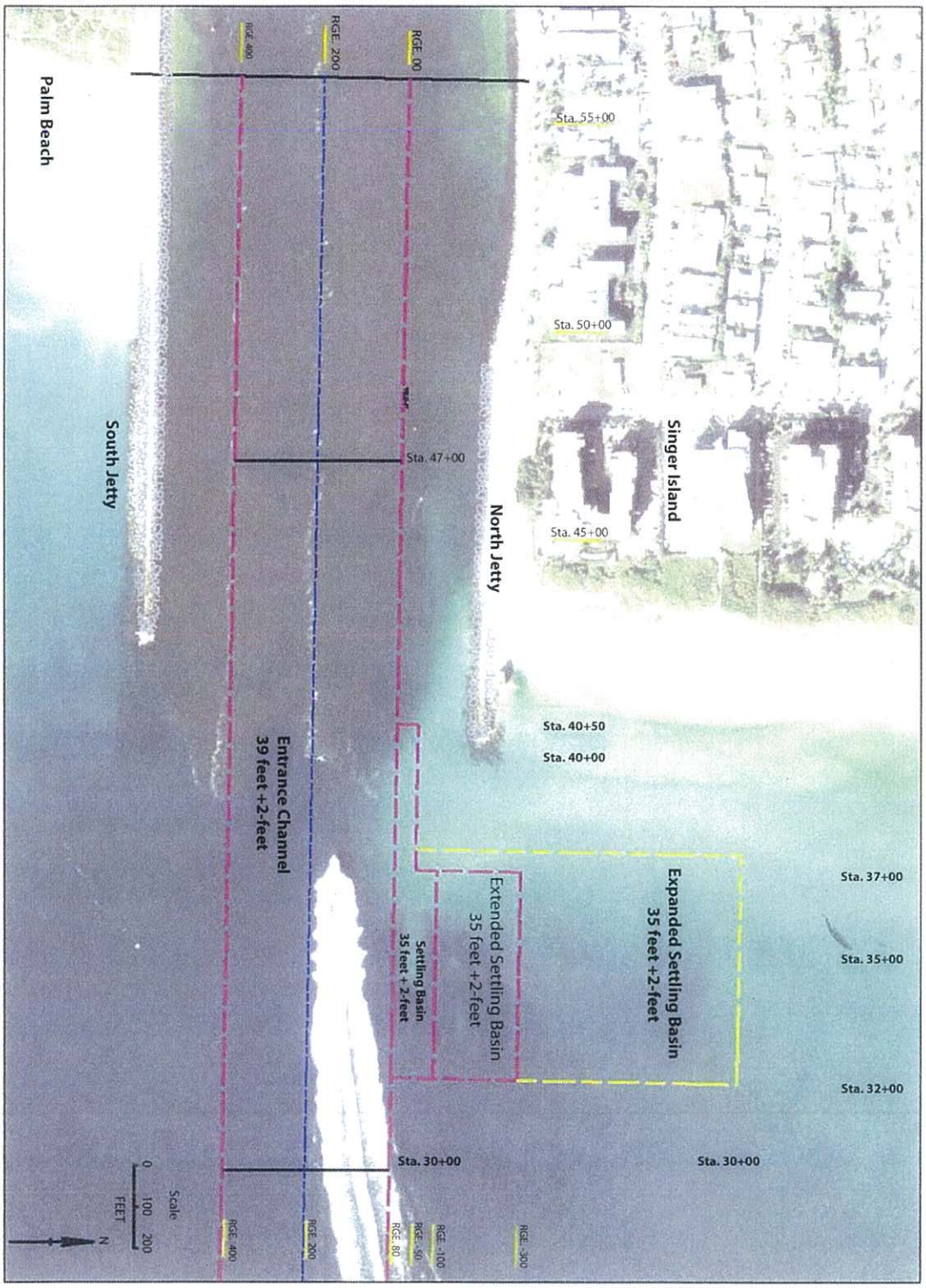

Figure 2. Location of the entrance channel, existing settling basin, and expanded settling basin, Lake Worth Inlet, Palm Beach County, Florida.

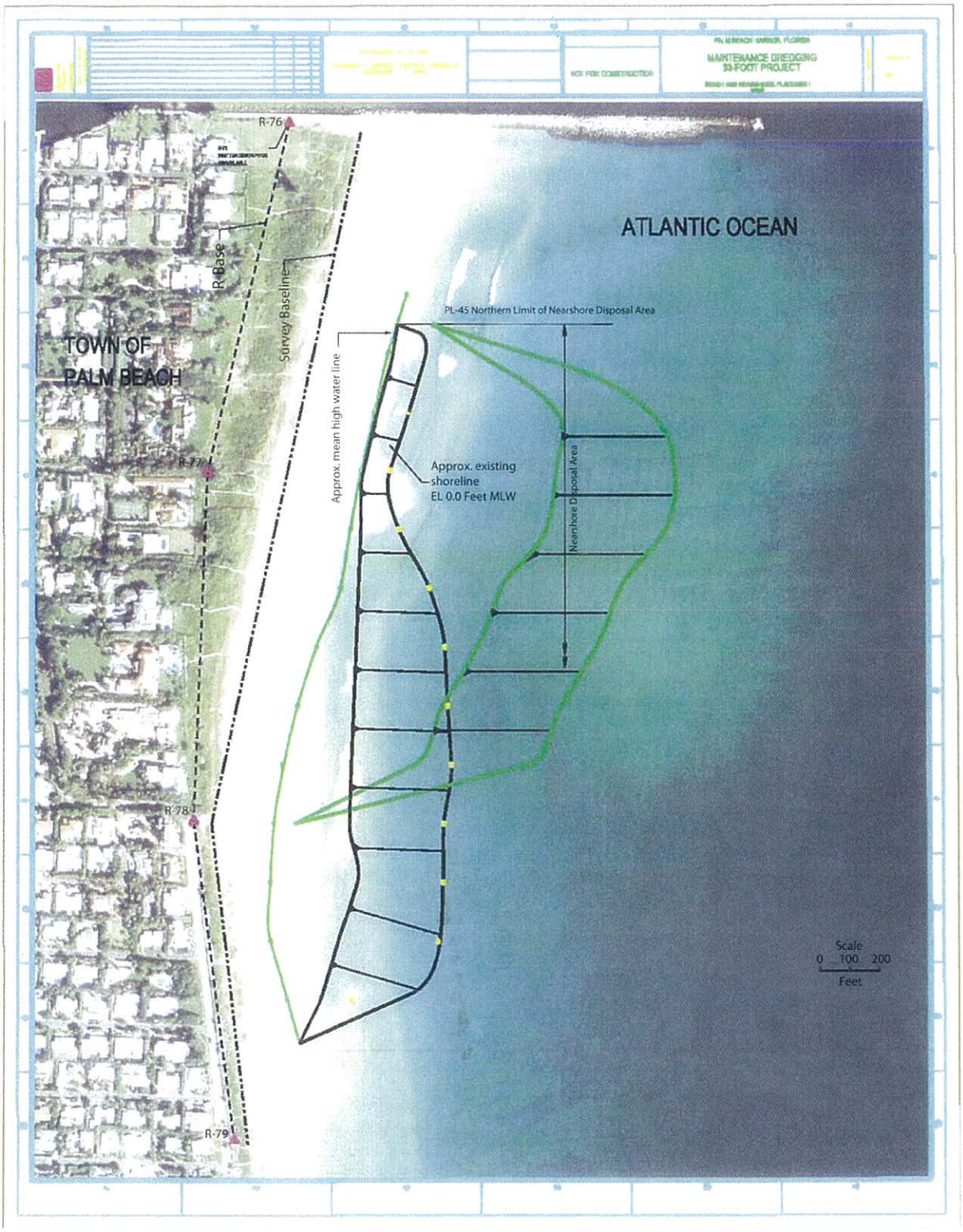

Figure 3. Location of the fill template south of Lake Worth Inlet, Palm Beach County, Florida.