

November XX, 2014

**Via Federal Express**

U.S. Army Corps of Engineers  
Attn: CECW-CE (Lisa Kiefel)  
441 G Street NW  
Washington, D.C. 20314-1000

Dear Ms. Kiefel:

Pursuant to Section 7001 of the Water Resources Reform and Development Act of 2014 and the Notice published in the **Federal Register** on August 5, 2014, St. Lucie County respectfully requests your consideration of our proposal for inclusion in the Annual Congressional Report to be issued in February 2015.

This request is specific to the federally authorized Ft. Pierce, FL Shore Protection Project. The purpose of the proposed modifications; 1) inlet sand bypassing and 2) shoreline stabilization structures, are to provide opportunities for beneficial cost savings and improved effectiveness of the federally authorized Ft. Pierce Shore Protection project. Supplementary information is enclosed to support the proposal.

Should you have any further questions please contact Mr. Richard Bouchard, St. Lucie County Sr. Coastal Engineer at (772) 462-1710.

Sincerely,

Frannie Hutchinson, Chair  
St. Lucie County Erosion District

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encls

cc: SLC Board of County Commissioners  
Howard Tipton, County Administrator  
Daniel McIntyre, County Attorney  
Robert Bentkofsky, Deputy County Administrator  
Sherry Burroughs, Mosquito Control & CMS Director  
Richard Bouchard, Sr. Coastal Engineer

U.S. Senator Bob Nelson  
U.S. Senator Marco Rubio  
U.S. Representative Patrick Murphy  
Ft. Pierce City Manager, Robert Bradshaw  
Florida DEP, Danielle Irwin

# FORT PIERCE, FL SHORE PROTECTION PROJECT

## Proposed Modifications to Authorized USACE Water Resources Development Project

### Supplementary Information

1. Non-Federal Interests
  - a. Local Sponsor: St. Lucie County (Erosion District)
  - b. Other Interest: State of Florida (Florida FDEP)
  
2. This proposal is for a modification to an authorized USACE project

The Fort Pierce, Florida Shore Protection Project in St. Lucie County, Florida was authorized by the River and Harbor Act of 1965 (PL 89-298, 79 Stat. 1089, 1092). The project authorization was modified by Section 102 of the 1968 River and Harbor Act (PL 90-483) to provide for project construction and periodic nourishment by the Secretary of the Army for a period of 10 years following initial construction. Under the authority of Section 156 of WRDA of 1976 (PL 94-587), the Chief of Engineers extended Federal participation to fifteen (15) years from initial construction. Federal participation then expired in 1986, fifteen years after the initial construction fill was placed in 1971. Congress added Section 506(a)(2) of WRDA of 1996 (PL 104-303) which authorized the extension of Federal participation in the periodic nourishment for a period of 50 years, beginning on the date of initiation of initial construction of the project. Initial construction fill was placed in 1971; therefore, Section 506(a)(2) of WRDA 1996 extends Federal participation in periodic nourishment until 2020.

3. The purpose of the proposed modifications are to provide opportunities for beneficial cost savings and improved effectiveness of the federally authorized Ft. Pierce Shore Protection project.

**Shoreline Stabilization Structures:** One concept that was conceptually evaluated by the local sponsor and the USACE is included in a 2001 report titled *Ft. Pierce Shore Protection Project – Design Documentation Report*. The report was result of a request from the local sponsor to improve shore protection along the northern section of the federally authorized project beach due to the aggravated erosion that caused encroachment of the design template associated with the 1999 nourishment quicker than originally designed. It is intended that the installation of permanent shoreline structures immediately south of Ft. Pierce Inlet would enhance project performance by helping to reduce the high shoreline erosion rate next to the inlet, which in turn would lengthen the beach nourishment cycle resulting in beneficial cost savings. Further analysis has been delayed due to issues associated with the USACE's model for these type structures.

**Inlet Sand Bypassing:** Evaluation of the sediment movement in the vicinity of the north jetty at Ft. Pierce Inlet by the local sponsor indicates that construction of an internal sand trap could support the capture of a portion of the sand migration into the inlet. This sand accumulation could be periodically removed and serve as a supplemental sand source for the Ft. Pierce Shore Protection project. A cost savings could be realized due to the close proximity of the inlet sand trap to the beach. Inlet sand bypassing could also reduce the dependence of offshore sand sources for future nourishments consistent with the concepts of the *S.E. Florida Regional Sediment Management* study. The inlet sand trap could likely provide favorable cost savings to the federally maintained harbor by decreasing the maintenance dredging frequency through the reduction of sand migration into the navigation channel.

4. Cost Estimates
  - a. Shoreline Structures: \$6.8 Million
  - b. Inlet Sand Bypassing: \$9.5 Million

## 5. Monetary and Non-Monetary Benefits

Recurring beach nourishment on the Ft. Pierce beachfront is critical to offset the continual erosive impacts caused by the Ft. Pierce Inlet due to the interruption of the natural down-drift sand movement along the southerly coastline. The shoreline adjacent to south jetty has the highest measured erosion rate in the area and has historically been the first area to display significant erosion along the beach due to its proximity to the Inlet. A nourished shoreline at Ft. Pierce beach temporarily mitigates the sand deficit caused by the inlet while allowing naturally occurring sand migration southward to the down-drift beaches. The findings of a 1982 USACE Section 111 study further espouses this cyclic shoreline erosion process.

The project and proposed modifications provide several benefits:

- Mitigates shoreline erosion attributable to the federally maintained deep water harbor
- Long-term beneficial cost savings
- Enhance project performance
- Affords protection from storm damage to upland property and infrastructure
  - Enhances property values
- Offers critical environmental habitat for sea turtle nesting and shorebirds
- Provides economic benefits
  - Fuels tourism and recreation
  - Creates businesses and jobs

## 6. Local Support

The City of Ft. Pierce and St. Lucie County strongly support the federally authorized Ft. Pierce, FL Shore Protection project. Several public and Board workshops have been held to receive input on various elements of the beach management program including the modifications identified in this proposal. The State of Florida (FDEP) continue to play a strong partnership role in advancing and funding various beach management strategies within St. Lucie County including the Ft. Pierce beach nourishment project and inlet sand bypassing.

## 7. Financial Stability

In 1967 the Florida Legislature created the St. Lucie County Erosion District through a Special Act. The Erosion District has historically utilized ad valorem taxes to generate long-term funding sources to operate and maintain the countywide beach management program. St. Lucie County has the financial ability to provide the required cost share as demonstrated in prior efforts with the USACE on the federally authorized Ft. Pierce, FL Shore Protection project.

## 8. Letter or Statement of Support

- a. State of Florida (FDEP)
- b. City of Ft. Pierce