BOARD OF COUNTY COMMISSIONERS

ST. LUCIE COUNTY FLORIDA

FRANNIE HUTCHINSON
COMMISSIONER

December 2, 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, 20014, 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

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

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD, MS 3590
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

CLIFFORD D. WILSON III.
INTERIM SECRETARY

December 2, 2014

U.S. Army Corps of Engineers
c/o Richard Bouchard, St. Lucie County
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

Dear Ms. Kiefel:

The Department of Environmental Protection has long advocated for inlet sand bypassing at Ft. Pierce Inlet, part of the Fort Pierce Harbor Navigation Project. Florida has emphasized inlet management for a number of years as part of our comprehensive beach management program, in an effort to manage our resources in the most efficient and effective manner. Florida Statutes Section 161.142 specifically declares the public policy of sand bypassing at improved inlets.

The state's Strategic Beach Management Plan includes a strategy of bypassing all beach compatible navigational channel maintenance dredged material to the beach south of the inlet, and the construction of a sediment impoundment basin within the inlet. The St. Lucie County Erosion District has conducted a number of studies and design alternatives, assisted by a cost-sharing agreement with the State. Improved sand bypassing would greatly help address the highly erosional area immediately south of the jetty in the Ft. Pierce Shore Protection Project, saving the Corps, the District and the State money and the human resources required to conduct the frequent nourishments. We believe that implementation of adequate sand bypassing would alleviate the need for erosion control structures.

All beach and inlet management projects that are compatible with the Strategic Beach Management Plan are eligible for State cost sharing, and implementation of bypassing at this inlet would likely rank high on the State's annual funding priorities.

Thank you for your consideration.

Sincerely,

Danielle H. Irwin, PWS
Deputy Director
Division of Water Resource Management

Attachment: Section 161.142

161.142 Declaration of public policy relating to improved navigation inlets.—The Legislature recognizes the need for maintaining navigation inlets to promote commercial and recreational uses of our coastal waters and their resources. The Legislature further recognizes that inlets interrupt or alter the natural drift of beach-quality sand resources, which often results in these sand resources being deposited in nearshore areas or in the inlet channel, or in the inland waterway adjacent to the inlet, instead of providing natural nourishment to the adjacent eroding beaches. Accordingly, the Legislature finds it is in the public interest to replicate the natural drift of sand which is interrupted or altered by inlets to be replaced and for each level of government to undertake all reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. Such activities cannot make up for the historical sand deficits caused by inlets but shall be designed to balance the sediment budget of the inlet and adjacent beaches and extend the life of proximate beach-restoration projects so that periodic nourishment is needed less frequently. Therefore, in furtherance of this declaration of public policy and the Legislature's intent to redirect and recommit the state's comprehensive beach management efforts to address the beach erosion caused by inlets, the department shall ensure that:

(1) All construction and maintenance dredgings of beach-quality sand are placed on the adjacent eroding beaches unless, if placed elsewhere, an equivalent quality and quantity of sand from an alternate location is placed on the adjacent eroding beaches.

(2) On an average annual basis, a quantity of beach-quality sand is placed on the adjacent eroding beaches which is equal to the natural net annual longshore sediment transport. The department shall, with the assistance of university-based or other contractual resources that it may employ or call upon, maintain a current estimate of such quantities of sand for purposes of prioritizing, planning, and permitting.

(3) Construction waterward of the coastal construction control line on downdrift coastal areas, on islands substantially created by the deposit of spoil, located within 1 mile of the centerline of navigation channels or inlets, providing access to ports listed in s. 403.021(9)(b), which suffers or has suffered erosion caused by such navigation channel maintenance or construction shall be exempt from the permitting requirements and prohibitions of s. 161.053(4) or (5); however, such construction shall comply with the applicable Florida Building Code adopted pursuant to s. 553.73. The timing and sequence of any construction activities associated with inlet management projects shall provide protection to nesting sea turtles and their hatchlings and habitats, to nesting shorebirds, and to native salt-resistant vegetation and endangered plant communities. Beach-quality sand placed on the beach as part of an inlet management project must be suitable for marine turtle nesting.

(4) The provisions of subsections (1) and (2) shall not be a requirement imposed upon ports listed in s. 403.021(9)(b); however, such ports must demonstrate reasonable effort to place beach-quality sand from construction and maintenance dredging and port-development projects on adjacent eroding beaches in accordance with port master plans approved by the Department of Economic Opportunity, and permits approved and issued by the department, to ensure compliance with this section. Ports may sponsor or cosponsor inlet management projects that are fully eligible for state cost sharing.

(5) The department shall ensure that any disposal of the beach-quality sand from federal projects in this state which involve dredging for the purpose of navigation is on, or in the nearshore area of, adjacent eroding beaches. The department may consider permitting nearshore or upland disposal of such beach-quality sand if emergency conditions exist. The state recognizes that due to the growing demand for beach-quality sand resources for beach restoration and nourishment projects, the limited supply of such sand resources, and the cost of such projects, beach or nearshore sand placement is the least-cost disposal method.

(6) If federal investigations and reports or state-approved inlet management plans do not specify the entity or entities responsible for the extent of erosion caused by an inlet, the department or local government, with the assistance of university-based or other contractual resources that they may employ or call upon, is encouraged to undertake assessments that aid in specifying the responsible entity or entities and in more accurately determining cost-sharing responsibilities for measures to correct such erosion. The entity that is responsible for maintenance dredging of an inlet may be deemed responsible for the erosion caused by the inlet if another responsible party is not specified in such an assessment, a shore protection project investigation or report, or a state-approved inlet management plan.

(7) If the beneficiaries of the inlet, the local governments having jurisdiction of lands adjacent to the inlet, or the owners of property adjacent to the inlet are involved in a dispute concerning how much sand should be bypassed, the department shall protect its monetary investment in beach nourishment projects within the inlet's physical zone of influence by taking all reasonable actions to balance the sediment budget of the inlet and adjacent beaches, including implementation of inlet sand bypassing and other inlet management projects.

City of Fort Pierce
Florida

Office of the Mayor and City Commission
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(772) 467-3025 • www.CityOfFortPierce.com

December 1, 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:

On behalf of the City of Fort Pierce, we offer our full support of St. Lucie County's request for consideration of a proposal for inclusion in the Annual Congressional Report to be issued in February, 2015 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.

The County's 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.

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

Sincerely,

Linda Hudson

Linda Hudson
Mayor

cc:
SLC Board of County Commissioners
Howard Tipton, County Administrator
Daniel McIntyre, County Attorney
Robert Bentkofsky, Deputy County Administrator
Sherry Burroughs, Mosquito Control & CMS
Richard Bouchard, Sr. Coastal Engineer
U.S. Senator Bob Nelson
U.S. Senator Marco Rubio
U.S. Representative Patrick Murphy
Robert Bradshaw, Ft. Pierce City Manager
Jack Andrews, Ft. Pierce City Engineer
Danielle Irwin, Director Florida DEP