

**FORT PIERCE
ST. LUCIE COUNTY, FLORIDA
SHORE PROTECTION PROJECT**

GENERAL REEVALUATION REPORT WITH ENVIRONMENTAL ASSESSMENT

**APPENDIX G
ENVIRONMENTAL**

**Section 404(b) Evaluation
Coastal Zone Management Consistency**

SECTION 404(B) EVALUATION

PART 1

1.01 PROJECT DESCRIPTION

- A. Location. The proposed work will occur along the Atlantic Ocean shoreline of St. Lucie County, Florida. The activity includes excavation of sand from a borrow area approximately three miles offshore of St. Lucie County and nourishment of 6,950 ft of shoreline from the Fort Pierce inlet south jetty (Florida Department of Environmental Protection [FDEP] Monument R-34) to R-41.

1.02 GENERAL DESCRIPTION. T

The project includes the following principal activities.

- A. A hopper dredge will excavate beach-quality sand from the offshore borrow area (Capron Shoal) located in state waters. The hopper dredge will transport dredged sand to a location in the Atlantic Ocean near the project site and pump the sand as slurry to the project beach. Placement of sand fill will occur within the dune and beach restoration template along the project beach.
- B. The selected plan includes construction of shore stabilization structures along the northernmost approximately 2,000 ft of the project area combined with beach and dune nourishment along the entire 6,950 ft (1.3 miles) of project area shoreline from the Fort Pierce Inlet south jetty (R-34) to R-41. The beach nourishment design includes construction of a variable width berm with an equilibrated width of 130 ft. The project template includes a 20-ft wide dune crest at elevation 12.4 feet relative to the 1988 North American Vertical Datum (NAVD88). The project berm will have an elevation of 7.4 ft NAVD88 and a 1V:10H foreshore slope.

Authority. The Fort Pierce SPP was originally authorized by the River and Harbor Act of 1965 (PL 89-298, 79 Stat. 1089, 1092) in accordance with the recommendations of the Chief of Engineers in House Document (HD) 84, 89th Congress. The authorization provided for the restoration of 1.3 miles of shoreline south of Fort Pierce Inlet and for periodic nourishment as needed for a period of 10 years following initial construction of the project. The U.S. Army Corps of Engineers completed the initial project construction in 1971 and conducted the first nourishment in 1980. Several congressional acts modified the project authorization from 1968 – 1999, with the Water Resources Development Act (WRDA) of 1999 (PL 106-53) providing the current authorization that expires in 2020 (i.e., 50 years from the date of initial project construction). With the expiration date of federal authorization approaching, the non-Federal sponsor of the project, St. Lucie County, requested this GRR address a 50-year analysis period

Resolution Docket 2634 St. Lucie County, Florida Shore Protection dated 11 April 2000 states: *“Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review the report of the Chief of Engineers for Fort Pierce Beach, Florida, published as House Document 84, 89th*

Congress, 1st Session, and other pertinent reports with a view to determining if modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of shore protection and hurricane and storm damage reduction to the shoreline areas in St. Lucie County in the area north of the Ft. Pierce Inlet, the southern five miles of St. Lucie County, and adjacent shorelines.”

Resolution Docket 2757 St. Lucie County, Florida Shore Protection dated 23 July 1998
states: *“Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That the Secretary of the Army is requested to review the report of the Chief of Engineers for Fort Pierce Beach, Florida, published as House Document 84, 89th Congress, 1st Session, and other pertinent reports with a view to determining if modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of shore protection and hurricane and storm damage reduction to the shoreline areas in St. Lucie County from the current project for Ft. Pierce Beach, Florida southward to the Martin County Line.”*

C. General Description of Dredged or Fill Material.

1. General Characteristics of Material. The native beach has a composite mean grain size of 0.416mm. Fort Pierce beach sand consists of light gray to very pale brown, moderately to poorly sorted, medium grained sand with 49.8% carbonate and less than 2% silt content. The proposed borrow area for the initial project is estimated to have a composite mean grain-size of 0.50mm, less than 2% fines (material passing a #230 U.S. Standard Sieve), and similar color as the native beach.
2. Quantity of Material. Beach fill material includes an estimated of 576,490 cubic yards for initial construction and each periodic nourishment of the project area.
3. Source of Material. The proposed borrow area Capron Shoal and is located about four miles offshore of the project beach in Federal and State waters with water depths of about -30 feet NAVD88. Sand from this source will conform to State of Florida standards, including compatibility with the native beach sand, for use as beach fill.

D. Description of the Proposed Discharge Site.

1. Location. Beach quality sand would be placed along the shoreline of Hutchinson Island in Fort Pierce, St. Lucie County, FL.
2. Size. The beach nourishment area includes 6,950 ft of shoreline from the Fort Pierce inlet south jetty (FDEP Monument R-34) to FDEP Monument R-41.
3. Type of Site. The beach nourishment site includes eroded recreational beach with naturally occurring hardbottom variously exposed between the approximate mean low water shoreline and about 1,000 ft offshore. The local sponsor (St. Lucie County) has mitigated for all identified project impacts (9.6 acres) to hardbottom, including 8.9 acres of anticipated impact from initial construction and 0.7 acres of unanticipated impact. The non-federal sponsor continues to conduct hardbottom monitoring annually and coordinate with regulatory agencies to identify any additional impacts that require mitigation. The selected plan, will not extend beyond the original toe of fill and the

expected project fill volume does not exceed previous projects. Therefore, no additional impact is anticipated.

4. Type of Habitat. The beach fill disposal site comprises dune, supratidal, tidal, and subtidal beach zones.
 5. Timing and Duration of Discharge. The non-federal sponsor anticipates a project to implement the selected plan in 2021. After that construction is completed, nourishment projects may occur on a 4-year schedule for the duration of the project authorization. In compliance with the 2008 USFWS Biological Opinion (updated in 2015) for the Fort Pierce SPP, beach placement activities would begin November 1 or later and end by May 15 in the R-37 to R-41 segment and by May 31 in the R-34 to R-37 segment to avoid the peak sea turtle nesting season.
- E. Description of Disposal Method. A hopper dredge will hydraulically pump sand from the ocean floor and transport the sand to a point offshore of the project beach. The hopper dredge typically anchors within the inlet alongside the south jetty and then hydraulically pumps the sand from the ship through a pipeline across the south jetty to the project beach. On the beach, the hydraulically pumped sand will discharge inside a shore-parallel berm, where the sand will settle and the water will flow back to the ocean. As the sand builds up, grading equipment will grade the sand into the desired template.

PART 2 FACTUAL DETERMINATIONS

- A. Physical Substrate Determinations.
1. Substrate Elevation and Slope. A schematic design cross section is available in Appendix A.
 2. Sediment Type. Sand from the borrow areas is fine to coarse grained quartz sand with varying amounts of small broken shell. See also D (1)above.
 3. Dredge/Fill Material Movement. Cross-shore and longshore currents (principally to the south) will move some of the fillmaterial.
 4. Physical Effects on Benthos. The placement of sand on the beach face will result in the burial and loss of most of the beach infauna. Key components of these assemblages are surf clams, mole crabs, and polychaete worms. Assuming typical planktonic larval recruitment of these and other benthic species to the project site, surf zone infauna should recover within one or two years after completion of construction. Based on known characteristics of the dredged sand and the required quality control over the sand placed on the beach, the site should remain sufficiently similar in physical characteristics to recruit a similar infaunal community.
- B. Water Circulation, Fluctuation, and Salinity Determination.
1. Water Column Effects. Fill placement will not have long-term or significant impacts on salinity, water chemistry, clarity, color, odor, taste, dissolved gas levels, nutrients, or eutrophication.

2. Current Patterns and Circulation. Currents in the project area are both tidal and longshore. Net movement of water due to the longshore current is typically north to south.
 3. Normal Water Level Fluctuations and Salinity Gradients. Tides in the project area are semidiurnal. Elevations of mean high water and mean low water in St. Lucie County are approximately +0.4 ft NAVD88 and -3.0 ft NAVD88, respectively.
- C. Suspended Particulate/Turbidity Determinations
1. Expected Changes in Suspended Particulates and Turbidity Levels in the immediate vicinity of the Disposal Site. A temporary increase in turbidity levels will occur in the waters adjacent to the hopper dredge during dredging and along the beach shoreline near the sand slurry discharge point. Short-term, localized turbidity increases should have no significant adverse impacts. Construction activities should not result in exceedance of State turbidity standards outside of the approved beach mixing zone or at the borrow site.
 2. Effects on the Chemical and Physical Properties of the Water Column.
 - a. Light Penetration. The placement and spread of fill on the beach will increase turbidity in the nearshore area during construction. The immediate nearshore area is a high-energy system, subject to naturally occurring turbidity fluctuations. Temporary turbidity increases due to project construction should not prove significant. The State of Florida requires a nearshore turbidity monitoring program during construction. Turbidity during construction outside of the mixing zone will not exceed State numeric standards.
 - b. Dissolved Oxygen. This project will not significantly alter dissolved oxygen levels.
 - c. Toxic Metals, Organics, and Pathogens. The project will release no toxic metals, organics, or pathogens.
 - d. Aesthetics. Construction activities (dredging and beach placement) will reduce aesthetic qualities during construction. The completed project will provide a long-term increase in aesthetic quality.
 3. Effects on Biota.
 - a. Primary Productivity and Photosynthesis. The level of suspended particles in the surf zone will temporarily increase during construction. During construction, suspended material will reduce the intensity of sunlight reaching existing algae, temporarily restricting photosynthesis and primary productivity in local areas. Post-construction monitoring of nearshore hardbottom communities will include assessment of potential project-related secondary impacts due to turbidity and sedimentation.
 - b. Suspension/Filter Feeders. Suspension feeders will experience short-term impacts during construction, but no long-term adverse impact.
 - c. Sight Feeders. Visual feeders will experience short-term impacts due to elevated turbidity, but no long-term adverse impact.

- d. Contaminant Determinations. Deposited fill material will not introduce, relocate, or increase contaminants.
 - e. Aquatic Ecosystem and Organism Determinations. Grain size characteristics and composition of the proposed fill material closely match those of the existing beach sediments. Therefore, no sediment-related impacts are expected. The proposed fill material meets the exclusion criteria and therefore will require no additional chemical-biological testing.
4. Effects on Plankton. Although turbidity may result in short-term effects (e.g., clogging of feeding appendages) on plankton, no adverse long-term impacts to planktonic organisms are anticipated.
 5. Effects on Benthos. Non-motile benthic species unable to migrate away from the project area will be covered and lost. However, due to the high fecundity and turnover rates of benthic invertebrates, full recovery of the benthic community should occur within one to two years.
 6. Effects on Nekton. Elevated turbidity related to the proposed project should not affect these species due to their motility and ability to avoid undesirable conditions. No long-term adverse impacts are anticipated.
 7. Effects on the Aquatic Food Web. The project will not likely create long-term adverse impacts to any trophic group in the food web.
 8. Effects on Special Aquatic Sites.
 - a. (St. Lucie County) has mitigated for all identified project impacts (9.6 acres) to hardbottom, including 8.9 acres of anticipated impact from initial construction and 0.7 acres of unanticipated impact. The non-federal sponsor continues to conduct hardbottom monitoring annually and coordinate with regulatory agencies to identify any additional impacts that require mitigation. The selected plan, will not extend beyond the original toe of fill and the expected project fill volume does not exceed previous projects. Therefore, no additional impact is anticipated
 - b. Sanctuaries and Refuges. No sanctuaries or wildlife refuges occur within the proposed dredge and disposal areas.
 - c. Wetlands. No wetlands occur within the proposed dredge and disposal areas.
 - d. Mud Flats. No mud flats occur within the proposed dredge and disposal areas.
 - e. Vegetated Shallows. No seagrass beds occur within or adjacent to the dredge, beach fill, or mitigation reef sites.
- D. Endangered and Threatened Species. The proposed project will 6,950 ft (1.3 miles) of shoreline, from the Fort Pierce inlet south jetty (R-34) to R-41, of the approximately 1,400 miles of available sea turtle nesting habitat in the southeastern United States. Turtle nesting along this section of the beach is lower than farther south, likely due to the fluctuating habitat quality in this area. As mentioned, project construction will occur outside of the peak sea turtle nesting season for the project area in accordance with the 2008 USFWS Biological Opinion (updated in 2015)

for the Fort Pierce SPP and, therefore, will likely avoid impacts to nesting sea turtles during construction. The work may affect, but is not likely to adversely affect, loggerhead critical habitat (see Section 4.1.4 of the main report).

Research has shown that the principal effect of beach nourishment on sea turtle reproduction is a reduction in nesting success, and this reduction is most often limited to the first year following project construction (USFWS 2005). Nesting success decreases during the year following nourishment as a result of escarpments obstructing beach accessibility, altered beach profiles, and increased compaction. Research has also shown that the impacts of a nourishment project on sea turtle nesting habitat are typically short-term, because a nourished beach will be reworked by natural processes in subsequent years, and beach compaction and the frequency of escarpment formation will decline (USFWS 2005).

The non-federal sponsor will follow the reasonable and prudent measures the recommended by the USFWS in its Biological Opinion. These measures will help minimize impacts to sea turtles. Widening of an eroded beach with beach-compatible sand will increase the amount of suitable nesting area available to sea turtles. This may aid in the population recovery of these protected species.

1. Other Wildlife. No significant adverse impacts to terrestrial foraging mammals, reptiles, wading birds, or other wildlife are expected. These highly motile organisms are able to actively seek favorable environmental conditions for foraging and nesting. Restoring the project beach and dune will have a long-term benefit by providing additional habitat.
2. Actions to Minimize Impacts. Implementing all practical safeguards during project construction to preserve and enhance aesthetic, recreational, and economic values in the project area. The environmental permits and contractor specifications will include these measures.
 - a. Proposed Disposal Site Determinations.
3. Mixing Zone Determination. The fill material will not cause unacceptable changes in the mixing zone specified in the State Water Quality Certificate in relation to: depth, current velocity (speed and direction), current variability, degree of turbulence, stratification, or ambient concentrations of constituents.
4. Determination of Compliance with Applicable Water Quality Standards. The project will not violate state water quality standards outside of the established mixing zone. At no time will nearshore turbidity levels exceed 29 NTUs above background levels.
5. Potential Effects on Human Use Characteristics.
 - a. Municipal and Private Water Supplies. Project implementation will not affect municipal or private water supplies.
 - b. Recreational and Commercial Fisheries. The disposal of dredged material on the beach project will not permanently impact recreational and commercial fisheries. The mitigation reef structures constructed in the project area nearshore waters have created increased or new opportunities for recreational fishing.

- c. Water Related Recreation. Beach restoration will enhance beach recreation by increasing the area of beach for public use. Increased turbidity in the vicinity of fill sites may temporarily affect nearshore snorkeling/SCUBA and fishing. The presence of construction-related equipment will create public safety risks at the beach sites during construction periods. Given the narrow scale of beach fill that the project will place immediately along the beach face, landward of locations where swimming and surfing occur, adverse impacts to swimming and surfing will not likely occur.
- d. Aesthetics. The stabilization of an eroding beach will improve aesthetics of the beach.
- e. Parks, National and Historic Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves. The widening of an eroded beach will increase the area available for public recreation at the county park within the project area. Additionally, the proposed restoration will provide storm protection for this park.
- f. Determination of Cumulative Effects on the Aquatic Ecosystem. The proposed beach restoration project should not have any significant cumulative effects that would result in a major impairment of water quality of the existing aquatic ecosystem. Dredging at the borrow site should likewise result in no significant cumulative effects to the aquatic ecosystem.
- g. Determination of Secondary Effects on the Aquatic Ecosystem. Placement of the fill material will not likely cause adverse secondary effects on the aquatic ecosystem.

PART 3 FINDINGS OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE.

- A. No significant adaptations of the guidelines were made relative to this evaluation.
- B. No practicable alternative exists which meets the study objectives that does not involve discharge of fill into waters of the United States.
- C. After consideration of disposal site dilution and dispersion, the discharge of fill materials will not cause or contribute to, violations of any applicable State of Florida water quality standards for Class III waters. The discharge operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.
- D. The project will not jeopardize the continued existence of any species listed as threatened or endangered or result in the likelihood of destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973, as amended.
- E. The placement of fill material will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic species and other wildlife will not be adversely affected. Significant adverse effects on aquatic

ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values will not occur.

- F. On the basis of the guidelines, the proposed disposal site for the discharge of dredged material is specified as complying with the requirements of these guidelines.

FLORIDA COASTAL ZONE MANAGEMENT PROGRAM

PART 1

- A. Chapter 161, Beach and Shore Preservation. The intent of the coastal construction permit program established by this chapter is to regulate construction projects located seaward of the line of mean high water and which might have an effect on natural shoreline processes.

Response: The proposed project plans and information shall be submitted to the State in compliance with this chapter.

- B. Chapters 186 and 187, State and Regional Planning. These chapters establish the State Comprehensive Plan, which sets goals articulating a strategic vision of the State's future. Its purpose is to define in a broad sense, goals, and policies that provide decision-makers directions for the future and provide long-range guidance for an orderly social, economic and physical growth.

Response: The appropriate Federal, State, and local agencies have been engaged in project review and comment from the initial planning process through all the permit applications authorized for this project. The project meets the primary goal of the State Comprehensive Plan through preservation and protection of shorefront development and infrastructure.

- C. Chapter 252, Disaster Preparation, Response and Mitigation. This chapter creates a state emergency management agency, with the authority to provide for the common defense; to protect the public peace, health, and safety; and to preserve the lives and property of the people of Florida.

Response: The proposed project involves the placement of beach compatible material onto an eroding beach as a means to protect residents, development, and infrastructure located along the Atlantic shoreline within St. Lucie County. Therefore, this proposed project is consistent with the efforts of the Division of Emergency Management.

- D. Chapter 253, State Lands. This chapter governs the management of submerged state lands and resources within state lands. This includes archeological and historical resources; water resources; fish and wildlife resources; beaches and dunes; submerged grass beds and other benthic communities; swamps, marshes and other wetlands; mineral resources; unique natural features; submerged lands; spoil islands; and artificial reefs.

Response: The proposed beach nourishment would increase recreational beach and potential sea turtle nesting habitat. No seagrass beds, swamps, marshes and other wetlands; mineral resources, unique natural features, spoil islands, or artificial reefs occur within or adjacent to the areas proposed for dredging or beach fill placement. The proposed project would comply with the intent of this chapter.

- E. Chapters 253, 259, 260, and 375, Land Acquisition. This chapter authorizes the state to acquire land to protect environmentally sensitive areas.

Response: This project proposes no land acquisition.

- F. Chapter 258, State Parks and Aquatic Preserves. This chapter authorizes the state to manage state parks and preserves. Consistency with this statute would include consideration of projects that would directly or indirectly adversely impact park property, natural resources, park programs, management, or operations.

Response: No state parks or preserves occur within the project area.

- G. Chapter 267, Historic Preservation. This chapter establishes the procedures for implementing the Florida Historic Resources Act responsibilities.

Response: Documented exploration and transportation activities along Florida's east coast date from the second half of the 16th century. Because of over 400 years of navigation in the Bahama Channel, several hundred shipwrecks have been identified in the waters off the state's southeast coast. Remains of recorded and unrecorded shipwrecks may be located in the area affected by the proposed Fort Pierce SPP.

Archival research and field investigations have been conducted for the study area, and coordination with the Florida State Historic Preservation Officer (SHPO) is complete. Results of the investigation of Capron Shoal are included in the draft report Submerged Historic Properties Survey Capron Shoal Borrow Site, Fort Pierce Beach Erosion Control Project, St. Lucie County, Florida, December 4, 1997. Mid-Atlantic Technology and Environmental Research completed the fieldwork and prepared the report under contract to the USACE.

One magnetic target was identified during the remote sensing survey. Analysis indicated that the target's magnetic signature does not have characteristics similar to historic shipwreck sites. It was concluded that the target probably was a single modern object and not likely to represent a resource eligible for inclusion in the National Register of Historic Places.

Based on archival research and consultation with SHPO, no significant historic properties are known to exist on the beach segment proposed for nourishment. No additional fieldwork or other investigation related to historic preservation is proposed for either the borrow area or beach at Fort Pierce.

- H. Chapter 288, Economic Development and Tourism. This chapter directs the state to provide guidance and promotion of beneficial development through encouraging economic diversification and promoting tourism.

Response: The proposed beach nourishment would provide more space for recreation and protect recreational facilities along the receiving beach. The project remains consistent with the goals of this chapter, which encourages creation of additional space for recreation.

- I. Chapters 334 and 339, Public Transportation. This chapter authorizes the planning and development of a safe balanced and efficient transportation system.

Response: This project would not impact the public transportation system.

- J. Chapter 370, Saltwater Living Resources. This chapter directs the state to preserve, manage and protect the marine, crustacean, shell and anadromous fishery resources in state waters; to protect and enhance the marine and estuarine environment; to regulate fishermen and vessels of the state engaged in the taking of such resources within or without state waters; to issue licenses for the taking and processing products of fisheries; to secure and maintain statistical

records of the catch of each such species; and, to conduct scientific, economic, and other studies and research.

Response: Motile species such as fish and epifaunal crustaceans will be able to avoid the area during construction and seek favorable environmental conditions. Non-motile autotrophic organisms and infaunal invertebrates will be temporarily lost. However, these organisms are highly adapted to the periodic burial by sand in the intertidal zone. As demonstrated from past scientific investigations concerning the recolonization success of the benthic communities seaward of nourished beaches, the loss of nonmotile invertebrates is expected to be a short-term impact. These organisms are highly fecund and are expected to return to pre-construction levels within 1-2 years following construction.

Nourishment activities will occur outside of the peak sea turtle nesting season. The USFWS Statewide 2008 USFWS Biological Opinion (updated in 2015) for the Fort Pierce SPP, FDEP permit, and contract specifications will contain protective measures specifically designed to avoid adverse impacts to manatees and sea turtles that may be foraging in the area. It is not expected that sea turtles would be significantly impacted by this project. In fact, sea turtle nesting habitat should be increased as a result of increased beach width.

As stated in the 2002 Environmental Impact Statement (EIS) for this project, plan formulation and the authorized project included all practicable means to avoid or minimize adverse environmental impacts. The 1999 project — which applied the authorized template with a 50 ft MHW extension — impacted 8.9 acres of hardbottom. As noted in the Mitigation Plan for Fort Pierce 1.3-Mile Beach (Taylor Engineering, November 1997) for the FDEP, mitigation efforts have compensated for hardbottom impacts.

- K. Chapter 372, Living Land and Freshwater Resources. This chapter establishes the Game and Freshwater Fish Commission and directs it to manage freshwater aquatic life and wild animal life and their habitat to perpetuate a diversity of species with densities and distributions which provide sustained ecological, recreational, scientific, educational, aesthetic, and economic benefits.

Response: The project will have no significant effect on freshwater aquatic life or wild animal life.

- L. Chapter 373, Water Resources. This chapter provides the authority to regulate the withdrawal, diversion, storage, and consumption of water.

Response: This project does not involve water resources as described by this chapter.

- M. Chapter 376, Pollutant Spill Prevention and Control. This chapter regulates the transfer, storage, and transportation of pollutants and the cleanup of pollutant discharges.

Response: The contract specifications will prohibit the contractor from dumping oil, fuel, or hazardous wastes in the work area and will require the contractor to adopt safe and sanitary measures for the disposal of solid wastes. Contract specifications will require an approved spill prevention plan before contractor receipt of a notice to proceed.

- N. Chapter 377, Oil and Gas Exploration and Production. This chapter authorizes the regulation of all phases of exploration, drilling, and production of oil, gas, and other petroleum products.

Response: This project does not involve the exploration, drilling, or production of gas, oil or petroleum products. Therefore, this chapter does not apply.

- O. Chapter 380, Environmental Land and Water Management. This chapter establishes criteria and procedures to assure that local land development decisions consider the regional impact nature of proposed large-scaled development.

Response: The proposed nourishment project will not have any regional impact on resources in the area. Therefore, the project is consistent with the goals of this chapter.

- P. Chapter 388, Arthropod Control. This chapter provides for a comprehensive approach for abatement or suppression of mosquitoes and other pest arthropods within the state.

Response: The proposed project will not further the propagation of mosquitoes or other pest arthropods.

- Q. Chapter 403, Environmental Control. This chapter authorizes the regulation of pollution of the air and waters of the state by the Florida Department of Environmental Regulation (FDER -now a part of the Florida Department of Environmental Protection, FDEP).

Response: The FDEP participated in review and comment on the Feasibility Report and Environmental Impact Statement (EIS) completed in September 1996. State Environmental Agencies including the FDEP have reviewed and authorized permits for 12 beach nourishment projects between 1998 and 2015. The local sponsor will continue to permit future projects through the FDEP.

- R. Chapter 582, Soil and Water Conservation. This chapter establishes policy for the conservation of the state soil and water through the Department of Agriculture. Land use policies will be evaluated in terms of their tendency to cause or contribute to soil erosion or to conserve, develop, and utilize soil and water resources both onsite or in adjoining properties affected by the project. Particular attention will be given to projects on or near agricultural lands.

Response: The proposed project will not occur near or on agricultural lands. Therefore, this chapter does not apply.