

**JUPITER CARLIN SEGMENT
PALM BEACH COUNTY
SHORE PROTECTION PROJECT**

**Final Integrated Section 934 Report and
Environmental Assessment**

**APPENDIX G
Environmental**

**Attachment 1 – Section 404(b) Evaluation
Attachment 2 – Coastal Zone Management Consistency**

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**US Army Corps
of Engineers**
Jacksonville District

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ATTACHMENT 1

SECTION 404(B)(1) EVALUATION

**JUPITER CARLIN
PALM BEACH COUNTY
SHORE PROTECTION PROJECT**

SECTION 404(B)(1) EVALUATION

JUPITER CARLIN PALM BEACH COUNTY SHORE PROTECTION PROJECT

I. PROJECT DESCRIPTION

a. Location. The Jupiter Carlin Segment of the Palm Beach County Shore Protection Project lies south of Jupiter Inlet between Florida Department of Environmental Protection (FDEP) reference monuments R-13 and R-19 in Palm Beach County, Florida. The segment is situated along the Atlantic Ocean in Section 5, Township 41 South, Range 43 East. Sand sources for past and currently proposed project beach nourishments in this segment include the Jupiter Inlet ebb shoal and offshore borrow areas.

b. General Description. The Jupiter/Carlin segment of the Palm Beach County Shore Protection Plan would nourish a 1.1-mile stretch of beach south of Jupiter Inlet between FDEP monuments R-13 and R-19. The proposed beach fill profile consists of a 30-foot berm using beach quality sand from an offshore borrow area in the Atlantic Ocean.

One sand source, "Jupiter Carlin A," was identified by the non-Federal sponsor as the preferred source of material for beach nourishment. Palm Beach County collected 29 vibracores within the proposed sand source in 1995 and 1996 and performed grain size analyses on selected samples. Based on historical data, the thickness of potential beach-compatible material ranges from 4 to 20 feet, with an average thickness of more than 10 feet. Conservative dredge cut depths and a 15-year-old bathymetric survey were used to estimate an available volume of approximately 5 million cubic yards. This should allow for plenty of material in the sand source for the proposed beach fill.

Subsequent beach nourishments may utilize permitted upland sand mines, or may continue to use an offshore sand source. There are several permitted existing sand mines in south Florida that could be used to nourish the Jupiter Carlin beach. Based on information provided by these mines, USACE has determined that they contain sufficient sand reserves for the life of the project.

c. Authority and Purpose. See section 1.4 and 1.5 of the main report.

d. General Description of Dredged Material

(1) General Characteristics of Material: The offshore sand source does contain rock and large shell that will require screening. Additional core borings may be collected and laboratory analyses performed to ensure that the material is compatible with the beach placement area and is in compliance with FDEP's "Sand Rule" guidelines. Boring logs and laboratory testing results are attached in the Geotechnical Appendix. In the event that an upland sand source or mine is utilized, the material shall be required to meet certain criteria in order to ensure that the material is compatible with the native beach and minimizes potential turbidity issues.

(2) Quantity of Material: The average nourishment volume per event is 193,300 cy.

(3) Source of Material: Material will be dredged from the offshore borrow area known as Jupiter Carlin A. Subsequent beach nourishments may utilize permitted upland sand mines, or they may continue to use the offshore borrow area.

e. Description of the proposed Borrow Site.

(1) Location and Size. The offshore sand source lies in water depths of approximately 60 to 70 feet, centered about two miles offshore, between the Palm Beach County line, south to FDEP range monument R-10. Irregular in shape, the offshore sand source encompasses approximately 700 acres.

Upland sand mines that could be used for this project include, but are not necessarily limited to the following:

Stewart Mining Industries – Immokalee: The Stewart mine is located just northwest of the City of Immokalee in northwestern Collier County.

Vulcan Materials – Witherspoon: The Vulcan Witherspoon mine is located in southern Glades County, near the city of LaBelle, approximately 120 miles from the project area.

E. R. Jahna – Ortona: The E. R. Jahna Ortona mine is also located in southern Glades County, adjacent to the Witherspoon mine and approximately 120 miles from the project area.

Atlantic Civil, Inc. – Homestead: The ACI mine is located in southern Miami-Dade County, in the city of Homestead and approximately 35 miles from the project area.

(2) Type of Site. The offshore site is a sandy shoal that contains rock and large shell. Additional core borings may be collected and laboratory analyses performed to ensure that the material is compatible with the beach placement area and is in compliance with FDEP's "Sand Rule" guidelines. Generally, sand mines in Florida consist of an open pit, haul roads, and structures and equipment located on the perimeter or in the near vicinity of the pit.

(3) Type of Habitat. The borrow area is characterized by a sandy bottom. There are no known seagrass beds or rock outcrops in the borrow area. The permitted upland sand mines are disturbed sites with no natural habitat remaining.

(4) Timing and Duration of Dredging. The exact timing of dredging operations is not known, although dredging activities are expected to occur in the winter months.

f. Description of the Proposed Placement Site(s)

(1) Location. Dredged material would be placed along the beach between DEP monuments R-13 and R-19, Palm Beach County, Florida.

(2) Size. The beach placement size is approximately 1.1 miles in length (between R-13 and R-19) with a 30-foot berm.

(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 the offshore. The non-Federal sponsor provided mitigation to offset these impacts. The Recommended Plan, with its smaller placement area, would not exceed previous impacts and, therefore, no additional mitigation is proposed.

(4) Type(s) of Habitat. The beach fill disposal site comprises dune, supratidal, tidal, and subtidal beach zones.

(5) Timing and Duration of Discharge. The schedule of dredging and sand placement activities are unknown at this time, and are dependent on securing funding. In compliance with the USFWS Statewide Programmatic Biological Opinion, beach placement activities would begin November 1 or later and end before May 1 to avoid the peak sea turtle nesting season.

g. Description of Disposal Method. A hydraulic dredge will likely be used to pump sand from the offshore borrow area via a pipeline to the 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.

II. Factual Determinations

a. Physical Substrate Determinations

(1) Substrate Elevation and Slope: Schematic design plan view and cross section drawings area available in Appendix A.

(2) Sediment Type. The material to be placed on the beach will only be of beach quality sand (see Appendix A).

(3) Dredged Material Movement: Material will settle and remain within boundaries of the beach template or be moved to downdrift beaches by wave.

(4) Physical Effects on Benthos: Some benthic organisms that are not mobile may be covered by the beach material. 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 Determinations

(1) Water column: During beach or nearshore disposal operations, turbidity will increase temporarily in the water column adjacent to the project. The increased turbidity will be short-term; therefore beach placement or nearshore placement will have no long-term or significant impacts, if any, on salinity, water chemistry, clarity, color, odor, taste, dissolved gas levels, nutrients or eutrophication.

(2) Current Patterns and Circulation: Net movement of water is from the north to the south. The project will have no significant effect on existing current patterns, current flow, velocity, stratification, or the hydrologic regime in the area.

(3) Normal Water Level Fluctuations: Mean tidal range in the project area is 3.5 feet with a spring tide range of approximately 4.1 feet.

(4) Salinity Gradients: Salinity is that of oceanic water. Dredged material placement will not affect normal tide fluctuations or salinity.

(5) Actions That Will Be Taken to Minimize Impacts: BMPs and other benthic protection measures have been coordinated with the resource agencies to minimize impacts.

c. Suspended Particulate/Turbidity Determinations

(1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site: There may be a temporary increase in turbidity levels in the project area along the disposal site during discharge. Turbidity will be short-term and localized and no significant adverse impacts are expected. State water quality standards for turbidity outside an allowable mixing zone would not be exceeded.

(2) Effects (degree and duration) on Chemical and Physical Properties of the Water Column: The sea floor, at this location, is characterized by a sandy beach. There would be little, if any adverse effects to chemical and physical properties of the water as a result of placing clean beach compatible sand on the beach.

(a) Light Penetration: Some decrease in light penetration may occur in the immediate vicinity of the disposal area. This effect will be temporary, limited to the immediate area of construction, and will have no adverse impact on the environment. 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: Dissolved oxygen levels will not be altered by this project due to the high energy wave environment.

(c) Toxic Metals and Organics: No toxic metals or organics are expected to be released by the project.

(d) Pathogens: No pathogens are expected to be released by the project.

(e) Aesthetics: The aesthetic quality of the water in the immediate area of the project will be reduced during construction due to increased turbidity. This will be a short-term and localized condition. The placement of clean beach compatible sand on an erosive beach will likely improve the aesthetic quality of the immediate area. Material placed in the nearshore would likely provide improved beach width downdrift.

(3) Effects on Biota

(a) Primary Production, 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.

(b) Suspension/Filter Feeders: An increase in turbidity could adversely impact burrowing invertebrate filter feeders within and adjacent to the immediate construction area. It is not expected that a short-term, temporary increase in turbidity will have any long-term negative impact on these highly fecund organisms.

(c) Sight Feeders: No significant impacts on these organisms are expected as the majority of sight feeders are highly motile and can move outside the project area.

(4) Actions taken 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.

d. Contaminant Determinations: The material that will be disposed will not introduce, relocate, or increase contaminants at the area. The material would be clean sand meeting the sand specification and compatible with the existing beach or sandy material with some silt in the nearshore or upland.

e. Aquatic Ecosystem and Organism Determinations: The material that will be placed on the beach is similar enough to the existing substrate so that no impacts are expected. The materials meet the exclusion criteria, therefore, no additional chemical-biological interactive testing will be required.

(1) 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.

(2) 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.

(3) Effects on Nekton: Elevated turbidity related to the proposed project should not affect these species due their motility and ability to avoid undesirable conditions. No long-term adverse impacts are anticipated.

(4) Effects on Aquatic Food Web: No adverse long-term impact to any trophic group in the food web is anticipated.

(5) Effects on Special Aquatic Sites: As previously stated, nearshore hardbottom habitat within the study area was impacted by prior sand placement activities. The non-Federal sponsor provided mitigation to offset these impacts. The Recommended Plan, with its smaller placement area, would not exceed previous impacts and, therefore, additional mitigation is not proposed.

(6) Threatened and Endangered Species: The proposed project will affect 1.1 miles of the approximately 1,400 miles of available sea turtle nesting habitat in the southeastern United States. Project construction will occur outside of the peak sea turtle nesting season (May 1 – October 31) and, therefore, will reduce impacts to nesting sea turtles during construction.

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. 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.

USACE will follow the reasonable and prudent measures recommended by the USFWS in its Statewide Programmatic 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.

(7) 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.

(8) 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.

f. Proposed Disposal Site Determinations

(1) Mixing Zone Determination: Clean sand, compatible with the existing beach, would be placed on the beach. This will not cause unacceptable changes in the mixing zone water quality requirements as specified by the State of Florida's Water Quality Certification permit procedures. No adverse impacts related to depth, current velocity, direction and variability, degree of turbulence, stratification, or ambient concentrations of constituents are expected from implementation of the project. Rock will need to be screened from the

sand, and rock placement is yet to be determined. All appropriate permits will be attained prior to rock disposal.

(2) 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.

(3) Potential Effects on Human Use Characteristic

(a) Municipal and Private Water Supply: No municipal or private water supplies will be impacted by the implementation of the project.

(b) Recreational and Commercial Fisheries: Fishing in the immediate construction area will be prohibited during construction. Otherwise, recreational and commercial fisheries will not be impacted by the implementation of the project.

(c) Water Related Recreation: Beach/water related recreation in the immediate vicinity of construction will be prohibited during construction activities. This will be a short-term impact.

(d) Aesthetics: The existing environmental setting will not be adversely impacted. Construction activities will cause a temporary increase in noise and air pollution caused by equipment as well as some temporary increase in turbidity. These impacts are not expected to adversely affect the aesthetic resources over the long term and once construction ends, conditions will return to pre-project levels.

(e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves: No such designated sites are located within the project area.

g. Determination of Cumulative Effects on the Aquatic Ecosystem: There will be no cumulative impacts that result in a major impairment in water quality of the existing aquatic ecosystem resulting from the placement of material at the project site.

h. Determination of Secondary Effects on the Aquatic Ecosystem: There will be no secondary impacts on the aquatic ecosystem as a result of the dredging.

III. Findings of Compliance or Non-Compliance with the Restrictions on Discharge

a. Adaptation of the Section 404(b)(1) Guidelines to this Evaluation: No significant adaptations of the guidelines were made relative to this evaluation.

b. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Adverse Impact on the Aquatic Ecosystem: No practicable alternative exists which meets the study objectives that does not involve discharge of fill into waters of the United States. Further, no less environmentally damaging practical alternatives to the proposed actions exist. To test the suitability of upland sand sources, the borrow areas proposed by the contractor will be used for this project. In addition, the impacts of using other

sources on cultural resources, protected species, and other environmental factors would likely be equal to or greater than the impacts of the proposed action.

c. Compliance with Applicable State Water Quality Standards: After consideration of disposal site dilution and dispersion, the discharge of dredged materials will not cause or contribute to, violations of any applicable State water quality standards for Class III waters.

d. Compliance with Applicable Toxic Effluent Standard or Prohibition: Under Section 307 Of the Clean Water Act: The discharge operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

e. Compliance with Endangered Species Act of 1973: The disposal of dredged material 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. Standard conditions for monitoring and relocating turtle nests would be employed.

f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972: No marine sanctuaries are located within the project area.

g. Evaluation of Extent of Degradation of the Waters of the United States: The placement of dredged 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.

h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem: Appropriate steps have been taken to minimize the adverse environmental impact of the proposed action. The material proposed as beach has low silt content, therefore, turbidity due to silt will be low when discharging. Turbidity will be monitored so that if levels exceed State water quality standards of 29 NTU's above background, the contractor will be required to cease work until conditions return to normal. In the vicinity of reef and other hard grounds, measures would be taken to minimize sediment deposition on sensitive reef organisms.

i. On the basis of the guidelines, the proposed dredging and disposal sites are specified as complying with the requirements of these guidelines.

ATTACHMENT 2

**COASTAL ZONE MANAGEMENT ACT
FEDERAL CONSISTENCY DETERMINATION**

**JUPITER CARLIN
SHORE PROTECTION PROJECT**

PALM BEACH COUNTY, FLORIDA

**COASTAL ZONE MANAGEMENT ACT AND FLORIDA COASTAL MANAGEMENT PROGRAM
FEDERAL CONSISTENCY DETERMINATION**

**JUPITER CARLIN
SHORE PROTECTION PROJECT
PALM BEACH COUNTY, FLORIDA**

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 plans and information shall be submitted to the State in compliance with this Chapter.

Chapters 163 (part II), 186 and 187, County, Municipal, State, and Regional Planning. These chapters establish the Local Comprehensive Plans, the Strategic Regional Policy Plans, and the State Comprehensive Plan (SCP). The SCP sets goals that articulate 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 orderly social, economic and physical growth.

Response: The proposed project has been coordinated with various Federal, State, and local agencies during the planning process. The project meets the primary goal of the SCP through preservation and protection of the shorefront development and infrastructure.

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 dredging of an offshore borrow area in order to protect the shoreline conditions of the Jupiter Carlin Segment of the Palm Beach County Shore Protection Project. Therefore, this project is consistent with the efforts of the Division of Emergency Management.

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.

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.

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: This project would not impact state parks or preserves.

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

Response: This project has been coordinated with the State Historic Preservation Officer (SHPO). Because of the nature of the project there is little potential for impact to historic properties. The project is consistent with this chapter.

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.

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

Response: The dredging and placement of borrow area material would not improve or degrade transportation.

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 Programmatic Biological Opinion, State 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.

Nearshore hardbottom habitat within the study area was impacted by prior sand placement activities. The non-Federal sponsor provided mitigation to offset these impacts. The Recommended Plan, with its smaller placement area, would not exceed previous impacts and, therefore, no additional mitigation is proposed.

Chapter 372, Living Land and Freshwater Resources. This chapter establishes the Fish and Wildlife Conservation 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 would not have a substantial adverse impact on living land and freshwater resources. Use of the placement areas could temporarily adversely impact wildlife, but these areas should be re-colonized between uses.

Chapter 373, Water Resources. The waters in the state of Florida are managed and protected to conserve and preserve water resources, water quality, and environmental quality. This statute addresses sustainable water management; the conservation of surface and ground waters for full beneficial use; the preservation of natural resources, fish, and wildlife; protecting public land; and promoting the health and general welfare of Floridians. The state manages and conserves water and related natural resources by determining whether activities will unreasonably consume water; degrade water quality; or adversely affect environmental values such as protected species habitat, recreational pursuits, and marine productivity.

Specifically, under Part IV of Chapter 373, the Department of Environmental Protection, water management districts, and delegated local governments review and take agency action on wetland resource, environmental resource, and stormwater permit applications, which address the construction, alteration, operation, maintenance, abandonment, and removal of any stormwater management system, dam, impoundment, reservoir, or appurtenant work or works, including dredging, filling and construction activities in, on, and over wetlands and other surface waters. This chapter regulates the withdrawal, diversion, management and storage of surface waters, water supply, and permitting of consumption use of water.

Response: This project will temporarily increase the turbidity of water during the dredging operations. The project would be constructed in compliance with State water quality criteria.

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 that the contractor adopt safe and sanitary measures for the disposal of solid wastes. A spill prevention plan will be required.

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 product and therefore, this chapter does not apply.

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-scale development. This chapter also deals with the Area of Critical State Concern program and the Coastal Infrastructure Policy.

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

Chapters 381 (selected subsections on on-site sewage treatment and disposal systems) and 388 (Mosquito/Arthropod Control). Chapter 388 provides for a comprehensive approach for abatement or suppression of mosquitoes and other pest arthropods within the state.

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

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 Protection (DEP).

Response: A draft Environmental Assessment has been prepared and was made available to the public and resource agencies including DEP. Environmental protection measures will be implemented to ensure that no lasting adverse effects on water quality or other environmental resources will occur. The project complies with the intent of this chapter.

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: Agricultural lands do not occur in the vicinity of the project; therefore this chapter does not apply.