APPENDIX G – ENVIRONMENTAL ATTACHMENTS

ATTACHMENT 1 - SECTION 404(b) (1) EVALUATION

SECTION 404(b) (1) EVALUATION

LEE COUNTY, FLORIDA SHORE PROTECTION PROJECT GASPARILLA ISLAND SEGMENT

I. Project Description

a. Location. The proposed project will be constructed on Gasparilla Island, Lee County, Florida. Lee County is located on the lower gulf coast of Florida, about 90 miles south of the entrance to Tampa Bay. The 44-mile Gulf coastline of the county consists of all, or part of, seven coastal barrier islands and several smaller islands separated from the mainland by shallow tidal lagoons. Gasparilla Island is bounded on the north by Gasparilla Pass and on the south by Boca Grande Channel. The Gulf shore of the island is about 6.5 miles in length. Natural ground elevations are generally less than ten feet above Mean Low Water (MLW).

b. General Description. The presently authorized Gasparilla Island Segment of the Lee County Florida Shore Protection Project consists of maintaining approximately 2.8 miles of beach between Lee County, Florida Department of Environmental Protection (FDEP) reference monument R-10.5 (R-11 plus a 1,200 foot long north extending taper) and R-24.5 (R-24 plus a 600 foot long south extending taper). Figure 1-1 within the main report shows the project area and limits.

Beach quality sand for this project will be dredged from an offshore borrow site. The design template consists of a 20 foot extension of the 1995 mean high water level baseline at elevation +5 feet (ft) above MLW (+3.75 ft-NAVD88); a foreshore slope of 1V:15H transitioning to a nearshore slope of 1V:25H from MLW extending out to the intersection with the existing profile.

c. Authority and Purpose. The Lee County, Florida, Beach Erosion Control Project, a single purpose project, was authorized under the provisions of Section 201 of the 1965 River and Harbor and Flood Control Act (PL 89-298) by Senate Resolution dated December 17, 1970, and House Resolution dated December 15, 1970. This authority was amended by Section 131 of the Water Resource Development Act of 1976 (PL 94-587). The project was modified by section 309 of WRDA 2000 to authorize the Secretary to carry out the authorized project in accordance with Section 206 of WRDA 1992, allowing for non-federal interests to design and construct the authorized project and allowing for reimbursement of the Federal share of the cost. The purpose of the proposed action is to reduce loss of public beach front to continuing erosional forces and to prevent or reduce periodic damages and potential risk to life, health, and property in the developed lands adjacent to the beach.

d. General Description of Dredged or Fill Material.

(1) General Characteristics of Material. The following existing beach information was taken from "Lee County Shore Protection Project Gasparilla Island Segment: Sand Source Report," prepared for Lee County, Florida, prepared by Humiston and Moore

Engineers on August, 2000. Samples were collected at intervals from the edge of vegetation to the Mean Low Water (MLW) line to obtain a composite that would be representative of the dune, berm, and beach face. The composite sample classifies the sediments as clean, poorly-graded, fine to medium grained quartz sands with a mean grain size of 0.54 mm or 0.90 phi, and a standard deviation of 1.06 phi. The percentage of fines passing the # 230 sieve is 0 percent. Visual shell contents and Munsell Color values were not reported.

In response to storm damage sustained in 2012, approximately 457,824 cubic yards of material were dredged from an offshore sediment source and placed between Florida Department of Environmental Protection (FDEP) reference monuments R-11 and R-25 on Gasparilla Island. Dredging operations commenced on 20 October 2013 and ceased on 30 January 2014. The following existing beach information was taken from "Permit File No. 0174403-001-JC, Gasparilla Island Beach Restoration Project, Lee County, Post-Fill Sampling Report," prepared by the USACE on February 24, 2014. The test results characterized the placed material as well graded, medium grained sand with an average visual shell of 39.5 percent, ranging from 26.3 to 55.4 percent. The average grain size of the composite post-fill beach was 0.47 mm (1.13 phi), and the average standard deviation (sorting) was 1.34 phi. The amount of fines passing the #230 sieve averaged 0.33 percent. The typical dry Munsell color of the sand was 2.5Y 8/1, or white.

(2) Quantity of Material. The average renourishment volume is approximately 617,000 cy, and the average expected renouishment interval is 22 years.

(3) Source of Material. Offshore borrow site locally referred to as the "Gasparilla Shoal".

e. Description of the proposed Borrow Site.

(1) Location and Size. The borrow site is located within the Gulf of Mexico, and is centered about 1.85 miles offshore the southern tip of Gasparilla Island, Lee County, and south of FDEP reference monument R-25 and adjacent to Boca Grande Pass. Rectangular in shape, the sand source encompasses approximately 425 acres.

(2) Type of Site. The borrow site is a sand shoal that lies in water depths of approximately 6 to 18 feet. The material within the proposed borrow site is compatible with the beach placement area and is in compliance with FDEP's "Sand Rule" guidelines.

(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.

(4) Timing and Duration of Dredging. Project construction is proposed for the year 2029. Beach placement is estimated to be accomplished over a 3-month period. In reality, project construction could vary significantly depending on erosion and storm events.

f. Description of Proposed Fill Site.

(1) Size and Location. The beach renourishment area includes 2.8 miles of shoreline on Gasparilla Island.

(2) Type of Site. The Gasparilla Island shoreline is a sandy beach flanked by development. Natural ground elevations are generally under 10 feet MLW. Existing hardened shoreline features in the project area are listed below, relative to FDEP shoreline monuments:

Rock groin R-13.6

Pre-cast groins R-14.5 to R-15.3

Seawall R-10.3 to R-15.4

Seawall/groins R-18

(3) Type of Habitat. The habitat of the fill site includes supratidal dry sandy beach, intertidal sandy swash zone, and subtidal sandy areas. A vegetated dune exits along some portions of the project area as well. The area beyond the dune is developed.

(4) Timing and Duration of Discharge. The project is presently planned for the months of December through March to avoid peak sea turtle nesting season. However, it may be necessary to construct the project between April and November due to planning and cost constraints. Beach restoration and periodic nourishment, if performed from May to October, could cover up nests and interfere with or prevent the natural hatching process. A turtle nest monitoring and relocation program will be established and implemented in the event that construction is performed during nesting season. The duration of discharge is expected to be about 3 months.

II. Factual Determinations

a. Physical Substrate Determinations.

(1) Substrate Elevation and Slope. The design template consists of a 20 foot extension of the 1995 mean high water level baseline at elevation +5 feet (ft) above MLW (+3.75 ft-NAVD88); a foreshore slope of 1V:15H transitioning to a nearshore slope of 1V:25H from MLW extending out to the intersection with the existing profile.

(2) Sediment Type. Conservative dredge depths and a spring 2016 survey of the borrow site were used to estimate an available volume of approximately 3.5 million cubic yards. A review of the available geotechnical data for the proposed sand source indicates that the material is compatible with the beach placement area. The mean grain size of the sand from the 33 analyzed vibracores in 2014 was 0.47 mm with a standard deviation of 1.25. Table 3 of the Geotechnical Appendix shows a comparison of the 2000 native beach data and 2014 existing beach data with the available sand source data. Additionally, the sand source sediment color was described typically as light gray to

gray (10 YR 7/1 to 10 YR 6/1, respectively). Based on these descriptions the sand source color is compatible with USACE's (2014) beach characterization of white sand (2.5Y 8/1).

(3) Dredge/Fill Material Movement. The fill material will be subject to erosion by waves with the net movement of material to the south of Gasparilla.

(4) Physical Effects on Benthos. Some benthic organisms that are not mobile may be lost during dredging. Recolonization soon after project completion is expected to replace those organisms which do not survive project construction. It is anticipated that no long-term effects will occur.

b. Water Circulation. Fluctuation and Salinity Determination.

(1) Water Column Effects. During dredging, turbidity will increase temporarily in the water column. The increased turbidity will be short-term; therefore, placement of fill 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. The primary currents in the nearshore are waveinduced longshore currents. These currents are driven by the transformation of obliquely incident waves in the nearshore. The mean longshore current is from north to south. The project will have no significant effect on existing current patterns, current flow, velocity, stratification, or the hydrologic regime of the area.

(3) Normal Water Level Fluctuations and Salinity Gradients. Mean high water in the Gasparilla project area is located at elevations of 1.87 feet and 1.42 feet (respectively) National Geodetic Vertical Datum 1929 (NGVD). Salinity is that of normal ocean water.

c. Suspended Particulate Turbidity Determinations.

(1) Expected Changes in Suspended Particulate and Turbidity Levels in the Vicinity of the Disposal Site. There may be a temporary increase in turbidity levels in the project area during discharge of material.

(2) Effects on the Chemical and Physical Properties of the Water Column.

(a) Light Penetration. Some decrease in light penetration may occur in the immediate vicinity of the dredging area. This effect will be temporary, limited to the immediate area of construction, and will have no adverse impact on the environment.

(b) Dissolved Oxygen. Dissolved oxygen levels will not be altered by this project.

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

(d) 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.

(3) Effects on Biota.

(a) Primary Productivity and Photosynthesis. The proposed borrow and fill areas are characterized by a sandy, featureless bottom. There is no attached algae and the effects on phytoplankton, if any, will be minimal and short-term.

(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 effects on these highly prolific organisms.

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

d. Contaminant Determinations. Material which will be dredged from the proposed borrow sites will not introduce, relocate, or increase contaminants at the fill area.

e. Aquatic Ecosystem and Organism Determinations.

(1) Effects on Plankton. No long-term adverse impact on autotrophic or heterotrophic organisms are anticipated.

(2) Effects on Benthos. No adverse long-term impacts to non-motile benthic invertebrates are anticipated.

(3) Effects on Nekton. These organisms are highly motile, and therefore no long-term adverse impacts are expected.

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

(5) Effects on Special Aquatic Sites.

(a) Hardground and Reef Communities. Prior beach fill activities impacted hardground resources located at the northern taper of Gasparilla Island. Mitigation was successfully performed to offset this impact. Future beach nourishment is not expected to exceed prior impacts and, therefore, would not be mitigated. Please see sections 2.4.6, 4.6 and Appendix E-Attachment 3 for more information on the mitigation including monitoring reports.

(5) Endangered and Threatened Species. There will be no significant adverse impacts to any threatened or endangered species or on critical habitat of any threatened or

endangered species. Refer to section 5.4.4 in the main report for measures that will be implemented to protect threatened and endangered species.

(6) Other Wildlife. Minor adverse impacts to small foraging mammals, reptiles, or wading birds, or wildlife in general are expected.

(7) Actions to Minimize Impacts. All practical safeguards will be taken during construction to preserve and enhance environmental, aesthetic, recreational, and economic values in the project area. Specific precautions are discussed elsewhere in this 404(b) (1) evaluation and in the environmental assessment for this project.

f. Proposed Disposal Site Determinations.

(1) Mixing Zone Determination. A mixing zone variance application will be submitted to the Florida Department of Environmental Protection because the dredged material is expected to cause a temporary increase in turbidity at the beach placement site. No adverse impacted related to depth, current velocity, direction and variability, degree of turbulence, stratification, or ambient concentrations of constituents are expected from implementation of the project.

(2) Determination of Compliance with Applicable Water Quality Standards. Because of the inert nature of the material to be dredged, Class III water quality standards will not be violated.

(3) Potential Effects on Human Use Characteristics.

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

(b) Recreational and Commercial Fisheries. Fishing in the immediate construction area will be prohibited while construction is in progress. Recreational and commercial fisheries will not be otherwise impacted by implementation of the project.

(c) Water Related Recreation. Beach and 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 due to 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 ceases, these conditions will return to pre-project levels.

(e) Parks. National and Historic 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 major impairment of water quality of the existing aquatic ecosystem as a result of the placement of fill 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. 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 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 dredging and placement of fill 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.

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.

ATTACHMENT 2 - COASTAL ZONE CONSISTENCY EVALUATION

COASTAL ZONE CONSISTENCY EVALUATION

FLORIDA COASTAL ZONE MANAGEMENT PROGRAM FEDERAL CONSISTENCY EVALUATION PROCEDURES

LEE COUNTY, FLORIDA SHORE PROTECTION PROJECT GASPARILLA ISLAND SEGMENT

1. 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 what might have an effect on natural shoreline processes.

Response: The proposed plans and information will be submitted to the state in compliance with this chapter.

2. Chapters 186 and 187, State and Regional Planning.

These chapters establish the State Comprehensive Plan, which 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 an orderly social, economic and physical growth.

Response: This proposed project will be coordinated with appropriate Federal, state, and local governmental agencies. The project meets the primary goal of the State Comprehensive Plan through preservation and protection of the shorefront development and infrastructure.

3. 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 public peace, health and safety; and to preserve the lives and property of the people of Florida.

Response: The proposed project involves placing beach compatible material onto an eroding beach. As a protective means for residents, development, and infrastructure located along 2.8 miles of Gasparilla Island in Lee County. Therefore, this project would be consistent with the efforts of the Division of Emergency Management.

4. 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 resources; submerged lands, spoil islands, and artificial reefs.

Response: The authorized beach nourishment would create increased recreational beach and provide storm protection for the project segment of Gasparilla Island. No sea grass beds are located within the proposed fill or borrow areas. Buffer (no work) zones will be used to protect potentially significant cultural resources within the borrow area. Prior beach fill activities impacted hardground resources located at the northern taper of Gasparilla Island. Mitigation was successfully performed to offset this impact. Future beach nourishment is not expected to exceed prior impacts and, therefore, would not be mitigated. The proposed project would comply with the intent of this chapter.

5. Chapters 253, 259, 260, and 375, Land Acquisition.

This chapter authorizes the state to acquire land to protect environmentally sensitive areas.

Response: Since the affected property already is in public ownership, this chapter does not apply.

6. 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: The proposed project area does not contain any state parks or aquatic preserves. The project is consistent with this chapter.

7. 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). Historical property investigations were conducted in the project area. A buffer (no work) zone will be established to protect potentially significant cultural resources identified in the Gasparilla borrow area. The project will be consistent with the goals of this chapter.

8. 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 area for recreational opportunities and protection of development. This will be compatible with tourism for this area and will be consistent with the goals of this chapter.

9. Chapters 334 and 339, Public Transportation.

This chapter authorizes the planning and development of a safe and efficient transportation system.

Response: No long term adverse impacts to public transportation systems are anticipated by this project.

10. 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 research studies.

Response: The proposed beach nourishment may cause a temporary short-term impact on non-motile species such as filter feeding, burrowing and attached organisms. Motile species such as fish and crustaceans may experience some short-term impacts but should be able to avoid the area during construction and seek more favorable environmental conditions. No adverse impacts to marine fishery resources are expected. Based on the overall impacts of the project, the project is consistent with the goals of this chapter.

11. Chapter 372, Living Land and Freshwater Resources.

This chapter establishes the Florida Fish and Wildlife Conservation Commission and directs it to manage freshwater aquatic life and wild animal life and their habitats. The purpose is 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 effect on fresh water aquatic life and minor effects to wild animal life.

12. 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 groundwater or surface water resources as described by this chapter.

13. 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.

14. 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 other petroleum products and, therefore, does not apply.

15. 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.

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

16. 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 project would not further the propagation of mosquitoes or other pest arthropods.

17. 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 (FDEP).

Response: Environmental protection measures will be implemented to ensure that no lasting adverse effects on water quality, air quality, or other environmental resources will occur. Water Quality Certification will be sought from the state prior to construction. The project complies with the intent of this chapter.

18. 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 project is not located near or on any agricultural lands. Therefore, this chapter does not apply.

ATTACHMENT 3 - PERTINENT CORRESPONDENCE



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS 701 San Marco Boulevard JACKSONVILLE, FLORIDA 32207-8175

AUG 2 9 2015

Planning and Policy Division Environmental Branch

TO WHOM IT MAY CONCERN

This scoping letter is being promulgated by the U.S. Army Corps of Engineers (Corps) in compliance with public coordination requirements of the National Environmental Policy Act. The purpose of this correspondence is to inform the public on the status of the Gasparilla Island Segment of the Lee County Coastal Storm Risk Management (CSRM) Federal project, and to provide additional opportunity for comment.

The Gasparilla Island Project has been Congressionally authorized, however Federal participation in funding the beach nourishment has expired. A report is currently being prepared to extend this Federal participation an additional 40 years. The Gasparilla Project consists of maintaining approximately 2.8 miles of beach between Lee County, Florida Department of Environmental Protection (FDEP) reference monument R-10.5 (R-11 plus a 1,200 foot long north extending taper) and R-24.5 (R-24 plus a 600 foot long south extending taper)(**Figure A-1**). The project includes a 20 foot extension of the 1995 mean high water (MHW) baseline as established by the 2000 General Reevaluation Report (GRR) (Corps, 2000). The authorized fill allows for the 20 foot extension and provides additional material (540,000 cubic yards) to offset erosive losses for seven years between renourishments.

The Corps welcomes your views and comments on the proposed Gasparilla Island Coastal Storm Risk Management Federal project. Your concerns will be appropriately considered and discussed in a draft Environmental Assessment which will update the original Supplemental Environmental Impact Statement prepared for this project. Please send your comments or inquiries to Ms. Wendy Dauberman at the letterhead address within thirty (30) days of the date of this letter. You can also send your comments to us via email at wendy.s.dauberman-zerby@usace.army.mil. Please let us also know if you would like to receive future notifications on this project. If you do not wish to receive future notices, then simply do not respond and we will remove your name from our mailing list.

Sincerely,

Gina Paduano Ralph, Ph.D.

Chief, Environmental Branch

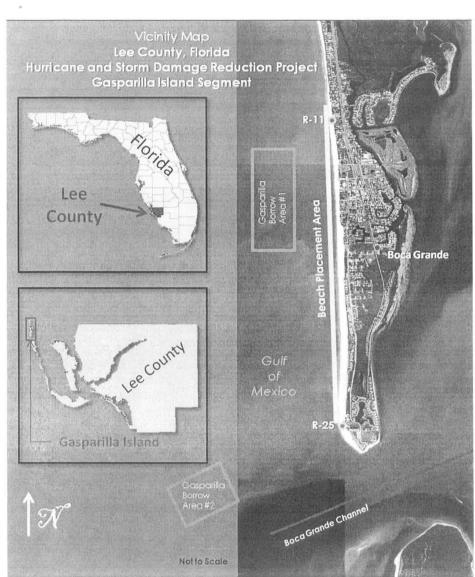


Figure A- 1. Project Site



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS 701 San Marco Boulevard JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division Environmental Branch

115 2 5 2016

Mr. Fred Dayhoff, Tribal Representative NAGPRA, Section 106 Miccosukee Tribe of Indians of Florida HC 61 SR 68 Ochopee, Florida 34141

Re: Lee County Coastal Storm Risk Management Project, Gasparilla Island Segment

Dear Mr. Dayhoff:

The U.S. Army Corps of Engineers, Jacksonville District (Corps), is studying the environmental effects associated with the previously-authorized Gasparilla Island Segment of the Lee County Coastal Storm Risk Management project. Gasparilla Islands is a barrier island that measures approximately 6.5 miles and is bounded on the north by Gasparilla Pass and on the south by the Boca Grande Channel. The project provides restoration and periodic nourishment of 2.8-miles of gulf shoreline extending south from 15th Street on Gasparilla Island. The project will utilize sand from the Gasparilla shoal borrow area and place the material between Florida Department of Environmental Protection range monuments R-10.5 to and R-24.5 at an average renourishment interval of 7 years (Figure 1).

As part of the previously-authorized federal project, the Corps has undertaken three cultural resources investigations of the Gasparilla shoal borrow area. The first study was conducted by Mid-Atlantic Technology and Environmental Research in 1998. The study produced a report entitled; *Cultural Resource Remote Sensing Survey of Two Borrow Areas, Lee County Shore Protection Project, Lee County Florida.* This survey identified fourteen potential targets for future consideration (DHR No. 991351). In 2000, Mid-Atlantic Technology and Environmental Research conducted diver identification and evaluation of the fourteen potentially significant targets identified in the 1998 survey. The results of this investigation are detailed in the report, *Archaeological Diver Identification for Lee County the Shore Protection project, Lee County Florida* (DHR No. 997901). Based on this report, three targets (G-1, G-2/3 and G-5) were identified as shipwrecks and target G-2/3 was recommended for avoidance. Targets G1- and G-5 were determined to be ineligible for inclusion in the National Register of Historic Places (NRHP); however, upon review of this report, it was determined that an error existed between the reported location of target G-5 in the original 1998 report and the 2000 study.

An additional survey of the borrow area was performed by Dr. Coz Cozzi in 2005 under a grant from the Florida Division of Historical Resources (Grant #SO553). Dr. Cozzi's study resulted in a reversal of the determination of eligibility for targets G-1 and G-5 as he recorded the sites as 8LL1602 and 8LL2033, respectively. Finally, due to the discrepancies between previous survey and the shift of eligibility status, the Corps determined that a new survey was warranted to bring the study up to date, to clarify issues on location and eligibility, and to conduct a sub-bottom analysis to determine if any relic geologic features may be present. Panamerican Consultants, Inc. (PCI), detailed this survey in the 2013 report entitled; Submerged Cultural Resources Remote Sensing and Diver Identification Survey of the Gasparilla Borrow Area. Lee County, Florida (DHR No. 2013-03124). As a result of this survey, PCI identified 24 magnetic anomalies, 15 sonar contacts, and 3 sub-bottom features. An underwater diver evaluation of two potentially significant magnetic anomalies (M09 and M10), targets G-1 (8LL1602), G-2/3 (8LL1603), and the reported locations of G-5 (8LL2033) was also conducted. PCI determined that sites 8LL1602 and 8LL2033 were destroyed, site 8LL1603 was found not to be associated with a historic vessel, and the two magnetic anomalies (M09 and M10) did not consist of cultural material; therefore, these resources have been determined ineligible for listing in the NRHP. As a result of the sub-bottom analysis, PCI identified a cluster of three sub-bottom features that may represent a back-bay channel with estuarine sediments. As such, this area contains a high potential for significant cultural resources and avoidance of the feature with a 600-foot buffer was recommended. Based on this analysis of the Gasparilla Island Coastal Storm Risk Management Project and contingent on maintaining a 600-foot buffer on the sub-bottom feature cluster, the Corps determined that the project posed no effect to historic properties prior to the last dredging event in 2013. The State Historic Preservation Office concurred with the determination in a letter to the Corps dated August 14, 2013 (DHR File No. 2013-03124).

During implementation of the Lee County Coastal Storm Risk Management Project, Gasparilla Island Segment, the Corps will continue to avoid the sub-bottom feature cluster by maintaining the 600-foot buffer previously utilized during dredging. Contingent upon maintaining the buffer, the Corps maintains that the proposed undertaking will have no effect on historic properties listed or eligible for listing in the NRHP. Pursuant to Section 106 of the National Historic Preservation Act (16 USC 470) and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect. If there are any questions, please contact Ms. Meredith Moreno at 904-232-1577 or e-mail at Meredith.A.Moreno@usace.army.mil.

Sincerely,

Gina Paduano Ralph, Ph

Chief, Environmental Branch

Enclosure

-2-



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS 701 San Marco Boulevard JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division Environmental Branch



Dr. Paul Backhouse, THPO Seminole Tribe of Florida Tribal Historic Preservation Office 30290 Josie Billie Highway PMP 1004 Clewiston, Florida 33440

Re: Lee County Coastal Storm Risk Management Project, Gasparilla Island Segment

Dear Dr. Backhouse:

The U.S. Army Corps of Engineers, Jacksonville District (Corps), is studying the environmental effects associated with the previously-authorized Gasparilla Island Segment of the Lee County Coastal Storm Risk Management project. Gasparilla Islands is a barrier island that measures approximately 6.5 miles and is bounded on the north by Gasparilla Pass and on the south by the Boca Grande Channel. The project provides restoration and periodic nourishment of 2.8-miles of gulf shoreline extending south from 15th Street on Gasparilla Island. The project will utilize sand from the Gasparilla shoal borrow area and place the material between Florida Department of Environmental Protection range monuments R-10.5 to and R-24.5 at an average renourishment interval of 7 years (Figure 1).

As part of the previously-authorized federal project, the Corps has undertaken three cultural resources investigations of the Gasparilla shoal borrow area. The first study was conducted by Mid-Atlantic Technology and Environmental Research in 1998. The study produced a report entitled; *Cultural Resource Remote Sensing Survey of Two Borrow Areas, Lee County Shore Protection Project, Lee County Florida.* This survey identified fourteen potential targets for future consideration (DHR No. 991351). In 2000, Mid-Atlantic Technology and Environmental Research conducted diver identification and evaluation of the fourteen potentially significant targets identified in the 1998 survey. The results of this investigation are detailed in the report. *Archaeological Diver Identification for Lee County the Shore Protection project, Lee County Florida* (DHR No. 997901). Based on this report, three targets (G-1, G-2/3 and G-5) were identified as shipwrecks and target G-2/3 was recommended for avoidance. Targets G1- and G-5 were determined to be ineligible for inclusion in the National Register of Historic Places (NRHP); however, upon review of this report, it was determined that an error existed between the reported location of target G-5 in the original 1998 report and the 2000 study.

An additional survey of the borrow area was performed by Dr. Coz Cozzi in 2005 under a grant from the Florida Division of Historical Resources (Grant #SO553). Dr. Cozzi's study resulted in a reversal of the determination of eligibility for targets G-1 and G-5 as he recorded the sites as 8LL1602 and 8LL2033, respectively. Finally, due to the discrepancies between previous survey and the shift of eligibility status, the Corps determined that a new survey was warranted to bring the study up to date, to clarify issues on location and eligibility, and to conduct a sub-bottom analysis to determine if any relic geologic features may be present. Panamerican Consultants, Inc. (PCI), detailed this survey in the 2013 report entitled; Submerged Cultural Resources Remote Sensing and Diver Identification Survey of the Gasparilla Borrow Area, Lee County, Florida (DHR No. 2013-03124). As a result of this survey, PCI identified 24 magnetic anomalies, 15 sonar contacts, and 3 sub-bottom features. An underwater diver evaluation of two potentially significant magnetic anomalies (M09 and M10), targets G-1 (8LL1602), G-2/3 (8LL1603), and the reported locations of G-5 (8LL2033) was also conducted. PCI determined that sites 8LL1602 and 8LL2033 were destroyed, site 8LL1603 was found not to be associated with a historic vessel, and the two magnetic anomalies (M09 and M10) did not consist of cultural material; therefore, these resources have been determined ineligible for listing in the NRHP. As a result of the sub-bottom analysis, PCI identified a cluster of three sub-bottom features that may represent a back-bay channel with estuarine sediments. As such, this area contains a high potential for significant cultural resources and avoidance of the feature with a 600-foot buffer was recommended. Based on this analysis of the Gasparilla Island Coastal Storm Risk Management Project and contingent on maintaining a 600-foot buffer on the sub-bottom feature cluster, the Corps determined that the project posed no effect to historic properties prior to the last dredging event in 2013. The State Historic Preservation Office concurred with the determination in a letter to the Corps dated August 14, 2013 (DHR File No. 2013-03124).

During implementation of the Lee County Coastal Storm Risk Management Project, Gasparilla Island Segment, the Corps will continue to avoid the sub-bottom feature cluster by maintaining the 600-foot buffer previously utilized during dredging. Contingent upon maintaining the buffer, the Corps maintains that the proposed undertaking will have no effect on historic properties listed or eligible for listing in the NRHP. Pursuant to Section 106 of the National Historic Preservation Act (16 USC 470) and it's implementing regulations (36 CFR 800), the Corps kindly requests your comments on the determination of no effect. If there are any questions, please contact Ms. Meredith Moreno at 904-232-1577 or e-mail at Meredith A Moreno@usace.army mil

Sincerely,

Gina Paduano Ralph, Ph.D

-Chief, Environmental Branch

Enclosure



DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT CORPS OF ENGINEERS 701 San Marco Boulevard JACKSONVILLE, FLORIDA 32207-8175

Planning and Policy Division Environmental Branch

MIG 2 5 2016

Tim Parsons, Ph.D., SHPO Division of Historical Resources State Historic Preservation Officer 500 South Bronough Street Tallahassee, Florida 32399-0250

Re: Lee County Coastal Storm Risk Management Project, Gasparilla Island Segment

Dear Dr. Parsons:

The U.S. Army Corps of Engineers, Jacksonville District (Corps), is studying the environmental effects associated with the previously-authorized Gasparilla Island Segment of the Lee County Coastal Storm Risk Management project. Gasparilla Islands is a barrier island that measures approximately 6.5 miles and is bounded on the north by Gasparilla Pass and on the south by the Boca Grande Channel. The project provides restoration and periodic nourishment of 2.8-miles of gulf shoreline extending south from 15th Street on Gasparilla Island. The project will utilize sand from the Gasparilla shoal borrow area and place the material between Florida Department of Environmental Protection range monuments R-10.5 to and R-24.5 at an average renourishment interval of 7 years (Figure 1).

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Sincerely,

Gina Paduano Ralph, Ph.D. Chief, Environmental Branch

Enclosure

-2-



RICK SCOTT Governor

Mr. Eric Summa Department of the Army Jacksonville District Corps of Engineers P.O. Box 4970 Jacksonville, Florida 322232-0019 KEN DETZNER Secretary of State

August 14, 2013

Re: DHR Project File No.: 2013-03124 / Received by DHR: July 22, 2013 1A-32 Permit No.: 1213.048 Submerged Cultural Resources Remote Sensing and Diver Identification Survey of the Gasparilla Borrow Area, Lee County, Florida

Dear Mr. Summa:

Our office received and reviewed the above referenced report in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R.*, *Part 800: Protection of Historic Properties*, and Chapter 267 of the *Florida Statutes*, for possible adverse impact to cultural resources (any prehistoric or historic district, site, building, structure, or object) listed, or eligible for listing, in the National Register of Historic Places (NRHP).

In June 2013, Panamerican Consultants, Inc. (PCI) conducted an underwater remote sensing survey of the proposed Gasparilla borrow area on behalf of the U.S. Army Corps of Engineers (Corps). PCI identified twenty-four (24) magnetic anomalies, fifteen (15) side-scan sonar targets, and three subbottom features within the surveyed area during the investigation. PCI determined that two of the magnetic anomalies and one of the subbottom features have the potential to represent significant cultural resources.

PCI conducted diver investigation of the two magnetic anomalies (M09 and M10), as well as of three previously recorded archaeological sites that were identified in earlier surveys (8LL1602, 8LL1603, and 8LL2033).

PCI identified historic metal at 8LL1603, but determined that based on its thickness it does not appear to have been part of a ship hull. PCI determined that 8LL1603 is not eligible for listing in the NRHP and recommends no further investigation.

PCI found a scatter of bricks and a chainplate deadeye at the location of 8LL1602. While it appears to be the remains of an historic vessel, no articulated remains were located. PCI confirmed that site 8LL1602 has been destroyed and is not eligible for listing in the NRHP. PCI recommends no further investigation of 8LL1602.



DIVISION OF HISTORICAL RESOURCES R. A. Gray Building * 500 South Bronough Street * Tallahassee, Florida 32399-0250 Telephone: 850.245.6300 * <u>www.flheritage.com</u> Commemorating 500 years of Florida history <u>www.VivaFlorida.org</u>



Mr. Summa August 14, 2013 Page 2

Aside from a concrete beam with rebar, PCI did not locate cultural material at site 8LL2033. PCI determined that it has been destroyed and is ineligible for listing in the NRHP. No further investigation is recommended.

PCI investigated the sources of magnetic anomalies M09 and M10 and did not find cultural resources.

PCI identified a subbottom feature that could represent a back bay channel with estuarine sediments. There is potential for deeply buried prehistoric remains to be present at the feature, but divers would not be able to positively determine if a site is present. Therefore, PCI recommends avoidance of the feature with a 600 meter radius buffer for bottom disturbance deeper than three meters.

Contingent upon avoidance of one deeply buried subbottom feature, the Corps determined that the proposed borrow area will have no effect on cultural resources listed, or eligible for listing in the NRHP, or otherwise of archaeological, historical, or architectural value. If avoidance is not possible, additional investigation will be necessary in order to test for prehistoric archaeological sites.

Based on the information provided, our office concurs with these determinations. However, in order for the submitted report to be complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code*, please forward Florida Master Site File archaeological site forms to update sites 8LL1602 and 8LL1603.

For any questions concerning our comments, please contact Rudy Westerman, Historic Preservationist, by email at <u>Rudy.Westerman@DOS.MyFlorida.com</u>, or by phone at 850.245.6333. We appreciate your continued interest in protecting Florida's historic properties.

Sincerely

Robert É. Bendus, Director Division of Historical Resources and State Historic Preservation Officer

Pc: Julie Byrd, Interoffice Mail Station 8B

SEMINOLE TRIBE OF FLORIDA TRIBAL HISTORIC PRESERVATION OFFICE

TRIBAL HISTORIC PRESERVATION OFFICE SEMINOLE TRIBE OF FLORIDA AH-TAH-THI-KI MUSEUM 30290 JOSIE BILLIE HWY PMB 1004 CLEWISTON, FL 33440 PHONE: (863) 983-6549 FAX: (863) 902-1117



TRIBAL OFFICERS CHAIRMAN JAMES E. BILLIE VICE CHAIRMAN TONY SANCHEZ, JR. SECRETARY PRISCILLA D. SAYEN TREASURER MICHAEL D. TIGER

August 25, 2013

David Hughes Department of the Army Jacksonville District Corps of Engineers P.O. Box 4970 Jacksonville, Florida 32232

THPO#: 012310

Subject: Gasparilla Island Shoreline Restoration, Lee County, Florida

Dear Mr. Hughes,

The Seminole Tribe of Florida's Tribal Historic Preservation Office (STOF-THPO) received the Jacksonville District Corps of Engineers correspondence on July 25, 2013. The STOF-THPO has no objection to the proposed project at this time. However, the STOF-THPO would like to be informed if cultural resources that are potentially ancestral or historically relevant to the Seminole Tribe of Florida are inadvertently discovered at any time.

Thank you for the opportunity to review the information that has been sent to date regarding this project. Please reference *THPO-0012310* for any related issues.

Sincerely,

Geoffrey Wasson Compliance Review Analyst Seminole Tribe of Florida 30290 Josie Billie Hwy, PMB 1004 Clewiston, Florida 33440 (863)983-6549 Ext. 12216

From:	John Gravanda <jgravanda_98@yahoo.com></jgravanda_98@yahoo.com>
Sent:	Tuesday, September 06, 2016 2:09 PM
To:	Dauberman-zerby, Wendy S SAJ
Subject:	[EXTERNAL] Gasparilla Island Segment of the Lee County Coastal Storm Risk Management

Dear Ms. Dauberman,

Thank you for your letter notifying me that federal participation in funding the Gasparilla Island Beach Nourishment Project has expired. I was very happy to learn that a report is being prepared to extend this participation. As a landowner within this replenishment area I am of course very concerned with my beach erosion for both property value and safety reasons. As you probably know hundreds of home owners, as well as several of our beautiful public beaches, will be severely effected if the replenishment program does not continue.

I strongly voice my support that federal funding of the Program is extended and would like to receive future notifications concerning this project.

Please let me know if there is anything else I can do to help assure the success of your report.

Also, if possible I would appreciate a confirmation by email of your receipt of this letter.

Sincerely,

John N. Gravanda 394 Gulf Blvd. PO Box 464 Boca Grande, FL 33921

From: Sent: To: Subject: Mary Beth Kilian <kilianinsure@earthlink.net> Wednesday, September 07, 2016 2:54 PM Dauberman-zerby, Wendy S SAJ [EXTERNAL] Gasparilla Beach Restoration

Hello Wendy,

I am writing on behalf of our family, my parents John & Patricia Kilian located in Boca Grande, FL. Per the recent mailing we received from the Army Corps of Engineers, we would like to continue to receive updates on the project and the status of funding. We are grateful for the project to curb the erosion. It's a very special place. Thank you for your efforts.

Mary Beth Kilian

From:	rcarlos976@aol.com
Sent:	Monday, September 12, 2016 9:58 PM
To:	Dauberman-zerby, Wendy S SAJ
Subject:	[EXTERNAL] Gasparilla Island Project

Ms Gina Paduano Ralph, Ph. D

We received a letter regarding the Gasparilla Island Project and want to confirm we strongly support the project and would like to continue to receive notifications on this project.

Best regards,

Carlos Rodriguez 200 Banyan Street Boca Grande FL

Mailing address: 29 Colts Glen Lane Basking Ridge, NJ 07920

From:	bocadoc1017@aol.com
Sent:	Monday, September 12, 2016 10:08 PM
To:	Dauberman-zerby, Wendy S SAJ
Subject:	[EXTERNAL] Gasparilla Island Project

Thank you for your information and update regarding the status of the Gasparilla Island Project. My wife and I support the project. We appreciate your efforts to keep us informed. We would like to be kept informed.

Please include us in any future notices. Thank you,

George and Vicki Elmes bocadoc1017@aol.com

From: Sent: To: Cc: Subject: Dod Fraser <dodfraser@mac.com> Tuesday, September 13, 2016 10:22 AM Dauberman-zerby, Wendy S SAJ Misty Nabors [EXTERNAL] Gasparilla Island Project

Ms. Dauberman-Zerby,

Reference yours of August 29, 2016, re: Gasparilla Island Project.

We are owners of property on Gasparilla Island at 138 Gulf Blvd. and am writing to express strong support of the extension of Federal participation in the Gasparilla Island Project for an additional 40 years.

Thank you for your interest in the Project.

Dod and Susan Fraser 138 Gulf Blvd PO Box 1831 Boca Grande, FL 33921

 From:
 Mark Spurgeon <mark.spurgeon@bgre1.com>

 Sent:
 Wednesday, September 28, 2016 10:40 AM

 To:
 Dauberman-zerby, Wendy S SAJ

 Subject:
 [EXTERNAL] Gasparilla Island segment of the Lee County CSRM

Dear Ms. Dauberman,

I am particularly interested in the continuation of your Department's involvement with the Gasparilla Island segment of the Lee County Coastal Storm Risk Management

Federal project. The mitigation to the loss of sand into Boca Grande Pass each year being estimated at 90,000 cubic yards, (in the inlet study performed by Humiston and Moore in 1994),

is essential to provide a stable habitat for nesting sea turtles, nesting shoe birds and the public's use.

Best regards,

Mark Spurgeon

From: Sent: To: Subject: State_Clearinghouse (Shared Mailbox) <State.Clearinghouse@dep.state.fl.us> Tuesday, September 20, 2016 8:42 AM Dauberman-zerby, Wendy S SAJ [EXTERNAL] SAI# FL201609197759C

To: Wendy Dauberman

Re: Florida State Clearinghouse Project Review

Project SAI#: FL201609197759C

Date Received: 09/07/16

Project Description: USACOE - DRAFT ENVIRONMENTAL ASSESSMENT AS SUPPLEMENTAL TO THE ENVIRONMENTAL IMPACT STATEMENT FOR THE LEE COUNTY COASTAL STORM RISK MANAGEMENT PROJECT - GASPARILLA ISLAND- LEE COUNTY, FLORIDA.

The Florida State Clearinghouse has received the above-referenced project and has forwarded it to the appropriate state agencies for review. Please refer to the State Application Identifier (SAI) number in all correspondence with the Florida State Clearinghouse regarding this project. Applicants should expect to receive their State Clearance Letter 30-60 days from the received date. Additional information can be found at Blockedhttp://dep.state.fl.us/secretary/oip/state_clearinghouse/manual2.htm <Blockedhttp://dep.state.fl.us/secretary/oip/state_clearinghouse/manual2.htm>.

Future project applications may be submitted by email to state.clearinghouse@dep.state.fl.us <mailto:state.clearinghouse@dep.state.fl.us> or one copy (CD or paper) may be mailed to the Florida State Clearinghouse. For assistance or additional information, contact Chris Stahl at (850) 717-9076.

Florida State Clearinghouse

Florida Department of Environmental Protection

2600 Blair Stone Rd., MS 47

Tallahassee, FL 32399-2400

<Blockedhttp://survey.dep.state.fl.us/?refemail=State.Clearinghouse@dep.state.fl.us>

9/1/16

TO: MIS WENDY DAUBERNIAN RE: GASPORILLA ISLAND PROJECT - BEACH THANKS FOR THE UPDATE. YES, I WOULD LIKE TO RECEIVE FUTURE PROJECT NOT IFICATIONS. MY ONE COMMENT AS A BOCK GRANDE RESIDENT FOR ABOUT HALF OF THE YEAR IS THAT THE NEXT TIME WE DO A BENCH RENCHDISTAMENT(SP) LEADETHE STRUCTURES IN THE GULF ALONE. LAST TIME AT CREAT EXPENSE (I TALKED TO THE WORKERS) MOST OF THE STRUCTURES WERE PULLED OUT. THESE AREAS WERE HOME TO MANY BAIT FICH AND FAUORITE FEEDING AREAS FOR GAME FISH. THE BEACH FISHING HAS NEVER RECOURSED FROM THIS LOSS OF HABITAT.

THANKS FOR YOUR INTEREST,

Trank Kofferd 2159 SUN REUSIE DR. Appleton, WI 54914

E TURTLEBACK #3 PO BOX 1 BOCA GRANDE, FL-33927



PRESIDENT EMERITUS

September 7, 2016

Ms. Wendy Dauberman US Army Corps of Engineers CESAJ-PD 701 San Marco Boulevard Jacksonville, Florida 32207-8175

Dear Ms. Dauberman,

I am writing to support funding for beach re-nourishment. The beach restoration on Gasparilla Island has been critical to maintaining the island infrastructure as well as its use as a recreational area for residents and tourists. In 2006, the Gulf waters came to within feet of several of the houses on the west facing beaches of Gasparilla, including ours. Eventually the erosion would have destroyed those houses. At that time, if erosion didn't destroy the houses, any surge from a hurricane or even strong on-shore winds would have flooded the properties.

In addition, there was no useable public beach on much of the gulf side of the island and thus one of the main attractions for the town of Boca Grande – its white sand beaches -- had largely ceased to exist.

The re-nourishments in 2007 and again in 2014 changed all that. Suddenly the beach was extended by as much as about 100 yards in places, keeping erosion at bay and wind driven waves far enough away from residences to keep them from harm. At the same time, the beach returned as a recreational resource and with that the residents and tourists flocked to it.

As sea level rises, people have talked about all sorts of beach erosion concepts over the years, including berms, groins, jetties, seawalls and breakwaters, but the re-nourishment is the only one that has worked. Without continuing re-nourishment, the attractive island of Gasparilla and the town of Boca Grande will eventually be so seriously compromised that they will cease to be viable places to live or vacation. The very significant real-estate tax revenue from the island will diminish as land values diminish or disappear altogether.

The State of Florida and Lee County as well as the Federal government would be penny wise and pound foolish to stop this effective program. Dollars <u>saved</u> by not continuing the program will eventually be dollars <u>lost</u> in sales tax and real-estate tax revenue. And with that will go a piece of the legendary "old Florida" that so many tourists seek.

We urge you to continue this program and to renew the funding for it. Please keep us informed as you proceed.

Sincerely yours,

and the

William and Sarah Kling 134 Gulf Blvd (P.O Box 2335) Boca Grande, Florida bkling@mpr.org

O AMERICAN PUBLIC MEDIA

4900 IDS TOWER, 80 S. 8TH STREET, MINNEAPOLIS, MN 55402 651.290.1555 AMERICANPUBLICMEDIA.ORG

Donald H Christakos 174 Gulf Blvd Boca Grande FL, 33921 315-663-4092

Wendy Dauberrman c/o Department of Navy - Corps of Engineers Planning and Policy Div. Environmental Branch 701 San Marco Blvd. Jacksonville, FL 32207-8175

Dear Ms. Dauberrman,

I am in receipt of your 8/29 letter regarding beach re-nourishment on Gasparilla Island Grande FL.

We strongly are in favor of the renewal of Federal Participation of this Beach Re-nourishment project over the next 40 years.

That beach, and the State Parks that line that beach, service thousands of Florida Residents every day and every year. Without re-nourishment, that opportunity goes away. It is critical to the human experience to get to the beach on this portion of the gulf coast.

Please keep me informed as the projects evolve.

My e-mail is <u>sparky@gladdingbraid.com</u> how ch

Thank You,

Donald H. Christakos



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13th Avenue South St. Petersburg, Florida 33701-5505 http://sero.nmfs.noaa.gov

September 9, 2016 F/SER46:MS/RS

Colonel Jason A. Kirk District Commander, Jacksonville District Jacksonville District Corps of Engineers 701 San Marco Boulevard Planning and Policy Division, Environmental Branch Jacksonville, Florida 32207-8175

Dear Colonel Kirk:

NOAA's National Marine Fisheries Service (NMFS) Habitat Conservation Division has reviewed your staff's scoping letter dated August 29, 2016, indicating your agency is beginning preparation of a National Environmental Policy Act (NEPA) assessment for the Gasparilla Island Segment of the Lee County Coastal Storm Risk Management (CSRM) Federal Project. The Project would include the renourishment of approximately 2.8 linear miles of beach between Florida Department of Environmental Protection reference monuments 10.5 through 24.5 along the western side of Gasparilla Island in the Gulf of Mexico, Lee County, Florida.

Marine habitats in the Gulf of Mexico adjacent to the Project area include water column, vegetated and non-vegetated bottoms, and live bottoms, and are identified by the Gulf of Mexico Fishery Management Council (GMFMC) as essential fish habitat (EFH) for postlarval, juvenile, and subadult shrimp; postlarval, juvenile, and adult red drum; postlarval, juvenile, and adult gray snapper; juvenile red and gag groupers; and juvenile and adult yellowtail and lane snappers. The area has also been designated as EFH by the NMFS for highly migratory species including bull, lemon, and bonnethead sharks. Detailed information on federally managed fisheries and their EFH is provided in the 2005 Generic Amendment of the Fishery Management Plans for the Gulf of Mexico prepared by the GMFMC and in the 2009 Amendment 1 to the Consolidated Atlantic Highly Migratory Species Fishery Management Plan prepared by the NMFS as required by the Magnuson-Stevens Act. Federal agencies that permit, authorize, or fund activities potentially impacting EFH are required to consult with NMFS and, as a part of the consultation process, prepare an EFH assessment. Based upon requirements in NMFS implementing regulations, an EFH assessment for the project should include:

- 1. an analysis of the effects (including secondary and cumulative effects) of proposed CSRM activities on EFH, associated federally managed fisheries, and their prey within the Gulf of Mexico;
- 2. management actions taken to avoid and minimize adverse impacts to EFH:
- 3. the USACE's views regarding the effects of these activities on EFH and managed species; and,



4. proposed compensatory mitigation and adaptive management strategies, if unavoidable adverse impacts would result to EFH from the proposed activities.

The EFH consultation can be initiated independent of other project review tasks or can be incorporated in the NEPA analysis. Upon review of the EFH assessment, NMFS will determine if it is necessary to provide EFH conservation recommendations on the project.

Finally, the project area is within the known distribution limits of federally listed threatened and endangered species under the purview of NMFS. In accordance with the Endangered Species Act of 1973 (ESA), as amended, it is your responsibility to review this proposal and identify actions potentially affecting endangered or threatened species, and/or their designated critical habitat. Determinations involving listed species should be reported to our Protected Resources Division at the letterhead address. If it is determined the activities may adversely affect any ESA listed species and/or their critical habitats, formal consultation must be initiated.

If you have questions regarding NMFS' review of this project, please contact Mr. Mark Sramek at the letterhead address, by telephone at (727) 824-5311, or e-mail at Mark.Sramek@noaa.gov.

Sincerely,

Virgue m. Lay

Virginia M. Fay Assistant Regional Administrator Habitat Conservation Division

Cc: F/SER – Silverman F/SER3 – Brame COMMANDER USCG SEVENTH DISTRICT BRICKNELL PLAZA FEDERAL BLDG 909 SE 1ST AVENUE MIAMI FL 33131-3050

FIELD SUPERVISOR U S FISH & WILDLIFE SERVICE 7915 BAYMEADOWS WAY, SUITE 200 JACKSONVILLE FL 32256-7517

DR PACE WILBER NOAA FISHERIES SERVICE 217 FORT JOHNSON ROAD CHARLESTON SC 29412

SOUTHERN REGION FORESTER USDA FOREST SERVICE SOUTHERN REGION (R8) 1720 PEACHTREE ROAD NW ATLANTA GA 30309

U S DEPT OF HSG & URBAN DEVELOPMENT FIVE POINTS PLAZA BUILDING ROOM 600-C 40 MARIETTA STREET 16TH FLOOR ATLANTA GA 30303-2806

FLORIDA DEPT OF ENV PROTECTION BUREAU OF SURVEY & MAPPING DIVISION OF STATE LANDS 3900 COMMONWEALTH BLVD MS 105 TALLAHASSEE FL 32399

FLORIDA STATE CLEARINGHOUSE 3900 COMMONWEALTH BLVD MS 47 TALLAHASSEE FL 32399

REGIONAL DIRECTOR U S FISH & WILDLIFE SERVICE 1875 CENTURY BLVD, SUITE 400 ATLANTA GA 30345-3319

CHIEF PROTECTED SPECIES BRANCH NOAA FISHERIES SERVICE SOUTHEAST REGIONAL OFFICE 263 13TH AVENUE SOUTH ST PETERSBURG FL 33701

REGIONAL DIRECTOR FEMA INSURANCE & MITIGATION DIV 3003 CHAMBLEE-TUCKER ROAD ATLANTA GA 30341

MR HEINZ J MUELLER U S ENVIRONMENTAL PROTECTION AGENCY **61 FORSYTH STREET** ATLANTA GA 30303

U S DEPT OF AGRICULTURE-NRCS TAVARES SERVICE CENTER 1725 DAVID WALKER DRIVE SUITE C TAVARES FL 32778

FLORIDA DIVISION OF HISTORICAL RESOURCES RA GRAY BUILDING **500 S BRONOUGH STREET** TALLAHASSEE FL 32399-0250

FLORIDA COASTAL MANAGEMENT PROGRAM FL DEPT OF ENVIRONMENTAL PROTECTION FL DEPT OF ENVIRONMENTAL PROTECTION 3900 COMMONWEALTH BLVD MS 235 TALLAHASSEE FL 32399

FL FISH & WILDLIFE CONSERVATION COMM OFFICE OF ENVIRONMENTAL SERVICES BRADLEY J HARTMAN, DIRECTOR 620 S MERIDIAN STREET TALLAHASSEE FL 32399-1600

MR STEVE TERRY CULTURAL REPRESENTATIVE, MICCOSUKEE TRIBE PO BOX 440021 TAMIAMI STATION MIAMI FL 33144

MR ROBERT THROWER TRIBAL HISTORIC PRESERVATION OFFICER POARCH BAND OF CREEK INDIANS HCR 69 A, PO BOX 85B ATMORE AL 36503

MS JOYCE BEAR CULTURAL PRESERVATION OFFICER MUSCOGEE (CREEK) NATION PO BOX 580 OKMULGEE OK 74447

MS AUGUSTINE ASBURY CULTURAL PRESERVATION SPECIALIST ALABAMA-QUASSARTE TRIBAL TOWN PO BOX 187 WETUMBA OK 74883

MS NATALIE DEERE TRIBAL HISTORIC PRESERVATION OFFICER SEMINOLE NATION OF OKLAHOMA PO BOX 1498 WEWOKA OK 74884

REFUGE MANAGER U S FISH & WILDLIFE SERVICE MERRITT ISLAND & PELICAN ISLAND NATIONAL WILDLIFE REFUGES P O BOX 6504 TITUSVILLE FL 32782 EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL 631 NORTH WYMORE ROAD SUITE 100 MAITLAND FL 32751

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FETZER PETER 1540 NEWPORT LN INVERNESS, IL 60010

MCGRATH SUSAN LYNNE TR 15 HAWTHORNE RD BARRINGTON, IL 60010

MCKEEL JULIANNE TR + 3106 W SUNSET DR TAMPA, FL 33629

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PARK ROY H JR + ELIZABETH P TR PO BOX 4680 ITHACA, NY 14852

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COCHRAN LYNN M 1/2 INT + 1 PARK VISTA LN STE 420 WINSTON SALEM, NC 27101 CARLIN BRENDA E PO BOX 1174 BOCA GRANDE, FL 33921

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PARSLEY BETTY TR 1 BEACH DR SE APT 1305 SAINT PETERSBURG, FL 33701

STEINMAN WILLIAM F PO BOX 959 BOCA GRANDE, FL 33921

MOSER CHRISTOPHER J TR + 2525 N PEAR ST #1006 DALLAS, TX 75201

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DORAN HAROLD G JR TR + 1527 FERGUSON AVE NASHVILLE, TN 37212

GASS ROBERT M + SONYA E 944 BEAUMONT DR NORTH VANCOUVER, BC V7R 1P4

BERG DAVID P 100 3RD AVE S UT 3801 MINNEAPOLIS, MN 55401

SCOTT DEBORAH J TR	MILLS JOHN C JR TR	JONES DENNIS D MD
444 BAYSHORE DR	5020 BAYSHORE BLVD 205	300 CAPSTAN DR
VENICE, FL 34285	TAMPA, FL 33611	PLACIDA, FL 33946
TRUSTEES UNDER AGREEMENT OF	MCCABE CHRISTOPHER J + CAROLYN	SEGUITI FRED A + MARY C
200 EAGLE RD STE 316	21 COLLIER AVE	7235 N MOBERLY RD
WAYNE, PA 19087	SCITUATE, MA 02066	ODESSA, FL 33556
ENGSTROM LIMITED PARTNERSHIP	KOFFEND FRANK S + JEAN T TR	BAUMGARTEN PENNY L
116 9TH ST	2179 SUNRISE DR	2818 LONDON RD
HAMPTON, IL 61256	APPLETON, WI 54914	DULUTH, MN 55804
MOHR SHARON A TR +	MCMILLAN MICHAEL H	ZUCCOTTI JOHN ANDREW TR +
47 BEACH PLUM LANE	4215 DEL PRADO BLVD	616 RODMAN AVE
SCITUATE, MA 02066	CAPE CORAL, FL 33904	JENKINTOWN, PA 19046
COZART CARLTON C CO TR +	FERNANDES WILBUR E II +	FERINGA SCOTT D + KAREN A
5121 WEST NEPTUNE WAY	1211 DIABLO RD	1009 BUCKINGHAM RD
TAMPA, FL 33609	GREENWOOD, IN 46143	GROSSE POINTE PARK, MI 48230
NTS CORPORATION	YOUNG JORDAN KEITH + BETTIE J	HERRERA RICARDO + ANELY
70-1507 W 12TH AV	6624 BAYBROOKS CIR	8006 SW 173 TER
VANCOUVER, BC V6J 2E2	TEMPLE TERRACE, FL 33617	PALMETTO BAY, FL 33157
ELIASON DONALD C JR	WOOD SUSAN O TR	BEUKEMA KENNETH G + CONNIE J
700 PINTA DR	235 COCOANUT AVE UNIT 117	5947 RIVER FOREST CIR
TIERRA VERDE, FL 33715	SARASOTA, FL 34236	BRADENTON, FL 34203
RICHARDS HARLEY + MARTHA	LOEBS RICHARD C JR TR	MONTGOMERY PAUL + MAUREEN
1400 EASTON DR	101 INDIAN AVE	81 BURBANK DR
LAKELAND, FL 33803	MIDDLETOWN, RI 02842	BUFFALO, NY 14226
GEER JAMES H L/E + 1582 MACCHARLES CT DUNEDIN, FL 34698	RUNCK RENO F III + BETTY S PROCTOR BLAIR CPA PO BOX 187 PARIS, KY 40362	HAMMOND MICHAEL R + DENISE M 2115 LAKESIDE DR ORLANDO, FL 32803
ZUTT MARTIN J JR +	RANDALL SUSAN D TR	MASUCCI ROBERT N + IRENE
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W B LLC 314 S PINE BLDG 100 SPARTANBURG, SC 29302

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ISAACS HOWARD M TR 2010 BAYVIEW DR TIERRA VERDE, FL 33715

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TYNDALL MANAGEMENT CORP JOHN MACDONNELL 19597 EBENEZER CHURCH RD BLUEMONT, VA 20135

GULF SOUTH OUTFITTERS LLC 320 GULF BLVD UNIT 4B BOCA GRANDE, FL 33921

HALSEY COLETTE 322 PROSPECT AVE LITTLE SILVER, NJ 07739

ADVANTAIRA TRUST LLC 2616 TAMIAMI TRL UNIT 2 PORT CHARLOTTE, FL 33952

CLOUGHLEY JAMES E 1/3 + 100 SE PELICAN DR STUART, FL 34996

CARPENTER DAVID C + KAREN B 100 N MOODUS RD MOODUS, CT 06469 FERNANDEZ EMILIO + OTILLA TR 9600 WHITEGATE LN CINCINNATI, OH 45243

TIITF/REC + PARKS DEPT OF ENVIR PROTECTION 3900 COMMONWEALTH BLVD TALLAHASSEE, FL 32399

PRAHL CAROLYN H 5133 LAKE IN THE WOODS BLVD LAKELAND, FL 33813

JOYCE WILLIAM + JANET R TR 30 EQUESTRIAN WAY LEMONT, IL 60439

BLEMKER DAVID L + ANN L 9 GREEN ACRES RD WASHINGTON, IN 47501

BOCA GRANDE BEACH CLUB SENTRY MANAGEMENT INC 2180 W SR 434 STE 5000 LONGWOOD, FL 32779

GASPARILLA INN INC PO BOX 1088 BOCA GRANDE, FL 33921 STEVENSON JENNA J TR 535 BEAVER RD SEWICKLEY, PA 15143

EDWARDSON JOHN A PO BOX 1423 BOCA GRANDE, FL 33921

ALEXMOR PROPERTIES II LLC + 1015 S DAKOTA AVE TAMPA, FL 33606

MCDONALD SARAH M PO BOX 1403 BOCA GRANDE, FL 33921

SUNDOWN COLONY ASSN PO BOX 1646 BOCA GRANDE, FL 33921

GULF VILLAS HOMEOWNERS ASSN 1861 PLACIDA RD STE 204 ENGLEWOOD, FL 34223 RAINMAKER GROUP LLC 1314 E LAS OLAS BLVD #433 FORT LAUDERDALE, FL 33301

DEBOEST BLAKE L + VICTORIA W PO BOX 2424 BOCA GRANDE, FL 33921

ZENERE COLLEEN TR 10548 YANKEE RIDGE DR FRANKFORT, IL 60423

ELMES GEORGE A + VICKI L 700 MORNINGSIDE CT ZIONSVILLE, IN 46077

SEAGRAPE COLONY PO BOX 391 BOCA GRANDE, FL 33921

BOCA BAY MASTER ASSN INC PO BOX 1239 BOCA GRANDE, FL 33921

PA FARM PROPERTIES LLC 590 GULF BLVD BOCA GRANDE, FL 33921

HOLLINS DIXIE M 580 GULF BLVD BOCA GRANDE, FL 33921

PINCKNEY CHARLES M 570 GULF BLVD 9 BOCA GRANDE, FL 33921

ROSE JAMES C TR 570 GULF BLVD 6 BOCA GRANDE, FL 33921

BATTEL ROBERT L + DOROTHY K 570 GULF BLVD 3 BOCA GRANDE, FL 33921

FETZER PETER 500 GULF BLVD 10 BOCA GRANDE, FL 33921

MCGRATH SUSAN LYNNE TR 500 GULF BLVD 7 BOCA GRANDE, FL 33921

MCKEEL JULIANNE TR + 500 GULF BLVD 4 BOCA GRANDE, FL 33921

NIEDER GLORIA E 500 GULF BLVD 1 BOCA GRANDE, FL 33921

CINCO HERMANOS LLC 480 GULF BLVD 13 BOCA GRANDE, FL 33921 TIITF STATE OF FLORIDA 680 GULF BLVD BOCA GRANDE, FL 33921

GOODRICH RAYMOND T JR TR + 570 GULF BLVD 11 BOCA GRANDE, FL 33921

PAVILION BOCA LLC 570 GULF BLVD 8 BOCA GRANDE, FL 33921

PARK ROY H JR + ELIZABETH P TR 570 GULF BLVD 5 BOCA GRANDE, FL 33921

JACOB JAMES A + DENISE A 540 GULF BLVD 5 BOCA GRANDE, FL 33921

FETZER PETER 500 GULF BLVD 9 BOCA GRANDE, FL 33921

THOMPSON PAUL D 500 GULF BLVD 6 BOCA GRANDE, FL 33921

OLDLAND FL ENTERPRISES INC 500 GULF BLVD 3 BOCA GRANDE, FL 33921

WATTS CAMPBELL F JR TR 480 GULF BLVD 12 BOCA GRANDE, FL 33921

COCHRAN LYNN M 1/2 INT + 480 GULF BLVD 10 BOCA GRANDE, FL 33921 CARLIN BRENDA E 576 GULF BLVD BOCA GRANDE, FL 33921

BOCA REALTY LLC 570 GULF BLVD 2 BOCA GRANDE, FL 33921

CARSON WILLIAM V JR + BARBARA 570 GULF BLVD 7 BOCA GRANDE, FL 33921

PARSLEY BETTY TR 570 GULF BLVD 4 BOCA GRANDE, FL 33921

STEINMAN WILLIAM F 540 GULF BLVD 4 BOCA GRANDE, FL 33921

MOSER CHRISTOPHER J TR + 500 GULF BLVD 8 BOCA GRANDE, FL 33921

BGSBG HOLDINGS LLC 500 GULF BLVD 5 BOCA GRANDE, FL 33921

DORAN HAROLD G JR TR + 500 GULF BLVD 2 BOCA GRANDE, FL 33921

GASS ROBERT M + SONYA E 480 GULF BLVD 14 BOCA GRANDE, FL 33921

BERG DAVID P 460 GULF BLVD 6 BOCA GRANDE, FL 33921 SCOTT DEBORAH J TR 480 GULF BLVD 11. BOCA GRANDE, FL 33921.

TRUSTEES UNDER AGREEMENT OF 480 GULF BLVD 7 BOCA GRANDE, FL 33921

ENGSTROM LIMITED PARTNERSHIP 480 GULF BLVD 4 BOCA GRANDE, FL 33921

MOHR SHARON A TR + 480 GULF BLVD 1 BOCA GRANDE, FL 33921

COZART CARLTON C CO TR + 460 GULF BLVD 2 BOCA GRANDE, FL 33921

NTS CORPORATION 460 GULF BLVD 9 BOCA GRANDE, FL 33921

ELIASON DONALD C JR 460 GULF BLVD 8 BOCA GRANDE, FL 33921

RICHARDS HARLEY + MARTHA 420 GULF BLVD 21 BOCA GRANDE, FL 33921

GEER JAMES H L/E + 420 GULF BLVD 14 BOCA GRANDE, FL 33921

ZUTT MARTIN J JR + 420 GULF BLVD 24 BOCA GRANDE, FL 33921 MILLS JOHN C JR TR 480 GULF BLVD 9 BOCA GRANDE, FL 33921

MCCABE CHRISTOPHER J + CAROLYN 480 GULF BLVD 6 BOCA GRANDE, FL 33921

KOFFEND FRANK S + JEAN T TR 480 GULF BLVD 3 BOCA GRANDE, FL 33921

MCMILLAN MICHAEL H 460 GULF BLVD 3 BOCA GRANDE, FL 33921

FERNANDES WILBUR E II + 460 GULF BLVD 7 BOCA GRANDE, FL 33921

YOUNG JORDAN KEITH + BETTIE J 460 GULF BLVD 4 BOCA GRANDE, FL 33921

WOOD SUSAN O TR 420 GULF BLVD 26 BOCA GRANDE, FL 33921

LOEBS RICHARD C JR TR 420 GULF BLVD 28 BOCA GRANDE, FL 33921

RUNCK RENO F III + BETTY S 420 GULF BLVD 23 BOCA GRANDE, FL 33921

RANDALL SUSAN D TR 420 GULF BLVD 20 BOCA GRANDE, FL 33921 JONES DENNIS D MD 480 GULF BLVD 8 BOCA GRANDE, FL 33921

SEGUITI FRED A + MARY C 480 GULF BLVD 5 BOCA GRANDE, FL 33921

BAUMGARTEN PENNY L 480 GULF BLVD 2 BOCA GRANDE, FL 33921

ZUCCOTTI JOHN ANDREW TR + 460 GULF BLVD 10 BOCA GRANDE, FL 33921

FERINGA SCOTT D + KAREN A 460 GULF BLVD 5 BOCA GRANDE, FL 33921

HERRERA RICARDO + ANELY 460 GULF BLVD 1 BOCA GRANDE, FL 33921

BEUKEMA KENNETH G + CONNIE J 420 GULF BLVD 22 BOCA GRANDE, FL 33921

MONTGOMERY PAUL + MAUREEN 420 GULF BLVD 27 BOCA GRANDE, FL 33921

HAMMOND MICHAEL R + DENISE M 420 GULF BLVD 25 BOCA GRANDE, FL 33921

MASUCCI ROBERT N + IRENE 420 GULF BLVD 19 BOCA GRANDE, FL 33921 RA VILLE JANET HOWE GARDNER 420 GULF BLVD 18 BOCA GRANDE, FL 33921

W B LLC 420 GULF BLVD 15 BOCA GRANDE, FL 33921

COLEMAN KENNETH R + TRACEY TR 420 GULF BLVD 12 BOCA GRANDE, FL 33921

ISAACS HOWARD M TR 420 GULF BLVD 8 BOCA GRANDE, FL 33921

BOCA GRANDE ISLE LLC 420 GULF BLVD 5 BOCA GRANDE, FL 33921

RAINMAKER GROUP LLC 420 GULF BLVD 2 BOCA GRANDE, FL 33921

WHITE ANN EVERETT TR 390 GULF BLVD BOCA GRANDE, FL 33921

PEACOCK SUSAN A TR 380 GULF BLVD 14 BOCA GRANDE, FL 33921

FERNANDEZ EMILIO THOMAS + 380 GULF BLVD 8 BOCA GRANDE, FL 33921

FETZER BERNDT 380 GULF BLVD 6 BOCA GRANDE, FL 33921 MIRAVI MICHAEL M TR + 420 GULF BLVD 17 BOCA GRANDE, FL 33921

LONGEST THOMAS C+

BOCA GRANDE, FL 33921

BOCA GRANDE, FL 33921

BOCA GRANDE, FL 33921

BOCA GRANDE, FL 33921

FARRIOR RICHARD T TR

BOCA GRANDE, FL 33921

JACKSON HELEN DAY TR

BOCA GRANDE, FL 33921

WILCOX THOMAS E TR +

BOCA GRANDE, FL 33921

PELLICCI MICHAEL + KIMBERLY

380 GULF BLVD 12

380 GULF BLVD 13

380 GULF BLVD 10

PAIRITZ ERIC A + MICHELLE C

WAGNER THOMAS W + GLENDA J

420 GULF BLVD 13

BOCA SOL LLC

420 GULF BLVD 10

420 GULF BLVD 7

420 GULF BLVD 4

420 GULF BLVD 1

GRIMES CHRISTOPHER S 420 GULF BLVD 16 BOCA GRANDE, FL 33921

FERGUSON SUSAN Y 420 GULF BLVD 11 BOCA GRANDE, FL 33921

SIG PROPERTIES LLC 420 GULF BLVD 9 BOCA GRANDE, FL 33921

MILLER GAIL B + 420 GULF BLVD 6 BOCA GRANDE, FL 33921

HOWELLS JEFFERY P TR 420 GULF BLVD 3 BOCA GRANDE, FL 33921

GRAVANDA JOHN N TR 394 GULF BLVD BOCA GRANDE, FL 33921

15 SEAGRAPE LLC 380 GULF BLVD 15 BOCA GRANDE, FL 33921

VANOSDAL WARREN F + 380 GULF BLVD 11 BOCA GRANDE, FL 33921

ARCHIES BUNKER LLC 380 GULF BLVD 9 BOCA GRANDE, FL 33921

MACLETCHIE BERYL C 380 GULF BLVD 4 BOCA GRANDE, FL 33921

OLEARY WILLIAM R TR 380 GULF BLVD 5

BOCA GRANDE, FL 33921

BOCA GRANDE, FL 33921

BLAKESLEE BYRON E 380 GULF BLVD 3 BOCA GRANDE, FL 33921

STOUT MARIANNE C 370 GULF BLVD BOCA GRANDE, FL 33921

HOOKER EDWIN STANTON III 350 GULF BLVD BOCA GRANDE, FL 33921

MERCERS MENS + WESTERN STORE 290 GULF BLVD 16 BOCA GRANDE, FL 33921

MARTIN MICHAEL D + JOY L 290 GULF BLVD 12 BOCA GRANDE, FL 33921

STEVENSON JENNA J TR 290 GULF BLVD 19 BOCA GRANDE, FL 33921

UNITED STATES COAST GUARD 220 GULF BLVD BOCA GRANDE, FL 33921

CHRISTAKOS DONALD H TR + 174 GULF BLVD BOCA GRANDE, FL 33921

FRASER DOD A + SUSAN P 138 GULF BLVD BOCA GRANDE, FL 33921

KELLEY BRAD + SUSAN 100 GULF BLVD BOCA GRANDE, FL 33921 NEWELL GARY 380 GULF BLVD 2 BOCA GRANDE, FL 33921

NYGAARD EGON 360 GULF BLVD 66 BOCA GRANDE, FL 33921

HAYES DAVID L + PATTY S 344 GULF BLVD BOCA GRANDE, FL 33921

TREMELIN SCOTT S TR 290 GULF BLVD 15 BOCA GRANDE, FL 33921

BG LIGHTHOUSE 14 LLC 290 GULF BLVD 14 BOCA GRANDE, FL 33921

ARNETT JANICE H 290 GULF BLVD 20 BOCA GRANDE, FL 33921

TIITF/REC + PARKS 184 GULF BLVD BOCA GRANDE, FL 33921

ALLEN DARRYL F + SHARON 160 GULF BLVD BOCA GRANDE, FL 33921

KLING SARAH B TR 134 GULF BLVD BOCA GRANDE, FL 33921

RUSSELL MARIE TR 111 GILCHRIST AVE BOCA GRANDE, FL 33921 DANIELS JOHN TR 380 GULF BLVD 1 BOCA GRANDE, FL 33921

WATKINS LOUISE M 356 GULF BLVD BOCA GRANDE, FL 33921

ALLEN JOANNE J TR 31.25% + 340 GULF BLVD BOCA GRANDE, FL 33921

ZIGMAN LYNETTE M + MICHAEL J 290 GULF BLVD 11 BOCA GRANDE, FL 33921

WILLETS EMILY S TR 290 GULF BLVD 17 BOCA GRANDE, FL 33921

SNEAD HENRY T TR + 290 GULF BLVD 21 BOCA GRANDE, FL 33921

BERG JOHN A + NANCY C TR 132 GULF BLVD BOCA GRANDE, FL 33921

STOKELY RANDOLPH H + LYNN K 150 GULF BLVD BOCA GRANDE, FL 33921

KELLEY BRAD + SUSAN 110 GULF BLVD BOCA GRANDE, FL 33921

BURDGE RICHARD M SR TR 235 WHISKEY ROW BOCA GRANDE, FL 33921 FAWKES LAS OLAS LLC 121 GILCHRIST AVE BOCA GRANDE, FL 33921

COURT DAVID + 211 BANYAN ST BOCA GRANDE, FL 33921

KENAN BRUCE A + LINDA H 300 3RD ST W BOCA GRANDE, FL 33921

COMRIE DOUGLAS C + CAROLYN A 301 3RD ST W BOCA GRANDE, FL 33921

HRS REAL ESTATE LLC 801 GASPARILLA RD BOCA GRANDE, FL 33921

SH ERMAN MARY NORINE TR 1110 11TH ST W BOCA GRANDE, FL 33921

COWPERTHWAIT JAMES B + CHRIS H 1221 12TH ST W BOCA GRANDE, FL 33921

BLAU ELIZABETH B 1501 GASPARILLA RD BOCA GRANDE, FL 33921

SHARP FARISH FP 1511 GASPARILLA RD BOCA GRANDE, FL 33921

KILE NOEL O + DAWN M 1900 19TH ST W BOCA GRANDE, FL 33921 SLIGAR GARY + SUSAN C 161 GILCHRIST AVE BOCA GRANDE, FL 33921

NOYES LINDA CO TR + 245 WHISKEY ROW BOCA GRANDE, FL 33921

SULLIVAN HUGH D & JULIE H 400 4TH ST W BOCA GRANDE, FL 33921

FEHSENFELD FRED MEHLERT JR + 351 GILCHRIST AVE BOCA GRANDE, FL 33921

FRAZIER ELIZABETH P 1210 12TH ST W BOCA GRANDE, FL 33921

HOBBS PATRICIA W 1111 11TH ST W BOCA GRANDE, FL 33921

1300 13TH STREET LLC 1300 13TH ST W BOCA GRANDE, FL 33921

SEMA HOLDING CORPORATION 1400 14TH ST W BOCA GRANDE, FL 33921

WEBB MARJORIE H 1701 17TH ST W BOCA GRANDE, FL 33921

COLONIAL INDUSTRIES INC 320 GULF BLVD 5B BOCA GRANDE, FL 33921 RODRIGUEZ CARLOS A + EILEEN T 200 BANYAN ST BOCA GRANDE, FL 33921

SODERBERG PETER H + ELSA A 255 WHISKEY ROW BOCA GRANDE, FL 33921

CRUZ EDWARD + SHARON 341 GILCHRIST AVE BOCA GRANDE, FL 33921

FLETCHER ROBERT K TR 361 GILCHRIST AVE BOCA GRANDE, FL 33921

FRASER RICHARD M + HELEN T 1000 10TH ST W BOCA GRANDE, FL 33921

BEE ZEE LLC 1700 17TH ST W BOCA GRANDE, FL 33921

HEATTER JUSTIN W TR 1301 13TH ST W BOCA GRANDE, FL 33921

JOURNEYS END BOCA GRANDE II LL 1800 18TH ST W BOCA GRANDE, FL 33921

KEEVIL MARY T H TR 1801 18TH ST W BOCA GRANDE, FL 33921

MOSELEY STEVE + LISA 320 GULF BLVD 5F BOCA GRANDE, FL 33921 WBG PROPERTY LLC 320 GULF BLVD 5A BOCA GRANDE, FL 33921

JULIEN JEFFREY P + KAREN M 320 GULF BLVD 1A BOCA GRANDE, FL 33921

MALOTT DOROTHY ANNE MARGARET + 320 GULF BLVD 1C BOCA GRANDE, FL 33921

SHERWOOD CLARK T + JOY S 320 GULF BLVD 2F BOCA GRANDE, FL 33921

MAHAFFEY WILLIAM H TR 320 GULF BLVD 5H BOCA GRANDE, FL 33921

BRANHAM ANTHONY GREGG 320 GULF BLVD 4A BOCA GRANDE, FL 33921

OBECK ERIC S + MARY L 320 GULF BLVD 3C BOCA GRANDE, FL 33921

SANFORD GREGORY W 320 GULF BLVD 3G BOCA GRANDE, FL 33921

SCHOENEBECK SIGRID 320 GULF BLVD 3F BOCA GRANDE, FL 33921

ND KING FAMILY LTD PTNSP 320 GULF BLVD 2B BOCA GRANDE, FL 33921 SCANLON JAMES W TR 320 GULF BLVD 4C BOCA GRANDE, FL 33921

HORNER KATHARINE D TR 320 GULF BLVD 1B BOCA GRANDE, FL 33921

BLALOCK RALPH + PATRICIA 320 GULF BLVD 2D BOCA GRANDE, FL 33921

KING WALTER G + CHRISTINE M 320 GULF BLVD 5C BOCA GRANDE, FL 33921

HAMILTON DORRANCE H TR + 320 GULF BLVD 5D BOCA GRANDE, FL 33921

DONIGAN JAMES D + JANET 320 GULF BLVD 4D BOCA GRANDE, FL 33921

BEAUMONT DINA M 320 GULF BLVD 3H BOCA GRANDE, FL 33921

GROH FRITZ + MANUELA 320 GULF BLVD 3D BOCA GRANDE, FL 33921

FORSELL LAURENCE L + ALICE M 320 GULF BLVD 2H BOCA GRANDE, FL 33921

BEAUMONT DINA M 320 GULF BLVD 2C BOCA GRANDE, FL 33921 SCHWEGMAN JACQUELINE W TR 320 GULF BLVD 3E BOCA GRANDE, FL 33921

BENISEK GEORGE J TR 320 GULF BLVD 1D BOCA GRANDE, FL 33921

FORSELL LAWRENCE L + ALICE M 320 GULF BLVD 2G BOCA GRANDE, FL 33921

KILIAN J J + PATRICIA R TR 320 GULF BLVD 5E BOCA GRANDE, FL 33921

TYNDALL MANAGEMENT CORP 320 GULF BLVD 5G BOCA GRANDE, FL 33921

GULF SOUTH OUTFITTERS LLC 320 GULF BLVD 4B BOCA GRANDE, FL 33921

HALSEY COLETTE 320 GULF BLVD 3A BOCA GRANDE, FL 33921

ADVANTAIRA TRUST LLC 320 GULF BLVD 3B BOCA GRANDE, FL 33921

CLOUGHLEY JAMES E 1/3 + 320 GULF BLVD 2E BOCA GRANDE, FL 33921

CARPENTER DAVID C + KAREN B 320 GULF BLVD 2A BOCA GRANDE, FL 33921 FERNANDEZ EMILIO + OTILLA TR 380 GULF BLVD 7 BOCA GRANDE, FL 33921

TIITF/REC + PARKS 610 GULF BLVD BOCA GRANDE, FL 33921

PRAHL CAROLYN H 540 GULF BLVD 10 BOCA GRANDE, FL 33921

JOYCE WILLIAM + JANET R TR 540 GULF BLVD 7 BOCA GRANDE, FL 33921

BLEMKER DAVID L + ANN L 540 GULF BLVD 1 BOCA GRANDE, FL 33921

BOCA GRANDE BEACH CLUB BOCA GRANDE BEACH CLUB C/E BOCA GRANDE, FL

GASPARILLA INN INC 500 PALM AVE BOCA GRANDE, FL 33921 STEVENSON JENNA J TR 290 GULF BLVD 18 BOCA GRANDE, FL 33921

EDWARDSON JOHN A 596 GULF BLVD BOCA GRANDE, FL 33921

ALEXMOR PROPERTIES II LLC + 540 GULF BLVD 9 BOCA GRANDE, FL 33921

MCDONALD SARAH M 540 GULF BLVD 6 BOCA GRANDE, FL 33921

SUNDOWN COLONY ASSN 422 GULF BLVD BOCA GRANDE, FL 33921

GULF VILLAS HOMEOWNERS ASSN GULF VILLAS C/E BOCA GRANDE, FL RAINMAKER GROUP LLC 540 GULF BLVD 8 BOCA GRANDE, FL 33921

DEBOEST BLAKE L + VICTORIA W 570 GULF BLVD 10 BOCA GRANDE, FL 33921

ZENERE COLLEEN TR 540 GULF BLVD 3 BOCA GRANDE, FL 33921

ELMES GEORGE A + VICKI L 540 GULF BLVD 2 BOCA GRANDE, FL 33921

SEAGRAPE COLONY SEAGRAPE COLONY C/E BOCA GRANDE, FL

BOCA BAY MASTER ASSN INC 130 GULF BLVD BOCA GRANDE, FL 33921 **ATTACHMENT 4 – MONITORING REPORT**



Gasparilla Island

Mitigation Reef



Post Nourishment Biological Survey

Permit 0174403-001-JC

May 2015

Prepared By: Lee County Division of Natural Resources 1500 Monroe Street P.O. Box 398 Fort Myers, FL 33902-0398

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INTRODUCTION

Lee County constructed the Gasparilla Island Erosion Control project between December 2006 and April 2007. The work authorized by permit 0174403-JC entailed placement of 1,072,781 cubic yards of sand on the beaches of Gasparilla Island. The material was dredged from the Boca Grande Pass ebb shoal, located approximately 2 miles offshore. Beach placement occurred over 15,000 linear feet, from 17th Street to Boca Grande Pass, and covered 0.9 acres of hardbottom.

The rock outcroppings were located in the nearshore region and alternated between being exposed and covered by the localized sediment transport. The limestone substrate provided beneficial habitat for macroalgae and filter feeding organisms when it was exposed. A cognizable benefit was delivered to the regions natural food chain by providing this habitat. Algae communities are a food source for other sea life such as sea turtles, invertebrates, and other plant eating fish. Overhangs and crevices from the rock also provided small fish and invertebrates' locations for avoiding larger predatory animals (Mote, 2001).

Mitigation for perpetuating this loss of habitat requires the creation of a similar reef structure immediately offshore of the fill area. Lee County is responsible for constructing the reef in accordance with the permit conditions. A minimum of 0.9 acres of limestone is required to be placed in water depths of 8 to 10 ft NGVD approximately 500 feet off the beach. Each individual limestone rock must weigh between ¼ and ¾ ton (500 and 1,500 lbs), and remain at least six (6) feet below the water surface, or MLLW, for navigational purposes. (The datum of MLLW and NGVD are equivalent for Gasparilla Island.)

Monitoring the success of the mitigation is also stipulated by the authorized permit and requires 1 type of follow-up survey. A one year biological survey and report that will list epibenthic species present on each of ten quadrates. The results of this survey are presented below.

REEF CONSTRUCTION

Reef construction began on September, 15, 2008 by Barnacle Bay Transport. Seventeen (17) loads of limestone rock were taken to the deployment site. The loads averaged in weight of 48 tons. The material was placed using a barge mounted excavator while positioned in the designated reef placement location. Lee County denoted the reef locations for each deployment. Placement of the limestone concluded on November 21, 2008.

Gasparilla Island Mitigation Reef 2014 Monitoring Report



Unloading Operations of Reef Material

Limestone Rock for Mitigation Reef

The permitted reef site covered 1.4 acres and consisted of six (6) 100 ft. x 100 ft. squares approximately 500 ft offshore in water depths from 10 to 12 feet NGVD. Figure 1 shows the plan view layout of the reef site with geographical coordinates.

The total volume of material placed was 817 tons. The deployments began in the southern most reef site and advanced to the north, covering each site. The tonnage placed in each site is listed below with site references corresponding with the post construction survey.

Table 1 – V	Volume of	'Reef Material	Placed by	Weight
-------------	-----------	----------------	-----------	--------

Site	Tonnage Placed
A	88
В	252
С	74
D	92
Е	118
F	193

A density of 155 lb/ft^3 was assumed for the limestone rock. With this assumption, the average rock diameter would be 2.3 feet assuming an equal distribution of rock sizes between the $\frac{1}{4}$ and $\frac{3}{4}$ ton requirement. Similarly, the average weight could be assumed at 992 pounds.

The typical construction technique for reef placement is to deploy material off the side of stationary barge. Therefore, consideration was given to allow placement without the need for stacking. The rock is required to be contained within a vertical range of four (4) feet in the deepest locations and two (2) feet in the shallower spots. The water depth was reported as 8 to 10 feet and 6 feet of clearance is required for navigation (Humiston and Moore, 2001). Thus, two (2) average rocks would exceed 4 feet in height if staked together. For this reason, a 1.5 foot void space was allotted for each side of the rocks. This allowed for a minimal 3 foot separation between each rock and a total volume of approximately 825 tons to fill the reef sites.

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11:17 AF

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Figure 1 - Mitigation Reef Plan View



SIDESCAN SONAR SURVEY

The side scan sonar data shows the locations and area of the mitigation reefs.

The sidescan survey was conducted using a 900 kHz side scan sonar surveying along preplotted navigation lines. Navigation and positioning was obtained using a Garmin DGPS Satellite Positioning System. The sidescan sonar was set to a range of 40m, allowing for 80m of swath coverage and 100% coverage of the survey area. All horizontal controls were referenced to WGS 84, Meter.

BIOLOGICAL SURVEY

Lee County staff conducted the biological survey on May 12th,2015. Ten (10) random one meter (1 m) quadrates were field selected for sampling. The percent cover of algae including epibenthic species present within the sampling area was recorded and shown in Appendix B. The results show the reef supports a typical hard-bottom reef community and also is providing smaller organisms' refuge from larger predatory fish.

The intent to reproduce a habitat suitable for sustaining a food source for invertebrate herbivores has been achieved. The reef site is comparable by function to the hardbottom buried by the sand placement. Each sampling site had significant cover with diverse groups of reef organisms observed.

CONCLUSION

The mitigation reef structure is providing similar habitat as the impacted hardbottom buried in the nearshore region. Activity from organisms around the reefs are beginning to expose previously buried nearby hardbottom, thus increasing the amount of available reef habitat. Grazers are being supplied an organic food base establishing on the placed limestone. Smaller organisms such as seaweed blenny, belted sandfish and hermit crabs are also finding refuge in the rock. Diversity at the site continued to increase since the previous survey.

References

Mote Marine Laboratory. (2001). An Evaluation of Nearshore Rock Habitat & Artificilal Reef Survey Off Gasparilla Island. (Technical Report No. 764). Sarasota, Florida.

Humiston and Moore Engineers. (2001). *Gasparilla Island Beach Restoration, Hard Bottom Mitigation Plan.* Naples, Florida.

Gasparilla Island Mitigation Reef 2014 Monitoring Report

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Appendix A – Sidescan Sonar Survey



Gasparilla Mitigation Reef Sidescan Sonar

Gasparilla Island Mitigation Reef 2014 Monitoring Report

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Appendix B – Biological Survey

Percent cover and presence (x) of biota within ten randomly selected 1m quadrats at Gasparilla Island mitigation reef.

		SAMPLE NUMBER									
		1	2	3	4	5	6	7	8	9	10
red algae	Note 1	5			5			5		5	5
brown algae	Note 2	10	5	10	20	10	5	10	10	10	20
green algae	Note 3	10	5	10	10	10	5	10	10	10	10
barnacle	Chthamalus or Balanus sp.	х		x	х	x	х	х	x	x	х
hydroid	Hydroid sp.									х	х
colonial tunicate	Eudistoma sp.	x	x	x	x	x	x	x	x	x	x x
flat tunicate	Botrylloides nigrum		х	х	х	х	х	x	x	х	х
encrusting sponge	Cliona delitrix	х	x	х	х	х	х	х	х	х	х
soft coral	Leptogorgia virgulata		x	x	x	x		x			
feather duster worms	Sabellidae undetermined										

Combined % Algal Cover		25	10	20	35	20	10	25	20	25	35
porcelain crab gastropod	sp. Undetermined Cerithiopsidae or Cerithiidae	sp.									
hermit crab	sp. Undetermined			х		х	х	х	х	х	х
stone crab	Menippe mercenaria				х	x	x	х			х
urchin	Echinometra lucunter			х	х	x	х	х			
juv. lane snapper	Lutjanus synagris	х					х		х		х
belted sandfish	Serranus subligarius	х		х	x	х	х	х	x	x	х
seaweed blenny	Parablennius marmoreus	х		x	x	х	x	х	x	x	X

Note 1: Includes but not limited to Gracilaria sp., Enteromorpha sp., Acanthophora sp., Hypnea sp. Note 2: Includes but not limited to Dictyota sp., Padina sp. Note 3: Includes but not limited to Caulerpa serfularoides s, Caulerpa taxifolia, Caulerpa mexicana, Caulerpa prolifera

Observational data only. No specimens were collected. Site visit on May 12,2015;