3.5 DREDGING AND BEACH PLACEMENT

3.5.1 Physical.

a. Water quality. There would be a minor short-term increase in turbidity at the dredging.

3.5.2 Biological

a. Benthos. The benthic organisms at the dredging site would be eliminated. This area would be rapidly recolonized by the organisms that can be moved by tidal flows from adjacent areas. Crustaceans and clams would take longer to re-enter the area.

b. Manatees. The auxiliary vessels associated with the dredging operation could impact manatees. In order to reduce this impact, the standard state and Federal manatee protection conditions would be implemented. Included in these conditions are an education requirement, monitoring and avoidance of manatees. This avoidance includes a requirement to shutdown equipment should individuals come close to the equipment.

c. Fisheries. There would be no adverse impact on fisheries.

d. Seagrass. Dredging would not impact seagrass beds. Turbidity levels at the edge of the beds would be monitored to protect seagrasses.

e. Migratory Birds. Migratory bird nesting could be affected at the beach placement area. In order to offset this affect, a a monitoring program would be established and buffer zone created around the nesting sites during nesting season (Feb-Aug).

3.5.3 Social.

a. Historic Properties. As discussed in section 3.3.3.a. of this document, no significant historic properties are not known to exist in the disposal area. This alternative would have no effect on resources included in or eligible for inclusion in the National Register of Historic Places.

b. Recreation. There would be a short-term minor impact on recreational navigation from the presence and operation of the dredging equipment in the navigation channel.

c. Aesthetics. There would be a short-term degradation of the aesthetics of the navigation channel from the presence and the noise from the operation of heavy equipment and a disruption of the seascape.

3.5.4 Economic.

a. Navigation. There would be a long-term major benefit from the continued maintenance on the navigable capacity. There would be a short-term disruption to commercial navigation from the

presence and operation of dredging equipment.

b. Economics. There would be a medium, short-term benefit to the local economy from the sale of goods and services in support of the construction effort. There would be a long-term benefit on the economics of the area from the maintenance of recreational boats handling capacity of the channel.

3.5.5 Cumulative effects.

If this action was considered in conjunction with other similar projects and similar No Actions, there would be cumulative effects.

3.5.6 Unavoidable effects.

There would be localized turbidity at both the dredging site and the placement area and disruption of commercial navigation in the channel.

3.5.7 Irreversible and Irretrievable Resource Commitments.

There would be no irreversible or irretrievable commitment of resources from the selection of this alternative.

4. LIST OF PREPARERS.

The following professionals prepared the Environmental Assessment.

NAME	DISCIPLINE	EXPERIENCE	ROLE IN PREPARING EIS
William J. Fonferek	Biologist	25 years environmental impacts assessment	NEPA Coordinator, Biological Impact Assessment, Endangered Species Consultation
Tim Murphy	Civil Engineer	8 years experience	Project Manager
Paul Stevenson	Landscape Architect	12 years experience recreation design, construction and development	Recreation Resources Analysis and Mitigation Development
Tommy Birchett	Archeologist	20 years historic property management and assessment	Historic Property Analysis and Assessment
Glen Schuster	Environmental Engineer	21 years	Water Quality Investigations and Impact Assessment
Peter Besrutchko	Environmental Engineer	5 years	HTRW Assessment

5. CONSULTATION WITH OTHERS - PUBLIC INVOLVEMENT PROCESS.

5.1 PUBLIC NOTICE.

Public notice (PN-NP-211) dated November 18, 1996 was issued for project. The following comments were received (Appendix IV):

5.2 NMFS.

The National Marine Fisheries Service responded to the public notice by letter dated December 16, 1996 stating that adverse impacts would be minimal.

5.3 Florida Department of State, Division of Historical Resources.

The Division responded to the public notice and in a separate letter to them dated November 13, 1996. In a letter dated December 18, 1996, the Division recommended a magnetometer survey be conducted and the results coordinated with them. After coordinating the results, the Division responded by letter dated May 20, 1997, stating that none of the magnetometer targets are potentially significant and that the maintenance would have no effects on historic properties listed or eligible for listing on the National Register of Historic Places.

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APPENDIX I

SECTION 404(B)(1) EVALUATIONS

SECTION 404(b)(1) EVALUATION
DREDGED MATERIAL

I. Project Description

a. Location. New Pass, Sarasota County, Florida.

b. General Description. The Corps is proposing to place dredged material from the maintenance of New Pass on the beaches north and south of the channel on Lido and Longboat keys.

c. Authority and Purpose. House Document 214, 89th Congress, 14 July 1960. Since the initial maintenance, sand and sediments have periodically accumulated in the channel reducing the navigable capacity of the project. The navigation channel is used by recreational vessels. The channel depths are reduced by sedimentation. In order to maintain the Federal standard, the channel must be dredged..

d. General Description of Dredged or Fill Material

(1) General Characteristics of Material. The excavated material to be placed on the beach would be sandy material that shoaled in the waterway

(2) Quantity of Material. Approximately 350,000 cubic yards of dredged material excavated from the navigation entrance channel per dredging cycle.

(3) Source of Material. The material will be excavated from New Pass Navigation Project.

e. Description of the Proposed Discharge Site.

(1) Size and Location. The north beach placement area is approximately 7000' with a 150' wide at the top of the berm. The south beach placement area is 3000' long with a 250' wide berm.

(2) Type of Site. The placement areas are beach and surf areas adjacent to the beach.

(3) Type of Habitat. The habitat is a surf area with a sandy bottom.

(4) Timing and Duration of Discharge. The dredging cycle would occur approximately every 4 years.

f. Description of Disposal Method. The dredging would be conducted by a hydraulic dredge or hopper with pump-out capabilities. The outfall would likely have a diffuser at the terminal end.

II. Factual Determinations

a. Physical Substrate Determinations.

(1) Substrate Elevation and Slope. The placement area bottom is relatively flat..

(2) Sediment Type. The bottom is sandy material..

(3) Dredged/Fill Material Movement. The material is being placed in the shoreline/littoral drift area. Movement is expected.

(4) Physical Effects on Benthos. Placement will result in the loss of benthic organisms at the placement site. These communities will reestablish quickly upon completion of work. Disruption of marine life at the placement area will be short term.

(5) Other Effects. Standard manatee construction conditions will be required of all contractors. The work as proposed will not jeopardize protected species. No known historical properties will be affected by this project. The proposed work will result in some temporary disruption of normal vessel traffic in the harbor, but it's completion will have a favorable impact on the operation of the port with a resulting beneficial effect on the local and regional economy. Temporary degradation in water quality at the dredging and disposal sites will also occur. Turbidity would be controlled to not impact adjacent seagrass beds. Beach placement of material would affect sea turtle nesting. A nest relocation and monitoring program would be implemented during the nesting season 1 March through 30 November. There would also be an escarpment and compaction monitoring program after completion of the project.

(6) Actions Taken to Minimize Impacts. Turbidity curtains could be employed to reduce impacts on seagrass beds. The standard manatee protection conditions would also be employed to reduce potential for impacts.

b. Water Circulation, Fluctuation and Salinity Determinations

(1) Water

(a) Salinity. No impacts to salinity at disposal site.

(b) Water Chemistry. There will be no changes in water chemistry at the site.

(c) Clarity. There will be a temporary increase in turbidity level at the disposal site and immediately adjacent to the disposal area during the disposal operations.

(d) Color. Due to the minor silt content, there will be a brown turbidity plume associated with the discharge operations.

(e) Odor. There would be no odor problems associated with the dredged material since the material contains few organics and would not be exposed to the air.

(f) Taste. Not applicable.

(g) Dissolved Gas Levels..

(h) Nutrients. The material to be discharged is mainly sand with shell fragment, therefore no nutrients would be bound in the material and no release of nutrients would be anticipated.

(i) Eutrophication. No eutrophication is anticipated.

(2) Current Patterns and Circulation. Not applicable.

(3) Normal Water Level Fluctuations. Not applicable.

(4) Salinity Gradients. Not applicable.

(5) Actions That Will Be Taken to Minimize Impacts. The disposal site will be operated to maintain state water quality standards.

d. Suspended Particulate/Turbidity Determinations

(1) Expected Changes in Suspended Particulate and Turbidity Levels in Vicinity of Disposal Site. No changes are anticipated because the dredged material is sandy material containing few fines.

(2) Effects (degree and duration) on Chemical and Physical values

(a) Light penetration. Light penetration would be reduced during disposal operations. This would be short-term in duration and would not cause any

significant adverse effects.

(b) Dissolved Oxygen. There would be no reduction in dissolved oxygen levels from the discharge of the sandy dredged material.

(c) Toxic Metals and Organics. No toxic materials are anticipated to be encountered.

(d) Pathogens. Not Applicable.

(e) Aesthetics. There will be an increase in noise levels and aesthetic degradation from the presence and operation of dredging equipment at the disposal site.

(f) Others as Appropriate. None.

(3) Effects on Biota (consider environmental values in sections 230.21, as appropriate)

(a) Primary Production, Photosynthesis. No photosynthesis occurs at this site.

(b) Suspension/Filter Feeders. Little or no impact is expected.

(c) Sight Feeders. Little or no impact is expected.

(4) Actions taken to Minimize Impacts. None required.

d. Contaminant Determinations. No contaminants have been previously encountered and therefore none are anticipated.

e. Aquatic Ecosystem and Organism Determinations

(1) Effects on Plankton. No significant effects.

(2) Effects on Benthos. No significant benthic populations are located in the disposal site and therefore no significant adverse impacts are anticipated.

(3) Effects on Nekton. None are anticipated.

(4) Effects on Aquatic Food Web. None are anticipated.

(5) Effects on Special Aquatic Sites. No special aquatic sites are located within the disposal site.

(a) Sanctuaries and Refuges. Not applicable.

(b) Wetlands. Not applicable.

(c) Mud Flats. Not applicable.

(d) Vegetated Shallows. None would be affected.

(e) Coral Reefs. Not applicable.

(f) Riffle and Pool Complexes. Not applicable.

(6) Threatened and Endangered Species. None would be affected.

(7) Other Wildlife. Not applicable.

(8) Actions to Minimize Impacts. No actions are necessary.

f. Proposed Disposal Site Determinations

(1) Mixing Zone Determination. No mixing will likely occur due to the sandy nature of the dredged material, the shallow water and the small quantity of fines associated with the material.

(2) Determination of Compliance with Applicable Water Quality Standards. Water quality certification has been issued by the State. Monitoring of the discharge site will be conducted to insure State standards met.

(3) Potential Effects on Human Use Characteristic

(a) Municipal and Private Water Supply. Not applicable.

(b) Recreational and Commercial Fisheries.

(c) Water Related Recreation. Not applicable.

(d) Aesthetics. The proposed discharge would increase noise and scenic degradation along the ocean front during disposal operations.

(e) Parks, National and Historical Monuments, National Seashores,

Wilderness Areas, Research Sites, and Similar Preserves. Not applicable.

g. Determination of Cumulative Effects on the Aquatic Ecosystem..

h. Determination of Secondary Effects on the Aquatic Ecosystem. Not applicable.

APPENDIX II

COASTAL ZONE CONSISTENCY DETERMINATION

FLORIDA COASTAL ZONE MANAGEMENT PROGRAM
FEDERAL CONSISTENCY EVALUATION PROCEDURES

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 which might have an effect on natural shoreline processes.

Response: The proposed project is located in an area seaward of the mean high water line. However, this placement is regarded as beneficial to the shoreline processes by placing sandy material on the beach. Therefore, the project would not apply to 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. It's 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: A public notice was coordinated with the State Clearinghouse. No adverse State comments were received. Therefore, this project would comply with the intent of this Chapter.

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

Response: The dredging and placement would be consistent with the intent of this Chapter.

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 features; submerged lands; spoil islands; and artificial reefs.

Response: The maintenance dredging and placements would affect state lands. No state resources

would not be affected. The material is being placed on the beach at the request of the State of Florida. The proposal 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 would 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 work would not affect any State parks or preserves, and would, therefore, be consistent with this chapter.

7. **Chapter 267, Historic Preservation.**

This chapter establishes the procedures for implementing the Florida Historic Resources Act responsibilities.

Response: The maintenance of this existing navigation channel has been coordinated with the Florida State Historic Preservation Officer. Procedures will be implemented to avoid affects on unidentified historic properties which may be located within the affected areas. No known historic properties, included or eligible for inclusion in the National Register of Historic Places, have been identified in the navigation channel or in the proposed upland disposal area. Therefore, the work 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 maintenance dredging of the navigation channel encourages the development of Sarasota Bay and economic growth of the area. Therefore, the work would 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 balanced and efficient transportation system.

Response: The maintenance dredging of the navigation channel promotes recreational navigation. Therefore, the work would comply with the goals of this chapter.

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 fisherman 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: The maintenance dredging of this area would not adversely affect saltwater living resources. No saltwater living resources are found in the placement area. Based on the overall impacts of the work, the work is consistent with the goals of this chapter.

11. **Chapter 372, Living Land and Freshwater Resources.**

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

Response: No living land or freshwater resources are located in the project area. Therefore, the work would comply with the goals of this chapter.

12. **Chapter 373, Water Resources.**

This chapter provides the authority to regulate the withdrawal, diversion, storage, and consumption of water.

Response: This work does not involve 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: This work does not involve the transportation or discharging of pollutants.

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 work does not involve the exploration, drilling or production of gas, oil or petroleum product 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: Since this is management of an existing project the work would be 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 work 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 DEP.

Response: A request was sent to the Florida Department of Environmental Protection to reissue an existing permit for maintenance dredging. Final compliance would come with the permit issuance. Therefore, the work is complying 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 work. Particular attention will be given to work on or near agricultural lands.

Response: The proposed work is not located near or on agricultural lands and would therefore, this chapter would not apply.

APPENDIX III

ENDANGERED SPECIES CONSULTATION

February 5, 1990

Planning Division
Environmental Resource Branch

Mr. David L. Ferrell
Field Supervisor
U.S. Fish and Wildlife Service
Vero Beach, Florida 32961-0712

Dear Mr. Ferrell:

This provides additional information for your consideration relative to coordination under Section 7 of the Endangered Species Act for proposed maintenance dredging and beach disposal in the area of New Pass, Sarasota County, Florida. Mr. Carroll recommended in his letter of January 26, 1990 (no log number) that work should be completed outside the May-September time period. This was based on information presented in our letter dated December 13, 1989. We request your concurrence with beach disposal for this project during the sea turtle nesting months, based on the following additional information.

The disposal beach may be used for nesting by loggerhead sea turtles (Caretta caretta). However, only a relatively small number of turtles utilize the proposed disposal beach on an annual basis. The sea turtle nesting period generally begins in April and continues through August. Beach disposal activities during the nesting period could damage the nests. To safeguard sea turtles, the Corps proposes to implement the following sea turtle protection measures:

a. Nest relocation programs will be conducted for any nourishment activities performed between March 1 and November 30.

b. Surveys and nest relocations will be conducted by individuals permitted by the Florida Department of Natural Resources, and nests will be relocated to a self-release beach hatchery, secure from vandals, and in a place protected from artifical lighting.

c. The nourished beach will be measured with a penetrometer for compaction and, if necessary, disced or plowed to a depth of at least 30 inches to facilitate turtle nesting. A penetrometer reading of 500 units or more will indicate the need to plow the beach.

These protective measures will be required in any applicable contract let for this project. Because of these measures, no adverse effect on sea turtles would occur as a result of this action.

Sincerely,

A. J. Salem
Chief, Planning Division

Atmar/CESAJ-PD-ES/2615
pkp 2/2/90
Smith/CESAJ-PD-E
Davis/CESAJ-PD-A
Salem/CESAJ-PD

United States Department of the Interior
FISH AND WILDLIFE SERVICE
P.O. BOX 2676
VERO BEACH, FLORIDA 32961-2676

March 28, 1990

Colonel Bruce A. Malson
District Engineer
U.S. Army Corps of Engineers
P.O. Box 4970
Jacksonville, FL 32232-0019

Attn: Planning Division RE: New Pass Maintenance Project

Dear Colonel Malson:

This is in response to a letter dated February 5, 1990, from Mr. A.J. Salem, Chief of your Planning Division, requesting our concurrence with a "no effect" determination for the endangered loggerhead sea turtles that occur in the area of the New Pass Maintenance Project, Sarasota County, Florida. The U.S. Fish and Wildlife Service disagrees with your determination in regard to sea turtles and, therefore, is providing this Biological Opinion. This report is submitted in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report represents the views of the Department of the Interior and satisfies the consultation requirements of Section (7)(a)(2) of the Endangered Species Act, as amended (16 U.S.C. 1531 et seq.). An administrative record of this consultation is on file in the Vero Beach, Florida, Field Office.

PROJECT DESCRIPTION

The Corps of Engineers (Corps) proposes to maintenance dredge New Pass, Sarasota County, Florida. The project involves the removal of approximately 350,000 cubic yards of sandy beach material which would be placed on one of three permitted beach disposal sites.

PROJECT IMPACTS

Adverse impacts resulting from this project would be mainly from sand deposition. The adverse effects resulting from this project include the potential for burying sea turtle nests under sands used for beach renourishment. Even with a nest relocation program, some nests will likely remain undetected and subsequently be buried by nourishment material or crushed by heavy equipment. Increased false crawls, aberrant nests, and broken nests are among the possible effects resulting from beach

nourishment, depending on the quality of material being used (Raymond, 1984). In spite of the best intentions or efforts by persons relocating nests; wind, rain and tides can quickly obscure tracks and prevent workers from finding nests. Turtle activities themselves can often obscure nest locations, making them difficult to find, especially if the searchers are inexperienced or lack motivation. If not properly conducted, relocation of nests to hatcheries can result in reduced hatching rate (Limpus et al., 1979). In summary, although relocation of nests during beach nourishment is preferable to allowing destruction of the nests, the avoidance of adverse impacts is not absolute.

CONSULTATION HISTORY

In Mr. Salem's letter, dated February 5, 1989, the Corps provided their determination of "no affect" on sea turtles. The Service does not concur with this determination and has prepared the following Biological Opinion.

BIOLOGICAL OPINION

It is the Service's Biological Opinion that the project as proposed is not likely to jeopardize the continued existence of listed sea turtles. However, adverse effects on sea turtles may occur. The Reasonable and Prudent Measure and Terms and Conditions provided below with the Incidental Take statement, and the Conservation Recommendations, will reduce the degree of adverse impacts on sea turtles.

INCIDENTAL TAKE

Section 7(b)(4) of the Act requires that when a proposed agency action is found to be consistent with Section 7(b)(2) of the Act and the proposed action is likely to result in the take of some individuals of the listed species incidental to the action, the Service will issue of statement that specifies the impact (amount or extent) of such incidental taking. It also states that reasonable and prudent measures, coupled with terms and conditions to implement these measures, be provided to minimize such impacts. The Service must also specify procedures to be used to handle or dispose of any individual specimens taken. Reasonable and prudent measures are <u>requirements</u> of the action agency.

In regard to sea turtles, although the Corps has assured us that sea turtle conservation measures will be taken, the Service considers that some level of incidental take will be unavoidable. We have reviewed the biological information and other information relevant to this action, and based on our review, incidental take is authorized for all nests missed by a nest relocation program within the project boundary. The is inclusive of the direct impacts on nest burial and crushing and the indirect impacts of aberrant nests and broken eggs which may result from sand compaction in nesting seasons subsequent to nourishment activities.

REASONABLE AND PRUDENT MEASURES

The following reasonable and prudent measures are appropriate and necessary to minimize the incidental taking of sea turtles by the New Pass dredging and nourishment project. The reasonable and prudent measures do not alter the basic intent or function of the project.

1. Nourished beaches will be tilled of compaction occurs.

2. Nest relocation will begin 65 days prior to any deposition of material on the beaches that occurs during the nesting season.

TERMS AND CONDITIONS

Section 9 of the Act prohibits the taking of listed species without a special exemption. In order to be exempt from the prohibitions of Section 9 of the Act, the following terms and conditions, which implement the Reasonable and Prudent Measure described above, must be complied with:

1. Nourished beaches will be plowed to a depth of at least 36 inches immediately following completion of beach nourishment if sand compaction after nourishment is greater than 500 cone penetrometer units.

2. Nest relocation activities must begin 65 days prior to any nourishment activities that occur within the nesting season (March 1 to November 30), or by March 1, whichever is later. If any disposal occurs between October 5 and November 30, nest relocation must also be done in the fall, up to November 30.

3. Nest surveys and relocation will be conducted by personnel with prior experience and training in nest survey and relocation procedures, and with a valid Florida Department of Natural Resources permit. This is essential to reduce the number of undetected nests.

4. Nests shall be relocated between sunrise and 10 A.M. each day, and relocation will be to a nearby self-release beach hatchery in a location where artificial lighting will not conflict with hatchling orientation. The hatchery must be secure from human vandalism and natural predators.

5. In the event that a turtle nest is dug up during beach construction work, the individual responsible for nest relocation in the project area must be immediately notified, so that the contents of the nest can be relocated to the hatchery.

6. Any dead specimens will be immediately recovered and held until instructions are received by telephone from the Service's Vero Beach Field Office at (407) 562-3909.

7. A report describing the actions taken to implement the terms and conditions will be submitted to this office within 60 days of completion of the proposed project. This report will include dates of actual nourishment activities, names, and qualifications of personnel involved in nest surveys and relocations, description and location of hatcheries, results of nest surveys and relocations, and hatching success of relocated nests.

CONSERVATION RECOMMENDATIONS

The following conservation recommendations are provided to further reduce the potential for adverse impacts on sea turtles, and we request that the Corps include them as conditions in the permit.

1. Because turtle nesting density is relatively low along this stretch of beach, the Service has decided that an absolute prohibition of sand deposition during the nesting season is not essential. However, we still recommend, if at all possible, that the work be performed outside the peak period of turtle nesting (i.e. the project should be started after October 5 and completed before June 1).

2. Sea oats or other appropriate dune vegetation should be planted on nourished beaches to enhance dune restoration. The Florida Department of Natural Resources, Division of Beaches and Shores, can provide technical assistance on the specifications for the design and implementation.

3. Lighting on dredge equipment and beach equipment should be minimized by installation of shielding around the bulbs, use of low pressure sodium lights, reduction in intensity, or by eliminating lighting where possible, to reduce adverse impacts to nesting turtles and hatchlings.

This concludes consultation under Section 7 of the Act, as amended. If there are modifications made in the project or if additional information becomes available relating to threatened and endangered species, reinitiation of consultation may be necessary.

Sincerely yours,

David L. Ferrell

David L. Ferrell
Field Supervisor

cc:
EPA, Atlanta, GA
NMFS, St. Petersburg, FL
NMFS, Panama City, FL
FG&FWFC, Tallahassee, FL
FG&FWFC, Vero Beach, FL
DER, Tallahassee, FL
FWE, Jacksonville, FL
CE, Tampa, FL
FG&FWFC, Punta Gorda, FL
DNR, Tallahassee, FL

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APPENDIX IV

PUBLIC COORDINATION