



DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
P. O. BOX 4970  
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO  
ATTENTION OF

MAINTENANCE DREDGING  
NAPLES TO GORDON PASS NAVIGATION CHANNEL  
COLLIER COUNTY, FLORIDA

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed the Environmental Assessment (EA) of the proposed action. Based on information analyzed in the EA, reflecting pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, I conclude that the proposed action will have no significant impact on the quality of the human environment. Reasons for this conclusion, are in summary:

1. There will be no adverse impacts to endangered or threatened species or sites of cultural or historical significance.
2. State water quality standards will be met.
3. The proposed project has been determined to be consistent with the Florida Coastal Zone Management Program.
4. Measures to eliminate, reduce, or avoid potential impacts to fish and wildlife resources will be implemented during project construction.
5. Benefits to the public will be erosion protection of Naples Beach properties, increased sea turtle nesting habitat, and increased recreation and aesthetics of the beach.

In consideration of the information summarized, I find that the proposed action will not significantly affect the human environment and does not require an Environmental Impact Statement.

13 Nov 92  
Date

TERRENCE C. SALT  
Colonel, Corps of Engineers  
Commanding

MAINTENANCE DREDGING  
NAPLES TO GORDON PASS NAVIGATION CHANNEL  
COLLIER COUNTY, FLORIDA

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\_\_\_\_\_  
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\_\_\_\_\_  
TERRENCE C. SALT  
Colonel, Corps of Engineers  
Commanding

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OCTOBER 1992

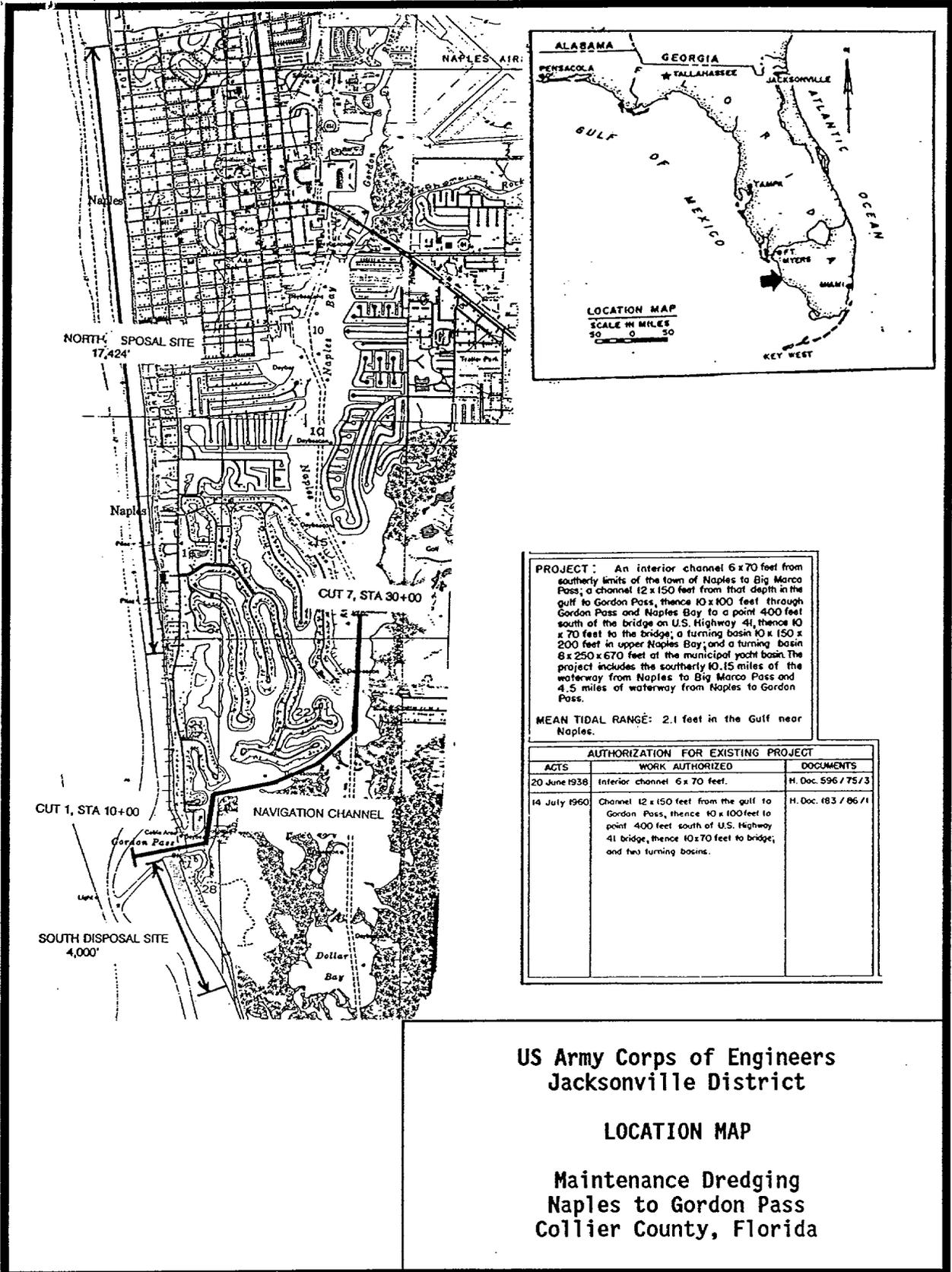
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**MAINTENANCE DREDGING  
NAPLES TO GORDON PASS  
COLLIER COUNTY, FLORIDA**

## **ENVIRONMENTAL ASSESSMENT**



**US Army Corps  
of Engineers**  
Jacksonville District  
South Atlantic Division



US Army Corps of Engineers  
Jacksonville District

LOCATION MAP

Maintenance Dredging  
Naples to Gordon Pass  
Collier County, Florida

**ENVIRONMENTAL ASSESSMENT  
MAINTENANCE DREDGING AND DISPOSAL OPERATIONS  
AT  
NAPLES TO GORDON PASS, NAVIGATION CHANNEL**

*one of the two*

**1.0. PROJECT DESCRIPTION:** The project involves the maintenance dredging of approximately 60,000 cubic yards of material from the Federal navigation channel, Naples to Gordon Pass, Cut 1 through Cut 7 (approximately 13,500 feet). The material will be placed on two approved beach disposal areas, one located to the north of Gordon Pass on the City of Naples Beach, the other to the south on Keewaydin Island (Figure 1).

**2.0. THE NEED AND PURPOSE OF THE PROJECT:** The original construction of the project was authorized by the Rivers and Harbors Act, 14 July 1960, House Document 293, 86th Congress, 1st Session. Since the initial construction, sand and sediments have accumulated in the channel reducing the navigable capacity of the project. In order to meet the public need as authorized by Congress, the Federal standard must be maintained.

**3.0. ENVIRONMENTAL SETTING WITHOUT THE PROJECT.**

**3.1. General.** The federal channel connects the Gulf of Mexico with Dollar Bay of the Gordon River. Gordon Pass is approximately 1.65 miles long. Geotechnical studies indicate that the shoaled material within the Pass is beach quality. Since its initial construction, the channel and Pass have been excavated numerous times. Much of the original dredged material was pumped into adjacent mangrove areas and developed for residential use. According to John Staiger, City of Naples, the Pass portion was completely dredged from shoreline to shoreline with the material placed upland adjacent to the channel. The Pass is devoid of seagrasses due to the dredging and subsequent municipal and industrial pollution of this area. Since there would be no seagrasses for feeding by sea turtles and manatees, it is not likely they would be found in the Pass. Turtle nesting densities along this area are relatively low. Along the beach at the City of Naples there are few, if any, nests found. The Naples Beach, generally, is not very wide and has many riprap and bulkhead shore protection structures along what would be above the high tide mark preventing most sea turtle nesting efforts. The beach disposal area to the south on Keewaydin Island is well formed with upland areas suitable as nesting habitat for sea turtles. The nesting densities are likely greater according to the Nature Conservancy but not well documented because of the private ownership of the island. Gopher tortoises are located on Keewaydin Island. As part of the development plans for the island, Mr. John Remmington, owner, has obtained a permit from the State of Florida to relocate tortoises from the residential housing development area to a parcel of land designated as a Gopher Tortoise Preserve. This area is located on the scrub upland areas

of the island. Keewaydin Island is a private resort complex offering cabins and remote recreational facilities. A mangrove wetland fringe is located along the federal channel inland of the Gulf. Behind this fringe Australian pine are growing in previously disturbed areas.

**3.2. Threatened and Endangered Species.** The work may affect the following species listed as threatened or endangered by U.S. Fish & Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) pursuant to the Endangered Species Act (USFWS, 1987):

green sea turtle . . . . .	<i>Chelonia mydas</i>
hawksbill sea turtle . . . . .	<i>Eretmochelys imbricata</i>
Kemp's Ridley sea turtle . . . . .	<i>Lepidochelys kempii</i>
leatherback sea turtle . . . . .	<i>Dermochelys doriacea</i>
loggerhead sea turtle . . . . .	<i>Caretta caretta</i>
West Indian manatee . . . . .	<i>Trichechus manatus</i>

**3.2.1. Manatees.** These waters have been designated as critical habitat for the Florida manatee.

**3.2.2. Sea Turtles.** According to the USFWS, the loggerhead is known to nest on Keewaydin Island. The USFWS theorizes that the green turtle could possibly nest along these beaches because the site lies between two known nesting areas, the Florida Keys and the panhandle. The Florida DNR reported 136 loggerhead and 207 loggerhead "false crawls" for Keewaydin Island (7.2 kilometers) in 1990. This equates to 18.9 nests per kilometer.

**3.3. Cultural, Historical, and Archeological Resources.** An archival and literature review, including a review of the current National Register of Historic Places listing and consultation with the Florida State Historic Preservation Officer (SHPO), was conducted to determine if significant cultural resources are present in the project area. No significant archeological sites or historic properties are recorded in the project area, and the area is judged to have little potential for containing significant cultural resources. In a 2 August 1991 letter, the SHPO's office concurred with our recommendation that no further cultural resources investigations are necessary to meet the requirements of the National Historic Preservation Act (PL 89-665).

**3.4. Navigation.** This channel is used for recreational and commercial navigation associated with fishing. Property owners along the waterway own various sized vessels that use the channel. Marinas provide mooring spaces for individuals not having proprietary access to the waterway. Boat launching ramps also provide access for smaller vessels. The navigation channel provides some fishing but mostly provides ingress and egress to the Gulf.

**3.5. Socioeconomics.** The Gulf Intracoastal Waterway (GIWW) in this area supports commercial and public recreational activities. Restaurants and marinas located along the

navigation channel and beach generate revenues from the sale of goods and services to people using these facilities. The beach area attracts tourists into the local hotels and motels. Currently the beach area is diminishing, limiting the desirability by users.

**3.6. Recreation.** As described in Section 3.5, the navigation channel is used for recreational and commercial purposes such as fishing and boating. The beach at Keewaydin Island is part of a resort complex and is used for the typical beach recreational purposes even though it generally excludes the public due to its remoteness. The beach along the north side of the pass (Naples Beach) is "typical" public beach with adjacent hotels and motels. It also has the typical beach recreational activities such as sunbathing, volleyball, swimming, and shell collecting.

**3.7. Aesthetics.** The aesthetic setting along the north disposal area is heavily used by tourists and local recreationists. The beach in this area is heavily eroded up to the bulkheads along the shoreline with the hotel/motels along the backdrop. The aesthetic setting along the south disposal area is a more serene setting due to the remoteness and lack of shoreline development. A few cottages are sporadically placed on the island and are generally hidden from view of the beach. The navigation channel from Gordon's Pass to Naples passes through residential properties and mangrove wetlands. Few natural settings exist along the channel, since, historically, the excavated material was deposited in wetland areas and developed.

**4.0. Relationship of the Proposed Project to Land Use Plans.** Based on a review of the file and previous project correspondence, it has been concluded that the proposed action will not conflict with any existing or proposed land use plans, policies, or controls.

#### **5.0. Probable Impact of the Proposed Action.**

**5.1. Water Quality.** Dredging operations will result in some temporary changes in water quality. Turbidities in the area of dredging will be elevated above normal. Visible plumes at the water surface are expected in the immediate vicinity of the dredging operation. Elevated turbidity levels are expected to dissipate rapidly, returning to background levels in a short period of time.

**5.2. Impact on Flora and Fauna.** Dredging will result in the loss of benthic organisms at the sites designated for maintenance. These communities will reestablish themselves upon completion of the work. Temporary disruption of normal activity of marine life in the vicinities of the dredging and disposal areas return water is likely. Most animal life will relocate to surrounding areas during disposal operations.

#### **5.3. Threatened and Endangered Species.**

**5.3.2. Sea Turtles.** Since there are no sea grass beds (generally considered preferred turtle habitat) within Gordon Pass, it is highly unlikely that sea turtles would be affected by the dredging. However, the placement on the beach could affect sea turtle nesting. If the

materail was placed on the City of Naples beach, it would likely provide more habitat for nesting. On Keewaydin Island beach, it might adversely impact existing nesting if the work is conducted within the turtle nesting season. Standard precautions will be taken to avoid impacting sea turtle nesting and the nesting season.

5.4. **Cultural, Historical or Archeological Resources.** As stated in paragraph 3.4 above, no known historic resources will be affected by this project. If during dredging activities resources are observed which may have historic or archeological value, appropriate authorities are to be notified so that a determination can be made as to their significance and what, if any, special disposition of the finds should be made.

5.5. **Navigation.** The proposed work will result in some temporary disruption of normal recreational and commercial vessel traffic in the channel. The maintenance of the navigation channel would provide long-term economic benefits to the local community dependent upon boat sales, and recreational and commercial boat traffic.

5.6. **Aesthetics.** The dredging will occur within a residential setting. Impacts will include a short-term (3 months) increase in noise and visual disruption of the landscape from the presence and operation of the dredging equipment. There would be a short-term reduction in the visual and auditory aesthetics along the beach disposal areas from the presence of a pipeline, the front end loader spreading sand on the beach and the return water entering the surf zone.

5.7. **Recreation.** The dredging will disrupt recreational and commercial boat operation. The disposal along the beach will temporarily disrupt beach activities. On Keewaydin Island this impact could be relatively minor due to the private nature of the island and the limited use that it receives. If the material is disposed on Naples Beach there would be increased disruption to recreational beach activities due to the use by the public. These adverse impacts would be short-term in nature. There would be long-term benefits to recreation from the increased beach surface area.

5.8. **Socioeconomics.** No adverse impacts on socioeconomics have been identified. If the material is placed on the beach north of the pass, then, the improved beach would attract tourism and be of economic benefit to the local merchants. There would be no economic benefit if the material is placed along the beach on the south side of the pass.

5.9. **Cumulative Impacts.** Cumulative benefits to the turtle nesting population in the area may be gained through the disposal operation providing a wider berm for nesting turtles on the City of Naples beach.

#### 6.0. **COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS.**

6.1. **National Environmental Policy Act of 1969, as amended.** Environmental information on the project has been compiled, and the draft Environmental Assessment was made available for review by the public in compliance with Regulations 33 CFR Parts 335-338.

These regulations govern the Operations and Maintenance of U.S. Army Corps of Engineers Civil Works Projects involving the Discharge of Dredged or Fill Material into Waters of the US or Ocean Waters. This public coordination and environmental impact assessment complies with the intent of NEPA. Public coordination has been completed by notice dated 15 February 1985. No adverse comments were received. The process will fully comply with the Act once the Finding of No Significant Impact has been signed by the District Commander.

6.2. Endangered Species Act of 1973, as amended. Consultation with the NMFS and USFWS was conducted by letter dated 9 October 1991 (Appendix I). A No Effects Determination was made for manatees and a May Effect for sea turtles nesting along the beach disposal areas. By letter dated 18 November 1991, the USFWS responded with a Biological Opinion and concurred in our findings. The NMFS responded by letter dated 25 November 1991 concurring in the determination. Standard precautions will be taken during maintenance activities to protect manatees and turtles as appropriate and required.

6.3. Fish and Wildlife Coordination Act of 1958, as amended. The project was coordinated with the USFWS during the public notice period. No comments were received.

6.4. Migratory Bird Treaty Act. The work has been evaluated pursuant to the Migratory Bird Treaty Act. The beach areas to be used as the dredged material disposal sites do not provide nesting habitat for migratory birds. Therefore, the proposed work would be in compliance with the Act.

6.4. Archeology and Historic Preservation Act (PL 93-291). As stated in paragraph 3.4, no historical resources will be affected by the work. If, during maintenance activities, the contractor observes resources that might have historical or archeological value, and these resources may be affected by further work activities, these resources shall be reported to the Contracting Officer. If, in consultation with the SHPO, these resources are determined to be significant, measures will be taken to protect them or mitigate the impacts. Work shall proceed in a manner to prevent any harm to these resources. By letter dated 2 August 1991, the SHPO stated that no significant archeological or historic sites are located in the project area or would be affected by the project.

6.5. National Historic Preservation Act of 1966, as amended (PL 89-655). See Section 6.4.

6.6. Clean Water Act of 1972, as amended.

6.6.1. Section 401. A Water Quality Certification was issued by the Florida Department of Environmental Regulation for a 10-year period by Permit No. 360891019 dated 21 June 1985 and expiring 21 June 1995 for the dredging and beach disposal south the pass. A modification was issued to the permit dated 7 December 1989 to include the beach area north of the pass.

6.6.2. Section 404. A Section 404(b)(1) Evaluation for the discharge of dredged material

was conducted (Appendix III). Based on this evaluation, it was determined that the proposed work would comply with the intent and goals of the Clean Water Act.

6.7. Clean Air Act of 1972, as amended. No air quality permits will be required for this project. Therefore, this Act would not be applicable.

6.8. Coastal Zone Management Act of 1972, as amended. The project has been evaluated in accordance with Section 307 of the Coastal Zone Management Act. It has been determined that the project would have no unacceptable impacts and would be consistent with the Florida Coastal Management Plan (Appendix II). In accordance with the 1979 Memorandum of Understanding and the 1983 Addendum to the Memorandum concerning acquisition of water quality certifications and other State of Florida authorizations, this preliminary Environmental Assessment and Section 404(b)(1) Evaluation has been submitted to the State in lieu of a summary of environmental impacts to show consistency with the Florida Coastal Zone Management Plan.

6.9. Farmland Protection Policy Act of 1981. No prime or unique farmland will be impacted by implementation of this project. This act is not applicable.

6.10. Wild and Scenic River Act of 1968, as amended. No designated Wild and Scenic river reaches will be affected by project related activities. This act is not applicable.

6.11. Marine Mammal Protection Act of 1972, as amended. Incorporation of the safe guards used to protect threatened or endangered species during dredging and disposal operations will also protect any marine mammals in the area, therefore, this project is in compliance with the Act.

6.12. Estuary Protection Act of 1968. No designated estuary will be affected by project activities. This act is not applicable.

6.13. Federal Water Project Recreation Act, as amended. There is no recreational development proposed for maintenance dredging or disposal. Therefore, this Act does not apply.

6.14. Resource Conservation and Recovery Act of 1976, (PL 94-580; 7 U.S.C. 100, et seq. This law has been determined not to apply as there are no items regulated under this act being disposed of or affected by this project.

6.15. Toxic Substances Control Act of 1976, (PL 94-469; U.S.C. 2601, et seq. This law has been determined not to apply as there are no items regulated under this act being disposed of or affected by this project.

6.16. Archeology and Historic Preservation Act (PL 93-291). Cultural resource coordination with the State Historic Preservation Office was conducted and no known historical or archeological resources will be affected by the proposed dredging project.

6.17. E.O. 11990, Protection of Wetlands. No wetlands will be affected by project activities. This project is in compliance with the goals of this Executive Order.

6.18. E.O. 11988, Floodplain Management. No activities associated with this project will take place within a floodplain, therefore this project is in compliance with the goals of this Executive Order.

6.19. E.O. 11593, Protection and Enhancement of the Cultural Environment. In compliance with this Executive Order, a cultural resource investigation was conducted. No known resources listed on or eligible for listing on the National Register of Historic Places are situated within the area of impact.

**7.0. ADVERSE IMPACTS WHICH CANNOT BE AVOIDED SHOULD THE WORK BE CONDUCTED.** Benthic organisms will be destroyed in the dredged channel. Temporary lowering of water quality may occur in the turbidity plume. However, the material will settle rapidly and result in minimal turbidity and sedimentation effects on nearby silt bottom habitats. Natural resource impacts will be minimized by the repopulation of various animal life at the dredging and disposal sites. There would be increased minor turbidity levels adjacent to the disposal site from the return water entering the surf zone. There could be a minor disruption to turtle nesting if the work is conducted during turtle nesting season. Conditions will be made part of the Plans and Specifications to avoid turtle nesting.

## **8.0. ALTERNATIVES TO THE PROPOSED WORK.**

8.1. Disposal Alternatives. The following alternatives to the proposed project were considered.

a. No Action. The No Action alternative would result in the gradual reduction of the channel with increased navigational risks. Once the channel depths have been reduced, propeller wash from passing ships would continually resuspend sediments. This is not considered to be a reasonable alternative.

b. Ocean Disposal. There are no nearby EPA approved or interim-approved ocean disposal sites available.

c. Near-shore Wetland Creation. Wetland creation using dredged material was not pursued due to lack of available sites and a general prohibition by the Florida Department of Environmental Regulation and adverse effects on other fishery resources in Gordon River.

d. Upland Disposal. No designated upland disposal areas are present. A potential upland disposal area was evaluated on Keewaydin Island. The upland area contained gopher tortoises and mangrove fox squirrels. These species are protected by the State of Florida.

## 8.2. Dredging Alternatives.

a. Hopper Dredge. This method uses a cutter head with a suction pump to extricate disturbed sediments into the hopper holding area until it is pumped overboard either to an openwater disposal site or into an upland area. This method is significantly cheaper but has greater environmental impacts on aquatic life. The use of this method is limited by the size of the channel to be dredged. This would not be feasible from an engineering standpoint.

b. Suction Dredge. This type of dredge is located on a stationary barge and uses hydraulic pumping to remove sand and sediments from the bottom. The slurried material is pumped via floating pipeline to the disposal site. The pipeline is placed along the beach by the use of front-end loader and additional sections of pipeline are attached to relocate the outfall. The barge is held in place by spud poles or anchors placed on either side of the channel to be dredged.

c. Clamshell Dredge. A crane with a clamshell bucket would be placed on a barge and held in place by spud poles. The dredged material would be placed in a barge and hauled to the disposal site and dumped. A turbidity plume would be generated from the clamshell lifting the bottom sediments through the water column to the surface.

**9.0. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE CONDUCTED.** There would be no commitment of significant resources for this work.

**10.0. COORDINATION WITH OTHERS.** A public notice dated 15 February 1985 was prepared and sent to all interested parties. No adverse comments were received.

## **11.0. REFERENCES**

US Fish and Wildlife Service. 1987. Endangered and Threatened Species of Southeastern United States. Region 4, Atlanta,

**13.0. LIST OF PREPARERS.**

<u>NAME</u>	<u>DISCIPLINE</u>	<u>EXPERIENCE</u>	<u>ROLE IN PREPARING EA</u>
William J. Fonterek	Biologist	14 years environmental impacts assessment	O&M NEPA Coordinator, Biological Impact Assessment, Endangered Species Coordination
Janice E. Adams	Archeologist Environmental Coordination Section	7 years experience NEPA documentation, including cultural resources, socioeconomic, and aesthetics	Cultural Resources Analysis
Robert Pennington	Biologist Environmental Quality Section		Dredged Disposal Site Management, Water Quality Assessment
Matthew Miller	Civil Engineer	1 year experience engineering and economic analysis	Construction Scheduling, Navigation Assessment
Paul C. Stevenson	Landscape Architect	6 years landscape architect, field and design work	Aesthetic Resource Analysis

**APPENDIX I**

**ENDANGERED SPECIES CONSULTATION**

October 9, 1991

Planning Division  
Environmental Resources Branch

Mr. Charles A. Oravetz  
National Marine Fisheries Service  
Southeast Regional Office  
9450 Koger Boulevard  
St. Petersburg, Florida 33702

Dear Mr. Oravetz:

This is in reference to the proposed maintenance dredging of the navigation channel from Naples to Gordon Pass and beach disposal on Keewaydin Island or the City of Naples Beach, Florida. Pursuant to Section 7 of the Endangered Species Act, we are forwarding the Biological Assessment (BA) of the proposed action.

The following listed species pursuant to Section 7 of the Endangered Species Act could be in the project area:

- green sea turtle . . . . . Chelonia mydas
- hawksbill sea turtle . . . . . Eretmochelys imbricata
- Kemp's Ridley sea turtle . . . . . Lepidochelys kempii
- leatherback sea turtle . . . . . Derموchelys doriacea
- loggerhead sea turtle . . . . . Caretta caretta
- West Indian manatee . . . . . Trichechus manatus

As stated in the enclosed BA, we have determined that the project would have no affect on these listed species under jurisdiction of the National Marine Fisheries Service. Please provide this office with a concurrence in this determination.

If you have any questions concerning this matter please contact Mr. Bill Fonferek at telephone 904-791-1690.

Sincerely,

A. J. Salem  
Chief, Planning Division

Enclosure

CF CESAJ-CO

  
 Fonferek/CESAJ-PD-ES  
 Atmar/CESAJ-PD-ES  
 Smith/CESAJ-PD-E  
 Davis/CESAJ-PD-A  
 Salem/CESAJ-PD

**BIOLOGICAL ASSESSMENT  
MAINTENANCE DREDGING  
NAPLES TO GORDON PASS  
COLLIER COUNTY, FLORIDA**

1. **PROJECT DESCRIPTION:** The project involves the maintenance dredging of approximately 60,000 cubic yards of material from the Federal navigation channel, Naples to Gordon Pass, Cut 1 through Cut 7 (approximately 13,500 feet). The material could be placed on two approved beach disposal areas, one located to the north of Gordon Pass on the City of Naples Beach, the other to the south on Keewaydin Island (Figure 1).

2. **EXISTING SETTING:** The federal channel connects the Gulf of Mexico with Dollar Bay of the Gordon River. Gordon Pass is approximately 1.65 miles long. Geotechnical studies indicate that the shoaled material within the Pass is beach quality. Since its initial construction, the channel and Pass have been excavated numerous times. Much of the material was pumped into adjacent mangrove areas. According to Dr. Jon Staiger, City of Naples Natural Resources Manager, the Pass was completely dredged from shoreline to shoreline with the material placed upland for development of residential housing along the newly formed waterway. The Pass is devoid of seagrasses due to the dredging and subsequent municipal and industrial pollution of this area. Since there would be no seagrasses for feeding by sea turtles and manatees it is not likely they would be found in the Pass, even though this area is considered Critical Habitat for manatees. Turtle nesting densities along this area are relatively low (USFWS, 1985). According to the USFWS, the Florida DNR surveyed 8.0 kilometers and recorded 5.9 loggerhead nests per kilometer for the Naples area. David Addison. The Conservancy, Inc., reported 68 nests and 63 false crawls for 1990 from an 11 mile area between Gordon Pass to Clam Pass. In 1991, this same area yielded 61 loggerhead nests and 57 false crawls. In 1990, the City of Naples Beach itself only had 36 records of activity for loggerheads with 16 nests. The City of Naples Beach, generally, is not very wide and has many riprap and bulkhead shore protection structures along what would be above the high tide mark preventing most sea turtle nesting efforts. The beach disposal area to the south on Keewaydin Island is well formed with upland areas suitable as nesting habitat for sea turtles. The nesting densities are likely greater but not well documented because of the private ownership of the island. Gopher tortoises are located on Keewaydin Island. As part of the development plans for the island, Mr. John Remington has obtained a permit from the State of Florida to relocate tortoises from the housing development area to a parcel of land designated as a Gopher Tortoise Preserve. This area is located on the scrub upland areas of the island. A mangrove wetland fringe is located along the federal channel inland of the Gulf. Behind this fringe Australian pine are growing in previously disturbed areas.

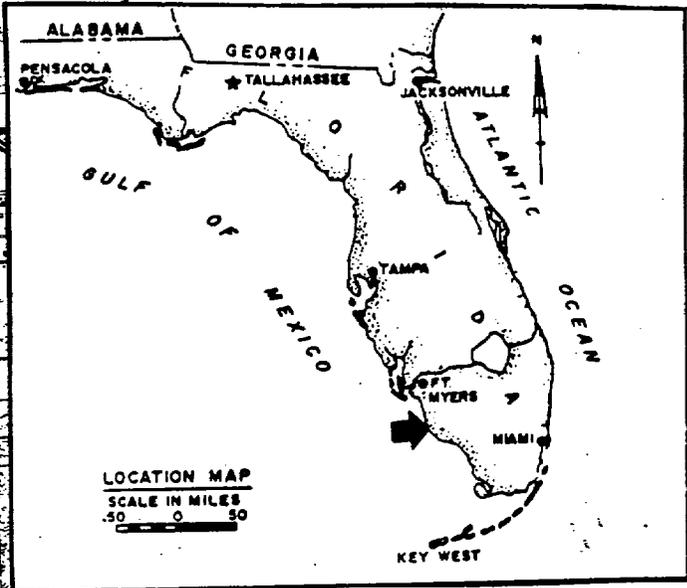
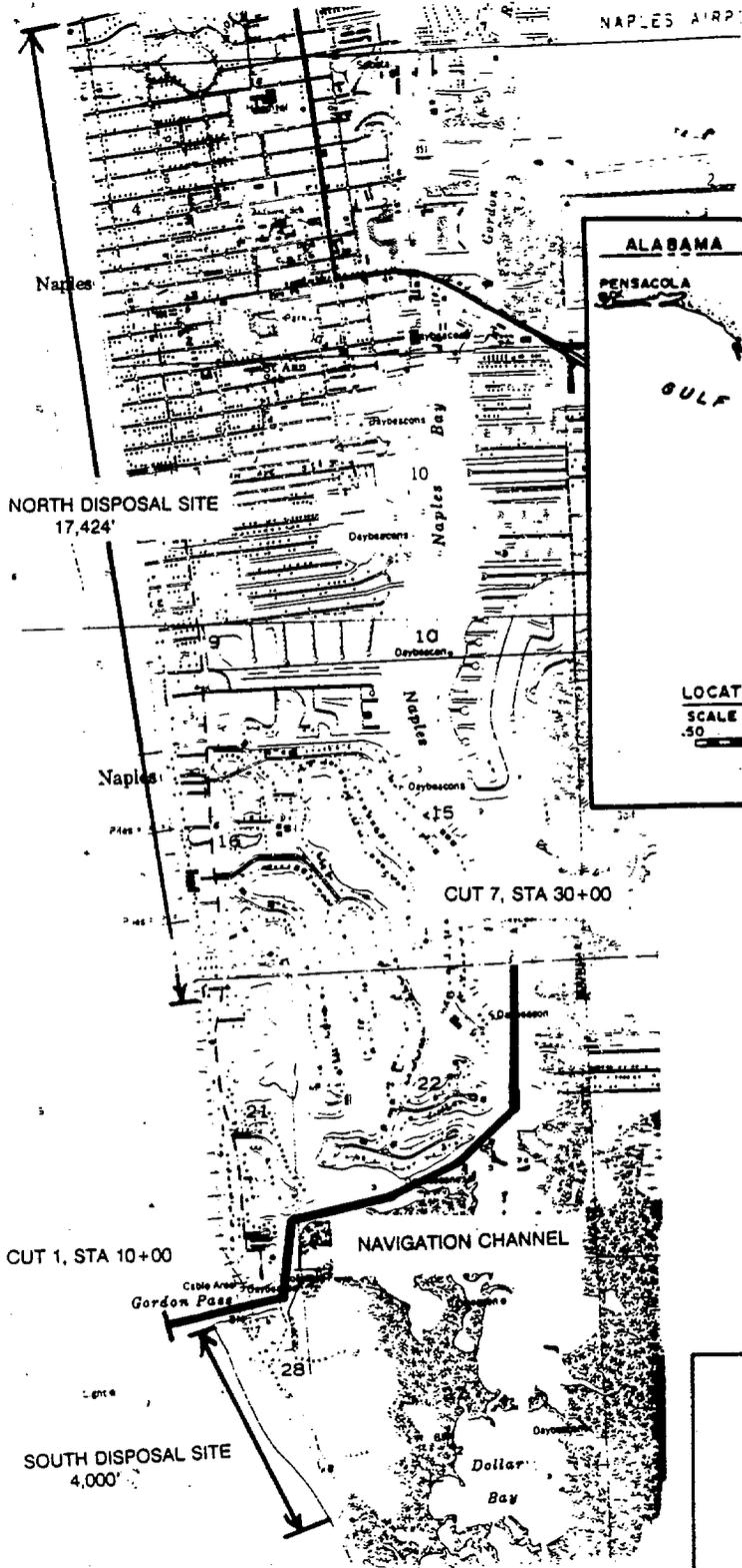
3. **ENDANGERED SPECIES:** By letter dated December 20, 1984, a Biological Assessment of the project was sent to the US Fish and Wildlife Service and the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act concluding that the proposed project would not affect the listed species. By letters dated January 7, 1985, (FWS Log No. 4-1-85-064), and December 27, 1984, the USFWS and the NMFS responded stating concurrence with this finding. The following listed species pursuant to Section 7 of the Endangered Species Act could be in the project area:

green sea turtle	.....	<i>Chelonia mydas</i>
hawksbill sea turtle	.....	<i>Eretmochelys imbricata</i>
Kemp's Ridley sea turtle	.....	<i>Lepidochelys kempii</i>
leatherback sea turtle	.....	<i>Dermochelys coriacea</i>
loggerhead sea turtle	.....	<i>Caretta caretta</i>
West Indian manatee	.....	<i>Trichechus manatus</i>

4. **IMPACTS ON LISTED SPECIES:**

4.1. **Manatees.** Since there are no sea grass beds within the affected area and the operation of a pipeline dredge for the project is likely, we have determined that there would be no affects to manatees. To completely insure this, special manatee protection conditions will be placed in the contract specifications.

4.2. **Sea turtles.** Since there would be no feeding areas within Gordon Pass, it is highly unlikely that sea turtles would be affected by the dredging. However, the placement on the beach could affect sea turtle nesting. On the City of Naples beach it would likely provide more habitat for nesting. On Keewaydin Island, it might adversely impact existing nesting if the work is conducted within the turtle nesting season.



US Army Corps of Engineers  
Jacksonville District

**LOCATION MAP**

Maintenance Dredging  
Naples to Gordon Pass  
Naples, Florida

FIGURE 1

October 9, 1991

Planning Division  
Environmental Resources Branch

Mr. David L. Ferrell  
Field Supervisor  
U.S. Fish and Wildlife Service  
P.O. Box 2676  
Vero Beach, Florida 32961-2676

Dear Mr. Ferrell:

This is in reference to the proposed maintenance dredging of the navigation channel from Naples to Gordon Pass and beach disposal on Keewaydin Island or the City of Naples Beach, Florida. Pursuant to Section 7 of the Endangered Species Act, we are forwarding the Biological Assessment (BA) of the proposed action.

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loggerhead sea turtle . . . . .	<u>Caretta caretta</u>
West Indian manatee . . . . .	<u>Trichechus manatus</u>

As stated in the enclosed BA, we have determined that the project may affect loggerhead turtle nesting. Please provide this office with a Biological Opinion pursuant to provisions of the Act.

If you have any questions concerning this matter please contact Mr. Bill Fonferek at telephone 904-791-1690.

Sincerely,

A. J. Salem  
Chief, Planning Division

Enclosure

CF CESAJ-CO

  
Fonferek/CESAJ-PD-ES  
Atmar/CESAJ-PD-ES  
Smith/CESAJ-PD-E  
Davis/CESAJ-PD-A  
Salem/CESAJ-PD

**BIOLOGICAL ASSESSMENT  
MAINTENANCE DREDGING  
NAPLES TO GORDON PASS  
COLLIER COUNTY, FLORIDA**

1. **PROJECT DESCRIPTION:** The project involves the maintenance dredging of approximately 60,000 cubic yards of material from the Federal navigation channel, Naples to Gordon Pass, Cut 1 through Cut 7 (approximately 13,500 feet). The material could be placed on two approved beach disposal areas, one located to the north of Gordon Pass on the City of Naples Beach, the other to the south on Keewaydin Island (Figure 1).

2. **EXISTING SETTING:** The federal channel connects the Gulf of Mexico with Dollar Bay of the Gordon River. Gordon Pass is approximately 1.65 miles long. Geotechnical studies indicate that the shoaled material within the Pass is beach quality. Since its initial construction, the channel and Pass have been excavated numerous times. Much of the material was pumped into adjacent mangrove areas. According to Dr. Jon Staiger, City of Naples Natural Resources Manager, the Pass was completely dredged from shoreline to shoreline with the material placed upland for development of residential housing along the newly formed waterway. The Pass is devoid of seagrasses due to the dredging and subsequent municipal and industrial pollution of this area. Since there would be no seagrasses for feeding by sea turtles and manatees it is not likely they would be found in the Pass, even though this area is considered Critical Habitat for manatees. Turtle nesting densities along this area are relatively low (USFWS, 1985). According to the USFWS, the Florida DNR surveyed 8.0 kilometers and recorded 5.9 loggerhead nests per kilometer for the Naples area. David Addison, The Conservancy, Inc., reported 68 nests and 63 false crawls for 1990 from an 11 mile area between Gordon Pass to Clam Pass. In 1991, this same area yielded 61 loggerhead nests and 57 false crawls. In 1990, the City of Naples Beach itself only had 36 records of activity for loggerheads with 16 nests. The City of Naples Beach, generally, is not very wide and has many riprap and bulkhead shore protection structures along what would be above the high tide mark preventing most sea turtle nesting efforts. The beach disposal area to the south on Keewaydin Island is well formed with upland areas suitable as nesting habitat for sea turtles. The nesting densities are likely greater but not well documented because of the private ownership of the island. Gopher tortoises are located on Keewaydin Island. As part of the development plans for the island, Mr. John Remington has obtained a permit from the State of Florida to relocate tortoises from the housing development area to a parcel of land designated as a Gopher Tortoise Preserve. This area is located on the scrub upland areas of the island. A mangrove wetland fringe is located along the federal channel inland of the Gulf. Behind this fringe Australian pine are growing in previously disturbed areas.

3. ENDANGERED SPECIES: By letter dated December 20, 1984, a Biological Assessment of the project was sent to the US Fish and Wildlife Service and the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act concluding that the proposed project would not affect the listed species. By letters dated January 7, 1985, (FWS Log No. 4-1-85-064), and December 27, 1984, the USFWS and the NMFS responded stating concurrence with this finding. The following listed species pursuant to Section 7 of the Endangered Species Act could be in the project area:

green sea turtle	.....	<i>Chelonia mydas</i>
hawksbill sea turtle	.....	<i>Eretmochelys imbricata</i>
Kemp's Ridley sea turtle	.....	<i>Lepidochelys kempii</i>
leatherback sea turtle	.....	<i>Dermochelys doriacea</i>
loggerhead sea turtle	.....	<i>Caretta caretta</i>
West Indian manatee	.....	<i>Trichechus manatus</i>

4. IMPACTS ON LISTED SPECIES:

4.1. Manatees. Since there are no sea grass beds within the affected area and the operation of a pipeline dredge for the project is likely, we have determined that there would be no affects to manatees. To completely insure this, special manatee protection conditions will be placed in the contract specifications.

4.2. Sea turtles. Since there would be no feeding areas within Gordon Pass, it is highly unlikely that sea turtles would be affected by the dredging. However, the placement on the beach could affect sea turtle nesting. On the City of Naples beach it would likely provide more habitat for nesting. On Keewaydin Island, it might adversely impact existing nesting if the work is conducted within the turtle nesting season.