



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

REPLY TO  
ATTENTION OF

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**PIER ECHO DREDGING**  
**LA PUNTILLA U.S. COAST GUARD STATION**  
**LA PUNTILLA, SAN JUAN PUERTO RICO**

I have reviewed the Detailed Project Report and Environmental Assessment (EA) prepared for the dredging from approximately -28 feet NGVD to -30 feet NGVD, an approximately 3.33-acre submerged area. This is located immediately waterward of the USCG Base Pier 'E' at La Puntilla, San Juan, Puerto Rico. The dredged material will be disposed of at the San Juan Offshore Disposal Site. The action recommended in the Report is the proposed action. I conclude that the proposed action will have no significant impact on the quality of the human environment. This conclusion is based on information analyzed in the Report and EA. It also reflects pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, and on comments and recommendations obtained after coordination of the Report. Reasons for this conclusion are, in summary:

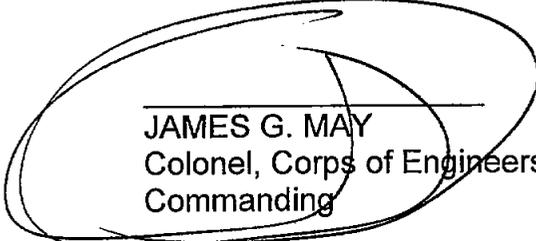
1. There will be no adverse impacts to endangered species of flora or fauna, wetlands or significant fish and wildlife populations or habitats. The National Marine Fisheries Service is expected to concur with this determination.
2. Water quality will not be adversely affected. Puerto Rico water quality standards will be met and a Water Quality Certificate (WQC) will be obtained from the Puerto Rico Environmental Quality Board. The WQC in effect for San Juan Harbor applies to this work, too.
3. No known historic properties will be directly affected by the project. In coordination with the State Historic Preservation Officer (SHPO) a survey may be conducted for cultural resources in the submerged dredging area. Negative findings are expected. Any previously delineated marine "no-work zones" will be established and enforced for all work in the harbor. The U.S. Army Corps of Engineers (Corps) has determined that the project will have no adverse effect on historic properties listed on or eligible for listing in the National Register of Historic Places (NRHP). The SHPO is expected to concur.
4. The Corps has determined that the project is consistent with the Puerto Rico Coastal Management Program (CZM). CZM concurrence for San Juan Harbor also applies to this work.
5. No known or suspected hazardous, toxic or radioactive waste materials are expected to be present or introduced.

6. Public benefits include reduction of shoreline erosion, and the establishment of suitable facilities for the duty cutter. An additional benefit is the increased response time of the USCG duty cutter in case of an emergency.

7. Adverse effects are expected to be temporary, will occur during construction, and include temporary increased ambient noise and water turbidity. Construction activities will be planned, scheduled and sequenced to minimize adverse effects.

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.

4 FEB 04  
DATE

  
\_\_\_\_\_  
JAMES G. MAY  
Colonel, Corps of Engineers  
Commanding

JANUARY 2002

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# **Environmental Assessment**

## **PIER ECHO DREDGING**

**La Puntilla U.S. Coast Guard Station  
La Puntilla  
San Juan, Puerto Rico**



**U.S. Army Corps  
of Engineers  
Jacksonville District**

# **ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT, DREDGING OF PIER ECHO, SOUTH OF THE U.S. COAST GUARD STATION, LA PUNTILLA, SAN JUAN, PUERTO RICO**

## **1.0 SUMMARY**

Pier E ('Echo'), on the southern shoreline of La Puntilla U.S. Coast Guards (USCG) Base, San Juan, Puerto Rico, is the primary docking site for the on-call cutter that responds to maritime rescue emergencies and interception missions in San Juan Harbor.

Under the San Juan Harbor (SJH) Limited Reevaluation Report, the Federally authorized but deferred features of dredging part of SJH (to include the Pier E or Pier Echo area) have been in coordination since March 6, 2001 (See Plate 1). Depths of up to -36 feet are currently under consideration for the entire area. A depth of -30 feet is considered for the USCG E Pier dredge area. This will require dredging an area approximately 3.33 acres.

The existing Federal channel adjacent to the dock has a depth of -28 feet along the entire USCG Pier E frontage berth and approximately -30 feet along the remainder of the berth (San Antonio Approach, See Plates 1 and 2). This has caused the duty cutter to run aground at Pier E.

## **2.0 AUTHORIZATION, PURPOSE, AND NEED FOR THE WORK**

The work was authorized under PL-99-662, November 1986. It was re authorized in 1996 by PL-104-303, 1996. The work is needed so the area, currently authorized for depths of up to -36 feet, can accommodate the USCG duty cutter requiring at least depths of -30 feet to avoid running aground.

Materials that would be dredged have been sampled and tested. An evaluation report was prepared in accordance with Section 103 of the Marine Protection, Research and Sanctuaries Act (MPRSA). The dredged material from the study area was determined to be suitable for ocean disposal at the San Juan Ocean Dredged Material Disposal Site. This site has an approved Site Management and Monitoring Plan (SMMP). Offshore disposal of the tested sediments was authorized by the U.S. Environmental Protection Agency on June 5, 2000.

## **3.0 DESCRIPTION OF THE PROPOSED ACTION**

The work consists of dredging from approximately -28 feet NGVD to -30 feet NGVD, an approximately 3.33-acre submerged area. The dredged material will be disposed of at the San Juan Offshore Disposal Site.

## **4.0 ALTERNATIVES TO THE PROPOSED ACTION**

4.01 **NO ACTION.** The no action alternative would preclude the berthing of the USCG duty cutter at USCG Pier E. This would result in a significant risk to human safety, since that boat is the primary responder in the case of shipwrecks, oil spills, interceptions, and other emergency situations that may threaten human life and welfare.

4.02 **ALTERNATE BERTHING.** This exists on the East side of La Puntilla. However, the object is to have the duty cutter so positioned that it can be manned and be underway as soon as an alarm is given. Berthing elsewhere will result in a loss of time while the boat is maneuvered, and could result in a threat to the life and welfare of any persons that the boat is sent to rescue.

4.03 **PROPOSED WORK.** The proposed work will allow the continued docking of the USCG duty cutter, prepared for an immediate response in the case of a maritime or other emergency. Pier E of the USCG La Puntilla Base at San Juan, Puerto Rico, will be dredged to -30 feet throughout its 3.33-acre area.

## **5.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT**

The area to be dredged consists of man-made channel bottom, actively transited by commercial vessels. It has the following characteristics:

### **Pier E ('Echo') Berthing Area:**

Currently from -27.4 feet deep near the existing bulwark, to -30 feet to -34 feet near the Federal Channel.

(Planned -36 feet Total Berthing Area Dredging Depth, after dredging)

### **Adjacent Federal Channel Depth:**

-34 feet Current Depth

No grass beds, mud flats, reef, or deep-water fishery habitat has been identified within the confines of the proposed work area. These characteristics are shared throughout the entire dredging area of San Juan Harbor.

The berth is in San Juan Bay, considered to be Essential Fish Habitat and to be part of the range of the West Indian manatee and diverse sea turtle species.

## **6.0 ENVIRONMENTAL CONSEQUENCES OF THE PROPOSED ACTION**

The Corps does not expect permanent environmental consequences to accrue from the dredging of the 3.33-acre area. Turbidity alterations would be only temporary, and standard conditions for the protection of manatees and sea turtles will be in force throughout the work period. Mainly, a

complete work stoppage will take place if either of those endangered species is seen within 500 feet of the work area, and work will not resume until the animals have vacated the area by their own initiative. The area to be dredged does not include any beaches that may be used by sea turtles for nesting.

## **7.0 COMPLIANCE OF THE PROJECT WITH ENVIRONMENTAL REQUIREMENTS**

### **7.01 NATIONAL ENVIRONMENTAL POLICY ACT OF 1969**

Environmental information on the project has been compiled and this Draft Environmental Assessment has been prepared. So far, the project is in compliance with the National Environmental Policy Act.

### **7.02 ENDANGERED SPECIES ACT OF 1973**

Consultation for the general dredging of the SJH area (of which this is part) was initiated with NMFS and FWS on March 6, 2001. This project was coordinated under the Endangered Species Act and is in compliance with the Act. The NMFS concurred with the COE on November 19, 2001.

### **7.03 FISH AND WILDLIFE COORDINATION ACT OF 1958**

This project is located within a total area being coordinated with the U.S. Fish and Wildlife Service (USFWS). The Corps has determined that this project is in compliance with the Act, at this stage of planning. The FWS asserted the current validity of it's June 13, 1994 Coordination Act Report.

### **7.04 NATIONAL HISTORIC PRESERVATION ACT OF 1966 (INTER ALIA)(PL 89-665, THE ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT (PL 93-291), EXECUTIVE ORDER 11593)**

Section 106 coordination with the Puerto Rico State Historic Preservation Officer (SHPO) is continuing in accordance with the National Historic Preservation Act, as amended; the Archeological and Historic Preservation Act and Executive Order 11593. Cultural resources investigations will be conducted to identify and evaluate historic properties within the project area. The project will be in compliance with each of these Federal laws. The SHPO stated by letter dated November 30, 2001, that according to their records, no historic properties were located within the project's area of potential effects.

### **7.05 CLEAN WATER ACT OF 1972**

This project will not introduce extraneous substances not currently found in the water body. Nor will it cause permanent turbidity changes. The entire Maintenance dredging work for San Juan Harbor received a Water Quality Certificate on July 31, 1979.

#### 7.06 CLEAN AIR ACT OF 1972

No air quality permits would be required from the Corps for this dredging project. The contractor will procure all the necessary and required local air and noise pollution permits.

#### 7.07 COASTAL ZONE MANAGEMENT ACT OF 1972

Coordination of this draft EA is ongoing. At this stage, the project is consistent with the Puerto Rico Coastal Zone Management Program. PRCZM Consistency Determination CZ-2002-9011-037 was granted by the PR Planning Board on December 6, 2001.

#### 7.08 FARMLAND PROTECTION POLICY ACT OF 1981

No prime or unique farmland would be impacted by implementation of this project. This act is not applicable.

#### 7.09 WILD AND SCENIC RIVER ACT OF 1968

No designated Wild and Scenic river reaches would be affected by project related activities. This act is not applicable.

#### 7.10 MARINE MAMMAL PROTECTION ACT OF 1972

Incorporation of the safe guards used to protect threatened or endangered species during dredging and disposal operations would also protect any marine mammals in the area, therefore, this project is in compliance with the Act.

#### 7.11 ESTUARY PROTECTION ACT OF 1968

No designated estuary would be affected by project activities. This act is not applicable.

#### 7.12 FEDERAL WATER PROJECT RECREATION ACT

Not applicable to this project.

#### 7.13 FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

The project is part of the larger area under coordination with the National Marine Fisheries Service (NMFS). The area is currently dedicated to commercial maritime navigation and does not include any fishery areas or commercial fishing activities. This work is in compliance with the Fishery Conservation and management Act of 1976.

#### 7.14 SUBMERGED LANDS ACT OF 1953

The project would occur on submerged lands of the Commonwealth of Puerto Rico, and is under coordination with that Commonwealth.

#### 7.15 COASTAL BARRIER RESOURCES ACT AND COASTAL BARRIER IMPROVEMENT ACT OF 1990

There are no designated coastal barrier resources in the project area that would be affected by this project. These acts are not applicable.

#### 7.16 RIVERS AND HARBORS ACT OF 1899

The proposed work would not obstruct navigable waters of the United States. It will enhance navigation of a United States waterway. The proposed action has been subject to the coordination procedures and other evaluations normally conducted for activities subject to the act. The project is in full compliance.

#### 7.17 ANADROMOUS FISH CONSERVATION ACT

Anadromous fish species would not be affected. The project is under coordination with the National Marine Fisheries Service and is expected to be in compliance with the act.

#### 7.18 MIGRATORY BIRD TREATY ACT AND MIGRATORY BIRD CONSERVATION ACT

No migratory birds would be affected by project activities. The project is in compliance with these acts.

#### 7.19 MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT

The disposal activities addressed in this EA have been evaluated under Section 404 of the Clean Water Act. Disposal will be at the previously and currently authorized San Juan Ocean Disposal Site.

#### 7.20 MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT

Coordination of an Essential Fish Habitat (EFH) Assessment and coordination with the National Marine Fisheries Service (NMFS) was carried out on March 6, 2001. No special recommendations were submitted in the reply dated November 19, 2001.

#### 7.21 E.O. 11990, PROTECTION OF WETLANDS

No wetland values would be affected by project activities. This project is in compliance with the goals of this Executive Order.

#### 7.22 E.O. 11988, FLOOD PLAIN MANAGEMENT

Project is in compliance.

### **7.23 E.O. 12898, ENVIRONMENTAL JUSTICE**

The action would not result in adverse human health or environmental effects. So, no impact of a disproportionately high nature will accrue toward minority or low-income populations.

### **7.24 E.O. 13089, CORAL REEF PROTECTION**

No coral reefs exist within the work area. This E.O. does not apply.

## **8.0 PREPARERS**

Esteban Jimenez, Biologist; Tommy Brichett, Archeologist; Ivan Acosta, Civil/Environmental Engineer.

## **9.0 REFERENCES**

Environmental Impact Statement for San Juan Harbor, Puerto Rico.  
U.S. Army Corps of Engineers, Jacksonville, Florida. September 1975.

## **10.0 COORDINATION**

The endangered species, and EFH aspects of this work are under coordination with the USFWS and the NMFS as part of the greater San Juan Harbor dredging area. Coordination was initiated on March 6, 2001. Additionally, coordination letters and copies of the draft EA and draft FONSI were sent to all concerned Federal, Commonwealth, and local agencies with jurisdiction in San Juan, Puerto Rico.

Although this maintenance work is considered to be different and separate from the overall Harbor dredging considered under the LRR, the species in the contiguous water body are the same and coordination is underway for the entire San Juan Harbor.

Responses were received from the National Marine Fisheries Service (NMFS), The Puerto Rico Electric Power Authority, and the Office of the Governor. No opposition to the project was stated.

## 11.0 APPENDICES

- A. Drawings. Location Photograph, Pier E, USCG Base, La Puntilla, San Juan, Puerto Rico.
- B. Coordination. Initiated for the general San Juan Harbor area dredging, to include the La Puntilla USCG Base Docking area, March 6, 2001. Coordination letter, EFH coordination letter to NMFS, and ESA Section 7 coordination letters to NMFS and USFWS
- C. Coastal Zone Management (CZM) Consistency Certification.
- D. Water Quality Certification. Pending signature of the Finding of No Significant Impact (FONSI)

## APPENDIX A DRAWINGS

PLATE 1 Photograph showing proposed dredge area and contour lines.

# U.S. COAST GUARD STATION

SUN 045



SUN 043



95

615

221

CB-S190-41

## APPENDIX B COORDINATION.

Initiated for the general San Juan Harbor area dredging, to include the La Puntilla USCG Base area. All of the following correspondence is dated March 6, 2001.

A draft Environmental Assessment and draft Finding Of No Significant Impact were circulated to all interested parties on July 17, 2001.

Coordination letter to all concerned agencies and entities

Essential Fish Habitat Coordination letter to the National Marine Fisheries Service

Section 7, Endangered Species Act Coordination letter to the U.S. Fish and Wildlife Service

Section 7, Endangered Species Act Coordination letter to the National Marine Fisheries Service

Responses from:

National Marine Fisheries Service  
Puerto Rico State Historic Preservation Officer  
City of San Juan



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

REPLY TO  
ATTENTION OF

Planning Division  
Environmental Branch

JUL 17 2001

TO ADDRESSEES ON THE ENCLOSED LIST:

The U.S. Army Corps of Engineers, Jacksonville District (Corps) is beginning to consider relevant issues and concerns related to the dredging of a 3.33-acre area directly south and waterward of the shoreline of the U.S. Coast Guard station at La Puntilla, San Antonio Channel, San Juan, Puerto Rico.

By means of this letter, we are circulating the enclosed draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI).

Improvements to all Federal navigation features of San Juan Harbor were authorized in November, 1986, under PL-99-662. Work on other navigation features of the Federal project continued to be deferred until actually required.

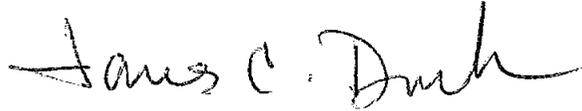
At this time, the berthing used by the USCG Cutter for immediate response to accidents and interceptions has been shoaled up to approximately -28 feet. The cutter requires depths of at least -30 feet. This creates a hazard condition in the case of the need for prompt response to a nautical incident/accident or an interception. This also poses a real threat to human safety in an emergency, as time would be lost manning a cutter from the adjacent, Eastward-facing berths. The USCG proposes to dredge the area to the -30 foot contour NGVD.

Materials that would be dredged have been sampled and tested. An evaluation report was prepared in accordance with Section 103 of the Marine Protection, Research and Sanctuaries Act (MPRSA). The dredged material from the study area was determined to be suitable for ocean disposal at the San Juan Ocean Dredged Material Disposal Site. This site has an approved Site Management and Monitoring Plan (SMMP). Offshore disposal of the tested sediments was authorized by the U.S. Environmental Protection Agency on June 5, 2000.

This proposed work is within the San Juan Harbor Limited Reevaluation Report (LRR) area. The LRR area is under coordination with the U.S. Fish and Wildlife Service (USFWS) and the National marine Fisheries Service (NMFS) for Essential Fish Habitat and Section 7, Endangered Species Act (ESA) compliance, through letters dated March 6, 2001. Therefore, the Corps will not initiate separate ESH and Sec 7, ESA coordination for the work planned for USCG Pier 'E'.

We welcome your contribution of information on natural or cultural resources, issues, concerns or other matters related to the proposed work, within the next 30 days. Please direct your comments to Mr. Esteban Jiménez at the letterhead address or at telephone number 904-232-2115.

Sincerely,

A handwritten signature in cursive script that reads "James C. Duck". The signature is written in dark ink and is positioned above the typed name and title.

James C. Duck  
Chief, Planning Division

Enclosures

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mailed out  
3-6-01

Planning Division  
Environmental Branch

MAR 06 2001

Mr. Rick Ruebsamen  
National Marine Fisheries Service  
Southeast Regional Office  
Habitat Conservation Division  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

Dear Mr. Ruebsamen:

The Jacksonville District, U.S. Army Corps of Engineers, (USACE) is beginning a limited re-evaluation (LRR) of the economics of potential improvements to the deferred features of San Juan Harbor, Puerto Rico, as noted in the general scoping letter we recently coordinated with your agency. The features of the harbor now under study include San Antonio Channel, San Antonio Approach Channel, San Antonio Channel Extension, Cruise Ship Basin and Anchorage Area "E", as shown on the enclosed map. Piers associated with these features would also be included in the study area. This study is for channel improvements, that is, potential deepening or widening, not routine maintenance (shoal removal). At this time, in accordance with provisions of the amended Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), we would like to initiate consultation with your office on Federally managed fish species.

The study area is connected to waters of the Atlantic Ocean. All Atlantic waters under the jurisdiction of the Caribbean Fisheries Management Council have been determined to be Essential Fish Habitat as defined in MSFCMA. This letter constitutes initial EFH coordination according to the requirements of the MSFCMA.

Preliminary consultation with the Caribbean Fisheries Management Council, San Juan Bay Estuary Program literature and other sources suggests strongly that study area waters (channels, piers and anchorage area) do not, in their present condition, constitute significant commercial fish habitat. Large portions of the channel have been dredged previously by the Corps and other unknown parties, as discussed in the general scoping letter for the Limited Re-evaluation study. No submerged aquatic vegetation (SAV) is known from this area;

similarly there are no coral reefs, rocky ledges, live rock, mangroves, or other habitat features that would provide feeding or maturation habitat for fish. We are aware of no published reports indicating the existence of significant fish habitat associated with the fine sand and silt bottoms of this area.

If dredging is recommended the dredged material from the area is suitable for ocean disposal. The San Juan Ocean Disposal Site would be the destination for this material. Use of the San Juan site was authorized by the U.S. Environmental Protection Agency (EPA) on June 5, 2000, under Section 103 of the MPRSA, after materials from the potential project area were tested and a report submitted to EPA. As discussed in the EFH consultation we conducted with NMFS during coordination of the SMMP for this site, there is no evidence indicating that dredged material disposed at the San Juan Ocean disposal site endangers human health or that of domestic animals, fish, shellfish, or wildlife due to the presence of living organisms, including biological pests, viruses, pathogenic microorganisms or other agents. Also, comparisons with the EIS data for the ODMDS show that the dredged material is physically compatible with the material at the disposal site, and that the site itself is not highly significant or unique fish habitat.

At this time we request you provide us with any information, issues and concerns specific to the study area your agency may possess. If the LRR recommends channel or anchorage area improvements the Corps will be preparing and coordinating an environmental document for the proposed project. At that time we expect to provide a more detailed and formal EFH assessment and determinations in accordance with MSFCMA.

Thank you for cooperating with the information gathering phase of this study. Please direct your comments to Mr. Esteban Jiménez at the letterhead address or by telephone 904-232-2115.

Sincerely,

James C. Duck  
Chief, Planning Division

Enclosures

mailed out  
3-6-01

Planning Division  
Environmental Branch

MAR 06 2001

Mr. James P. Oland, Chief,  
Boquerón Field Office  
US Fish and Wildlife Service  
PO Box 491  
Boquerón, Puerto Rico 00622

Dear Mr. Oland:

The Jacksonville District, U.S. Army Corps of Engineers, (USACE) is beginning a limited re-evaluation (LRR) of the economic justification and environmental consequences of potential improvements to the deferred features of San Juan Harbor, Puerto Rico, as noted in the general scoping letter you recently received. The features of the harbor now under study include San Antonio Channel, San Antonio Approach Channel, San Antonio Channel Extension, Cruise Ship Basin and Anchorage Area "E", shown on the enclosed map. Piers associated with these features would also be included in the LRR study and project area. At this time, in accordance with provisions of Section 7 of the Endangered Species Act, we would like to request a list of federally listed threatened or endangered species your agency considers likely to occur in the study/potential project area and the San Juan Offshore Disposal site, along with your recommendations regarding these species and their habitat.

As you know, use of the San Juan Offshore disposal area was coordinated with your agency at the time the Site Management and Monitoring Plan (SMMP) for this site was circulated in late 1999. We tested the sediments in the LRR study area and received EPA permission under Section 103 of the Marine Protection Research and Sanctuaries Act (MPRSA) to use the San Juan Offshore Disposal Site for them.

-2-

We look forward to working with you again to protect Puerto Rico's endangered species. Please refer any questions on the study scope to Mr. Esteban Jiménez at telephone number 904-232-2115.

Sincerely,

James C. Duck  
Chief, Planning Division

Enclosure

bcc:

CESAJ-DS

CESAJ-DP-I (O. Rodriguez)

Mailed out  
3-6-01

Planning Division  
Environmental Branch

MAR 06 2001

Dr. Charles Oravetz,  
Chief, Protected Species Division  
National Marine Fisheries Service  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

Dear Dr. Oravetz:

The Jacksonville District, U.S. Army Corps of Engineers, (USACE) is beginning a limited re-evaluation (LRR) of the economic justification and environmental consequences of potential improvements to the deferred features of San Juan Harbor, Puerto Rico, as noted in the general scoping letter you recently received. The features of the harbor now under study include San Antonio Channel, San Antonio Approach Channel, San Antonio Channel Extension, Cruise Ship Basin and Anchorage Area "E", shown on the enclosed map. Piers associated with these features would also be included in the LRR study and project area. At this time, in accordance with provisions of Section 7 of the Endangered Species Act, we would like to request a list of federally listed threatened or endangered species your agency considers likely to occur in the study/potential project area and the San Juan Offshore Disposal site, along with your recommendations regarding these species and their habitat.

As you know, use of the San Juan Offshore disposal area was coordinated with your agency at the time the Site Management and Monitoring Plan (SMMP) for this site was circulated in late 1999. We tested the sediments in the LRR study area and received EPA permission under Section 103 of the Marine Protection Research and Sanctuaries Act (MPRSA) to use the San Juan Offshore Disposal Site for them.

-2-

We look forward to working with you again to protect Puerto Rico's endangered species. Please refer any questions on the study scope to Mr. Esteban Jiménez at telephone number 904-232-2115.

Sincerely,

James C. Duck  
Chief, Planning Division

Enclosure

B. I. Coordination of Mitigation. Letter of transmittal, Final CAR

06-14/94 14:29 809 851 7440

CAR

001

June 13, 1994

Mr. A. J. Salem  
Chief, Planning Division  
U.S. Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 32232

RE: San Juan Bay Navigation

Dear Mr. Salem:

Enclosed is our final Coordination Act report for the proposed San Juan Bay Navigation Project. This report is issued in accordance with Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This report is presented in compliance of the FWCA and constitutes a final Section 2(b) report. The Service looks forward to continued coordination and review of the mitigation plan during the PED phase of the project.

If you have any questions please do not hesitate to call.

Sincerely,

James P. Oland  
Field Supervisor

fhl  
cc:  
DNR, San Juan  
COE, San Juan  
EPA, San Juan

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

# of pages

To	Barbara Cistron	From	Felix Lopez
Dept/Agency		Phone #	
Fax #		Fax #	

NSN 7540-01-317-7568

5099-101

GENERAL SERVICES ADMINISTRATION

A. Sec. 7



United States Department of the Interior



FISH AND WILDLIFE SERVICE  
 Caribbean Field Office  
 P.O. Box 491  
 Boqueron, Puerto Rico 00622

October 18, 1993

Chief A. J. Salem  
 Planning Division  
 Department of the Army  
 Jacksonville District Corps of Engineers  
 P.O. Box 4970  
 Jacksonville, Florida 32232-0019

Re: San Juan Harbor  
 Federal Navigation  
 Project

Dear Chief Salem:

Thank you for your letter of September 7, 1993, concerning the above-mentioned project. Our comments are provided under Section 7 of the Endangered Species Act of 1973, as amended (87 stat. 884; 16 U.S.C. 1531, et seq.). Your letter requested our concurrence with your determination of no effect on the following threatened and endangered species:

- |                             |                                   |
|-----------------------------|-----------------------------------|
| Brown pelican               | <u>Pelecanus occidentalis</u>     |
| Yellow-shouldered blackbird | <u>Agelaius xanthomus</u>         |
| Antillean manatee           | <u>Trichechus manatus manatus</u> |

The letter states that the leatherback (Dermochelys coriacea), green (Chelonia mydas), hawksbill (Eretmochelys imbricata), and loggerhead (Caretta caretta) sea turtles as well as other marine mammals may also occur in the adjacent waters.

The proposed project involves the deepening of the Bar, Anegado, Army Terminal, Puerto Nuevo and Graving Dock channels in the San Juan Bay. Blasting will be necessary in the Bar channel. All dredge material will be disposed of at the EPA-designated Offshore Disposal Area, 3 miles north of Isla de Cabras.

Because no disturbance of the shoreline is anticipated, the Biological Assessment states that the project is not likely to adversely affect either the brown pelican or the yellow-shouldered blackbird. We concur with this determination.

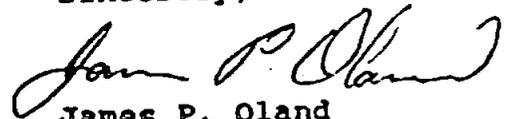
The Biological Assessment did not anticipate adverse affects for the Antillean manatee or the above-mentioned sea turtles. The document states, however, that there is negative evidence on the presence of manatees in the Bay. The Service's aerial surveys indicate that a manatee has been sighted in the Bay.

Nevertheless, measures were included to minimize any potential for collisions. We concur with the determination of no adverse affects to the manatee, but recommend that these measures be included as conditions of any contract. These include:

1. The contractor and his agents should be made aware of the possible presence of manatees and sea turtles and their protection under the Endangered Species Act. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees.
2. Should the species be observed at the disposal area or within 100 yards of the project area, all work shall stop until the animal has left the area. No marine mammal will be harassed in order to make it leave the area.
3. Towing vessel captains must post a watch for turtles and manatees and take measures to avoid collisions.
4. Blasting protection measures outlined in Appendix A will be implemented.
5. If a manatee is injured or killed during the project, the Fish and Wildlife Service, Caribbean Field Office (809/851-7297) and the Caribbean Stranding Network (809/380-0025) will be notified.

The National Marine Fisheries Service should be consulted concerning impacts to species under their jurisdiction, such as sea turtles in the water and other marine mammals. No further consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act is required. However, if the project is modified or if additional information on listed or proposed species is obtained consultation should be reinitiated.

Sincerely,



James P. Oland  
Field Supervisor

ss

cc:

COE, San Juan  
NMFS, St. Petersburg

## Biological Assessment and blasting protection specifications

U. S. ENDANGERED SPECIES ACT  
BIOLOGICAL ASSESSMENT  
SAN JUAN HARBOR NAVIGATION STUDY  
SAN JUAN, PUERTO RICO

1. Project Location. The project is located within San Juan Bay in the Bar, Anegado, Army Terminal, Puerto Nuevo and Graving Dock commercial shipping channels, extending seaward to the outer end of the bar (entrance) channel. Please refer to the enclosed map.
2. Authorization. Harbor improvements for navigation in San Juan Bay have been authorized periodically since 1917. The present project was authorized by the Water Resources Development Act of 1986.
3. Description. Improvements under study at this time include deepening of channels by means of dredging. Depths would be increased up to 10 feet in the Bar channel and up to 8 feet in other channels, to accommodate modern vessels. Most of the materials to be removed are clays and silts, but a part of the entrance channel, which would also be widened on its western side, has a rocky substrate. Blasting would be necessary in this area to fracture the rock and facilitate its removal by dredge. Blasting charges would be maintained in a range recommended by geotechnical engineers as adequate to avoid damage to historic masonry structures. Blasting safety specifications have also been developed to avoid injury to any marine reptiles or mammals that might incidentally occur in the blasting area, and are hereby appended. The dredging method would be by clamshell or dragline mounted on a barge. **NO HOPPER DREDGES WOULD BE USED.** All dredged materials would be disposed of at an EPA-designated Offshore Disposal Area. Biological and chemical testing of materials proposed for offshore disposal is now underway. The San Juan offshore disposal site is marked on NOAA navigation charts. It is located about 3 miles north of Isla de Cabras in water depths that range from 800 to 1,200 feet.
4. Listed species. Preliminary scoping of issues for the study was carried out in April of 1993. Neither the U.S. Fish and Wildlife Service (FWS) nor the National Marine Fisheries Service (NMFS) identified any listed species as present in the immediate project area, in their responses to scoping inquiries. However, the U.S. Army Corps of Engineers (USACE) has determined, based on past coordination of other projects in the geographic area, that the following listed species might occur in San Juan Harbor:

Yellow-shouldered Blackbird, Agelaius xanthomus.  
Brown Pelican, Pelecanus occidentalis.

Other listed organisms are the four species of marine turtles regularly observed in Puerto Rico waters: Dermodochelys coriacea, the leatherback, Chelonia mydas, the green turtle, Eretmodochelys imbricata, the tortoiseshell, and Caretta caretta, the loggerhead; the West Indian Manatee (Trichechus manatus); and migrating Humpback whales (Megaptera novaeangliae). None of

the other endangered marine mammal species (including whales) listed as present in Puerto Rico coastal waters occur close enough to shore to be potentially affected by activities in the harbor.

5. Discussion of the Potential Impacts to Listed Species.

Impacts on the two avian species would be related to disturbance of feeding, loafing and roosting habitat (for the pelican) or disturbance of mangrove habitat (for the blackbird). Since no disturbance of shorelines, mangroves or roosts is contemplated, USACE has determined that the project is not likely to adversely affect either of the above avian species.

Any potential adverse effects on the marine species listed in the above paragraph could be related to three aspects of the project under study: 1) Dredging and related blasting in the Bar (entrance) channel; 2) Transport of materials by barge to the offshore disposal site; and 3) Disposal at sea of the dredged materials.

A. Effect of disposal at sea. Materials will be transported in a barge to the disposal area, where they will be discharged over the side at the designated site. Barges will be towed by tugs. These rather slow-moving vessels are not believed to pose any threat to marine mammals or marine turtles. The contractor and his agents will be made aware of the potential presence of marine turtles and marine mammals in the area, federal penalties for taking listed species, and will be required to post a watch at all times when the vessel is underway or dumping dredged materials. Should one of the above listed species or other marine mammal species be present in the area all disposal shall stop until the animal(s) has left the area. No marine mammal will be harassed to make it leave the area.

B. Effect of dredged material transport. Of the species listed above, only the manatee and/or mating turtles are slow-moving enough to potentially be under threat of collision from a moving tug vessel. Towing vessel captains will be required to post a watch for turtles and manatees and take measures to avoid collision. The habits of the West Indian manatee Caribbean area populations are dissimilar to those of the Florida subspecies. West Indian manatees generally inhabit coastal waters of a depth sufficient to allow the animals to escape boat collisions by sounding. There are very few manatee stranding records for Puerto Rico that have been linked to damage from large propellers such as those used on commercial vessels (Rathbun *et al.* 1986). Manatees are regularly sighted off the shallow beaches of Levittown, to the west of the project area, and from high floors in the Condado-Isla Verde residential area to the east, but USACE has no information on sightings within or in the approaches to San Juan Harbor. Sea turtles are regularly sighted off San Juan Harbor, but generally sound (dive) quickly when approached by motor vessels. It is not believed that they are in any danger of collision from a towing vessel.

C. Effect of dredging and related activities (blasting). There are no verified records of either marine mammals or marine turtles in the San Juan Harbor entrance channels, nor are they

observed anywhere inside San Juan Bay. Humpback whales are observed every year near the channel approach (outside the harbor) during the January-March months when their annual migration takes them in an eastward direction along the north coast of Puerto Rico. The animals travel parallel to shore, are easily spotted from nearby buildings and El Morro, and often have young calves accompanying mature females. The "window" during which humpbacks appear extends from early January through mid-March. Other whales may occasionally be spotted far offshore, but are unlikely to travel near the harbor entrance. To avoid any possibility of affecting migratory whales, dolphins or other marine mammals while the controlled blasting under the entrance channel is underway, the USACE proposes to enact the blasting procedures in Appendix A. This procedure was developed by USACE in coordination with the U.S. Fish and Wildlife Service, to avoid adverse effects to manatees in the Intracoastal Waterway in Florida, is based on mammalian body tissues' sensitivity to blast impacts in the water, and has been determined to be adequate to avoid injury due to blasting.

6. Determination. Based on the above analysis, on information presently available, observations of DNR and FWS biologists consulted, and the West Indian Manatee recovery plan, the USACE has determined that implementation of the project under the proposed protection measures would lead to no adverse effects on any of the above listed species.

#### REFERENCES

- Rathbun, G.B., T. Carr, N. Carr and C.A. Woods. 1985. The distribution and abundance of manatees and sea turtles in Puerto Rico, with emphasis on Roosevelt Roads Naval Station. Natl. Tech. Info. Ser. PB86-1518347AS. 83 pp.
- U.S. Fish and Wildlife Service. 1986. Recovery Plan for the Puerto Rico Population of the West Indian (Antillean) Manatee. U.S. Fish and Wildlife Service, Atlanta, Georgia 35 pp.
- U.S. Fish and Wildlife Service. 1991. West Indian Manatee. In: Endangered and Threatened Species of the Southeast United States: "The Red Book."
- U.S. Fish and Wildlife Service. 1991. Humpback Whale. In: Endangered and Threatened Species of the Southeast United States: "The Red Book."

ATTACHMENT A

Proposed Marine mammal protection measures during blasting at San Juan Harbor Bar Channel and disposal of dredged materials:

1. Blasting protection measures will be implemented as specified below:

a. For each explosive charge placed, detonation will not occur if a marine mammal is known to be (or based on previous sightings, may be) within a circular area around the detonation site with the following radius:

$$r = 260 \times \sqrt[3]{W}$$

where:

r = radius of the danger zone in feet  
W = weight of the explosive charge in pounds (tetryl or TNT)

b. A marine mammal watch will be conducted by no less than two qualified observers from small watercraft, at least one half hour before and after the time of each detonation, in a circular area at least three times the radius of the above described danger zone.

c. Any marine mammal(s) in the danger zone or the watch zone shall not be forced to move out of those zones by human intervention. Detonation shall not occur until the animal(s) move(s) out of the danger zone on its own volition.

d. In the event a marine mammal or marine turtle is injured or killed during blasting, the Caribbean Stranding Network (809/380-0025), the Fish and Wildlife Service, Caribbean Field Office (809/851-7297) and the National Marine Fisheries Service (813/893-3366) will be notified.

2. Precautions will be taken during DREDGING AND DISPOSAL activities to insure the safety of the marine turtles and marine mammals. To insure the contractor and his personnel are aware of the potential presence of these organisms in the project area, their endangered status, and the need for precautionary measures, the contract specifications will include the standard protection clauses concerning marine turtles, manatees and marine mammals. The contractor will instruct all personnel associated with the construction of the project about the potential presence of manatees in the area and the need to avoid collisions with them. All vessels associated with the project shall operate at "no

wake" speeds at all times while in shallow waters, or channels, where the draft of the boat provides less than three feet clearance of the bottom. Boats used to transport personnel shall be shallow draft vessels, preferably of the light-displacement category, where navigational safety permits. Vessels transporting personnel between the landing and any work boat shall follow routes of deep water to the extent possible. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing sea turtles or marine mammals, which are protected under the Endangered Species Act and the Marine Mammal Protection Act. The contractor shall be held responsible for any sea turtle or marine mammal harmed, harassed, or killed as a result of the construction of the project. If a marine turtle or marine mammal is sighted within 100 yards of the project area, appropriate safeguards will be taken, including suspension of work, if necessary, to avoid injury to it.

Concurrence letter from FWS



United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Caribbean Field Office  
P.O. Box 491  
Boqueron, Puerto Rico 00622



October 18, 1993

Chief A. J. Salem  
Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Re: San Juan Harbor  
Federal Navigation  
Project

Dear Chief Salem:

Thank you for your letter of September 7, 1993, concerning the above-mentioned project. Our comments are provided under Section 7 of the Endangered Species Act of 1973, as amended (87 stat. 884; 16 U.S.C. 1531, et seq.). Your letter requested our concurrence with your determination of no effect on the following threatened and endangered species:

Brown pelican  
Yellow-shouldered blackbird  
Antillean manatee

Pelecanus occidentalis  
Agelaius xanthomus  
Trichechus manatus manatus

The letter states that the leatherback (Dermochelys coriacea), green (Chelonia mydas), hawksbill (Eretmochelys imbricata), and loggerhead (Caretta caretta) sea turtles as well as other marine mammals may also occur in the adjacent waters.

The proposed project involves the deepening of the Bar, Anegado, Army Terminal, Puerto Nuevo and Graving Dock channels in the San Juan Bay. Blasting will be necessary in the Bar channel. All dredge material will be disposed of at the EPA-designated Offshore Disposal Area, 3 miles north of Isla de Cabras.

Because no disturbance of the shoreline is anticipated, the Biological Assessment states that the project is not likely to adversely affect either the brown pelican or the yellow-shouldered blackbird. We concur with this determination.

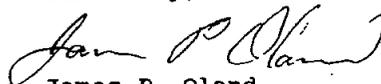
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Nevertheless, measures were included to minimize any potential for collisions. We concur with the determination of no adverse affects to the manatee, but recommend that these measures be included as conditions of any contract. These include:

1. The contractor and his agents should be made aware of the possible presence of manatees and sea turtles and their protection under the Endangered Species Act. All personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees.
2. Should the species be observed at the disposal area or within 100 yards of the project area, all work shall stop until the animal has left the area. No marine mammal will be harassed in order to make it leave the area.
3. Towing vessel captains must post a watch for turtles and manatees and take measures to avoid collisions.
4. Blasting protection measures outlined in Appendix A will be implemented.
5. If a manatee is injured or killed during the project, the Fish and Wildlife Service, Caribbean Field Office (809/851-7297) and the Caribbean Stranding Network (809/380-0025) will be notified.

The National Marine Fisheries Service should be consulted concerning impacts to species under their jurisdiction, such as sea turtles in the water and other marine mammals. No further consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act is required. However, if the project is modified or if additional information on listed or proposed species is obtained consultation should be reinitiated.

Sincerely,



James P. Oland  
Field Supervisor

SS  
CC:  
COE, San Juan  
NMFS, St. Petersburg

Final CAR. Tables and illustrations are identical to those included in the Draft FWCAR, so they were not submitted a second time.

**FWCA Report for San Juan Harbor**

Prepared by:  
Felix Lopez  
US Fish and Wildlife Service  
Caribbean Field Office  
November 30, 1993

## Executive Summary

The US Army Corps of Engineers is proposing to improve existing navigation channels in San Juan Harbor. The current proposal includes the deepening and widening of the Bar Channel, the widening of the Army Terminal, Anegado and Puerto Nuevo channel, and the deepening of the Graving Dock Channel. Ocean dumping is currently being considered for disposal of dredge spoil. A General Design Memorandum and EIS were prepared and filed for the project in 1982.

Surveys conducted by the Service in 1982 indicated the presence of algal beds in the vicinity of the Puerto Nuevo channel. Surveys carried out in 1993, show that these algal beds still survive and revealed the presence of the seagrass Halophila decipiens both in the new areas to be dredged in the Puerto Nuevo and Army Terminal channels.

San Juan Bay has lost most of its wildlife habitat value to development. However, dredging activities created the Palo Seco Peninsula in 1963, and expanded the mud flats. These areas are now primary wildlife habitats for brown pelicans and other seabirds. The Service is recommending that in lieu of ocean dumping the Corps create dredge spoil islands within the bay. These islands would serve as habitat for resident avifauna, re-establish the mangrove systems in the bay and provide additional fishery resources.

**Project Description:**

Federal Navigation projects have been authorized in San Juan since 1917. The creation of navigation channels, filling and bulkheading have taken place since the 1800's. The current project improvements were first considered in 1976. In 1982 a Re-evaluation Report and General Design Memorandum were prepared. The project's purpose is to improve existing navigation channels to accommodate newer and larger ships that are using the port. The current design calls for the following improvements.

A) Bar Channel - This area is at the entrance to the bay and is being considered for widening from 500' to 800' and deepening to 48'. This portion of the project will entail significant blasting. .

B) Navigation Channels - The Anegado, Sabana Approach, Army Terminal, Puerto Nuevo and Graving Dock channels are all being considered for deepening. The deepening and expansion of the turning basins for the Puerto Nuevo and widening of Army Terminal channel are also being considered.

**Resources:*****Wetlands***

At one time, the inner portion of San Juan Bay was a shallow water estuary consisting of several mangrove islands, grass beds and mud flats. Major mangrove islands that existed in San Juan Bay in the 1800's included Miraflores, Mata Redonda, Portell and Isla Grande. These islands disappeared with the development of the bay. All that remain are the names of the areas in city maps.

With the increased loss of habitat, other areas in the bay became critical to wildlife. In 1963 the Palo Seco Peninsula was created using dredge spoil from a Corps dredge operation in the bay. This 30 acre sand spit has changed its shape and position at a rate of 50 meters a year. Although attempts at stabilizing the area have been made by the placement of rip-rap, the southern portion of the peninsula continues to be eroded and sediment continues to move southward. The southward migration of the peninsula may eventually reach the shore forming a lagoon. A small park has been placed on this unstable land by the Municipality of Cataño which is now trying to armor the shore to avoid further movement. During its 30 years existence this area has been colonized and overgrown with red, black and white mangroves, australian pine, maho, and a variety of other plants. Although intended to protect the Bay View residential area from coastal erosion, this peninsula rapidly became a primary wildlife area. Numerous gulls, terns, pelicans, and frigate birds use the peninsula and sheltered waters behind it for roosting and feeding. The importance of this area was recognized by the Department of Natural Resources in 1979, when it was declared a "Critical Wildlife Area".

The mangroves and mud flats associated with the Martín Peña Channel are all that remain of the vast mangrove estuary that once was found in the inner bay. These areas have also been recognized as by DNR as a Critical Wildlife Area. These flats and mangroves, also known as the Constitution Bridge mudflats, have the richest avifauna

diversity in the bay, and one of the highest diversities on Puerto Rico. Over 62 aquatic and 31 terrestrial bird species are recorded for the area. In the 1988 DNR document "Critical Coastal Wildlife Areas of Puerto Rico", the Constitution Bridge mudflats although considered primary wildlife areas, were given a poor chance of survival into the next century. Port development is the main reason for this grim future. As part of the Agua-Guagua project, the Corps created additional mudflats north of the Martín Peña Channel. Parts of this area are being naturally colonized by red mangroves, thus mitigating for the loss of wetlands due to the navigation channel. More mudflats can be created to the south and north of the existing flats.

Algal and seagrass beds were located in Escollo Mojiganga, a shoal located to the north of the Puerto Nuevo Channel. The extent of this vegetated bottom is not known since water clarity is very poor. The bottom seems to be composed of very fine sediments. Because of poor water clarity it seems that these algae and grass beds are restricted to a three foot depth or less. In spite of the depth restriction, algae growth is dense and covers most of the bottom. The density of *Halophila* plants is relatively low in this area. Escollo Mojiganga was comprised mostly of macro algae. Grass beds in Escollo Grande near the Sabana Approach have similar depth restrictions, the bottom is composed of coarse fragments of rock and shell. This area would not be impacted by the proposed project. Very little bottom vegetation was found in the Graving Dock turning channel, bottom sediments are very fine and sediments are continuously being deposited by the Martín Peña Channel.

### ***Wildlife***

Vegetated marine bottoms were reported in 1976 and 1982. Surveys carried out by Service biologists in 1993 show that these algal beds continue to survive in the Puerto Nuevo area and consist mostly of *Gracilaria* ? spp., *Spyridia* spp., *Chaetomorpha* spp., *Acanthophora spicifica*, *Hypnea museiformis*, and *Hypnea cervicornis*. The presence of the seagrass *Halophila decipiens* was also found in the areas to be dredged in the Puerto Nuevo and Army Terminal channels but the area is mainly dominated by macro algae. These tend to concentrate around a shallow bank known as Escollo Mojiganga just at the edge of the existing channel (Figure 1). Upper sediments are very fine and water clarity poor. The majority of these algal beds are confined to the three foot depth. Deeper sampling revealed very sparse algal cover. Algal and seagrass were also found in the area of the proposed Sabana Approach. Again these beds are in very shallow water. Invertebrates found associated with these beds include blue crabs, tellin, polychete worms, tritons, and others.

Asides from marine species, aquatic and terrestrial birds are the main wildlife component of San Juan Bay. Species include egrets, gulls, terns, brown pelicans, frigate birds, plovers, sandpipers, doves, and others (see Appendix I). The lack of adequate habitats throughout the bay has caused the concentration of these species in Palo Seco Peninsula and Constitution Bridge Mudflats. The inland mangroves and wetlands provide travel corridors for these species.

### ***Endangered Species***

The Service concurred with the Corps "No Effect" determination for impacts to threatened and endangered species within the project site. The Service recommended that 5 conditions be included in any Corps contract to insure that the Antillian Manatee would not be affected (see enclosure).

### **Project Impacts**

The current project proposal contemplates the widening of both the Puerto Nuevo and Army Terminal Channels plus the enlarging of the turning basins. This would undoubtedly eliminate the algal and seagrass beds found adjacent to the Puerto Nuevo Channel, and would partially eliminate the algal and grass beds in the Sabana Approach.

### **Recommendations**

The Corps has identified over 1 million cubic yards of dredged material that can be used for the creation of spoil islands and shallows. Since past and current surveys indicate that both algal and seagrass vegetation are restricted by poor water clarity to shallow depths. The creation of shallows 0-1.5 meters deep would increase the opportunity of recolonization by algae and seagrass. The Corps is proposing to mitigate at a 1:1 ratio for the loss of 1.2 acres of vegetated shallows. We recommend a ratio of 1:1.5 to allow for loss of services provide by these shallows during the construction and creation phase.

Spoil islands could also be created in several areas around the bay. This would increase the habitat availability within the bay and serve to mitigate for past and present impacts of port development. The creation of spoil islands in Florida has been a boon to sea birds that had lost their original habitat areas. Mudflats can be extended to the north and south of Martín Peña Channel (Figure 2). Because of depth limitations the island and shallow creation would be restricted. However, the corps should consider insitu creation of islands using suction dredge and floating pipe. The International Institute of Tropical Forestry, US Forest Service, endorses the idea of creating spoil islands in San Juan Bay (see enclosure). The San Juan Bay Estuary program has also expressed some interest in the creation of spoil islands and could be a possible co-sponsor.

Possible areas for the creation of mangrove islands are located in the triangular area of San Juan Bay created by the Graving Dock, Puerto Nuevo and Army Terminal Channels (Figure 3). The material from the channel work could be deposited in this area to create several islands not more than 1 meter above mean sea level with a shelf of no more than 15 cm. for mangrove colonization. These islands can be planted with red mangroves and would provide a safe haven for the bay's wildlife. Dredge spoil from the work in Anegado Channel and the Bar Channel could be deposited on the lee of the Palo Seco Peninsula. This would expand the area available for wildlife and possibly help stabilize the southern migration of the peninsula.

The size and shape of the islands is the most important element after location in determining successful colonization by mangroves. The sand and mud dredge spoil to be used for these islands will have a low angle of repose and will create shallows around them. A size of 1-5 acres would be optimal for both creating marine habitat and

mangrove habitat. In the exposed areas of the bay, the islands should have a steep windward slope and crest to prevent wind and wave erosion. This shape would simulate natural shapes of sandy cays in exposed locations. The crest should have a final elevation above MLW of not more than one meter. The lee of the island should have a final elevation of 15 cm. above MLW.

For more sheltered areas, a symmetrical pancake shape could be used. This would increase the underwater profile and shoaling. The final slope of these islands should be 10:1. DNR calculations indicate that 20,000 cubic meters of material are needed for a 2.5 acre island, with a base depth of 1.5 meters (6 feet), and a final height of .15 meters. For a base depth of 2.5 meter (8 feet) a similar size islands would require some 400,000 cubic meters. Settling and stabilization should occur within six months after which mangrove planting can begin. See Figure 4 for a conceptual diagram of the two types of islands.

The Corps is proposing the creation of 3.8 acres of spoil islands to be created in the bay. The islands are to be left to natural revegetation. We believe that some red mangrove plantings can be carried out by either the local sponsor or as part of the San Juan Bay Estuary initiative. Depths in the area should be sufficient to spread out islands and allow barge navigation.

#### **Summary of Findings and Service Position**

The Service recognizes the need to alleviate the navigation restrictions in San Juan Bay. Provided that the Corps finalizes a mitigation plan and incorporates our comments we do not foresee any long term adverse impacts to the fish and wildlife resources of San Juan Bay.

## References

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OFICINA DEL SECRETARIO  
RADIO 300  
DEPARTAMENTO DE COMERCIO  
ESTADOS UNIDOS

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**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
9721 Executive Center Drive N.  
St. Petersburg, Florida 33702  
(727) 570-5317, FAX 570-5300

November 19, 2001 F/SER4:LC:am

NOV 27 11 12 AM '01  
MARINE FISHERIES SERVICE  
ST. PETERSBURG, FLORIDA

Marissa Tollinchi  
Secretary, Puerto Rico Planning Board  
Centro Gubernamental Minillas  
Ave. de Diego, Pda. 22, Santurce  
PO Box 41119  
San Juan, Puerto Rico 000940-1119

Dear Ms. Tollinchi:

The National Marine Fisheries Service (NMFS) has reviewed the application materials for the Certification of Consistency with the Coastal Zone Management Program dated October 23, 2001, by the U.S. Coast Guard for dredging of a 3.33-acre area directly south and waterward of the U.S. Coast Guard Station at La Puntilla, San Juan, Puerto Rico.

Based on the information provided, the proposed work will occur in an existing berthing area, actively transited by commercial vessels. The water depth in the area of the proposed dredging ranges from 27 to 34 feet and no submerged aquatic vegetation, coral reefs, or hardbottom are present. In a letter dated August 1, 2001, the NMFS informed Mr. James Duck of the Corps of Engineers, Jacksonville District, that adverse impacts to NMFS trust resources were not anticipated. Accordingly, the NMFS does not anticipate that the proposed dredging will adversely impact fishery resources and does not have an objection to the issuance of a Coastal Zone Consistency Certificate.

We appreciate the opportunity to review this application. Questions related to the proposed project and marine fishery resource issues should be directed to Dr. Lisamarie Carrubba in our Cabo Rojo, Puerto Rico, office at 787/851-3700.

Sincerely,



Andreas Mager, Jr.  
Assistant Regional Administrator  
Habitat Conservation Division

01 NOV 28 AM 2:31

SECRET  
NOV 28 2001  
MARINE FISHERIES SERVICE





**COMMONWEALTH OF PUERTO RICO**  
Office of the Governor

November 30, 2001

Control 01-8414

Mr. James C. Duck  
Chief, Planning Division  
Department of the ARMY  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

**SHPO: 03-18-93-01 MAINTENANCE DREDGING AT PIER ECHO, SOUTHERN END OF LA PUNTILLA, US COAST GUARD STATION, SAN JUAN, PUERTO RICO**

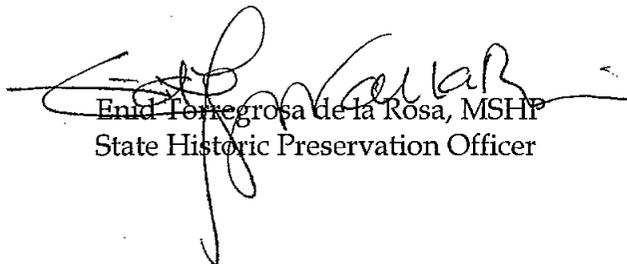
Dear Mr. Duck:

Our Office has received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 102-575) as amended in 1992 and *36 CFR Part 800: Protection of Historic Properties* from the Advisory Council on Historic Preservation. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects on them.

Our records support your finding that **no historic properties** are located within the project's area of potential effects.

If you have any questions concerning our comments, please do not hesitate to contact us. Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,



Enid Forregrosa de la Rosa, MSHPO  
State Historic Preservation Officer

ETD/MB/img



"Hacia el San Juan Soñado"

December 14, 2001

Arq. Roberto Alsina  
Director  
Departamento de Urbanismo

Mr. Esteban Jiménez  
Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, Fl. 32232

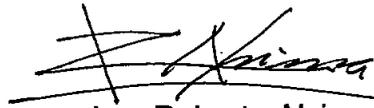
Dear Mr. Jiménez:

Thank you for informing us of the decision by the U.S. Army Corps of Engineers to dredge the 3.3-acre area South and Westward of the U. S. Coast Guard station's shoreline at the San Antonio Channel in La Puntilla, Old San Juan, Puerto Rico.

We believe that initiative will prove most beneficial to all nearby residents in the aforementioned area and suggest only that, if possible, the dredged material be used to fill some depressions currently found in Condado Lagoon, in order to maximize the operation's potential for environmental improvements in San Juan.

Once again, thank you for your letter and good luck in all of the U.S. Army's endeavors.

Sincerely,



Arq. Roberto Alsina  
Executive Director

APPENDIX C COASTAL ZONE MANAGEMENT CONSISTENCY.

The San Juan Harbor was granted a CZM consistency certificate CZ-2002-0911-037 on December 6, 2001.



COMMONWEALTH OF PUERTO RICO  
OFFICE OF THE GOVERNOR  
PLANNING BOARD

MINILLAS GOVERNMENT CENTER  
DE DIEGO AVE., STOP 22, SANTURCE  
PO Box 41119, SAN JUAN, PUERTO RICO 000940-1119

December 6, 2001

Captain Gene Brooks  
Commander  
U.S. Coast Guard  
5 La Puntilla Street  
San Juan, Puerto Rico, 00901-1800

**Federal Consistency Determination**  
**CZ-2002-0911-037**  
**U.S. Coast Guard Pier E Dredging**  
**La Puntilla, San Juan**

Dear Captain Brooks:

This is in response to your application for Certification of Consistency with the Puerto Rico Coastal Management Program (PRCMP) for the dredging of approximately 15,000 cubic yards of material from 3.33 acres of submerged land of the U.S. Coast Guard Berthing area (Pier E), located at Commander U.S. Coast Guard Base, 5 La Puntilla Final, San Juan, Puerto Rico.

The review period of this Certification began on October 9, 2001. The application and accompanying documents were sent to the Fish & Wildlife Service (FWS), the Environmental Quality Board (EQB), the State Historic Preservation Office (SHPO), the Underwater Archaeology Council, the Department of Natural and Environmental Resources (DNER), the San Juan Estuary Bay Program and the National Fisheries Marine Service (NFMS).

During the evaluation Period the NFMS commented that they do not anticipate that the proposed dredging will adversely impact fishery resources, and do not have objection to the issuance of a Coastal Zone Consistency Certificate. The FWS, DNER and SHPO did not presented objections or comments. The Environmental Quality Board informed that no environmental document about the proposed project has been submitted in compliance to Article 4c of the Puerto Rico Environmental Policy Law. The Underwater Archaeology Council commented that the proposed project is located at a high archeological sensitivity area and required archaeological studies Phase Level IA-IB.

The U.S. COE emitted a letter of permit dated October 1, 2001 in which there is included the following condition:

"PLANNING WITH YOU THE TRANSFORMATION OF PUERTO RICO"

Page 2

Federal Consistency Determination  
CZ-2002-0911-037

"The permittee shall install silt curtains in order to reduce the turbidity. The curtains shall be maintained throughout the end of the activities. Turbidity curtains shall be inspected daily and maintained in proper conditions in order to assure their adequacy. These curtains shall be securely anchored to the seafloor, and will extend from the seafloor to the surface. In addition, the applicant shall install silt curtains around the spoil area."

We would like to point out that the Puerto Rico Coastal Zone Management Program establishes the following policy:

- 18.02. "To Control those activities and land subdivisions which may adversely affect water quality, particularly in areas of aquifer recharge and in watersheds adjacent to lakes and reservoirs including, among others, --activities such as the wood clearings, elimination of the vegetation layer, soil movement causing erosions, the excessive use of the pavement resulting in increased runoff, and the indiscriminate use of fertilizers and pesticides causing water quality to deteriorate".

The San Juan Bay Estuary Program establishes as a goal: "Improve the water and sediment quality of the San Juan Bay Estuary to ensure it is suitable for fishing and swimming and to promote other compatible recreational and commercial activities". One of the objectives of the said program is "to minimize sediment loadings into the San Juan Bay Estuary". For this reason it is very important to strictly follow the U.S. COE condition as mentioned. In addition we would like to make the following recommendations in order to minimize the environmental impacts and be in compliance with the state laws and public policies:

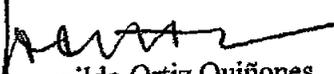
- 1- To coordinate with the Environmental Quality Board to fulfill their requirements in order to comply with the Article 4c of the Environmental Policy Law. (see enclosed letter)
- 2- To coordinate with Mr. Juan Vera Vega, director of the Underwater Archaeology Council, to do site inspections before the beginning of the works and fulfill the Underwater Archeology Council requirements about the required archeological studies. (see enclosed letter)
- 3- The San Juan Bay Estuary Program proposes to fill artificial depressions at the Suárez Canal and at the Los Corozos, San José, and La Torrecilla Lagoons. It would be of great benefit to use the dredged material of this project for the filling of the mentioned artificial depressions. For this purpose you should coordinate with the director of the San Juan Bay Estuary Program, Agustín Lugo F. Carbó, Esq. at (787) 725-8162.

Page 3  
Federal Consistency Determination  
CZ-2002-0911-037

Pursuant to the Federal Consistency Procedures and submitted information, and providing that the U.S. COE conditions are going to be strictly followed, the Puerto Rico Planning Board has determined that the proposed project is **consistent with the Puerto Rico Coastal Management Program.**

This final determination does not exempt the project to comply with any other procedures or permits of other State and Federal agencies. If you have any questions concerning this matter do not hesitate to contact Miss Rose A. Ortiz at 726-0289 or 723-6200, ext. 2020.

Cordially,

  
Hermenegildo Ortiz Quiñones  
Chairman

C: Jeffrey Benoit, OCRM, Maryland  
Edwin Muñiz, COE, San Juan  
Jorge M. Tous, COE, San Juan  
Ernesto Díaz, PRCMO, DNER, San Juan  
Celso Rossy, DNER, San Juan  
Wanda García, EQB, San Juan  
James P. Oland, FWS, Boquerón  
Lisamarie Carrubba, National Marine Fisheries Service

NAR/RAO

APPENDIX D WATER QUALITY CERTIFICATION.

Water Quality Certification currently exists for the waters of San Juan Bay.  
A copy is enclosed.



Environmental  
Quality Board

AG/ EAL/irp

SJH 10/1/79 WRC

PN-SJH-67

JUL 31 1979

Mr. Wilson Loubriel  
Executive Director  
Puerto Rico Ports Authority  
G.P.O.Box 2829  
San Juan, Puerto Rico 00936

RE: Water Quality Certificate  
Maintenance Dredging  
San Juan Harbor, San Juan, P.R.

Dear Mr. Loubriel:

We have received and reviewed the application to the U.S. Army Corps of Engineers for a permit to conduct the referenced activity.

Pursuant to Section 401 (a) of the Clean Water Act, Public Law 95-217 (the Act); it is certified that, as of the date hereof there is no federal effluent limitations and/or standard formally established under Section 301, 302, 306 and 307 of the act applicable to the referenced activity.

However, the classification and standards governing the quality of water of the Commonwealth of Puerto Rico have been determined to be applicable for the purposes of the Act. The following limitations are set forth as part of this certification, as provided under Section 401 (d) of the Act, and shall become conditions of any federal permit or license subject to the provisions of this section not to be exceeded in such permit:

<u>Parameter</u>	<u>Limitations</u>
Suspended, colloidal or settleable solids	None from works or wastes which will cause depositions or be deleterious for any usage as determined by the Water Quality Standards Regulations
Oil and floating substances	No residue attributable to any work or waste nor visible film nor globules of grease.
Turbidity	A Secchi disc shall be visible at a minimum depth of one (1) meter.

This certification applies only to the effect that this activity would have on water quality as defined by the regulations and not to other ecological, biological or environmental effects which may result from the project.

*Pedro A. Marrero*  
Pedro A. Marrero  
Vice-President

  
Santos Roheña  
Associate Member

  
Pedro A. Gelabert  
President

Enclosure

cc: Director Engineer  
U.S. Army Corps of Engineer  
P.O. Box 4970  
Jacksonville, Florida 32201



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

REPLY TO  
ATTENTION OF

**FINDING OF NO SIGNIFICANT IMPACT (FONSI)  
DREDGING NAVIGATIONAL CHANNEL AND  
TURNING BASIN  
YABUCOA HARBOR  
YABUCOA, PUERTO RICO**

I have reviewed the Environmental Assessment (EA) prepared for the dredging work at Yabucoa Harbor, Yabucoa, Puerto Rico. This consists of dredging to a depth of -50 feet a 700-foot wide channel and a 1,000-foot turning basin. Approximately 958,000 cubic yards of material will be dredged from 138 acres of submerged sandy harbor bottom. The recommended plan in the DPR is the proposed action. I conclude that the proposed action will have no significant impact on the quality of the human environment. This conclusion is based on information analyzed in the DPR and EA. It also reflects pertinent information obtained from other agencies and special interest groups having jurisdiction by law and/or special expertise, and on comments and recommendations obtained after coordination of the DPR. Reasons for this conclusion are, in summary:

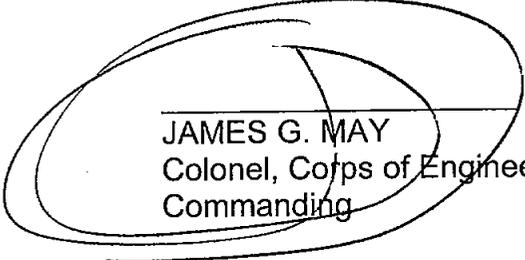
1. There will be no adverse impacts to endangered species of flora or fauna, wetlands or significant fish and wildlife populations or habitats. Recommendations of the U.S. Fish and Wildlife Service regarding the Coastal Barrier PR-39 have been adopted. No work will take place within Coastal barrier PR-39.
2. Water quality will not be adversely affected. Puerto Rico water quality standards will be met and a Water Quality Certificate (WQC) will be obtained from the Puerto Rico Environmental Quality Board.
3. The U.S. Army Corps of Engineers has determined that the project is consistent with the Puerto Rico Coastal Management Program. A Determination of Consistency is included in this EA. Puerto Rico Planning Board concurrence with the determination is expected, because no significant coastal resources will be affected, and no Puerto Rico or Federal agency has objected.
4. A level-1 survey and assessment for the presence of hazardous, toxic or radiological waste materials (HTRW), indicated no known or suspected materials in the project footprint.
6. Public benefits include the continued operation of an important local source of employment, and safer operating conditions that will preclude an oil tanker from running aground and causing contamination of the harbor with spilled oil. Adverse effects are temporary, will occur during construction, and include

incidental noise and vehicular exhaust fumes. Construction activities will be planned, scheduled and sequenced to minimize adverse effects.

This FONSI and EA were prepared at the request of the Puerto Rico Ports Authority. It does not intend to fulfill or fulfills the requisites under NEPA for issuance of a DA permit. A DA permit will be applied for separately by the Puerto Rico Ports Authority.

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

4 FEB 02  
Date

  
JAMES G. MAY  
Colonel, Corps of Engineers  
Commanding

DECEMBER 2001

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# **Environmental Assessment**

**DREDGING NAVIGATIONAL CHANNEL AND  
TURN BASIN  
YABUCOA HARBOR  
Yabucoa, Puerto Rico**

**ENVIRONMENTAL ASSESSMENT  
ON  
DREDGING THE PORT OF YABUCOA  
YABUCOA, PUERTO RICO**

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# **ENVIRONMENTAL ASSESSMENT ON DREDGING THE PORT OF YABUCOA YABUCOA, PUERTO RICO**

## **1.0 SUMMARY**

1.1 Situation. The harbor and port of Yabucoa, Puerto Rico, contains the secondary petroleum product off loading facilities associated with the Puerto Rico Sun Oil Company Refinery further inland. A risk currently exists of a tanker running aground in the shallow waters of the Yabucoa harbor. This would result in impacts to the environment of the harbor area. The area to be dredged consists of a -50 foot deep by 700-foot wide entrance channel and a turning basin 1000 feet in diameter. All dredged material has been analyzed and found to be suitable for Ocean dredged material disposal. The shoreline vegetation of the existing shoreline consists of coconut palms, red mangrove, buttonwood mangrove, hurricane grass, and sea ox eye daisy. The water does not visually evidence any turbidity or contaminant presence.

1.2 Major Findings and Conclusions. These proposed action is in the National interest and can be constructed while protecting the human environment from unacceptable impacts. Benefits of the proposed action would be the prevention of possible tanker grounding and associated crude oil spills. Adverse impacts would include temporary turbidity during the actual dredging operations. Measures taken to avoid, minimize, and compensate for adverse impacts include the deposition of dredged material in an approved offshore disposal site.

1.3 Alternatives. Alternatives being evaluated include No action, dredging, alternative site.

1.4 Issues Raised by the Public and Agencies. To be determined after circulation

1.5 Areas of Controversy. Areas of controversy at this time include possible adverse effects from turbidity caused by the dredging operations. These might affect existing fish species and underwater vegetation in the harbor and adjacent connected water bodies.

## 2.0 AUTHORIZATION AND PURPOSE

2.1 This is a 100% locally funded project funded and sponsored by the Puerto Rico ports Authority. The US Army Corps of Engineers (USACE) considers this as work for others.

2.2 A risk currently exists of a tanker running aground in the shallow waters of the Yabucoa harbor. This would result in impacts to the environment of the harbor area.

2.3 The Puerto Rico Ports Authority proposes to dredge the harbor to safely accommodate Tankers using the PRSOC facilities.

## 3.0 PROPOSED WORK

3.1 Dredge to a depth of -50 feet NGVD an area 700-foot wide entrance channel and a turning basin 1000 feet in diameter. All dredged material has been analyzed and found to be suitable for Ocean dredged material disposal. This material will be deposited in the designated ODMS located approximately 6 nautical miles east of Yabucoa harbor. Approximately 958,000 cubic yards of substrate will be dredged from 138 acres of sandy harbor bottom. The contractor is left free to select the type of dredging to be used, hopper dredging, or clamshell dredging. No blasting is projected since the material to be dredged is sand.

### 3.2 Alternative Selection

Alternative 1. No Action: The No action alternative would preserve an existing situation where situation in which a shallow harbor could cause an oil tanker to run aground, resulting in an oil spill and deleterious impacts to the existing environment.

Alternative 2. Alternate site. The current location of the Yabucoa harbor facilities service the nearby refinery. To use an alternate site would entail the prohibitively expensive construction of new facilities at another point in the shoreline, when facilities currently exist at Yabucoa. Yabucoa harbor is also the best-suited harbor in Southeastern Puerto Rico .

### Alternative 3. Dredging.

Alternative 3. Dredging. Dredging of the harbor facility to it's previous depth will allow the continuation of uninterrupted, environmentally safe, petroleum products offloading operations for the adjacent refinery.

#### 4.0 RESOURCES AFFECTED BY THE PROJECT

- 4.1 Essential Fish Habitat. Essential Fish Habitat. The Harbor of Yabucoa is considered to be EFH. Coordination with the NMFS was begun on August 9, 2001 and completed on September 10, 2001.
- 4.2 Fish and Wildlife Resources. Coordination with the FWS and the NMFS began on August 9, 2001 and completed on September 12, 2001.
- 4.3 Wetlands. The shoreline vegetation consists of several coconut stands. Red mangrove is found growing at approximately 20% of the shoreline and buttonwood mangrove dominates immediately behind. Other species found on site are hurricane grass and sea oxeye daisy. No vegetation is found growing in the existing riprap revetment behind the docking structures. No submerged vegetation or coral formations exist in the channel and turning basin that are to be dredged.
- 4.4 Endangered and Threatened Species. The waters around the Commonwealth of Puerto Rico are known to harbor the endangered West Indian manatee and several species of sea turtle.
- 4.5 Farms and Farmlands. Not Applicable.
- 4.6 Air and Water Quality and HTRW. The open harbor is in compliance with existing Commonwealth of Puerto Rico Air and Water Quality standards. Sampling done on March 30, 2001, did not show the presence of HTRW contaminants or any possible source.
- 4.7 Cultural Resources. Has been coordinated with the Commonwealth of Puerto Rico State Historic preservation officer (SHPO).
- 4.8 Recreation. There was no evidence of the site being used for any recreational activity.
- 4.9 Socio-Economic. The Puerto Rico Sun Oil Company refinery to which the harbor facilities are associated, is a mayor source of employment in Yabucoa. No Historic or cultural properties are expected to exist in the area to be dredged and which is currently transited by ships.
- 4.10 Cumulative Effects. No source of environmental cumulative impacts were detected. On site inspection, no escapes from the tankers present were detected.

## 5.0 ENVIRONMENTAL CONSEQUENCES

- 5.1 Essential Fish Habitat. The temporary turbidity caused by the dredging operations in Yabucoa Harbor is not expected to impact adversely on any existing EFH associated with the Harbor of Yabucoa. EFH coordination with the NMFS is ongoing
- 5.2 Fish and Wildlife Resources. No consequences are expected. Temporary turbidity and dredged sediment deposition in an existing approved disposal area will not cause an adverse impact on any existing Fish or Wildlife resource. Coordination With the FWS and the NMFS was begun on August 9, 2001 and completed on September 12, 2001, and September 10, 2001, respectively.
- 5.3 Wetlands. The dredging of the existing Yabucoa Harbor navigational channel and turning basin will not result in a net loss of wetlands.
- 5.4 Endangered and Threatened Species. Standard West Indian manatee protection conditions and conditions for the protection of sea turtles will be specified to the contractor, precluding any adverse impacts to those species. The NMFS indicated the possible risk hopper dredging might pose for sea turtles, but the standard sea turtle protection conditions for Puerto Rico which will be part of the work specifications, address both the instance of clamshell bucket dredging and hopper barge dredging.
- 5.5 Farms and Farmlands. Not applicable
- 5.6 Air, water quality, and HTRW. No effect.
- 5.7 Cultural Resources. No resources on site. Therefore, no effect.
- 5.8 Recreation. No Impact.
- 5.9 Socio-Economic. The proposed dredging work will allow continued unloading of the oil tankers, keeping the refinery in operation and safeguarding that source of employment in the area.
- 5.10 Cumulative Effects. None are expected. An increase in turbidity is the only effect and this will be temporary.

## 6.0 COMPLIANCE WITH FEDERAL LAWS, REGULATIONS AND POLICIES

### 6.1 National Environmental Policy Act of 1969

Environmental information on the project has been compiled and this Environmental Assessment, has been prepared. So far, this project is in compliance with the National Environmental Policy Act.

### 6.2 ENDANGERED SPECIES ACT OF 1973

Consultation under the Endangered Species Act (Section 7) was initiated with the NMFS and the USFWS on August 9, 2001.

### 6.3 FISH AND WILDLIFE COORDINATION ACT OF 1958

This project is was coordinated with the U.S. Fish and Wildlife Service (USFWS). A Coordination Act Report (CAR) by the USFWS is not deemed necessary at this point.

### 6.4 NATIONAL HISTORIC PRESERVATION ACT OF 1966

Consultation with the Puerto Rico State Historic Preservation Officer (SHPO), have been conducted in accordance with the National Historic Preservation Act, as amended; the Archeological and Historic Preservation Act, as amended and Executive Order 11593. The project will not affect historic properties included in or eligible for inclusion in the National Register of Historic places. The project is in compliance with each of these Federal laws in accordance with the SHPO letter dated November 29, 2001.

### 6.5 CLEAN WATER ACT OF 1972

The project is in compliance with this Act. The waters of Yabucoa harbor are currently considered to be in compliance with the Clean Water Act (CWA), Section 404(b). Dredging operations are not expected to induce a change in water quality. A Section 404(b) evaluation is included in this report as Appendix A.

### 6.6 CLEAN AIR ACT OF 1972

No air quality permits would be required for this project.

This project is being coordinated with U.S. Environmental Protection Agency (EPA) and is in compliance with Section 309 of the Act.

#### 6.7 COASTAL ZONE MANAGEMENT ACT OF 1972

A federal consistency determination in accordance with 15 CFR 930 Subpart C is included in this report as Appendix B. State consistency has been granted.

#### 6.8 Farmland Protection Policy Act of 1981.

No prime or unique farmland would be impacted by implementation of this project. This act is not applicable.

#### 6.9 WILD AND SCENIC RIVER ACT OF 1968

No designated Wild and Scenic river reaches would be affected by project related activities. This act is not applicable.

#### 6.10 MARINE MAMMAL PROTECTION ACT OF 1972

Incorporation of the safe guards used to protect threatened or endangered species during dredging and disposal operations would also protect any marine mammals in the area, therefore, this project is in compliance with the Act.

#### 6.11 ESTUARY PROTECTION ACT OF 1968

No designated estuary would be affected by project activities. This act is not applicable.

#### 6.12 FEDERAL WATER PROJECT RECREATION ACT

Not applicable. Yabucoa beach is not used as a recreational area.

#### 6.13 Fishery Conservation and Management Act of 1976

The project is under coordination with the National Marine Fisheries Service (NMFS) and is expected to be in compliance with the act.

#### 6.14 SUBMERGED LANDS ACT OF 1953

The project would occur on submerged lands of the Commonwealth of Puerto Rico. The project is under coordination with the State and is in compliance with the act.

#### 6.15 COASTAL BARRIER RESOURCES ACT AND COASTAL BARRIER IMPROVEMENT ACT OF 1990

There are no designated coastal barrier resources in the project area that would be affected by this project. These acts are not applicable. Coastal Barrier PR-39 lies to the North of the Proposed work, and will not be impacted by it.

#### 6.16 RIVERS AND HARBORS ACT OF 1899

The proposed work would not obstruct navigable waters of the United States. The project is in full compliance.

#### 6.17 ANADROMOUS FISH CONSERVATION ACT

No anadromous fish species will be affected. The project is under coordination with the National Marine Fisheries Service and is in compliance with the act.

#### 6.18 MIGRATORY BIRD TREATY ACT AND MIGRATORY BIRD CONSERVATION ACT

No migratory birds would be affected by project activities. The project is in compliance with these acts.

#### 6.19 MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT

The disposal activities addressed in this EIS have been evaluated under Section 404 of the Clean Water Act.

#### 6.20 MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT

Received a NMFS determination of no effect on September 10, 2001.

#### 6.21 E.O. 11990, PROTECTION OF WETLANDS

No wetlands would be affected by project activities. This project is in compliance with the goals of this Executive Order.

#### 6.22 E.O. 11988, FLOOD PLAIN MANAGEMENT

Not applicable.

#### 6.23 E.O. 12898, ENVIRONMENTAL JUSTICE

No impact.

#### 6.24 E.O. 13089, CORAL REEF PROTECTION

The dredging work is planned over a navigational route and turning basing previously dredged. No coral reefs exist in the channel and turning basin.

### 7.0 COMMITMENTS

7.1 Wetlands Mitigation. Wetlands will not be impacted by the proposed work.

7.2 Endangered and threatened species. All applicable monitoring and protection measures will be taken to ensure the protection of West Indian manatees, whales and Sea Turtles. These conditions will be part of the work specifications.

7.3 Cultural Resources Mitigation. None expected to be required.

7.4 Turbidity Monitoring. Increased turbidity within waters of the United States in the Harbor of Yabucoa will be temporary. It is not expected to create turbidity levels higher than those found on site at this time.

7.5 The PRPA will obtain any other required permits and authorizations.

## 8.0 PUBLIC COORDINATION AND COMMENT

The work was coordinated with the NMFS for EFH compliance and with both the FWS and NMFS for compliance with ESA Section 7. It is under coordination with the PR SHPO for compliance with the NHPA, and was coordinated with the PR Planning Board for CZM compliance.

## 9.0 LIST OF PREPARERS

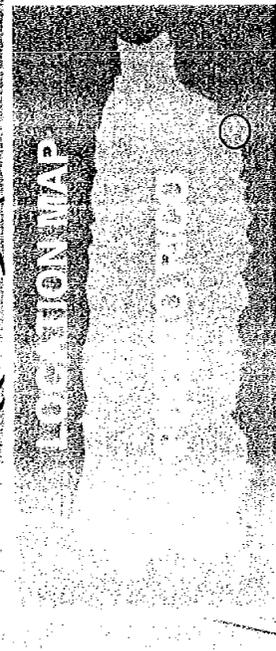
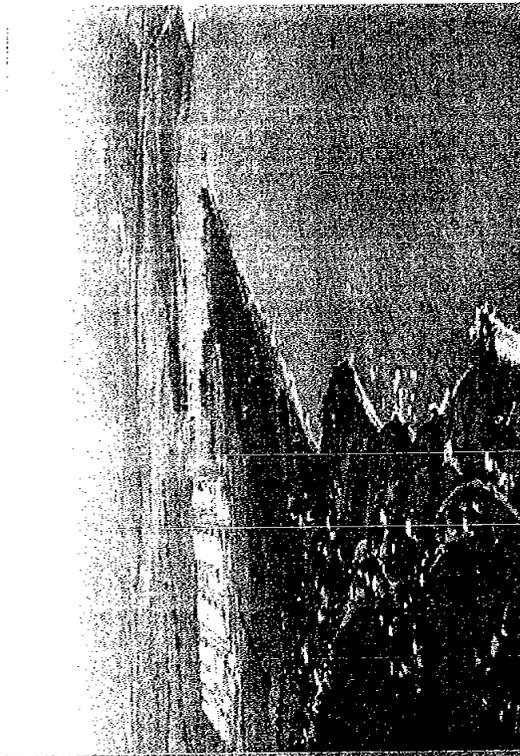
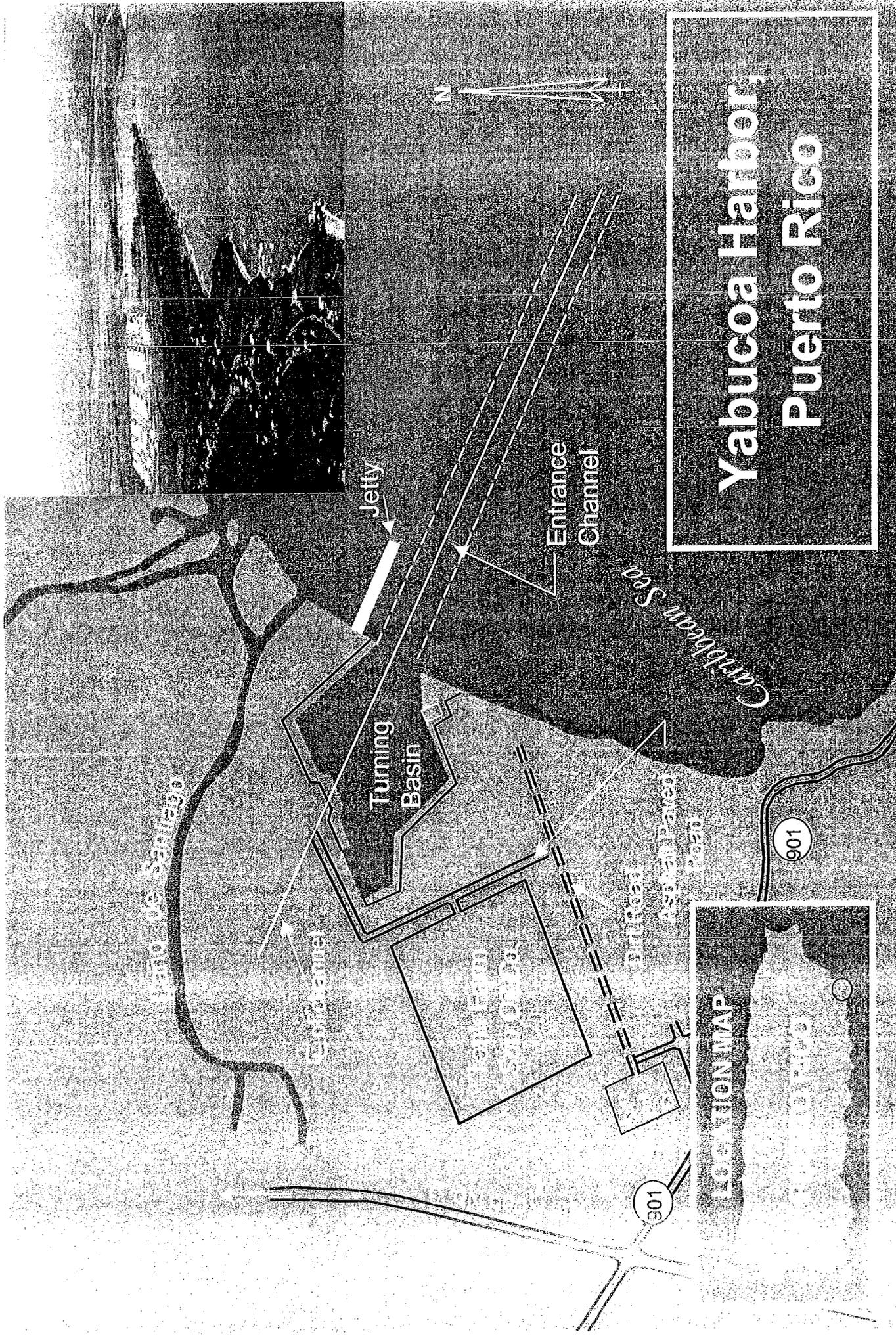
Esteban Jimenez, Biologist; David McCullough, Archeologist; Ivan Acosta, Environmental Engineer.

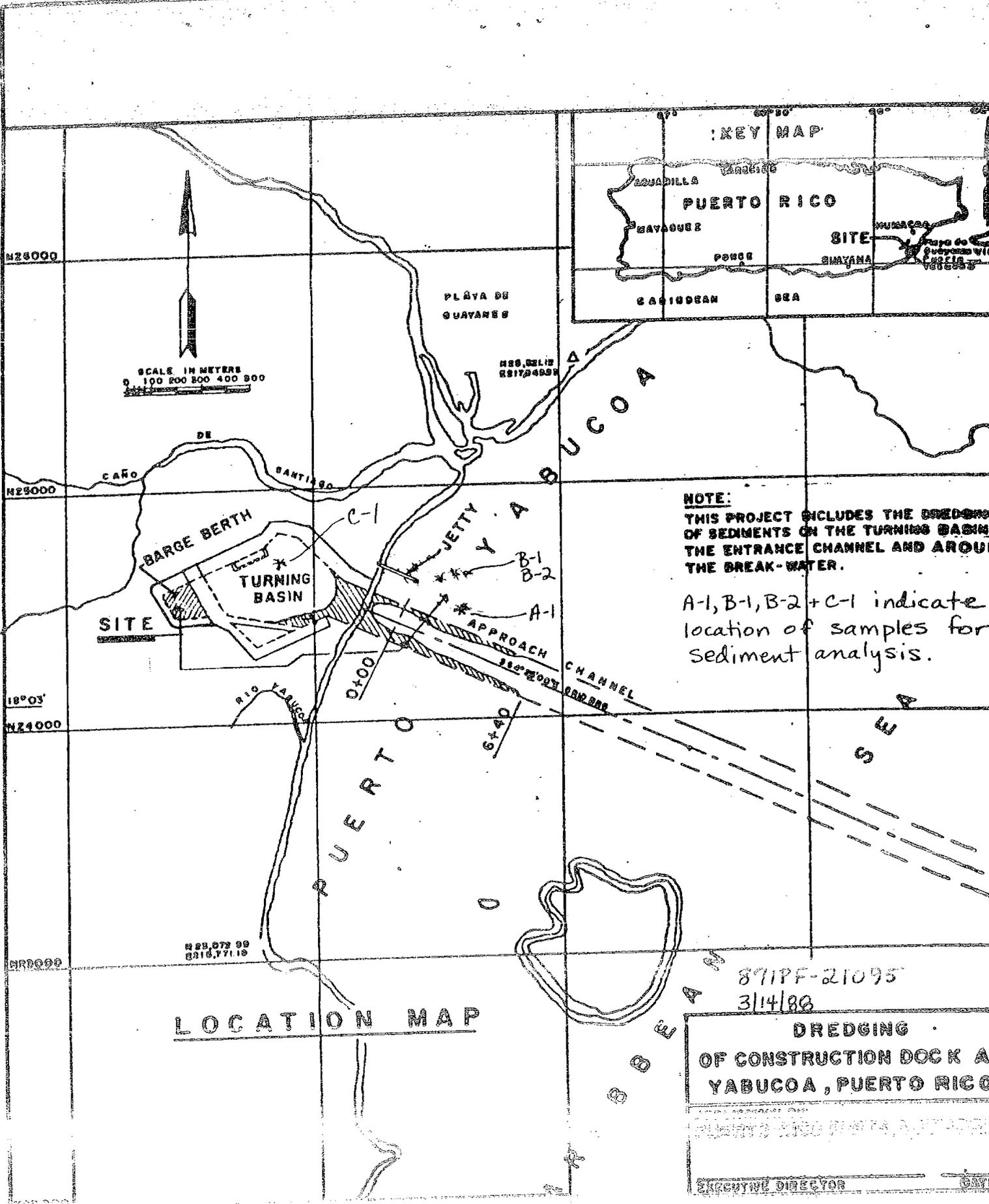
## 10.0 REFERENCES

Yabucoa Sun oil Company. Environmental Impact Report for Barge Loading Facility, Yabucoa Harbor, Yabucoa, Puerto Rico. November 15, 1973.

## 11.0 DRAWINGS AND PLANS

# Yabucoa Harbor, Puerto Rico





**NOTE:**  
 THIS PROJECT INCLUDES THE DREDGING OF SEDIMENTS ON THE TURNING BASIN, THE ENTRANCE CHANNEL AND AROUND THE BREAK-WATER.

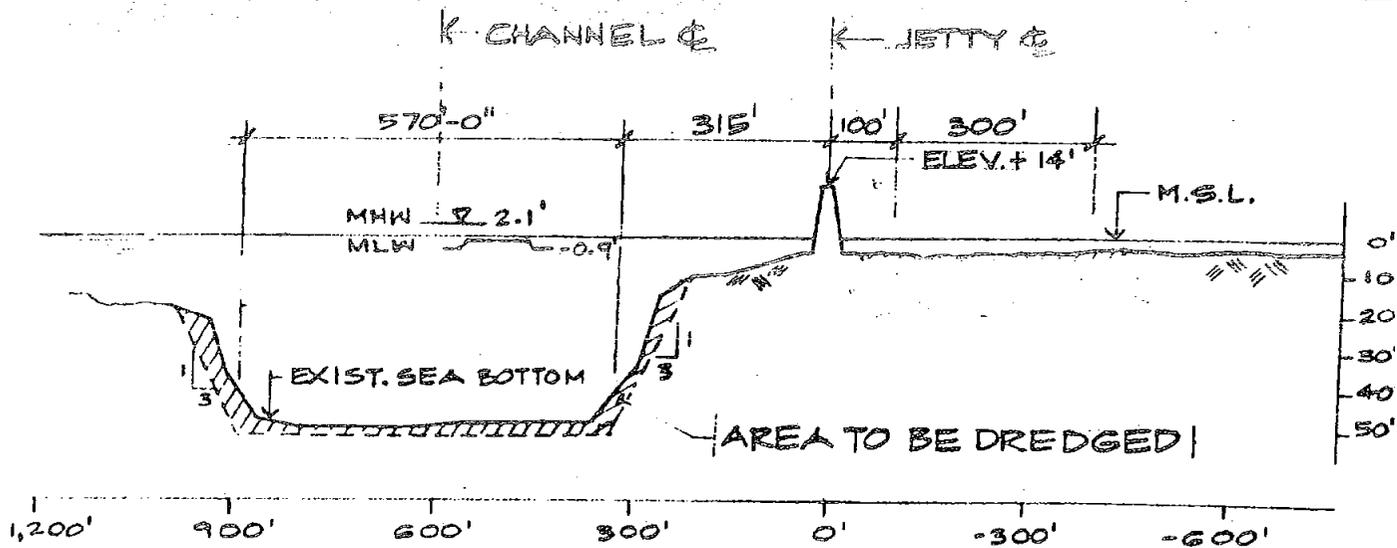
A-1, B-1, B-2 + C-1 indicate location of samples for sediment analysis.

**LOCATION MAP**

871PF-21095  
 3/14/88

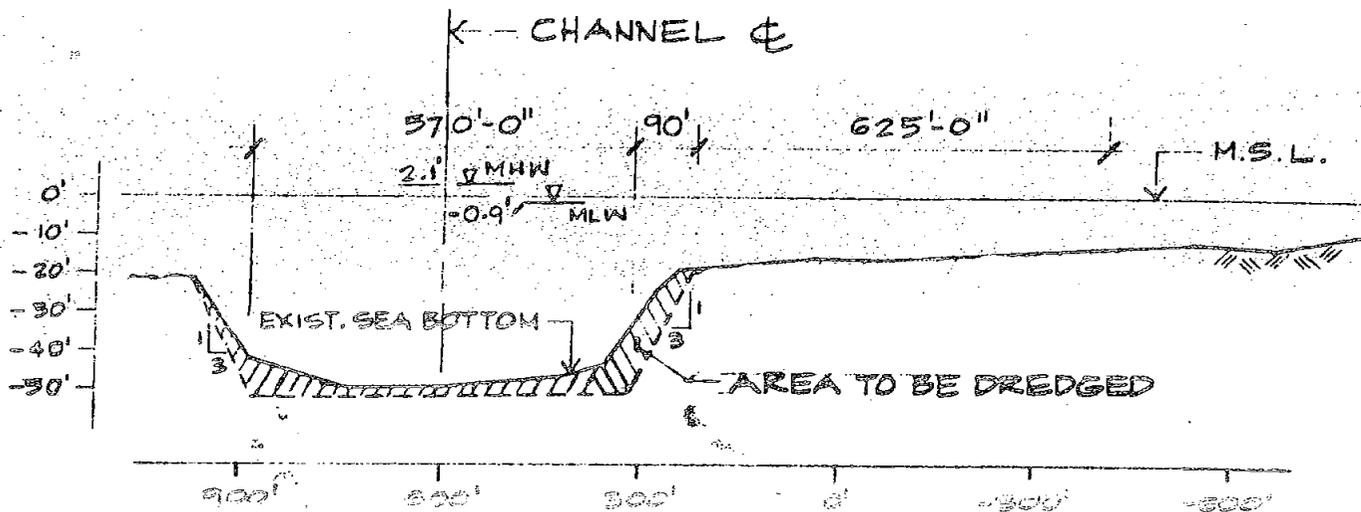
**DREDGING OF CONSTRUCTION DOCK AT YABUCA, PUERTO RICO**

EXECUTIVE DIRECTOR



SECTION AT JETTY MARKER

SCALES: HORZ. 1" = 300'  
 VERT. 1" = 50'



SECTION AT JETTY MARKER + 600'

SCALES: HORZ. 1" = 300'  
 VERT. 1" = 50'

MAINTENANCE DREDGING OF  
 YABUCOA HARBOR

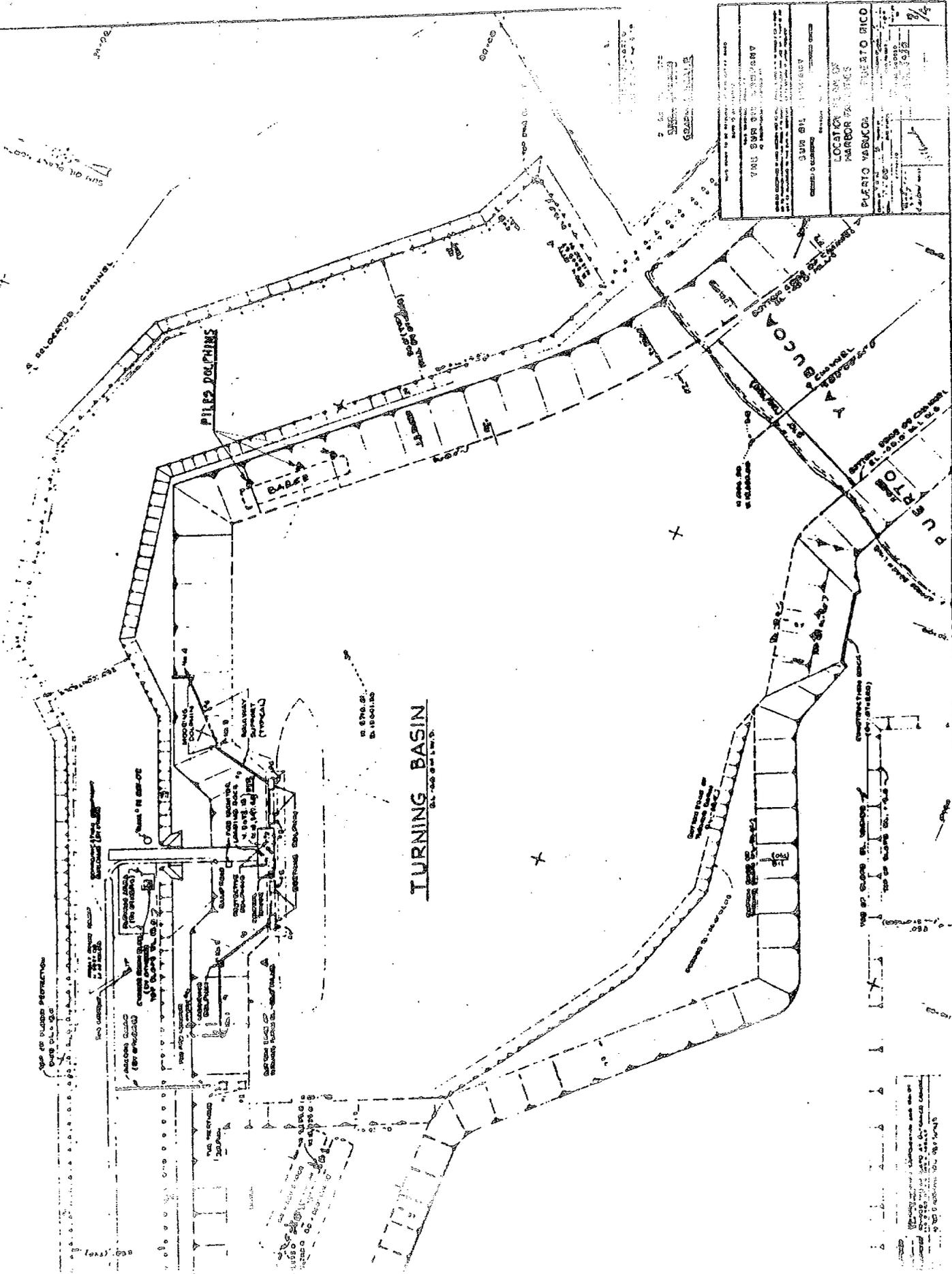
APPROVED BY: \_\_\_\_\_

EXECUTIVE DIRECTOR

DATE

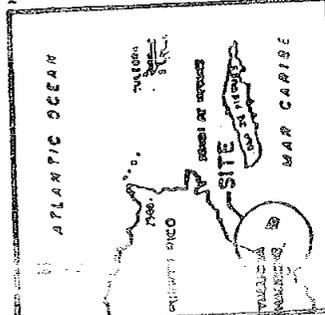
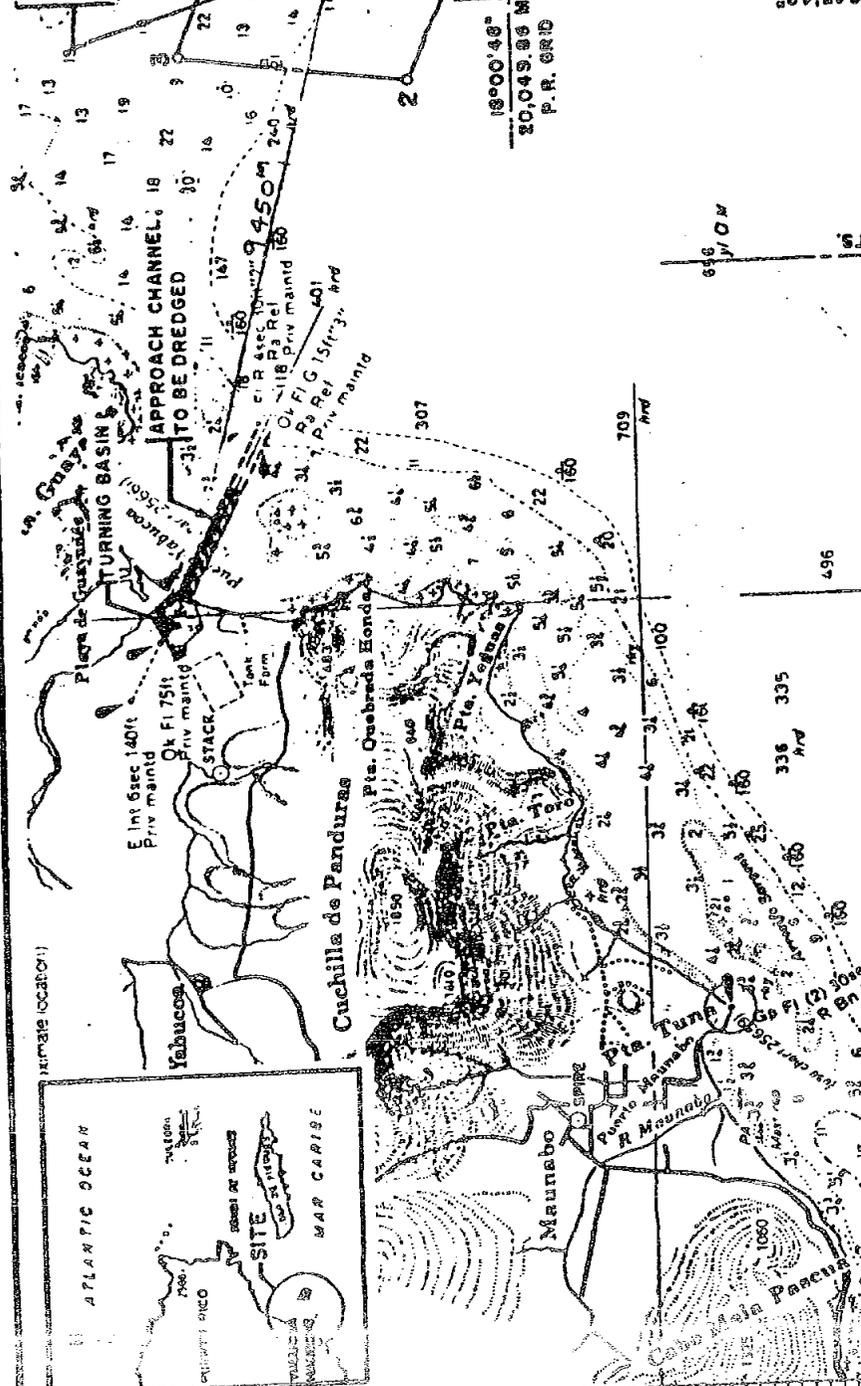
*atlas*

TITLE SHEET PROJECT NO. 100-100-100 SHEET NO. 100-100-100	
LOCATION HARBOUR OF PUNTA YUCUCA PUNTA YUCUCA, P.R.	
DATE 10/1/53	
DRAWN BY J. H. ...	
CHECKED BY ...	
SCALE 1" = 100'	



NOT TO SCALE  
 DIMENSIONS ARE APPROXIMATE  
 SEE SPECIFICATIONS FOR DETAILS

INTERMEDIATE DISPOSAL SITE  
AS APPROVED BY EPA  
40 CFR § 228.12  
MAY 11, 1979



SPOIL AREA DATA (HISTORICAL SITE)			
CORNER NO.	COORDINATES		DEPTH (FT.)
	Y	X	
1	65° 44' 23" W	18° 00' 54" N	1236
2	65° 45' 58" W	18° 01' 33" N	1440
3	65° 43' 42" W	18° 03' 12" N	78
4	65° 43' 43" W	18° 02' 30" N	480

1003  
SOUNDINGS IN FATHOMS - SCALE 1:100,000  
MAINTENANCE DREDGING AND SPOIL AREA  
YABUCOA HARBOR YABUCOA, PUERTO RICO

APPLICATION BY:  
PUERTO RICO PORTS AUTHORITY

**EXHIBIT "A"**

PURPOSE:  
MAINTENANCE DREDGING OF ENTRANCE CHANNEL.  
DATUM: MEAN HIGH WATER  
NOTES:  
SOUNDING ARE IN FATHOMS

(JOINS CHART 25677)

## 12.0 APPENDIXES

### 12.1 Section 404(b) Evaluation, Water Quality Certification

Pending Completion of this Environmental Evaluation

#### SECTION 404(b) EVALUATION

##### I. Project Description

- a. Location. The proposed work will be performed at Yabucoa Harbor, Puerto Rico.
- b. General Description. The proposed plan calls for dredging approximately 6 million cubic yards of material from 3.3 acres of submerged sandy navigational thoroughfare.
- c. Authority and Purpose. Section 107, navigation. The Purpose is to prevent an oil tanker running aground and causing a spill, with the accompanying environmental damage.
- d. General Description of Dredged or Fill Material.
  - (1) General Characteristics of Material. Sand
  - (2) Quantity of Material. Six million cubic yards.
  - (3) Source of Material. Sandy bottom of the Yabucoa Harbor access channel and turning basin.
- e. Description of the proposed Discharge Site.
  - (1) Location. Yabucoa ODMS 6 nautical miles offshore from the harbor.
  - (2) Size. 847.5 acres
  - (3) Type of Site. Approved offshore disposal marine site.
  - (4) Type of Habitat. Bare sand.
  - (5) Timing and Duration of Discharge. To be determined.

f. Description of Disposal Method. Dredging by either clamshell bucket or hopper dredge and subsequent gravity disposal in the dredging area.

## II. Factual Determinations

### a. Physical Substrate Determinations.

- (1) Substrate Elevation and Slope. -50 feet NGVD.
- (2) Sediment Type. Silty Sand.
- (3) Dredge/Fill Material Movement. Barge.
- (4) Physical Effects on Benthos. No permanent effect expected.  
Temporary turbidity will not have an effect.

### b. Water Circulation, Fluctuation and Salinity Determination.

Temporary increase in turbidity during dredging and disposal.

### d. Suspended Particulate/Turbidity Determinations.

Temporary increase in suspended particles.

### e. Contaminant Determinations.

No contaminants are known.

### f. Proposed Disposal Site Determinations.

- (1) Mixing Zone Determination. Not applicable.
- (2) Determination of Compliance with Applicable Water Quality Standards. Will comply with applicable standards.
- (3) Potential Effects on Human Use Characteristics.

No effect.

g. Determination of Cumulative Effects on the Aquatic Ecosystem.  
There will be no cumulative effects that result in mayor impairments of water quality.

h. Determination of Secondary Effects on the Aquatic Ecosystem.

There will be no secondary effects that result in mayor impairments of water quality.

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 of Yabucoa Harbor 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.

## 12.2 CZM Consistency

CZM consistency granted December 10, 1987, under number  
CZ-88-1021-039



COMMONWEALTH OF PUERTO RICO  
OFFICE OF THE GOVERNOR  
PUERTO RICO PLANNING BOARD

Minillas Governmental Center, North Bldg.  
De Diego Ave, Stop 22  
P.O. Box 41119, San Juan, P.R. 000940-9985

CERTIFICATE OF PROJECT CONSISTENCY WITH THE  
PUERTO RICO COASTAL MANAGEMENT PROGRAM

DATE: December 10, 1987

NAME OF APPLICANT: Eng. Lionel del Valle

ADDRESS: Puerto Rico Ports Authority  
G. P.O. Box 2829  
San Juan, Puerto Rico 00936-2829

PROJECT DESCRIPTION:

Maintenance dredging of entrance channel,  
turning basin, barge berthing area and  
sediments cast of the existing jetty.

PROJECT LOCATION:

Yabucoa Harbour  
Yabucoa, P.R.

TYPE OF PROJECT:  Federal activity  
 Activity requiring a federal license or permit  
 Federal assistance to State or Local Government

FEDERAL ADMINISTERING AGENCY: -----

PROGRAM IDENTIFICATION: -----

COASTAL ZONE APPLICATION IDENTIFIER: CZ-88-1021-039

CLEARINGHOUSE CERTIFICATION:

The Puerto Rico Planning Board, the designated state agency for administering Federal consistency procedures in Puerto Rico, CERTIFIES that it has received the notification and supporting documents related to the above project. As a result of an analysis of the comments by relevant agencies of the Government of Puerto Rico, the Planning Board concurs with  objects to  the consistency determination relating to the proposed project.

- 2 -

Coastal Zone Application  
Identifier Number CZ-88-1021-039

COMMENTS AND ADDITIONAL INFORMATION

The Department of Natural Resources has no objection to the proposed project, it is consistent with the Puerto Rico Coastal Zone Management Program.

The State Historic Preservation Office endorses the project. Nevertheless, if any unrecorded cultural resources (historic or prehistoric) be encountered during the works, the applicant must notify this Office so that they may take appropriate steps under 36 CFR, Part 800.11.

PUERTO RICO PLANNING BOARD  
EXECUTIVE ORDER 12372



---

Patria G. Custodio  
Chairperson

*COB*  
JR/COB/cvr

### 12.3 FWS CAR Coordination

Coordinated on August 9, 2001. And by means of this EA



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Boqueron Field Office  
P.O. Box 491  
Boqueron, Puerto Rico 00622



PD

September 12, 2001

Mr. James C. Duck  
Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 322320-0019

**RECEIVED**

SEP 21 2001

JACKSONVILLE DISTRICT  
USACE

Re: Dredging of the Yabucoa Harbor,  
Yabucoa, Puerto Rico

Dear Mr. Duck:

Thank you for your letter of August 9, 2001, requesting information on threatened and endangered species in the area of Puerto Yabucoa in Yabucoa, Puerto Rico. The area to be dredged includes the 50 foot deep by 700 foot wide entrance channel and a turning basin 1000 feet in diameter. The dredged materials were determined to be suitable for ocean disposal.

The following species under the jurisdiction of the Fish and Wildlife Service are found in the project area:

Antillean manatee  
Brown Pelican

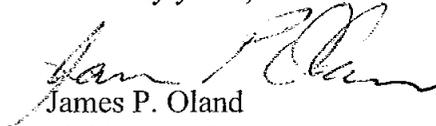
*Trichechus m. manatus*  
*Pelecanus o. occidentalis*

We are particularly concerned over the potential for adverse effects to the manatee during the dredging operation. As your letter states, specific measures must be developed to avoid such adverse effects during dredging. We are willing to work with you in their development. Similar measures have been developed for work in the San Juan Bay and for the work associated with the construction of the outfall for the Ponce Wastewater Treatment Plant.

In addition to dredging the navigation channel, the project calls for dredging to the north of the jetty. According to the section drawings provided, this area would be dredged from a depth of about 5' to a depth of 20'. It is possible that this area supports seagrass beds, although the water may frequently be turbid in the area due to river discharge from Caño Santiago and the Guayanés River. We recommend that a benthic survey be conducted in this area to determine the possible presence and extent of any seagrass beds or other marine resources or habitats. If seagrass beds are present, dredging that area should be avoided, if possible.

If you have any questions, please contact Beverly Yoshioka or Susan Silander of this office.  
Thank you for the opportunity to comment on this proposed project.

Sincerely yours,

  
James P. Oland  
Field Supervisor

bby

cc:

DNER, San Juan

COE, San Juan

EPA, San Juan

EQB, San Juan

NMFS, Boquerón

## 12.4 Coordination Correspondence.



**COMMONWEALTH OF PUERTO RICO**  
Office of the Governor

November 29, 2001

Control 01-8503

Mr. James C. Duck  
Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

**SHPO: 10-16-01-07 MAINTENANCE DREDGING AT YABUCOA HARBOR, YABUCOA, PUERTO RICO**

Dear Mr. Martínez:

Our Office has received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 102-575) as amended in 1992 and *36 CFR Part 800: Protection of Historic Properties* from the Advisory Council on Historic Preservation. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects on them.

Our records support your finding that no historic properties are located within the project's area of potential effects.

If you have any questions concerning our comments, please do not hesitate to contact us. Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,



Enid Torregrosa de la Rosa, MSHP  
State Historic Preservation Officer

ETD/MB/SMO/img



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

September 10, 2001

Mr. James C. Duck  
Chief, Planning Division  
Corps of Engineers, Jacksonville District  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Dear Mr. Duck:

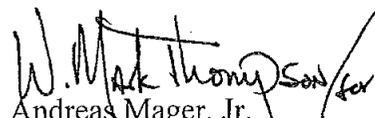
The National Marine Fisheries Service (NMFS) has reviewed your letter dated August 13, 2001, regarding the dredging of Yabucoa Harbor, in Yabucoa, Puerto Rico. The letter constitutes Essential Fish Habitat (EFH) coordination requirements of the Magnuson-Stevens Fishery Conservation Act and states that the project will not adversely affect NMFS trust resources.

Based on the information provided in the text of the letter, the area to be dredged consist of a 50-foot deep by 700-foot wide entrance channel and a turning basin 1000 feet in diameter. The material to be dredged is suitable for ocean disposal. However, the project drawings show that a shallow water area (+- 5 feet deep M.S.L.) around the existing jetty will be dredged to 20 feet deep. No information addressing the benthic resources within this shallow area is provided.

We do not anticipate that adverse impacts will occur to NMFS trust resources if dredging is limited to the existing basin and channel and have no EFH Conservation Recommendations regarding the project as described. However, if the project is to include dredging the shallow water area adjacent to the jetty, additional information addressing benthic resources should be provided in order to adequately assess impacts to NMFS trust resources and EFH.

We, therefore, request that you clarify this matter, and if needed, provide a detailed EFH Assessment for the project. Upon review, the NMFS will determine if it is necessary to provide EFH Consultation Recommendations on the overall project. If you have any questions regarding these comments, please contact Mark Thompson at 850/234-5061.

Sincerely,

  
W. Mark Thompson  
Assistant Regional Administrator  
Habitat Conservation Division





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

9721 Executive Center Drive North

St. Petersburg, FL 33702

(727) 570-5312; FAX (727) 570-5517

<http://caldera.sero.nmfs.gov>

SEP 10 2001

F/SER3:EGH:mdh

Mr. James C. Duck  
Chief, Planning Division  
Army Corps of Engineer, Jacksonville District  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This responds to your August 9, 2001, letter (received August 20, 2001) with reference to maintenance dredging of Yabucoa Harbor, Puerto Rico. The area to be dredged consists of a 50-ft deep by 700-ft wide entrance channel and a turning basin 1000 ft in diameter. You requested a listed of species likely to occur in the area and recommendations.

A species list for Puerto Rico coastal and oceanic waters is enclosed. Sea turtles are likely to be present in the project area, including greens, hawksbills, and loggerheads. Leatherbacks are less likely to be present but also may occur, especially in the outer reaches of the channel. Any dredging of the channel or turning basin with a hopper dredge will require preparation of a Biological Assessment by the Corps of Engineers (COE) assessing sea turtle (and other listed species) presence and potential adverse effects of the dredging activity, and formal consultation with NMFS culminating in NMFS issuance of a Biological Opinion. NMFS has previously determined that hopper dredging adversely affects sea turtles. Dredging by means other than hopper dredges would not require consultation under section 7 of the Endangered Species Act (ESA) since NMFS has previously determined that other dredge types--such as pipeline and clamshell dredges--are unlikely to adversely affect listed sea turtles by direct take.

The proposed dredging and associated turbidity effects could adversely impact seagrass beds and coral hardgrounds in the area. Seagrass beds and coral hardgrounds serve as foraging and developmental habitat to listed sea turtles, particularly greens and hawksbills. They may be indirectly, adversely affected by loss or degradation of this habitat in Yabucoa Bay. The effects of dredging up and resuspension of possibly contaminated bottom sediments should also be considered.

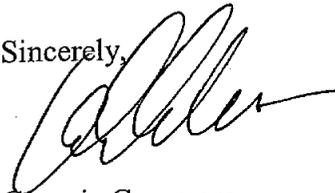
If blasting is contemplated, manatee-protection measures required by the U.S. Fish and Wildlife Service, including blast limits, safety zones, and observers, will also help protect sea turtles and may suffice to prevent adverse effects to them. NMFS will consider this further when additional information is received detailing the scope and particulars of the project.



In addition to the ESA section 7 consultation requirement, Federal action agencies must consult with NMFS' Habitat Conservation Division (HCD) on the potential effects of the proposed action on NMFS fishery resources, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCA) section 305 essential fish habitat consultation requirement (50 CFR 600.9 subpart k). We are forwarding a copy of this letter to HCD. They may be reached at 727/570-5317.

We appreciate the opportunity to comment on this project and work with the COE to ensure the protection of threatened and endangered species under NMFS purview, and to help the COE fulfill its mandate under the ESA. Please contact Eric Hawk or Bob Hoffman, fishery biologists, at 727-570-5312 if you have any questions or if we may be of assistance.

Sincerely,



Georgia Cranmore  
Assistant Regional Administrator  
Protected Resources Division

Enclosure

cc: F/SER4 - A. Mager  
F/PR3

o:\section7\informal\yabucoa.jax  
File: 1514-22 f.1. JAX

**Endangered and Threatened Species and Critical Habitats  
under the Jurisdiction of the National Marine Fisheries Service**

**Puerto Rico**

<b>Listed Species</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Date Listed</b>
<b>Marine Mammals</b>			
blue whale	<i>Balaenoptera musculus</i>	Endangered	12/02/70
finback whale	<i>Balaenoptera physalus</i>	Endangered	12/02/70
humpback whale	<i>Megaptera novaeangliae</i>	Endangered	12/02/70
sei whale	<i>Balaenoptera borealis</i>	Endangered	12/02/70
sperm whale	<i>Physeter macrocephalus</i>	Endangered	12/02/70
Caribbean monk seal	<i>Monachus tropicalis</i>	Endangered	03/11/67
<b>Turtles</b>			
green sea turtle	<i>Chelonia mydas</i>	Threatened <sup>1</sup>	07/28/78
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered	06/02/70
leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	06/02/70
loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	07/28/78

**Species Proposed for Listing**

None

**Designated Critical Habitat**

**Green sea turtle:** The waters extending seaward 3 nautical miles (5.6 km) from the mean high water line of Culebra Island, Puerto Rico.

MEMORANDUM FOR RECORD

13 September 2001

SUBJECT: Yabucoa Harbor Maintenance Dredging

1. On this day I had a conversation with Ms. Beverly Yoshioka of the US Fish and Wildlife Service, regarding their letter of 12 September (faxed copy).
2. Apparently, the FWS had mistakenly interpreted the drawings as presenting part of the dredging work occurring north of the existing jetty. Itself north of the harbor.
3. I explained to her that this was not so, and faxed an updated drawing.
4. Ms. Yoshioka stated that in that case, they would have no objection to the work, as we were also including Sea turtle (and West Indian manatee) protection conditions.

//////////////////////////////////NOTHING FOLLOWS//////////////////////////////////

ESTEBAN JIMENEZ  
BIOLOGIST

Planning Division  
Environmental Branch

OCT 24 2001

Ms. Georgia Cranmore  
Attn: Mr. Eric Hawk  
Assistant Regional Administrator  
Protected Resources Division  
National Marine Fisheries Service  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

Dear Ms. Cranmore:

Please refer to your letter of September 10, 2001, addressing the maintenance dredging (approximately 958,000 cubic yards of material from an approximately 138-acre area) of Yabucoa Harbor, Puerto Rico.

You state concerns for the existing populations of sea turtles in the area. You also indicate that if any dredging will take place using the hopper dredge method, then a Biological Assessment must be provided by the Corps of Engineers assessing the presence and potential impacts of the work on sea turtles and any other species identified in the area.

The methodology to be used, hopper dredging, clamshell dredging, or pipeline dredging, is at this time and point left open to the contractor. The Corps has assessed the area and the following Biological assessment of the area:

There is no documented use of the beach for sea turtle nesting. The bay is essentially occupied by the pipeline facilities used to discharge secondary or semi-refined petroleum products from inbound oil tankers. The constant presence of noise, vibration, and illumination in the Yabucoa Bay make it unlikely that the area will be used for nesting and egg deposition by sea turtles.

However, standard special conditions for the protection of sea turtles, West Indian manatees, and whales are included in the specifications for all work taking place in Puerto Rico. They will be included in this case, too.

The pathways to be dredged consist in the entrance and egress channel of the Yabucoa Harbor, as well as the turning basin. All are associated with the adjacent petrochemical refinery. The area to be dredged has been the route followed by inbound and outbound tanker ships during the continuous operation of the harbor. As such, it is not known to support any sea grass beds or coral reefs that may be affected by the

temporary turbidity or possible contaminant particle suspension that the dredging work may entail.

Explosives will not be used in the dredging operations. This is for environmental and safety reasons, given that the area is adjacent to Coastal Barrier PR 38 and supports existing facilities that handle highly flammable compounds.

All other required coordination under Section 7 of the Endangered Species Act and the Magnuson-Stevens Fishery Conservation Act, was initiated in August 9, 2001. The U.S. Fish and Wildlife Service has not identified the presence of any endangered or threatened species in the area.

Please refer any questions to Mr. Esteban Jiménez, at the letterhead address or at telephone number 904-232-2115.

Sincerely,

James C. Duck  
Chief, Planning Division

bcc:

CESAJ-DS  
CESAJ-DP-I (Rodriguez)  
CESAJ-DS-PD

Jimenez/CESAJ-PD-EP/2115  
Acosta/CESAJ-PD-EP  
Dugger/CESAJ-PD-E  
Rodriguez/CESAJ-DP-I  
Duck/CESAJ-PD

L:/GROUP/PDEP/JIMENEZ/2NMFSletterOFsep10

Government of Puerto Rico  
Office of the Governor  
Puerto Rico Planning Board  
Physical Planning Area  
Land Use Planning Bureau

**Application for Certification of Consistency with the  
Puerto Rico Coastal Management Program**

**General Instructions:**

- A. Attach a 1:20,000 scale, U.S. Geological Survey topographic quadrangular base map of the site.
- B. Attach a reasonably scaled plan or schematic design of the proposed object, indicating the following:
  - 1. Peripheral areas
  - 2. Bodies of water, tidal limit and natural systems.
- C. You may attach any further information you consider necessary for proper evaluation of the proposal.
- D. If any information requested in the questionnaire does not apply in your case, indicate by writing "N/A"(not applicable).
- E. Submit a minimum of seven (7) copies of this application.

**DO NOT WRITE IN THIS BOX**

Type of application: _____	Application Number: _____
Date received: _____	Date of Certification: _____
Evaluation result: <input type="checkbox"/> Objection <input type="checkbox"/> Acceptance <input type="checkbox"/> Negotiation	
Technician: _____	Supervisor: _____
Comments: _____	

7. Type of construction or other work proposed:

- drainage     channeling     landfill     sand extraction  
 pier     bridge     residential     tourist

others (specify and explain) Dredging

Description of proposed work: Dredge approximately 958,000 cu. yd.  
from 138 acres of sandy, unvegetated harbor bottom. The area  
comprises a 700 foot wide entrance channel and 1000-foot diameter  
turning basin. Dredging will be to a depth of -50 feet NGVD.

8. Natural, artificial, historic or cultural systems likely to be affected by the project

Place an X opposite any of the systems indicated below that are in the project area or its surroundings, which are likely to be affected by that activity. Indicate the distance from the project to any outside system that would likely be affected.

System	Within Project	Outside Project	Distance (meters)	Local name of affected system
beach, dunes				
marshes				
coral, reefs				
river, estuary				
bird sanctuary				

9. Indicate permits, approvals and endorsements of the proposal by Federal and Puerto Rican government agencies. Evidence of such support should be attached to the proposal.

	Yes	No	Pending	Application Number
a. Planning Board	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>CZ-88-1021-039 10 Dec 87</u>
b. Regulation and Permits Administration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Environmental Quality Board	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
d. Department of Natural Resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
e. State Historic Preservation Office	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>SHPO 10-16-01-07 29 Nov 0</u>
f. U.S. Army Corps of Engineers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
g. U.S. Coast Guard	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
h. Other (s) (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**CERTIFICATION**

I CERTIFY THAT (project name) Dredging Navigational Channel and Turning Basin, Yabucoa Harbor, PR is consistent with the Puerto Rico Coastal Zone Management Program, and that to the best of my knowledge the above information is true.

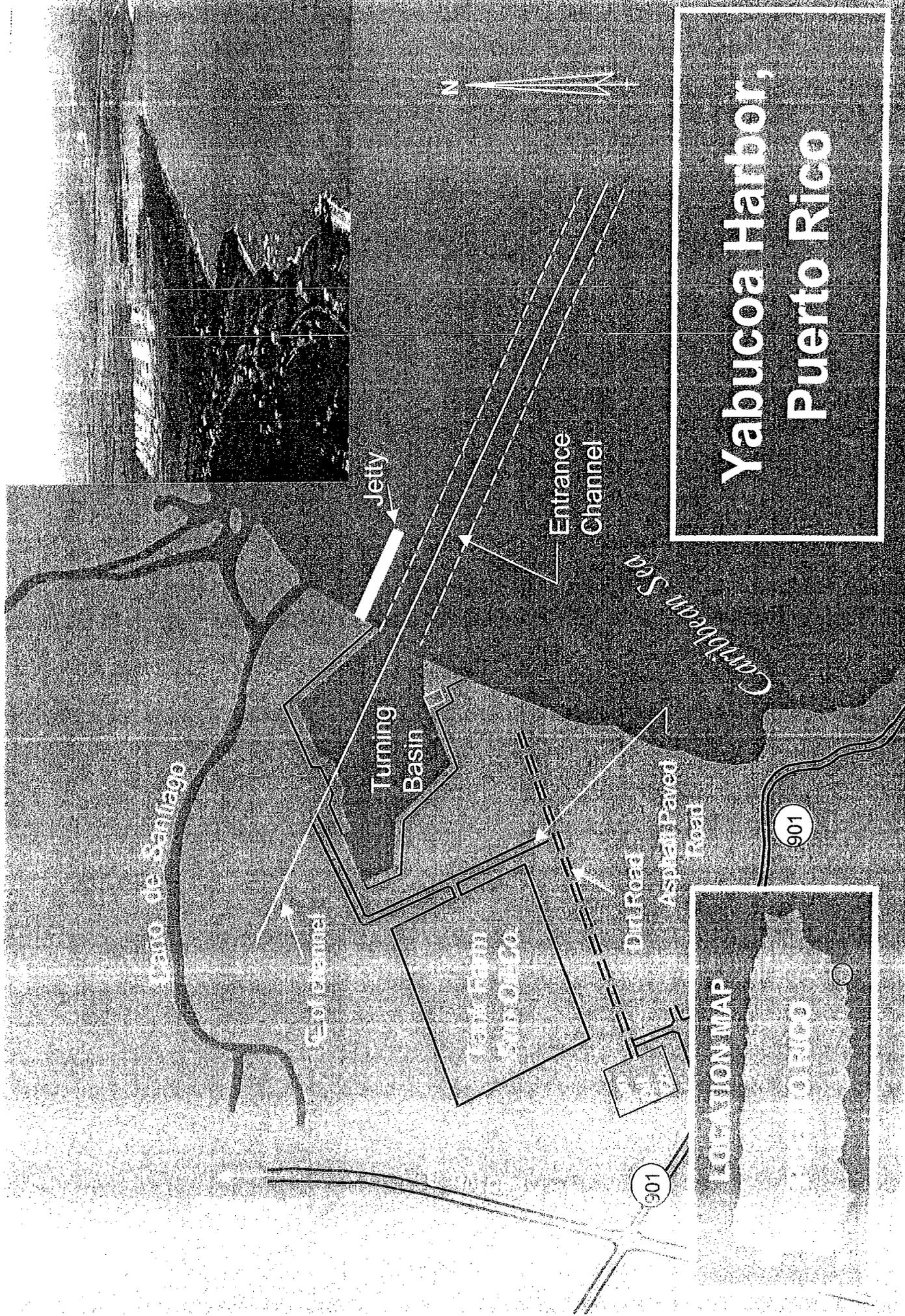
\_\_\_\_\_  
Name (legible)

\_\_\_\_\_  
Signature

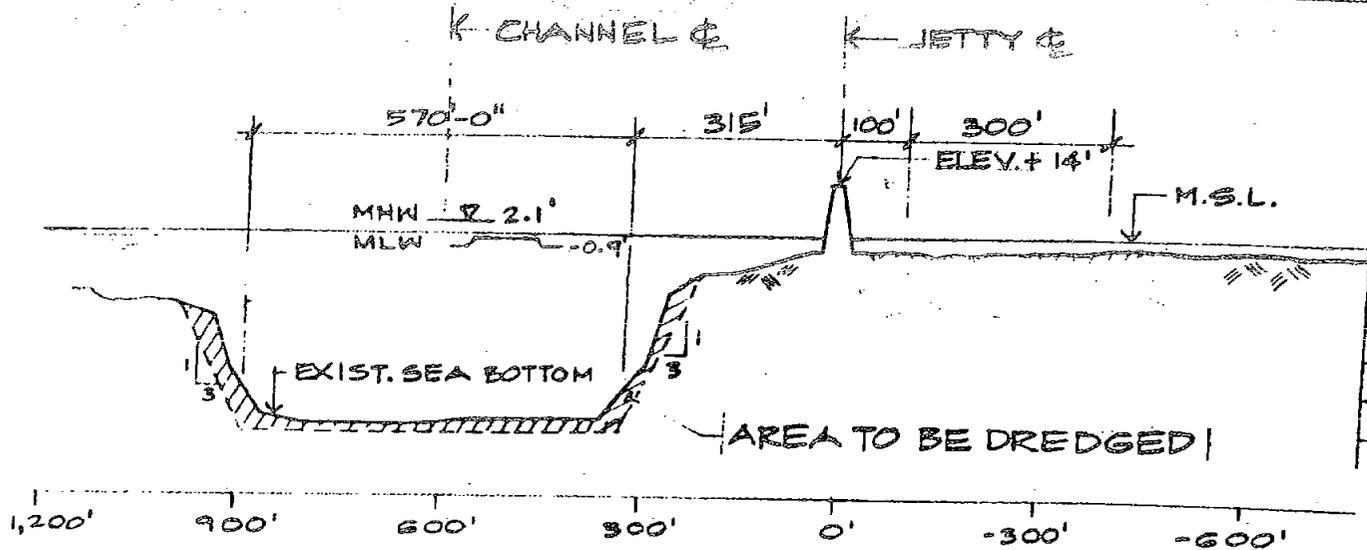
\_\_\_\_\_  
Position

\_\_\_\_\_  
Date

# Yabucoa Harbor, Puerto Rico

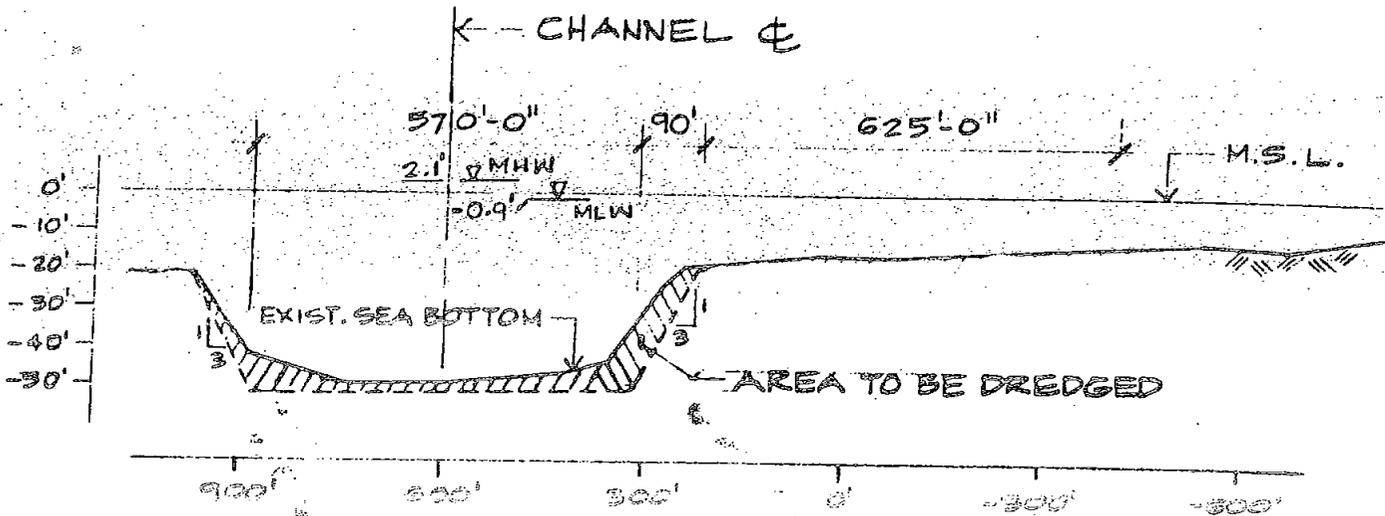






SECTION AT JETTY MARKER

SCALES: HORZ. 1" = 300'  
 VERT. 1" = 50'



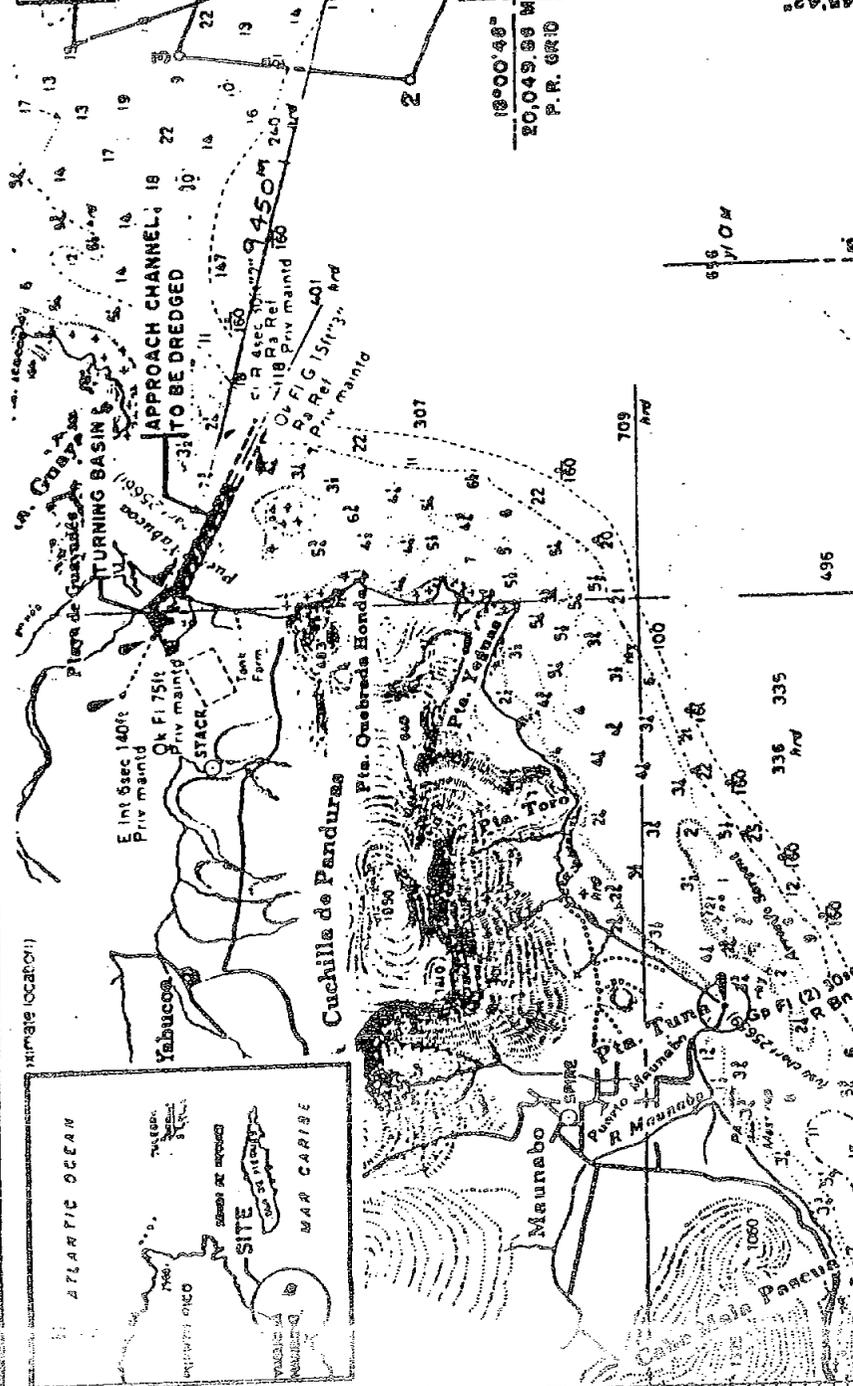
SECTION AT JETTY MARKER + 600'

SCALES: HORZ. 1" = 300'  
 VERT. 1" = 50'

MAINTENANCE DREDGING OF YABUCOA HARBOR	
DATE	BY
EXECUTIVE DIRECTOR	DATE



INTERIM DISPOSAL SITE  
AS APPROVED BY EPA  
40 CFR § 228.12  
MAY 10, 1979



SPOIL AREA DATA (HISTORICAL SITE)			
CORNER NO.	COORDINATES		DEPTH (FT.)
	Y	X	
1	65° 44' 25" W	18° 00' 54" N	1236
2	65° 45' 58" W	18° 01' 33" N	1440
3	65° 45' 42" W	18° 03' 12" N	78
4	65° 43' 43" W	18° 02' 30" N	480

1003  
SOUNDINGS IN FATHOMS - SCALE 1:100,000

**MAINTENANCE DREDGING AND SPOIL AREA  
YABUCOA HARBOR YABUCOA, PUERTO RICO**

APPLICATION BY:  
PUERTO RICO PORTS AUTHORITY

**EXHIBIT "A"**

PURPOSE:  
MAINTENANCE DREDGING OF ENTRANCE  
CHANNEL.

DATUM: MEAN HIGH WATER

NOTES:  
SOUNDING ARE IN FATHOMS

JOINS CHART 256771



Minillas Governmental Center, North Bldg.  
 De Diego Ave, Stop 22  
 P.O. Box 41119, San Juan, P.R. 000940-9985

CERTIFICATE OF PROJECT CONSISTENCY WITH THE  
 PUERTO RICO COASTAL MANAGEMENT PROGRAM

DATE: December 10, 1987

NAME OF APPLICANT: Eng. Lionel del Valle

ADDRESS: Puerto Rico Ports Authority  
 G. P.O. Box 2829  
 San Juan, Puerto Rico 00936-2829

PROJECT DESCRIPTION:

Maintenance dredging of entrance channel,  
 turning basin, barge berthing area and  
 sediments cast of the existing jetty.

PROJECT LOCATION: Yabucoa Harbour  
 Yabucoa, P.R.

TYPE OF PROJECT:  Federal activity  
 Activity requiring a federal license or permit  
 Federal assistance to State or Local Government

FEDERAL ADMINISTERING AGENCY: -----

PROGRAM IDENTIFICATION: -----

COASTAL ZONE APPLICATION IDENTIFIER: CZ-88-1021-039

CLEARINGHOUSE CERTIFICATION:

The Puerto Rico Planning Board, the designated state agency for administering Federal consistency procedures in Puerto Rico, CERTIFIES that it has received the notification and supporting documents related to the above project. As a result of an analysis of the comments by relevant agencies of the Government of Puerto Rico, the Planning Board concurs with  objects to  the consistency determination relating to the proposed project.

- 2 -

Coastal Zone Application  
Identifier Number CZ-88-1021-039

COMMENTS AND ADDITIONAL INFORMATION

The Department of Natural Resources has no objection to the proposed project, it is consistent with the Puerto Rico Coastal Zone Management Program.

The State Historic Preservation Office endorses the project. Nevertheless, if any unrecorded cultural resources (historic or prehistoric) be encountered during the works, the applicant must notify this Office so that they may take appropriate steps under 36 CFR, Part 800.11.

PUERTO RICO PLANNING BOARD  
EXECUTIVE ORDER 12372



---

Patria G. Custodio  
Chairperson

*COB*  
JR/COB/cvr



**COMMONWEALTH OF PUERTO RICO**  
Office of the Governor

November 29, 2001

Control 01-8503

Mr. James C. Duck  
Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, FL 32232-0019

**SHPO: 10-16-01-07 MAINTENANCE DREDGING AT YABUCOA HARBOR, YABUCOA, PUERTO RICO**

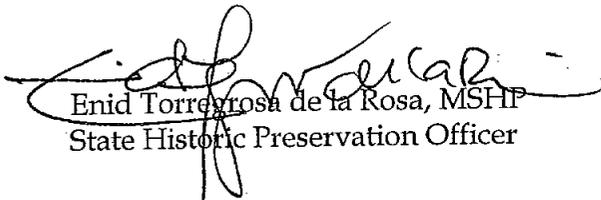
Dear Mr. Martínez:

Our Office has received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 102-575) as amended in 1992 and *36 CFR Part 800: Protection of Historic Properties* from the Advisory Council on Historic Preservation. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or reduce the project's effects on them.

Our records support your finding that no historic properties are located within the project's area of potential effects.

If you have any questions concerning our comments, please do not hesitate to contact us. Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. We appreciate your interest in the rescue and preservation of our national historical heritage and we reiterate our commitment to assist you in this endeavor.

Sincerely,

  
Enid Torresrosa de la Rosa, MSHPO  
State Historic Preservation Officer

ETD/MB/SMO/img



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Boqueron Field Office  
P.O. Box 491  
Boqueron, Puerto Rico 00622



September 12, 2001

Mr. James C. Duck  
Chief, Planning Division  
Department of the Army  
Jacksonville District Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 322320-0019

**RECEIVED**

SEP 21 2001

JACKSONVILLE DISTRICT  
USACE

Re: Dredging of the Yabucoa Harbor,  
Yabucoa, Puerto Rico

Dear Mr. Duck:

Thank you for your letter of August 9, 2001, requesting information on threatened and endangered species in the area of Puerto Yabucoa in Yabucoa, Puerto Rico. The area to be dredged includes the 50 foot deep by 700 foot wide entrance channel and a turning basin 1000 feet in diameter. The dredged materials were determined to be suitable for ocean disposal.

The following species under the jurisdiction of the Fish and Wildlife Service are found in the project area:

Antillean manatee  
Brown Pelican

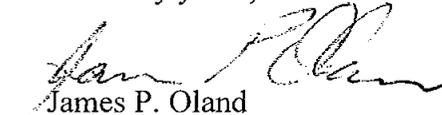
*Trichechus m. manatus*  
*Pelecanus o. occidentalis*

We are particularly concerned over the potential for adverse effects to the manatee during the dredging operation. As your letter states, specific measures must be developed to avoid such adverse effects during dredging. We are willing to work with you in their development. Similar measures have been developed for work in the San Juan Bay and for the work associated with the construction of the outfall for the Ponce Wastewater Treatment Plant.

In addition to dredging the navigation channel, the project calls for dredging to the north of the jetty. According to the section drawings provided, this area would be dredged from a depth of about 5' to a depth of 20'. It is possible that this area supports seagrass beds, although the water may frequently be turbid in the area due to river discharge from Caño Santiago and the Guayanés River. We recommend that a benthic survey be conducted in this area to determine the possible presence and extent of any seagrass beds or other marine resources or habitats. If seagrass beds are present, dredging that area should be avoided, if possible.

If you have any questions, please contact Beverly Yoshioka or Susan Silander of this office.  
Thank you for the opportunity to comment on this proposed project.

Sincerely yours,

  
James P. Oland  
Field Supervisor

bby

cc:

DNER, San Juan

COE, San Juan

EPA, San Juan

EQB, San Juan

NMFS, Boquerón



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, Florida 33702

September 10, 2001

Mr. James C. Duck  
Chief, Planning Division  
Corps of Engineers, Jacksonville District  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Dear Mr. Duck:

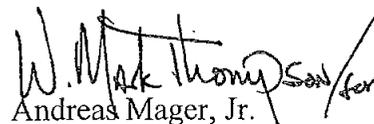
The National Marine Fisheries Service (NMFS) has reviewed your letter dated August 13, 2001, regarding the dredging of Yabucoa Harbor, in Yabucoa, Puerto Rico. The letter constitutes Essential Fish Habitat (EFH) coordination requirements of the Magnuson-Stevens Fishery Conservation Act and states that the project will not adversely affect NMFS trust resources.

Based on the information provided in the text of the letter, the area to be dredged consist of a 50-foot deep by 700-foot wide entrance channel and a turning basin 1000 feet in diameter. The material to be dredged is suitable for ocean disposal. However, the project drawings show that a shallow water area (+- 5 feet deep M.S.L.) around the existing jetty will be dredged to 20 feet deep. No information addressing the benthic resources within this shallow area is provided.

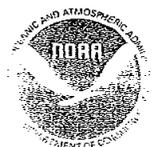
We do not anticipate that adverse impacts will occur to NMFS trust resources if dredging is limited to the existing basin and channel and have no EFH Conservation Recommendations regarding the project as described. However, if the project is to include dredging the shallow water area adjacent to the jetty, additional information addressing benthic resources should be provided in order to adequately assess impacts to NMFS trust resources and EFH.

We, therefore, request that you clarify this matter, and if needed, provide a detailed EFH Assessment for the project. Upon review, the NMFS will determine if it is necessary to provide EFH Consultation Recommendations on the overall project. If you have any questions regarding these comments, please contact Mark Thompson at 850/234-5061.

Sincerely,

  
W. Mark Thompson  
Andreas Mager, Jr.

Assistant Regional Administrator  
Habitat Conservation Division





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Southeast Regional Office  
9721 Executive Center Drive North  
St. Petersburg, FL 33702  
(727) 570-5312; FAX (727) 570-5517  
<http://caldera.sero.nmfs.gov>

SEP 10 2001

F/SER3:EGH:mdh

Mr. James C. Duck  
Chief, Planning Division  
Army Corps of Engineer, Jacksonville District  
P.O. Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Duck:

This responds to your August 9, 2001, letter (received August 20, 2001) with reference to maintenance dredging of Yabucoa Harbor, Puerto Rico. The area to be dredged consists of a 50-ft deep by 700-ft wide entrance channel and a turning basin 1000 ft in diameter. You requested a listed of species likely to occur in the area and recommendations.

A species list for Puerto Rico coastal and oceanic waters is enclosed. Sea turtles are likely to be present in the project area, including greens, hawksbills, and loggerheads. Leatherbacks are less likely to be present but also may occur, especially in the outer reaches of the channel. Any dredging of the channel or turning basin with a hopper dredge will require preparation of a Biological Assessment by the Corps of Engineers (COE) assessing sea turtle (and other listed species) presence and potential adverse effects of the dredging activity, and formal consultation with NMFS culminating in NMFS issuance of a Biological Opinion. NMFS has previously determined that hopper dredging adversely affects sea turtles. Dredging by means other than hopper dredges would not require consultation under section 7 of the Endangered Species Act (ESA) since NMFS has previously determined that other dredge types—such as pipeline and clamshell dredges—are unlikely to adversely affect listed sea turtles by direct take.

The proposed dredging and associated turbidity effects could adversely impact seagrass beds and coral hardgrounds in the area. Seagrass beds and coral hardgrounds serve as foraging and developmental habitat to listed sea turtles, particularly greens and hawksbills. They may be indirectly, adversely affected by loss or degradation of this habitat in Yabucoa Bay. The effects of dredging up and resuspension of possibly contaminated bottom sediments should also be considered.

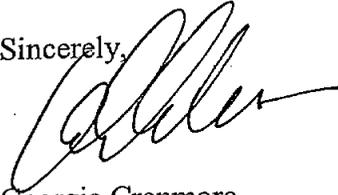
If blasting is contemplated, manatee-protection measures required by the U.S. Fish and Wildlife Service, including blast limits, safety zones, and observers, will also help protect sea turtles and may suffice to prevent adverse effects to them. NMFS will consider this further when additional information is received detailing the scope and particulars of the project.



In addition to the ESA section 7 consultation requirement, Federal action agencies must consult with NMFS' Habitat Conservation Division (HCD) on the potential effects of the proposed action on NMFS fishery resources, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSFCA) section 305 essential fish habitat consultation requirement (50 CFR 600.9 subpart k). We are forwarding a copy of this letter to HCD. They may be reached at 727/570-5317.

We appreciate the opportunity to comment on this project and work with the COE to ensure the protection of threatened and endangered species under NMFS purview, and to help the COE fulfill its mandate under the ESA. Please contact Eric Hawk or Bob Hoffman, fishery biologists, at 727-570-5312 if you have any questions or if we may be of assistance.

Sincerely,



Georgia Cranmore  
Assistant Regional Administrator  
Protected Resources Division

Enclosure

cc: F/SER4 - A. Mager  
F/PR3

o:\section7\informal\yabucoa.jax  
File: 1514-22 f.1. JAX

**Endangered and Threatened Species and Critical Habitats  
under the Jurisdiction of the National Marine Fisheries Service**

**Puerto Rico**

<b>Listed Species</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Date Listed</b>
<b>Marine Mammals</b>			
blue whale	<i>Balaenoptera musculus</i>	Endangered	12/02/70
finback whale	<i>Balaenoptera physalus</i>	Endangered	12/02/70
humpback whale	<i>Megaptera novaeangliae</i>	Endangered	12/02/70
sei whale	<i>Balaenoptera borealis</i>	Endangered	12/02/70
sperm whale	<i>Physeter macrocephalus</i>	Endangered	12/02/70
Caribbean monk seal	<i>Monachus tropicalis</i>	Endangered	03/11/67
<b>Turtles</b>			
green sea turtle	<i>Chelonia mydas</i>	Threatened <sup>1</sup>	07/28/78
hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Endangered	06/02/70
leatherback sea turtle	<i>Dermochelys coriacea</i>	Endangered	06/02/70
loggerhead sea turtle	<i>Caretta caretta</i>	Threatened	07/28/78

**Species Proposed for Listing**

None

**Designated Critical Habitat**

**Green sea turtle:** The waters extending seaward 3 nautical miles (5.6 km) from the mean high water line of Culebra Island, Puerto Rico.