

# SAN JUAN HARBOR, PUERTO RICO

## SUBMERGED AQUATIC VEGETATION MITIGATION ENVIRONMENTAL ASSESSMENT





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## EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers proposes to fill approximately 4 acres of certain dredged holes in Condado Lagoon to create habitat as mitigation for impacts of widening the Puerto Nuevo Channel in San Juan Harbor in 2001. The project would involve placing approximately 46,000 cubic yards of suitable material to a depth of -12 feet to -15 feet to create 1.2 acres of habitat for sea grass (*Halophila decipiens*) and marine macro-algae.

An earlier mitigation plan involved raising the bottom elevation of a portion of San Juan Harbor to support sea grass. This earlier mitigation plan presents (among other concerns) engineering concerns over the confinement of the material used for raising the elevation. Extensive and costly structures would be needed to contain the material and prevent migration of material into the navigation channel.

The fill material for the currently proposed mitigation plan would come from the recently shoaled areas of the La Esperanza Ecosystem Restoration project located along the western shore of San Juan Bay. In La Esperanza, one borrow source would be the north-facing opening into San Juan Bay. The east-facing opening could also provide some material if needed. Both of these areas have experienced substantial shoaling since the completion of the La Esperanza Ecosystem Restoration Project on May 20, 2005.

The filling of dredged holes in the Condado Lagoon was previously proposed in 2004 as a “beneficial use of dredged material” project under Section 204 of the Water Resources Development Act of 1992 (a Continuing Authorities Program). In addition, restoration of sea grass beds in Condado Lagoon would support a goal of the San Juan Bay Estuary Program’s Comprehensive Conservation and Management Plan.

The mitigation would involve the use of pipelines, boats, and other equipment. Activities in Condado Lagoon would be subject to the requirements and restrictions imposed by the Department of Natural and Environmental Resources (DNER). The placement of pipeline and the use of boats and equipment for the proposed mitigation could conflict with other uses for portions of Condado Lagoon. Portions of the lagoon and other project areas may experience a temporary increase in sedimentation and turbidity but this would be mostly limited to the deeper areas (the dredged holes).

The proposed action would not jeopardize the continued existence of any listed threatened or endangered species and would not destroy or adversely modify designated critical habitat (*Acropora* coral). On August 22, 2014, the Planning Board of the Commonwealth of Puerto Rico concurred that the proposed action is consistent with the Coastal Zone Management program (see Appendix B of the Environmental Assessment). The proposed action would comply with the guidelines pursuant to Section 404(b) of the Clean Water Act (see Appendix A of the Environmental Assessment). On January 14, 2015, the Environmental Quality Board certified the water quality for the project pursuant to Section 401 of the Clean Water Act. The proposed action would not impact any property eligible for inclusion in the National Register of Historic Places. The Essential Fish Habitat Consultation was completed by letter of



February 4, 2015, which includes Conservation Recommendations to avoid and minimize the impact of the pipeline to sea grass (see items (8) and (9) below).

Measures to eliminate, reduce, or avoid potential impacts include the following: (1) locating the borrow and fill sites outside of established coral reef areas, (2) providing a net gain of habitat for sea grass and other submerged vegetation, (3) avoiding eligible historic resources, (4) following standard manatee protection measures for any water based activity in manatee habitat, (5) following the sea turtle [and smalltooth sawfish] construction conditions (NMFS, March 23, 2006), (6) following the “Vessel Strike Avoidance Measures and Reporting for Mariners” (NMFS, Southeast Region, February 2008), (7) monitoring for and avoiding destruction of migratory birds (including eggs, chicks, and active nests) in nesting habitat, (8) locating the pipeline corridor to minimize impacts to sea grass and to avoid impacts to coral, (9) elevating the pipeline above the bottom where unavoidable sea grass is abundant (10) monitoring and managing turbidity, (11) geotechnical sampling to ensure suitability of borrow material, and (12) following the requirements of DNER for activities in Condado Lagoon.

The Notice of Availability of the draft Finding of No Significant Impact and Environmental Assessment was issued on May 23, 2014, to Federal, commonwealth, and local agencies and governmental officials. Also a scoping letter was issued on January 22, 2013. A public meeting was held on July 31, 2014 at the Museum of Contemporary Art (Museo de Arte Contemporáneo) in Santurce, Puerto Rico. A Notice of Intent to certify water quality was placed in a newspaper of local circulation (El Vocero) on November 28, 2014.



# FINAL ENVIRONMENTAL ASSESSMENT SAN JUAN HARBOR SUBMERGED AQUATIC VEGETATION MITIGATION, SAN JUAN, PUERTO RICO

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# ENVIRONMENTAL ASSESSMENT ON SAN JUAN HARBOR SUBMERGED AQUATIC VEGETATION MITIGATION, SAN JUAN, PUERTO RICO

## 1 PROJECT PURPOSE AND NEED

### 1.1 PROJECT AUTHORITY.

In response to requests from the Puerto Rico government, studies of the authorized San Juan Harbor Federal Navigation Project were completed and improvements were proposed in a Survey Report dated 1974. A Final Environmental Impact Statement (FEIS) was filed in 1976. The Congress of the United States authorized the preparation of a Phase I General Design Memorandum (GDM) in the Water Resources Development Act (WRDA) of 1976 (Public Law 94-587 dated 22 October 1976). The Phase I GDM and Supplemental Environmental Impact Statement (S-EIS) were prepared in 1982. The S-EIS incorporated new information provided by the U.S. Fish and Wildlife Service (FWS) on significant wildlife habitat areas, fisheries resources and submerged aquatic vegetation (SAV) in the Puerto Nuevo-Army Terminal channel area. The Congress authorized the deep draft navigation project recommended in the Phase I GDM in WRDA of 1986 (Public Law 99-662 dated 17 November 1986) (**Figure 1**). The San Juan Harbor improvements project authorized by WRDA of 1986 was re-authorized to include the recommendations made in the 1994 General Reevaluation Report (GRR) and Environmental Assessment (EA) by Section 301 of WRDA of 1996. The San Juan Harbor SAV mitigation is a component of the San Juan Harbor Federal Navigation Project reauthorized by Section 301 of the WRDA of 1996. The non-Federal sponsor for the project is the Puerto Rico Ports Authority (PRPA).

### 1.2 PROJECT LOCATION.

San Juan Harbor is located within the San Juan metropolitan area along the north coast of Puerto Rico. The Condado Lagoon is part of the San Juan Bay Estuary system (SJBES), connected to the San Juan Harbor by the San Antonio Channel and to the Atlantic Ocean through an opening known as El Boquerón. The Esperanza Peninsula is a low sandy spit located in the northwestern side of the San Juan Harbor (**Figure 2**).

### 1.3 PROJECT NEED OR OPPORTUNITY.

In 2001 the San Juan Harbor Federal Navigation Channel improvements were completed as re-authorized by Section 301 of WRDA of 1996. Mitigation is required for widening of the Puerto Nuevo Channel, where impacts to an estimated 1.2 acres of *Halophila decipiens* and marine macro-algae occurred.

#### 1.3.1 ORIGINALLY PROPOSED MITIGATION.

In order to determine the location and design of a mitigation site in the San Juan Harbor to compensate for the loss of SAV, the 2003 *San Juan Harbor Mitigation Baseline Survey and Conceptual Design Report* was developed and circulated to Federal and Commonwealth agencies for review and comment. As a result, the 2003 mitigation plan called for the creation of approximately 1.2 acres of suitable habitat (at appropriate depth for SAV) within a 10-acre fill



template within three years of placement of suitable sediment to support maturation of SAV (**Figure 3**). A combination of geotech-tubes, silt curtains and small riprap was recommended in order to stabilize and contain the material to be placed.

### 1.3.2 CURRENTLY PROPOSED MITIGATION.

In recent years, several meetings between the U.S. Army Corps of Engineers (Corps), Jacksonville District, PRPA (non-Federal sponsor), FWS, the National Marine Fisheries Service (NMFS), and the San Juan Bay Estuary Program (SJBEP) staff have been conducted to discuss the status of the San Juan Harbor SAV mitigation. During these meetings, the resource agencies have expressed concerns about the mitigation site location, as proposed in 2003 (**Figure 3**). Some of the resource agencies' concerns about the implementation of the mitigation near to the Puerto Nuevo Channel, are: 1) material stabilization to create and maintain the proposed shoal area, 2) impacts/perturbations to the mitigation from navigation and operation activities, 3) potential future expansion/widening of the channel that may impact the mitigation, and 4) likelihood of mitigation success at the proposed site. It was also recommended by the resource agencies to evaluate the relocation of the mitigation site and to consider the integration of the mitigation into the SJBEP Water Quality Improvement and Seagrass Restoration Project at the Condado Lagoon.

Restoration of seagrass beds in the Condado Lagoon is one of the goals of the SJBEP's Comprehensive Conservation and Management Plan (CCMP), Action Plan HW-2, completed in August 2000 (<http://www.estuario.org/index.php/ccmp-english>). The 102-acre (0.42 square kilometers) lagoon has suffered severe degradation of its water quality, benthic and fish habitat due to dredging operations during the 1950's (CCMP 2000). The lagoon was used as a "borrow area" to generate fill for nearby areas (**Figure 4**). As a result, tidal currents and wind action are not often enough to produce the adequate water circulation between the approximately 35 feet (10.8 m) deep bottom and surface waters, impairing the lagoon's water quality and living resources. The water quality within the deep areas of the Condado Lagoon is poor and there is no significant aquatic life due to the low levels of oxygen and reduced light penetration. Originally, it had an average depth of 7.6 feet (2.3 m) and did not exceed 23 feet (7 m) (CCMP 2000). Deep holes or depressions, such as the ones within the Condado Lagoon, typically act as sinks for organically enriched sediments and have very low dissolved oxygen levels near the bottom. Such conditions generally result in very low diversity of benthic flora and fauna, or in some cases the sediments are totally devoid of macrobiota (Haberer 2005).

The proposed source of sediments for the filling of the lagoon's artificial depressions would be from La Esperanza Peninsula located in the northwestern side of the San Juan Harbor. From 1962 to 1965, the San Juan Harbor Navigation Project was developed in San Juan Bay. This project included, among other works, the construction of the Puerto Nuevo Port facilities and the deepening and widening of the harbor's entrance channel, as well as the dredging of a new navigation channel, known today as the Puerto Nuevo Channel. A substantial amount of the dredged material from the development of these two channels was disposed at the northwestern section of the harbor, to protect Cataño's Bay View coastline from wave action and erosion. The two man-made islands created by the placement of dredged material eventually formed what is known today as La Esperanza Peninsula. Over the past 40 years, La Esperanza Peninsula has been migrating and changing in shape due to prevailing winds, tides, wave action, and annual swells produced by northern cold fronts. The eastern end of La Esperanza Peninsula curved



around to the southwest as it continued to move, forming a hook shape pointing to the southwest of Bay View. This long hook significantly impairs water circulation inside a shallow embayment by trapping and concentrating nutrients and sediment-laden water discharged by the Malaria Canal (SJBEP 2010). In 2005, the La Esperanza Peninsula was dredged by the Corps under the authority of Section 1135 of WRDA of 1986 as amended, to restore water quality of the Esperanza Cove and wildlife habitat on the Esperanza Peninsula. However, due to the littoral drift and wave action, the La Esperanza Peninsula is now in need of a maintenance dredging.

The compensatory mitigation proposed in this document consists of the beneficial use and placement of suitable dredged material from La Esperanza Peninsula Section 1135 project footprint into an artificial depression of approximately 4 acres within the Condado Lagoon. It is expected that providing appropriate elevations at 1.2 acres of the site will encourage SAV (e.g. seagrass) natural recruitment and also improve connectivity of the mitigation site to the adjacent seagrass bed community. Success for purposes of this mitigation is defined as achievement of 1.2 acres at the target elevation. The proposed base fill elevation is estimated to be between 12 feet (3.6 m) to 15 feet (4.5 m). It is estimated that approximately 46,000 cubic yards of suitable dredged material is needed to achieve these elevations. The proposed handling of the dredged material could involve several methods for transporting all suitable material from the La Esperanza Peninsula to the artificial depressions in the lagoon. A combination of scow barge and pumping through a floating and/or submerged pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon.

It is expected that increasing the area occupied by seagrass will enhance the fisheries of the Condado Lagoon, including species of commercial importance. Sport fishermen who currently use the San Antonio Bridge may benefit significantly from this action. Endangered species such as the green sea turtle (*Chelonia mydas*) and the West Indian (Antillean) manatee (*Trichechus manatus manatus*), which depend almost exclusively on seagrasses for their dietary needs, will be positively affected from an increase in their food supply. An increase in the living resources of the lagoon will enhance the recreational activities that can be performed by local residents and the tourist staying at nearby hotels. Water quality also will improve through the functions provided by seagrasses, such as sediment stabilization and oxygen production (CCMP 2000).





Figure 1. San Juan Harbor Federal Navigation Project.





Figure 2. Location Map of the San Juan Harbor and SJBES.

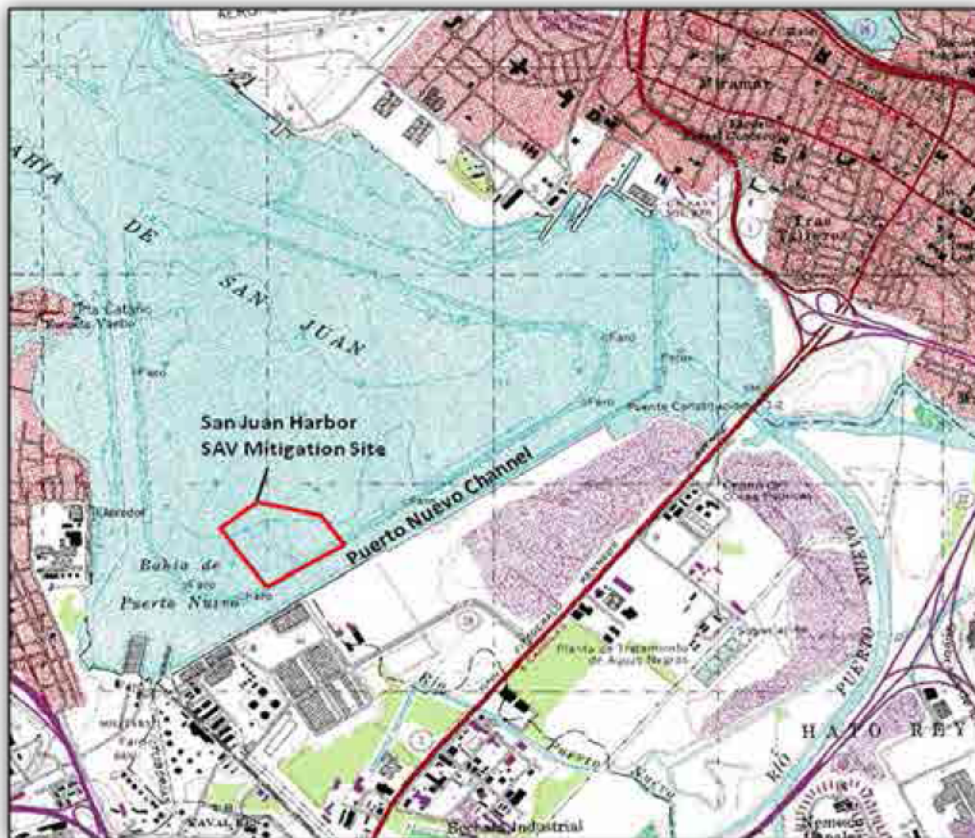


Figure 3. Location of the Mitigation Site Proposed in 2003.



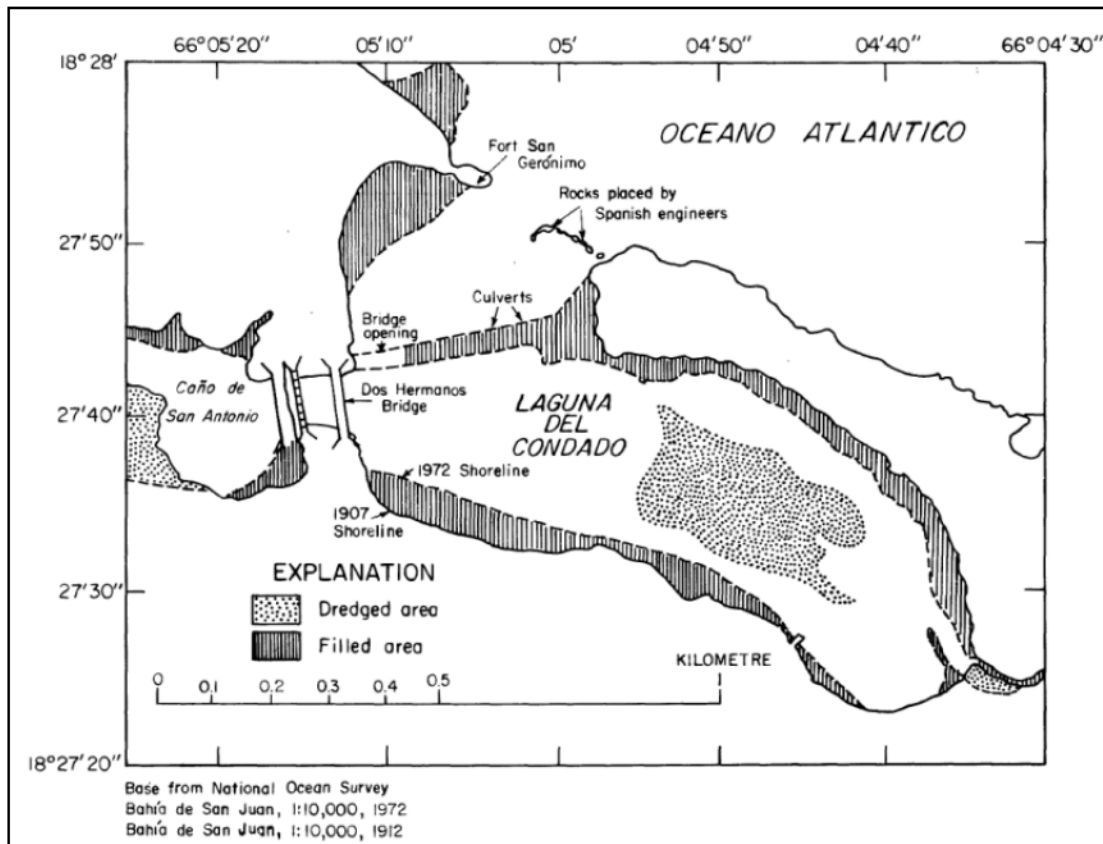


Figure 4. Comparison of 1900 and 1972 shorelines and areas of internal dredging of Condado Lagoon (USGS 1976).

## 1.4 AGENCY GOAL OR OBJECTIVE.

### 1.4.1 OBJECTIVE

The goal of the proposed project is to compensate for approximately 1.2 acres of SAV impacted as direct result of widening the Puerto Nuevo Channel. This project will also contribute to the overall purpose of the SJBP's CCMP.

### 1.4.2 PROPOSED ACTION

The Jacksonville District proposes the San Juan Harbor Submerged SAV mitigation in the Condado Lagoon. The project will consist of the placement of approximately 46,000 cubic yards into an artificial depression of approximately 4 acres within the Condado Lagoon. The recommended base fill elevation is estimated to be between 12 feet (3.6 m) to 15 feet (4.5 m). Suitable dredged material will be obtained from La Esperanza Peninsula Section 1135 footprint area.

## 1.5 RELATED ENVIRONMENTAL DOCUMENTS.

The following is a list of environmental documents related to the San Juan Harbor Federal Navigation Project and the ecosystem restoration of La Esperanza Peninsula:

- San Juan Harbor Mitigation Baseline Survey and Conceptual Design Report (Dial Cordy 2003).



- San Juan Harbor Federal Navigation Project Limited Reevaluation Report and Environmental Assessment (USACE 2002).
- Section 1135 – Environmental Restoration Report and Final Environmental Assessment. La Esperanza Península, Cataño, Puerto Rico (USACE 1999).
- San Juan Harbor Navigation Improvement General Reevaluation Report and Environmental Assessment (USACE 1994).
- Phase I General Design Memorandum and Supplement to Final Environmental Impact Statement, San Juan Harbor, Puerto Rico. Survey Review Report – Navigation (USACE 1982).
- Final Environmental Impact Statement, San Juan Harbor, Puerto Rico. Survey Review Report – Navigation (USACE 1975).

## **1.6 DECISION TO BE MADE.**

This EA will evaluate the environmental effects of the proposed project and evaluate alternatives to accomplish that goal.

## **1.7 SCOPING AND ISSUES.**

A scoping letter dated January 22, 2013, was issued for this action. The following issues were identified during scoping and by the preparers of this EA to be relevant to the proposed action and appropriate for detailed evaluation:

- a. Temporary impacts to water quality
- b. Endangered species
- c. Essential Fish Habitat (EFH)
- d. Recreation/Public Safety
- e. Source of suitable dredged material
- f. Handling of Solid Wastes

### **1.7.1 ISSUES ELIMINATED FROM DETAIL ANALYSIS.**

No issues were specifically identified for elimination.

## **1.8 PERMITS, LICENSES, AND ENTITLEMENTS.**

Full compliance with the Clean Water Act (CWA), the National Historic Preservation Act (NHPA), the Fish and Wildlife Coordination Act (FWCA), the Endangered Species Act (ESA), the Clean Air Act (CAA), the Coastal Zone Management Act (CZMA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) will be achieved prior to construction. The proposed work requires a Water Quality Certification (WQC) from the Puerto Rico Environmental Quality Board (PREQB). The Puerto Rico Planning Board (PRPB) determined the proposed action to be consistent with CZMA requirements. Appendix B includes a complete Application for Certification of Consistency with the Puerto Rico Coastal Management Program and their public notice of concurrence dated August 22, 2014. Refer also to Sections 4.35 and 4.36, Environmental Compliance and Commitments.



## 2 ALTERNATIVES

This section describes in detail the no-action alternative, the proposed action, and other reasonable alternatives that were studied in detail. Then based on the information and analysis presented in the sections on the Affected Environment (chapter 3) and the Environmental Effects (chapter 4), this section presents the beneficial and adverse environmental effects of all alternatives in comparative form, providing a clear basis for choice among the options for the decision maker and the public.

### 2.1 DESCRIPTION OF ALTERNATIVES.

The purpose of the proposed mitigation is to compensate for approximately 1.2 acres of SAV, comprised of *Halophila decipiens* (commonly known as paddle grass) and marine macro-algae, impacted during the Puerto Nuevo Channel widening. The alternatives presented will evaluate different options applicable to the mitigation.

#### 2.1.1 ALTERNATIVE 1: NO ACTION.

Alternative 1 is the No Action Alternative. This alternative evaluates the concept of not performing the required SAV mitigation. The No Action Alternative would prevent the compensation for SAV impacts and will not provide benefits to the ecological integrity of the SJBES.

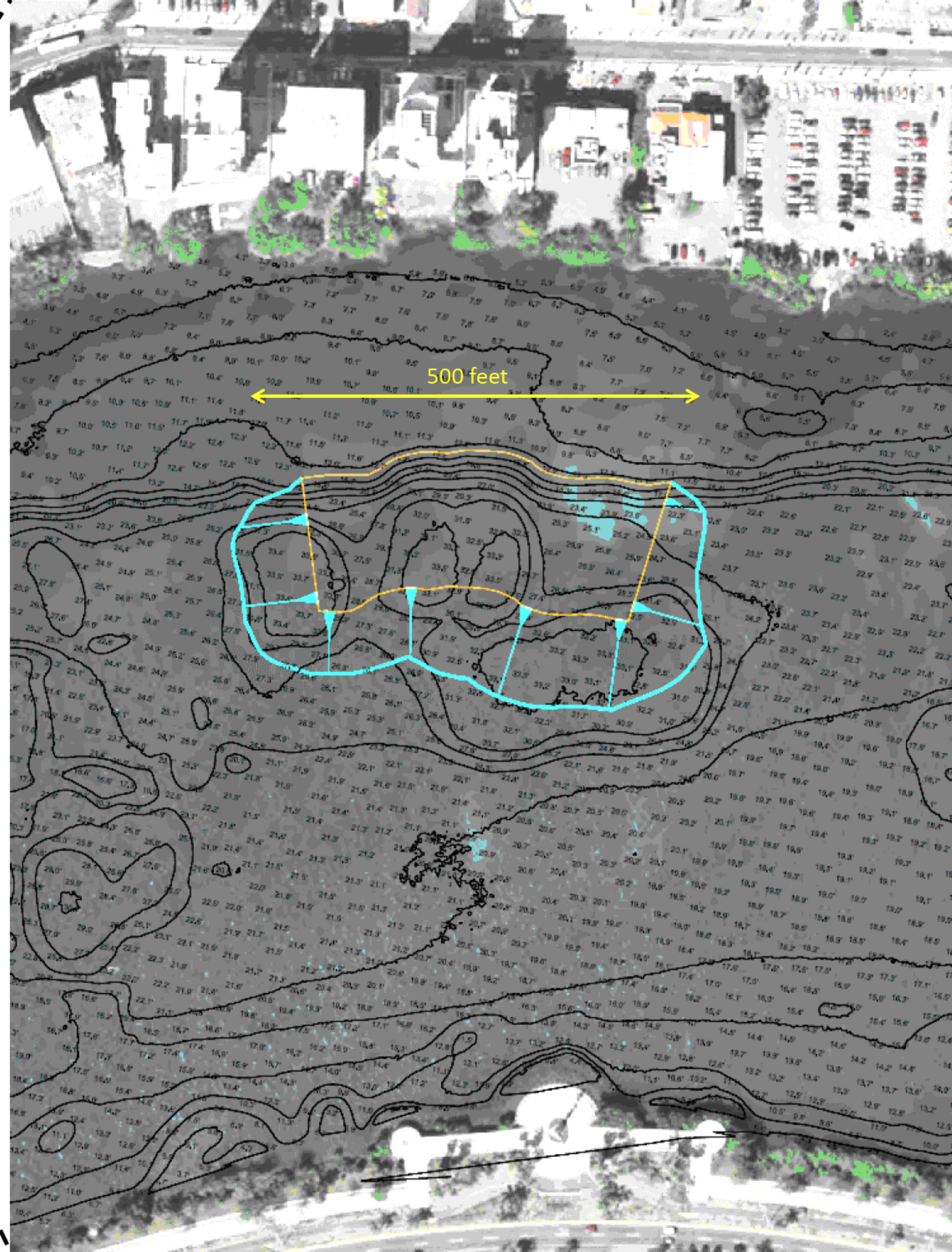
#### 2.1.2 ALTERNATIVE 2: IMPLEMENTING THE MITIGATION AT THE CONDADO LAGOON (PREFERRED ALTERNATIVE).

Alternative 2 is the preferred alternative and evaluates transporting suitable dredged material obtained from the La Esperanza Peninsula through the San Antonio Channel into a deep depression of the lagoon. By filling the deep depression, 1.2 acres would be restored to the natural depths of the lagoon. This action would promote the proliferation of seagrass beds, and enhance and increase benthic and fish habitat at the Condado Lagoon.

In 2011, Tetra Tech, Inc. under contract with the SJBEP conducted a detailed bathymetric survey of the present extension and depth of the depressions and a benthic community map of the Condado Lagoon. This information is being used to assist in determining the depression to be restored, volume of material needed to fill it, and benthic community in the proposed depression. The recommended depth of 12.0 ft (3.6 m) NAD 83 was determined from several characterization surveys of marine resources conducted within the Lagoon. Based on the areas surveyed, the biotic community was most diverse and *Halophila decipiens* had the highest in water depths ranging between 9 to 19 ft (2.7 to 5.8 m) in the central and eastern regions of the Lagoon. More specifically, the baseline results suggest a preferred depth of 13.3 ft (4.0 m) for *H. decipiens*. Restoring the dredged depression to 12.0 ft (3.6 m) would allow for some settlement and equilibration of the imported material as spreading is likely to occur from wind, wave and currents. The proposed restoration depths are also consistent with the Corps' Preliminary Restoration Plan (PRP) for Condado Lagoon, which investigates the use of suitable dredged material for ecosystem restoration in the Condado Lagoon as part of the San Juan Harbor Maintenance Dredging (USACE 2003). Volumes of required material were estimated based on the 2011 bathymetric survey of Condado Lagoon. Based on this survey, the Corps has estimated that approximately 46,000 cy of suitable dredged material is needed to restore the selected depression (see Figure 5).



# Mitigation Site for San Juan Harbor in Condado Lagoon





The use of dredged material in the mitigation poses many advantages, however numerous factors must be considered in determining the use of dredged material for mitigation. Surficial sediments collected in 2011, 2013, and 2014 from La Esperanza Peninsula suggest that this material is likely suitable for restoring the artificial depressions in Condado Lagoon, and could support restoration of a viable seagrass community. Disposal of contaminated dredged material may result in a deterioration of aquatic environment. Geotechnical testing of the borrow material from La Esperanza indicates a surface layer of accumulated coarse grain material (sand with minor inclusions of shell, silt, and organic matter). See Appendix E for geotechnical testing documentation. There is no known HTRW in the borrow material or at the disposal site. This material is unlikely to contain an unacceptable level of contaminants. The borrow material is suitable for its intended use, and no further testing is required. It is estimated that 46,000 cubic yards of material is available at La Esperanza Peninsula Section 1135 footprint area. This supports the volume needed, if this alternative is implemented.

Several methods to transport the dredged material from the La Esperanza Peninsula to the lagoon are available. The proposed handling of the dredged material could involve several methods for transporting all suitable material from the La Esperanza Peninsula to the artificial depression site in the lagoon. A combination of scow barge and pumping through a floating and/or submerged pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon. It should be noted that the Corps does not normally specify the type of dredging equipment to be used. This is generally left to dredging industry to offer the most appropriate and competitive equipment available at the time. Nevertheless, certain types of dredging equipment are normally considered more appropriate depending on the type of material, the depth of the channel, the depth of access to the disposal or placement site, the amount of material, the distance to the disposal or placement site, the wave-energy environment, etc. A more detailed description of types of dredging equipment and their characteristics can be found in Engineer Manual, EM 1110-2-5025, *Engineering and Design - Dredging and Dredged Material Disposal*. This Engineer Manual is available on the internet at [http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_1110-2-5025.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-5025.pdf).

Some clearing and grubbing of woody vegetation (mostly Australian pine) at the La Esperanza borrow sites may be required.

## **2.2 ISSUES AND BASIS FOR CHOICE.**

The alternative plans were evaluated based upon the coordination outcomes with Federal and Commonwealth agencies, as well as interested organizations.

## **2.3 ALTERNATIVES ELIMINATED FROM DETAILED EVALUATION.**

As discussed in section 1.3 above, several meetings between the Corps, PRPA, FWS, NMFS, and SJBE staff have been conducted to discuss the status of the mitigation. The resource agencies have expressed concerns about the original mitigation site location, in particular the likelihood of mitigation success as proposed in 2003 and recommended to evaluate the relocation of the mitigation site and to consider the integration of the mitigation into the SJBE Water Quality Improvement and Seagrass Restoration Project at the Condado Lagoon. For those reasons, no further analysis was conducted and the original mitigation was eliminated as an alternative.



Under Alternative 1: No Action, the Corps would not be fulfilling its responsibility. Furthermore, this action would prevent the compensation for SAV impacts and will not provide benefits to the ecological integrity of SJBES.

A detailed analysis of the No Action and Preferred Alternative will be carried throughout the remainder of this document.

## **2.4 ALTERNATIVES NOT WITHIN JURISDICTION OF LEAD AGENCY.**

To the Corps' knowledge, there are no alternatives that are not within jurisdiction of the lead agency.

## **2.5 COMPARISON OF ALTERNATIVES.**

Table 1 lists alternatives considered and summarizes the major features and consequences of the proposed action and alternatives. See section 4.0 Environmental Effects for more detailed discussion of impacts of alternatives.

Table 1. Summary of Direct and Indirect Impacts

<b>Environmental Factor</b>	<b>Alternative 1 No Action</b>	<b>Alternative 2 Implementing the Mitigation in the Condado Lagoon</b>
Protected Species	No change	Improve habitat for sea turtles, manatee, managed fish species, migratory birds
Hard Ground	No change	No change
Shoreline Erosion	No change	No change
Vegetation	No change	Provides Habitat for Submerged Aquatic Vegetation
Water Quality	No change	Initial temporary increase in turbidity. Long-term may improve water quality at placement and borrow sites.
Historic Properties	No change	No change
Recreation	No change	Improve fishing in Condado Lagoon
Aesthetics	No change	No change
Navigation	No change	Minor impact during construction
Economics	No change	Cost of mitigation is within range of other mitigation efforts
Energy Requirements and Conservation	No change	Energy will be expended to dredge and transport material
Essential Fish Habitat	No change	Expected to provide Submerged Aquatic Vegetation Habitat
Invasive Species	No change	May reduce shoaling and rate of Australian Pine invasion at La Esperanza borrow site



## **2.6 MITIGATION.**

The proposed action is itself mitigation which provides a net benefit to the environment (habitat for submerged aquatic vegetation). See copy of the mitigation plan in Appendix D.



### 3 AFFECTED ENVIRONMENT

The Affected Environment section succinctly describes the existing environmental resources of the areas that may reasonably be affected if any of the alternatives were implemented. This section describes only those environmental resources that are relevant to the decision to be made. It does not describe the entire existing environment, but only those environmental resources that would affect or that would be affected by the alternatives if they were implemented. This section, in conjunction with the description of the No Action Alternative, forms the base line conditions for determining the environmental impacts of the proposed action and reasonable alternatives.

#### 3.1 GENERAL ENVIRONMENTAL SETTING.

The Condado Lagoon supports an estuarine ecosystem with a variety of habitats and plant and animal communities. Mangrove, coral, hardbottom, and seagrass bed communities associated with the lagoon serve as either temporary or permanent habitats, as well as nurseries and spawning grounds for adult and juvenile species of fish and invertebrates (USFWS, 2005 – Harberer 2005). Comprehensive species inventories of the resources and animal communities of the Condado Lagoon were completed by Marine Resources, Inc. (2005), CSA Group (2008), and Tetra Tech, Inc. (2011), and used in this EA to support the following flora and fauna evaluation of the existing environment, along with data gathered from the SJBEP. Figures 6 through 8 show the boundaries and extent of benthic communities within the Condado Lagoon.

In addition, the NMFS conducted a survey of the pipeline corridor from San Antonio Channel in San Juan Harbor to the placement site in Condado Lagoon (see copy of this in Appendix C, part 2 as part of the Essential Fish Habitat Consultation). This confirms the presence of sea grass in Condado Lagoon and recommends a pipeline corridor to minimize impacts. NMFS also recommended elevating the pipeline above the bottom where unavoidable sea grass is abundant. No coral was identified along the pipeline corridor. In addition, the presence of coral or sea grass at the borrow site was discounted due to the high level of turbidity and sedimentation.

#### 3.2 VEGETATION.

##### 3.2.1 SUBMERGED AQUATIC VEGETATION (SAV)

SAV within the Condado Lagoon consists of seagrass and algae. Four species of seagrasses have been documented to occur in the Condado Lagoon (MRI, 2005). Reported types of seagrasses are shoal grass (*Halodule wrightii*), paddle grass (*Halophila decipiens*), manatee grass (*Syringodium filiforme*) and turtle grass (*Thalassia testudinum*). However, during the 2008 and 2011 surveys *S. filiforme* was not observed throughout the lagoon. Three seagrass species were observed during the 2011 benthic survey: *H. decipiens*, *T. testudinum*, and *H. wrightii*. *H. decipiens* was the dominant seagrass. No *H. decipiens* occurrences were recorded below 6 m (20 ft) at any of the investigated sites. *H. decipiens* was most abundant in the mid depth range 2.7 to 5.8 m (9.0 to 19.0 ft), but did not occur any deeper than 5.7m (19 ft). *T. testudinum* had the second highest number of occurrences. No *T. testudinum* was found deeper than 6.7 m (22.0 ft). The highest numbers of *T. testudinum* were recorded at shallow (1.8 to 2.4 m [6 to 8 ft]) and mid-range depths (2.7 to 5.8 m [9 to 19ft]). *H. wrightii* was sighted in only one quadrat at a depth of 5.2 m (17.0 ft).



A total of 13 different genera of macroalgae were observed during the 2011 benthic surveys. The different macroalgae genus observed were: *Acetabularia*, *Amphiroa*, *Batophora*, *Caulerpa*, *Dictyopteris*, *Dictyota*, *Gracilaria*, *Halimeda*, *Jania*, *Laurencia*, *Padina*, *Sargassum*, and *Udotea*. *Caulerpa* spp., *Dictyota* spp., *Acetabularia* spp., and *Laurencia* spp. were the dominant genera. No macroalgae were recorded below 8 m (26 ft).



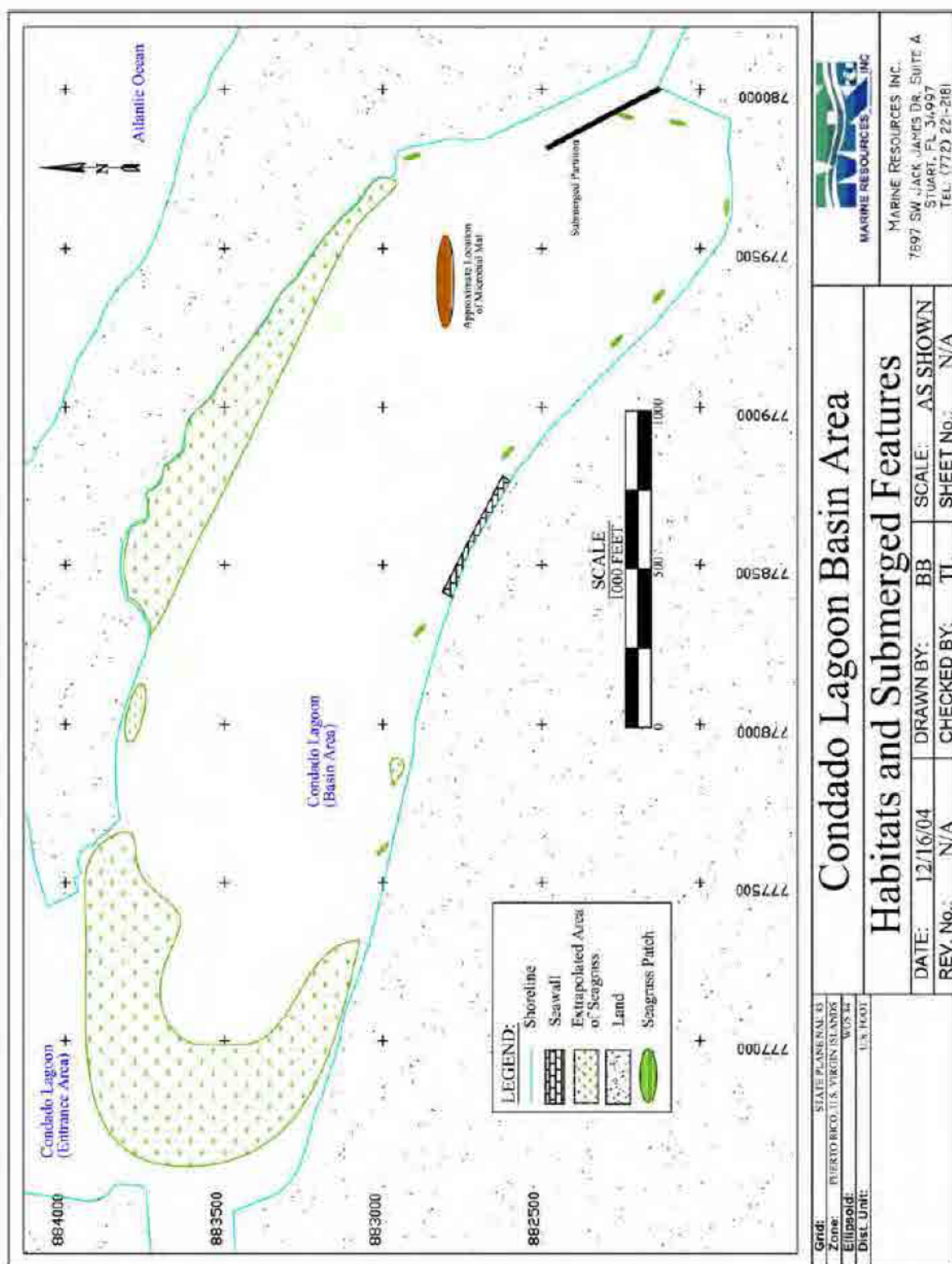


Figure 6. Habitats and submerged features associated with Basin Area substrates (MRI, 2004)



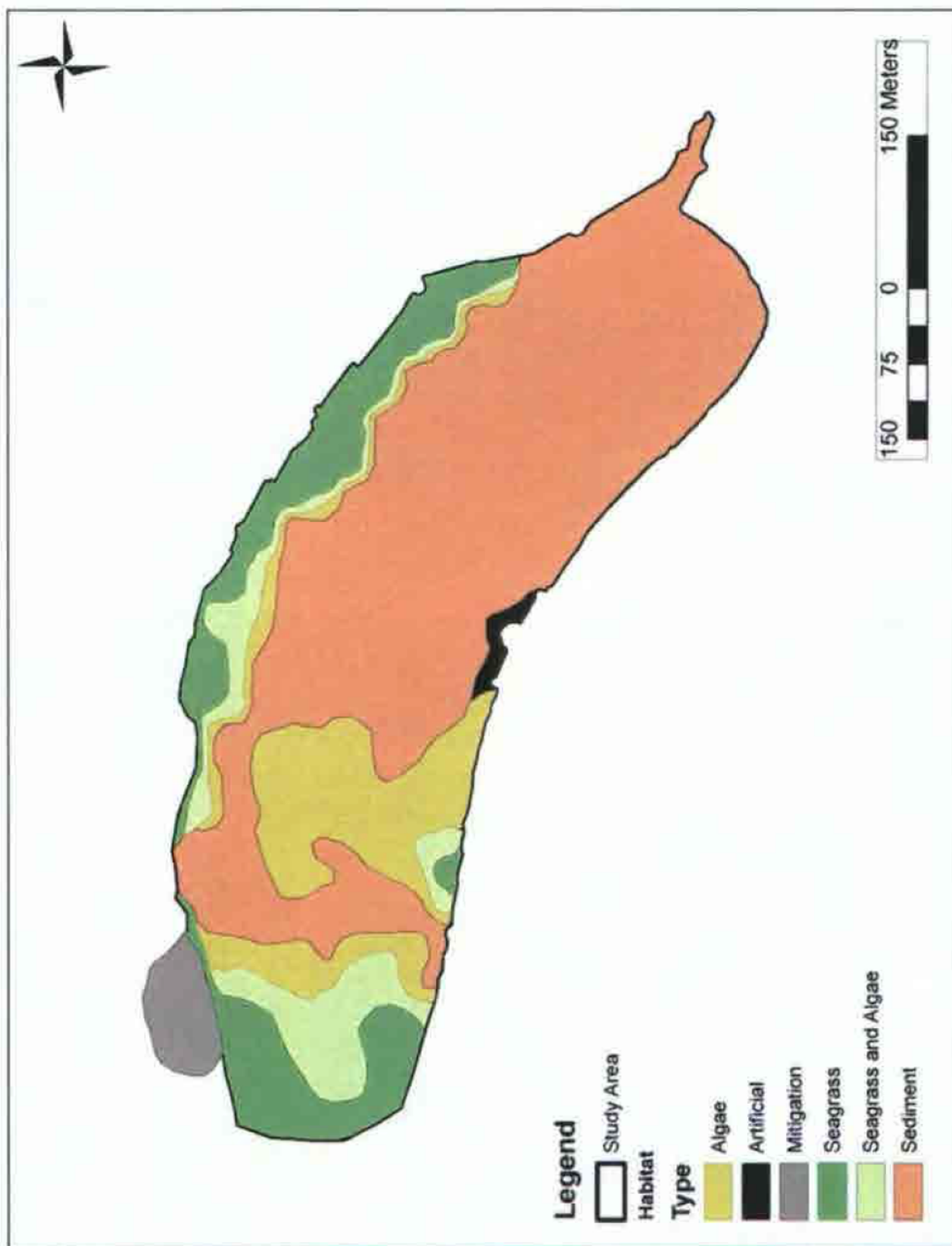


Figure 7. Benthic habitat map of the seafloor of Condado Lagoon (CSA, 2008)







### 3.2.2 MANGROVE (WETLANDS)

Through the years, mangroves have been cleared around the shoreline of the Condado Lagoon for various reasons such as dredging and filling. Some mangrove still exists along the shoreline fringe. However, the growth of mangroves around the lagoon is restricted due to the shoreline stabilization (riprap) placed along some of the shoreline. The mangrove species found around the Condado Lagoon are: red (*Rhizophora mangle*), black (*Avicennia germinans*), and white (*Laguncularia racemosa*). In an attempt to increase the acres of mangroves around the shoreline of the Condado Lagoon, the SJBEF has in place a program to plant mangroves, which consists of restoring a portion of the fringing mangrove wetland along the shoreline of the Lagoon. The mangrove restoration effort is listed in the CCMP as Action HW-3.

### 3.3 THREATENED AND ENDANGERED SPECIES.

The Endangered Species Act (ESA) protects plant and animal species, and their habitats, that are listed as endangered and threatened. The proposed mitigation would include activities in the Condado Lagoon, San Juan Harbor, San Antonio Channel as well as La Esperanza Peninsula, which are located within the range of the endangered and threatened species listed in Table 2.

**Table 2.** Threatened and Endangered Species with potential to occur in the vicinity of the proposed project.

Common Name	Scientific Name	Group	Status
Antillean manatee	<i>Trichechus manatus manatus</i>	Mammal	Endangered
Green sea turtle	<i>Chelonia mydas</i>	Reptile	Threatened
Hawksbill sea turtle	<i>Eretmochelys imbricata</i>	Reptile	Endangered
Leatherback sea turtle	<i>Dermochelys coriacea</i>	Reptile	Endangered
Yellow Shouldered Black Bird	<i>Agelaius xanthomus</i>	Bird	Endangered
Brown pelican	<i>Pelecanus occidentalis</i>	Bird	Delisted – Monitoring Plan
Staghorn and Elkhorn Coral	<i>Acropora cervicornis</i> <i>Acropora palmata</i>	Coral	Threatened and Critical Habitat
Other Corals	<ul style="list-style-type: none"> <li>•<i>Dendrogyra cylindrus</i> - Pillar coral</li> <li>•<i>Mycetophyllia ferox</i> - Rough cactus coral</li> <li>•<i>Orbicella annularis</i> - Lobed star coral</li> <li>•<i>Orbicella faveolata</i> - Mountainous star coral</li> <li>•<i>Orbicella franksi</i> - Boulder star coral</li> </ul>	Coral	Threatened

**Antillean manatee:** The Antillean manatee inhabits the coastal waters of Puerto Rico, and has been documented both feeding and traveling in the San Juan Harbor and Condado Lagoon area. Seagrass beds in the Lagoon provide suitable foraging habitat for the species. Furthermore, the location of the Lagoon provides suitable shelter for the species (SJBEF, 2011). The FWS has jurisdiction for protection of the manatee under ESA, and has jurisdiction under the Marine Mammal Protection Act. This species is also protected by Law Number 241 (Wildlife Law of



the Commonwealth of Puerto Rico) and Regulation Number 6766, which regulates the management of threatened and endangered species in Puerto Rico.

**Sea turtles:** The island of Puerto Rico provides nesting and foraging habitat for three species of sea turtles: the leatherback, hawksbill and green turtle, all listed as either endangered or threatened. The sandy beach north of Dos Hermanos Bridge, supports nesting habitat for the leatherback and hawksbill sea turtle (USFWS, 2005 – Harberer 2005). Nesting activities have been reported on several occasions. The FWS and NMFS have jurisdiction for protection of sea turtles under the ESA. This species is also protected by Law Number 241 and Regulation 6766 of the Commonwealth of Puerto Rico. Seagrass areas, like those found in the Condado Lagoon, are important grazing areas for the green sea turtle. Hawksbill sea turtles have been reported in San Juan Bay.

**Yellow shouldered black bird:** This species is endemic to Puerto Rico and formerly widespread throughout the mainland and offshore islands of Isla de Vieques and Isla Mona. Major threats affecting the populations include: brood-parasitism, predation by non-native carnivores, and loss of breeding habitat (BirdLife, 2011; USFWS, 1996). Nesting habitats include mudflats and salt ponds, offshore mangrove cays, and black mangrove forests.

**Brown pelican:** The brown pelican is a common resident along protected shorelines around Puerto Rico most of the year, particularly in winter when the North American migrants augment local numbers. The FWS report that the brown pelican frequently feeds in the Condado Lagoon and La Esperanza Peninsula area. The FWS has developed a Post-Delisting Monitoring Plan, designed to monitor and verify that the recovered, delisted population remains secure from the risk of extinction once the protections of the ESA are removed. The FWS can relist the brown pelican if future monitoring or other information shows it is necessary to prevent a significant risk to the brown pelican. However, with removal of the brown pelican from the list of threatened and endangered species, federal agencies will no longer be required to consult with the FWS to ensure any action they authorize, fund, or carry out will not harm the species.

**Acropora Coral:** Designated Critical Habitat for Acropora coral includes San Juan Bay, Condado Lagoon, and the connecting channel.

However, according to 50 CFR 226.216, the federally authorized and constructed channels are excluded from Critical Habitat designation.

It is further stated that "The physical feature essential to the conservation of elkhorn and staghorn corals is: substrate of suitable quality and availability to support larval settlement and recruitment, and reattachment and recruitment of asexual fragments. 'Substrate of suitable quality and availability' is defined as natural consolidated hard substrate or dead coral skeleton that is free from fleshy or turf macroalgae cover and sediment cover."

Not mentioned but important to Acropora survival are also the water quality, wave, and current environment. Water quality considerations would include clarity, salinity, sedimentation, dissolved oxygen, and nutrient level.

The borrow and fill sites are not good habitat for coral. Potential pipeline corridors in the inner San Juan Bay, Condado Lagoon, and the connecting channel generally do not have the water clarity or wave/current energy to support staghorn or elkhorn coral.



**Other Coral Species:** Several other species of coral have been listed as Threatened by the NMFS as listed in Table 2 above. Five of these recently listed coral species could occur along the coast of Puerto Rico. The northern portion of Condado Lagoon is more exposed to the Ocean and contains hard substrate that supports various coral species. However, the portion of Condado Lagoon south of the Ashford Avenue Bridge is more protected from wave action and has limited hard substrate to support corals. The same is true for the San Antonio Channel connecting Condado Lagoon to San Juan Harbor. As for the borrow sites at La Esperanza Lagoon, the area is subject to substantial turbidity and sedimentation as well as a lack of hard substrate to support a thriving coral community (see Essential Fish Habitat Consultation from NMFS in Appendix C).



## **4 ENVIRONMENTAL EFFECTS**

This section is the scientific and analytic basis for the comparisons of the alternatives. See table 1 in section 2.0 Alternatives, for summary of impacts. The following includes anticipated changes to the existing environment including direct, indirect, and cumulative effects.

### **4.1 GENERAL ENVIRONMENTAL EFFECTS**

The proposed action is to create habitat for submerged aquatic vegetation as mitigation for the San Juan Harbor Navigation Project.

### **4.2 VEGETATION**

Dredged holes in the Condado Lagoon would be filled to an elevation between -12 feet and -15 feet to support 1.2 acres of sea grass and other submerged aquatic vegetation. The borrow sites do not support submerged aquatic vegetation. The La Esperanza borrow sites are rapidly shoaling areas being invaded by Australian pine. The San Antonio Channel is mostly a deep channel that does not support submerged aquatic vegetation. Shallower portions of San Antonio Channel, Condado Lagoon and the channel connecting to San Juan Harbor contain beds of sea grass or other submerged aquatic vegetation. The pipeline corridor surveyed and recommended by NMFS in January 2015, would minimize impacts to sea grass. In addition, where abundant sea grass cannot be avoided, the pipeline would be elevated above the bottom.

### **4.3 THREATENED AND ENDANGERED SPECIES**

The proposed action would create habitat for the green sea turtle and the manatee. With the standard manatee protection measures for all in water work, the proposed action may affect but is not likely to adversely affect manatees. With the sea turtle and smalltooth sawfish construction conditions, the proposed action may affect but is not likely to adversely affect green or hawksbill sea turtles. Acropora coral are not likely to occur at the borrow sites or the fill site. The pipeline corridor was surveyed by NMFS in January 2015. No coral is located in the pipeline corridor.

### **4.4 HARDGROUNDS**

No coral reef or other hardgrounds would be impacted by the proposed dredging and filling.

### **4.5 FISH AND WILDLIFE RESOURCES**

The proposed action would provide habitat for fish, invertebrates, manatees, sea turtles, and birds.

### **4.6 ESSENTIAL FISH HABITAT ASSESSMENT**

The project description is in section 2.1. Mitigation of impacts is in section 2.6. Section 3.0 describes the “existing conditions” of the Essential Fish Habitat (EFH), Federally managed fisheries, and associate species such as major prey species, including affected life history stages. The following paragraphs describe the individual and cumulative impacts of the proposed



action(s) and alternatives on EFH, Federally managed fisheries, and associate species such as major prey species, including affected life history stages.

The mitigation site, borrow sites, possible pipeline routes, and transit areas are located in estuarine environments. The greater San Juan Estuary contains habitat for corals, other hard grounds, and sea grass which support (or potentially could support) associated sport/commercial fish, spiny lobster, queen conch, and aquarium trade species.

Neither the borrow sites nor the mitigation site currently provide quality habitat within the project footprint. The mitigation site is a dredged hole that is currently too deep to support sea grass or experience good water circulation. The La Esperanza borrow site is likely to benefit from removal of shoaled areas that tend to reduce flow and circulation to the lagoon and are susceptible to invasion by Australian pine. The proposed mitigation would improve habitat at the mitigation site and it would counteract shoaling at the La Esperanza borrow sites.

The pipeline impacts would be limited to a narrow corridor. The pipeline corridor surveyed and recommended by NMFS in January 2015, would minimize impacts to sea grass. In addition, where abundant sea grass cannot be avoided, the pipeline would be elevated above the bottom. Any impacts to sea grass from pipelines would be minor and temporary. Transit of the areas by dredges or other project vessels would have little impact on benthic habitat.

#### **4.7 HISTORIC PROPERTIES**

The project would not affect any historic property eligible for listing on the National Register of Historic Places. See letter of May 23, 2014, from the State Historic Preservation Officer in Appendix C, part 2.

#### **4.8 SOCIO-ECONOMIC**

The proposed mitigation cost is comparable to other sea grass mitigation efforts. The cost is not out-of-line with other mitigations which typically range from \$100,000 to \$1,000,000 per acre restored. Being a relatively small effort, this project does not experience the economy-of-scale for larger projects. Additional environmental benefits may accrue from the dredging of La Esperanza.

#### **4.9 AESTHETICS**

During dredging operations, the visual landscape and water clarity would be affected. After construction, the visual landscape would not be affected and some improvement in water quality may be observed.

#### **4.10 RECREATION**

There would be no adverse impact on boating once construction is completed. Fishing may improve in the Condado Lagoon.

#### **4.11 COASTAL BARRIER RESOURCES**

No coastal barrier resource unit would be impacted by the project.



#### **4.12 WATER QUALITY**

The dredging and filling operations would generate some turbidity. Water quality may improve after construction and following the establishment of additional sea grass beds.

#### **4.13 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE**

No hazardous, toxic, or radioactive waste would be encountered or released by the project. The Esperanza borrow sites consist mostly of recently accreted material. There is no indication of recent or former spills or discharges likely to contaminate the material. The fill/mitigation site is a cluster of dredged holes in Condado Lagoon with no indication of recent or former discharges likely to cause contamination.

#### **4.14 AIR QUALITY**

Dredging operations are typically powered by diesel engines. Depending on the size, type, age, and condition of the equipment, various emissions can be expected for the duration of the operation. The project area is in attainment for regulated air pollutants. The proposed activity will occur in a coastal area that experiences nearly constant on-shore trade winds and sea breezes. The proposed activity's contribution to air pollution would be negligible.

#### **4.15 NOISE**

Dredging operations generate noise. The borrow sites are located in or near San Juan Harbor with its associated contribution to background noise. The Condado Lagoon experiences noise from busy highways and background noise from wind and Ocean waves. Depending on the placement of a booster pump, nighttime operations may generate perceptible noise around the Condado Lagoon area.

#### **4.16 PUBLIC SAFETY**

Dredging is a hazardous activity. Human health and safety are a priority for Corps dredging operations. The contractor is required to have a "Site Safety and Health Officer (SSHO)" with a number of specified duties relative human health and safety.

#### **4.17 ENERGY REQUIREMENTS AND CONSERVATION**

Dredging operations are generally powered by diesel motors. Newer and more efficient diesel plants tend to be more competitive and efficient. However, procurement is subject to many contracting requirements, the availability of bidders in the dredging industry, and other market forces.

#### **4.18 NATURAL OR DEPLETABLE RESOURCES**

Quality sand is a vanishing resource in Puerto Rico. The proposed action will use approximately 46,000 cubic yards of material that is mostly less than construction grade without further processing.

#### **4.19 SCIENTIFIC RESOURCES**

The San Juan Harbor, La Esperanza, and Condado Lagoon have been the subject of much scientific investigation. The proposed action is largely supported by scientific evidence and the results of the restoration will be of interest to the scientific community.



#### **4.20 NATIVE AMERICANS**

No American Indian tribal resources would be impacted because there are no federally recognized Indian Tribes in Puerto Rico..

#### **4.21 REUSE AND CONSERVATION POTENTIAL**

The small amount of solid waste generated by the operation is subject to recycle and reuse.

#### **4.22 URBAN QUALITY**

The proposed mitigation would benefit this natural environment which is set in an urbanized area.

#### **4.23 SOLID WASTE**

Operation of dredging equipment may generate a small amount of solid waste. Dredged material is not considered “solid waste” especially when used for ecosystem restoration or mitigation purposes. The contractor is required in contract specifications to obtain a “permit or license for and the location of the solid waste disposal area” and “the Contractor shall comply with Federal, Commonwealth and local regulations pertaining to the use of the solid waste disposal site.” In addition, “the Contractor shall comply with all applicable [Federal, State, Commonwealth, Territorial] or local laws and regulations”. This may include, but is not limited to, applicable requirements for an approved solid waste management plan in Puerto Rico. If any Clearing and Grubbing of vegetation at La Esperanza is required, disposal or reuse of the removed vegetation may be subject to solid waste requirements.

#### **4.24 DRINKING WATER**

The proposed activity would be in a marine or estuarine environment not used as a source of drinking water.

#### **4.25 INVASIVE SPECIES**

The removal of shoaled material from La Esperanza would slow the invasion of Australian pine into the two openings of the lagoon. Since construction of the La Esperanza Ecosystem Restoration Project was completed on May 20, 2005, there has been an accumulation of sediment in the two opening constructed for circulation in the lagoon. The accumulation appears to be an ongoing process that eventually leads to invasion by Australian pine. While the dredging would be mostly in areas without established Australian pine, the dredging would at least temporarily counteract the accumulation of sediment that leads to invasion by the plant and would improve circulation in the lagoon.

#### **4.26 CUMULATIVE IMPACTS**

Cumulative impact is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions



regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7).

There have been a number of activities in and around San Juan Harbor and Condado Lagoon. There has been a general trend of increasing human activity. Activity in the area is expected to continue if not increase in the future. However, the proposed action is not expected to contribute to the cumulative impacts. The purpose of the proposed action is to mitigate for the incremental impact of expansion of San Juan Harbor.

#### **4.27 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

##### **4.27.1 IRREVERSIBLE**

An irreversible commitment of resources is one in which the ability to use and/or enjoy the resource is lost forever. One example of an irreversible commitment might be the mining of a mineral resource. The dredging of sand from one or more of the borrow sites reduces the availability of that resource for other purposes. However, continued shoaling and sediment accumulation would make more material available over time. The consumption of fuel for the operation may also be considered an irreversible commitment of resources.

##### **4.27.2 IRRETRIEVABLE**

An irretrievable commitment of resources is one in which, due to decisions to manage the resource for another purpose, opportunities to use or enjoy the resource as they presently exist are lost for a period of time. An example of an irretrievable loss might be where a type of vegetation is lost due to road construction. There would be no temporary (irretrievable) loss of a resource that is currently used or enjoyed.

#### **4.28 UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS**

There would be a temporary increase in turbidity and sedimentation during dredging and placement operations. Some shifting and sorting of the placed material would occur initially. There would be no long term turbidity and sedimentation impacts. Removal of sediments from the borrow sites may improve water quality.

#### **4.29 LOCAL SHORT-TERM USES AND MAINTENANCE/ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

The short-term impacts of dredging and filling would be outweighed by long-term benefit of the mitigation.

#### **4.30 INDIRECT EFFECTS**

The creation of additional benthic habitat would benefit the larger San Juan Estuary system.



#### **4.31 COMPATIBILITY WITH FEDERAL, STATE, AND LOCAL OBJECTIVES**

The proposed action would further the goals of the of the San Juan Bay Estuary Program's Comprehensive Conservation and Management Plan. The proposed action would be compatible with the Coastal Consistency Management program and local development plans.

#### **4.32 CONFLICTS AND CONTROVERSY**

Objection to the mitigation is not expected. Some would like to have seen the mitigation occur sooner and/or more restoration performed.

#### **4.33 UNCERTAIN, UNIQUE, OR UNKNOWN RISKS**

Improvements in water quality due to pollution control efforts in Condado Lagoon would enhance the establishment of sea grass and other submerged aquatic vegetation. Conversely, poor water quality would reduce the level of success.

#### **4.34 PRECEDENT AND PRINCIPLE FOR FUTURE ACTIONS**

The filling of dredged holes to encourage submerged aquatic vegetation has been practiced in a number of locations. Success in Condado Lagoon might encourage other efforts of a similar nature.

#### **4.35 ENVIRONMENTAL COMMITMENTS**

The U.S. Army Corps of Engineers and contractors commit to avoiding, minimizing or mitigating for adverse effects during construction activities by including the following commitments in the contract specifications:

- Following standard manatee protection measures for any water based activity in manatee habitat
- Following the sea turtle and smalltooth sawfish construction conditions
- Following the "Vessel Strike Avoidance Measures and Reporting for Mariners"
- Use the specified source(s) of suitable fill material
- Place the material within the specified fill site
- Comply with all applicable Commonwealth and local requirements
- Survey for and avoid destruction of migratory birds or their eggs
- Follow the pipeline corridor recommended by NMFS
- Elevate the pipeline above the bottom where unavoidable sea grass is abundant
- Monitor and manage turbidity as required

#### **4.36 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS**

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

Environmental information on the project has been compiled and this Environmental Assessment has been prepared. A Notice of Availability for the draft Finding of No Significant Impact was issued on May 23, 2014 (see in Appendix C, part 3). The project is in compliance with the National Environmental Policy Act.



#### 4.36.2 ENDANGERED SPECIES ACT OF 1973

Consultation was initiated with NMFS and USFWS by letter of April 22, 2014. With respect to the USFWS, the proposed activity (with the manatee protection measures for in-water activities) may affect but is not likely to adversely affect the manatee (see USFWS letter of May 5, 2014, in Appendix C, part 2). With respect to the NMFS, the proposed action may affect but is not likely to adversely affect green or hawksbill Sea Turtles. We will follow the “Sea Turtle and Smalltooth Sawfish Construction Conditions (NMFS, March 23, 2006) and the “Vessel Strike Avoidance Measures and Reporting For Mariners” (NMFS, SE Region, February 2008). See part 1 of Appendix C for a copy of these NMFS documents. The activity would be in designated Critical Habitat for Acropora coral. Pipeline corridors were subsequently surveyed for coral by NMFS in association with the Essential Fish Habitat consultation. No corals were found in the pipeline corridor. By letter of October 31, 2014, the NMFS agrees that the proposed activity (as described and with the identified measures) may affect but is not likely to adversely affect green or hawksbill sea turtles and would have no affect on listed corals or coral critical habitat (see NMFS letter in Appendix C, part 2).

#### 4.36.3 FISH AND WILDLIFE COORDINATION ACT OF 1958

This project has been coordinated with the USFWS. A Coordination Act Report (CAR) dated November 30, 1993, was submitted by the USFWS (USACE 1994, attachment B). This project is in full compliance with the Act.

#### 4.36.4 NATIONAL HISTORIC PRESERVATION ACT OF 1966 (INTER ALIA)

The Corps determined that the proposed action will not affect historic properties included in or eligible for inclusion in the National Register of Historic places. By letter dated April 22, 2014, consultation with the Puerto Rico Historic Preservation Officer was initiated in accordance with the National Historic Preservation Act of 1966, as amended, and as part of the requirements and consultation processes contained within the NHPA implementing regulations of 36 CFR 800. The State Historic Preservation Officer concurred in a letter dated May 23, 2014. A copy of the letters indicated above has been placed in Appendix C, part 2.

The proposed activity is also in compliance with the following:

- Archeological Resources Protection Act (96-95)
- Native American Graves Protection Act (PL 101-601)
- American Indian Religious Freedom Act (PL 95-341)
- Executive Order 11593 (Protection and Enhancement of the Cultural Environment)
- Executive Order 13007 (Indian Sacred Sites)
- Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments)
- Presidential Memo of 1994 on Government to Government Relations with Native American Tribal Governments
- Abandoned Shipwrecks Act
- Native American Graves Protection and Repatriation Act
- Archeological Resources Protection Act



#### 4.36.5 CLEAN WATER ACT OF 1972

The project is in compliance with this Act. A Section 401 water quality certification was obtained from the Environmental Quality Board by letter of January 14, 2015. All State water quality standards would be met. A Section 404(b) evaluation is included in this report as Appendix A. On May 23, 2014, a Notice of Availability of the Draft Finding of no Significant Impact and Environmental Assessment was issued with a comment period and opportunity to request a public hearing in accordance with the requirements of Section 404(a) of the Clean Water Act.

#### 4.36.6 CLEAN AIR ACT OF 1972

Established under the Clean Air Act (section 176(c)(4)), the General Conformity Rule plays an important role in helping states and tribes improve air quality in those areas that do not meet the National Ambient Air Quality Standards (NAAQS). Under the General Conformity Rule, federal agencies must work with State, Tribal and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. The Environmental Protection Agency lists (40 CFR 81) a non-attainment area in Puerto Rico for the substance Lead in the vicinity of a Battery Recycling facility in Arecibo. Maintenance areas in Puerto Rico include the municipality of Guaynabo for particles in the air with a diameter of 10 micrometers or less (PM-10). The proposed action would be in an attainment area. No air quality permits would be required for this project.

#### 4.36.7 COASTAL ZONE MANAGEMENT ACT OF 1972

A federal consistency determination was made in accordance with 15 CFR 930 Subpart C. A copy of the application to the Puerto Rico Planning Board and their consistency concurrence of August 22, 2014, is included in Appendix B.

#### 4.36.8 FARMLAND PROTECTION POLICY ACT OF 1981

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

#### 4.36.9 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. There are three designated Wild and Scenic Rivers in Puerto Rico. All three (Rio de la Mina, Rio Icacos, and Rio Mameyes) are in the Caribbean National Forest area in the eastern mountains of Puerto Rico.

#### 4.36.10 MARINE MAMMAL PROTECTION ACT OF 1972

Manatees could occur in and around the borrow sites, the mitigation site, and the greater San Juan Estuary System. Standard manatee protection measures are required for all in-water work. The proposed action is not likely to adversely affect manatees. No take is anticipated or allowed.



4.36.11 ESTUARY PROTECTION ACT OF 1968

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

4.36.12 FEDERAL WATER PROJECT RECREATION ACT

The San Juan Harbor Project is not claiming any recreational benefits, therefore Section 2(a) of the Federal Water Project Recreation Act, (Public Law 89-72) as amended, concerning recreation cost sharing does not apply.

4.36.13 SUBMERGED LANDS ACT OF 1953

The project would occur on submerged lands of Puerto Rico. The project has been coordinated with the Commonwealth and is in compliance with the act.

4.36.14 COASTAL BARRIER RESOURCES ACT AND COASTAL BARRIER  
IMPROVEMENT ACT OF 1990

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

4.36.15 RIVERS AND HARBORS ACT OF 1899

The proposed work would occur in but not obstruct navigable waters of the United States.

4.36.16 ANADROMOUS FISH CONSERVATION ACT

Anadromous fish species would not be affected. The project has been coordinated with the National Marine Fisheries Service and is in compliance with the act.

4.36.17 MIGRATORY BIRD TREATY ACT AND MIGRATORY BIRD  
CONSERVATION ACT

The Migratory Bird Treaty Act prohibits the destruction of migratory birds or their eggs, chicks, and active nests. The only area that might have nesting migratory birds would be the portion of the La Esperanza borrow area above high water (either along the shore or in vegetation). Contractors would be required to survey for migratory birds and their eggs, chicks, or active nest and to avoid actions resulting in their destruction.

4.36.18 MARINE PROTECTION, RESEARCH AND SANCTUARIES ACT

The term "dumping" as defined in the Act (33 U.S.C. 1402)(f) does not apply to the disposal of material for beach nourishment or to the placement of material for a purpose other than disposal (e.g., placement of rock material as an artificial reef or the construction of artificial reefs as mitigation). Therefore, the Marine Protection, Research and Sanctuaries Act does not apply to this project. The disposal activities addressed in this EA have been evaluated under Section 404 of the Clean Water Act.



4.36.19        MAGNUSON-STEVEN'S FISHERY CONSERVATION AND MANAGEMENT  
                  ACT

An Essential Fish Habitat Assessment (see paragraph 4.6) was sent to the National Marine Fisheries Service by letter of April 22, 2014 (copy in part 2 of Appendix C). If, in response, the NMFS provides Essential Fish Habitat Conservation Recommendations, the Corps has 30 days to indicate if such recommendations will not be followed. The NMFS can elevate such a decision to the Chief of Engineers. By letter of February 4, 2015, NMFS provided Essential Fish Habitat Conservation Recommendations. Based on a survey conducted by NMFS in January 2015, they recommend a pipeline corridor to avoid and minimize impacts to sea grass. In addition, the pipeline should be elevated above the bottom where the abundant sea grass cannot be avoided. These recommendations will be incorporated into the project plans and specifications.

4.36.20        UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY  
                  ACQUISITION POLICIES ACT OF 1970.

The purpose of PL 91-646 is to ensure that owners of real property to be acquired for Federal and Federally assisted projects are treated fairly and consistently and that persons displaced as a direct result of such acquisition will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. There would be no private real estate acquired for the proposed action.

4.36.21        E.O. 11990, PROTECTION OF WETLANDS

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

4.36.22        E.O. 11988, FLOOD PLAIN MANAGEMENT

The project is in the base flood plain (100-year flood) and has been evaluated in accordance with this Executive Order. The proposed borrow and fill would occur in tidal waters and would have little impact on flooding of surrounding coastal lands.

4.36.23        E.O. 12898, ENVIRONMENTAL JUSTICE

The proposed action would not result in adverse human health or environmental effects. There is no known "subsistence consumption of fish and wildlife" in the project area. Even so, the proposed action would benefit habitat for submerged aquatic vegetation and associated fisheries by mitigating for adverse impacts from improvements to San Juan Harbor.

4.36.24        E.O. 13089, CORAL REEF PROTECTION

While the proposed action would not directly impact coral reef, coral reef does occur in the San Juan Bay and Condado Lagoon. Reef species may transit or visit the borrow sites or the mitigation sites but are not likely to be adversely affected.



4.36.25 E.O. 13112, INVASIVE SPECIES

The mitigation site is not subject to any invasive species threat known at this time. The La Esperanza borrow sites are experiencing shoaling that appears to lead to invasion by Australian pine. The proposed borrow may counteract the shoaling and subsequent invasion by Australian pine.

4.36.26 E.O. 13186, MIGRATORY BIRDS.

Migratory birds are likely to use the shoaled areas at the La Esperanza borrow site. If there is nesting at La Esperanza, it would be above the high water mark. For use of the La Esperanza borrow sites, the contractor is required to monitor for nesting migratory birds. The contractor is not allowed to destroy migratory birds or their eggs, hatchlings, or active nests.



## **5 LIST OF PREPARERS**

### **5.1 PREPARERS**

<b>Name</b>	<b>Title</b>	<b>Role</b>
Wilberto Cubero	Environmental Scientist	Author
Kenneth Dugger	Biologist	Author
David McCullough	Archeologist	Cultural Resources
Steve Conger	Civil Engineer	Construction specifications Information
Bernard Seifert	Geologist	Geotechnical information
Johann Sasso	Tech	Logistic Support, San Juan POC

### **5.2 REVIEWERS**

<b>Name</b>	<b>Title</b>
Ivan Acosta	Civil Engineer, Chief of Special Projects Section
Javier Cortes	Environmental Engineer
Nelson Colon	Project Manager
Paul DeMarco	Biologist
Jason Spinning	Supervisory Biologist



## **6 PUBLIC INVOLVEMENT**

### **6.1 SCOPING AND DRAFT EA**

A scoping letter dated January 22, 2013, was issued for this action. The Scoping Letter and comments received are in Appendix C, part 1.

Additional coordination was initiated with FWS, NMFS, and the State Historic Preservation Officer in April 2014 (see Appendix C, part 2).

The draft EA and Finding of No Significant Impact (FONSI) were made available by notice of availability (NOA) of May 23, 2014 (see Appendix C, part 3).

A public meeting was conducted on July 31, 2014, in the Museum of Contemporary Art in Santurce, Puerto Rico (see Appendix B).

A public notice was issued by the Puerto Rico Planning Board on July 29, 2014 (see Appendix B).

A notice was placed in a newspaper of local circulation (El Vocero) on November 28, 2014, concerning certification of water quality for the proposed activity.

### **6.2 AGENCY COORDINATION**

Any agency coordination letters are in Appendix C.

### **6.3 LIST OF RECIPIENTS**

Mailing lists are attached to the Scoping Letter and the NOA in Appendix C, part 1. Note that these were sent to agencies. The mailing list for property/business interests was sent to the Puerto Rico Planning Board.

### **6.4 COMMENTS RECEIVED AND RESPONSE**

#### **6.4.1 SCOPING LETTER.**

Issues identified in response to the scoping letter of January 22, 2013, are related to the following topics:

- a. Temporary impacts to water quality
- b. Endangered species
- c. Essential Fish Habitat (EFH)
- d. Recreation/Public Safety
- e. Source of suitable dredged material
- f. Handling of Solid Wastes

These issues have been largely addressed in this Environmental Assessment.



See Appendix C, part 1 for copy of scoping letter and responses.

#### 6.4.2 ENDANGERED SPECIES ACT AND ESSENTIAL FISH HABITAT COORDINATION.

Consultation was initiated with the FWS and NMFS by letter of April 22, 2014, pursuant to Section 7 of the Endangered Species Act (see 4.36.2). An Essential Fish Habitat Assessment was forwarded to NMFS by letter of April 22, 2014 (see 4.36.19).

By letter of May 5, 2014, the FWS concurred that the proposed action would not adversely affect the manatee with application of the manatee conservation measures included in the letter (copy in Appendix C to this document).

By letter of 31 October, NMFS concurred that the proposed activity (as described and with the identified measures) may affect but is not likely to adversely affect green or hawksbill sea turtles and would have no effect on listed corals or coral critical habitat.

By letter of February 4, 2015, NMFS provided Conservation Recommendations. This includes a pipeline corridor and elevation of the pipe above an area of sea grass.

See Appendix C, part 2 for a copy of these letters and the responses of FWS and NMFS.

#### 6.4.3 NOTICE OF AVAILABILITY OF THE DRAFT FONSI/EA

A Notice of Availability of the Draft Finding of no Significant Impact (FONSI) and Environmental Assessment (EA) was issued on May 23, 2014. Comments received on the draft FONSI/EA (see Appendix C, part 3) have been incorporated into this final FONSI/EA.

#### 6.4.4 ADDITIONAL NOTICES AND PUBLIC MEETING

A public notice was issued by the Planning Board of Puerto Rico on July 29, 2014. A public meeting was held in the Museum of Contemporary Art in Santurce, Puerto Rico on July 31, 2014. See Appendix B for additional information. A notice was placed in the newspaper El Vocero, on 28 November 2014 concerning certification of Water Quality by the Environmental Quality Board (see Appendix C, part 4).

#### 6.4.5 COMMENTS AND RESPONSES

1. Sedimentation and Turbidity: Dredging and the discharge of dredged material would cause sedimentation and turbidity.

RESPONSE: Because of the low amount of wave energy and circulation in Condado Lagoon, the discharge of suitable dredged material into the dredged holes will produce little turbidity or sedimentation in the shallower portions of the lagoon. What little sedimentation results would mostly affect the deeper adjoining dredged holes. The contractor may take measures (such as



geobags) to reduce migration of the dredged material into the adjoining dredged holes to minimize the amount of dredged material needed to provide 1.2 acres at the specified elevation.

According to "The Hydrodynamics of the Condado Lagoon" prepared for the San Juan Estuary Program by the Caribbean Oceanography Group and Tetra Tech (October 3, 2011), the Condado Lagoon [south of Ashford Avenue bridge] is not a high energy environment. Circulation is largely wind driven. Material placed in the dredged holes will remain in the dredged holes except for very fine particles. Under a "98% exceedance wind event" material too fine to remain stable will be deposited in other adjoining dredged holes and will not impact shallower areas in the lagoon that support seagrass and other important benthic resources. We will not use material containing an excessive amount of organics or fine grained particles to fill the dredged holes (Appendix A of the EA). No further control of sedimentation is proposed or required under these conditions. The contractor may elect to incorporate any number of containment devices to further confine the material to the target area of the dredged hole.

Since 500 to 5,000 cubic yards per day and 50,000 cubic yards of material total is a rather small quantity compared to the total volume of dredged holes, dispersion of sediment or displacement of anoxic water into shallower areas would be unlikely.

While little turbidity and water quality impacts are anticipated (see above), we will comply with any monitoring of turbidity required in the Water Quality Certification under Section 401 of the Clean Water Act. The objective of the project is to provide 1.2 acres at an elevation suitable for sea grass and benthic macro-algae. The finished elevations will be surveyed to ensure that the contractor followed specifications.

Recent geological investigations indicate that the San Antonio Channel contains more silt than the La Esperanza site. The Esperanza site contains sufficient sandy material with a low incident of silt (see Appendix E).

2. Pipeline Impacts to Sea Grass: The pipeline from San Antonio Channel to the discharge site in Condado Lagoon would cross areas of sea grass.

RESPONSE: A 12" diameter pipeline would have a narrow footprint and any damaged sea grass is likely to recover. No mitigation is proposed for the minor and temporary impacts of the pipeline. Due to recreational activity and safety concerns, we are planning to use a submerged pipeline to the extent practicable. In accordance with Essential Fish Habitat Conservation Recommendations from NMFS, a pipeline corridor is designated to minimize impacts to sea grass. Also a portion of the pipeline will be raised above the bottom over a specified area in Condado Lagoon.

3. Insufficient Mitigation: The National Marine Fisheries Service expressed an opinion that 1.2 acres of habitat for Sea Grass is not sufficient mitigation for impacts to 1.2 acres and that there is not sufficient monitoring to ensure success of the mitigation.



RESPONSE: While the original authorization by Congress does NOT limit mitigation to 1.2 acres (1:1), Section 902 of the Water Resources Development Act (WRDA) of 1986, limits escalation of project cost to no more than 20% without further Congressional authorization.

Current funding is limited to the 20% escalation and must be contractually obligated by fiscal year 2015. Both time and funding are tight for the current mitigation proposal. Exceeding the funding amount or the fiscal year 2015 deadline would require further Congressional Authorization and/or appropriation of funds which is not likely to occur before at least fiscal year 2017. There is no guarantee that Congress would authorize and fund a larger mitigation effort.

4. No Planting of Sea Grass and Insufficient Monitoring of Mitigation: Monitoring for success sea grass and transplant of sea grass are not proposed.

RESPONSE: The proposed mitigation does not involve monitoring or corrective action beyond achievement of the specified elevation for the specified area with suitable dredged material. Establishment of sea grass and marine macro algae is expected given the presence of sea grass adjacent to the mitigation site at similar elevations. The clarity and nutrient content of the water is beyond the Corps' authority and control but is currently sufficient to support submerged aquatic vegetation at the specified depths in Condado Lagoon.

5. Contaminants in the Borrow: Borrow sources could introduce contaminants to the mitigation site.

RESPONSE: The La Esperanza borrow sites are currently proposed. These are areas of recently accumulated sediments consisting mostly of sandy material with some inclusions of silt, shell, and buried vegetation (see geological report in Appendix E). There is no recent history of a spill or contamination event at or near this location. The dredging will be limited to the upper layers of the sediment above the older underlying silty material. It is unlikely that the recently accumulated sandy material would contain any significant amount of contaminants. No further chemical or physical testing is required.

6. Impacts to Coral (listed, candidate, and other): The project and especially the pipeline could impact Coral organisms.

RESPONSE: While the Ocean facing portion of Condado Lagoon supports coral reef, the proposed mitigation would occur in more sheltered portions of the lagoon. Similarly, the San Antonio Channel does not support developed coral reef. The La Esperanza borrow sites do not have hard surfaces to support reef and experience substantial accretion that would preclude development of a reef. Isolated occurrence of reef organisms is possible in shallower portions of Condado Lagoon south of the Ashford Avenue bridge, in San Antonio Channel, and in the channel connecting the two.

A survey conducted by NMFS in January 2015 indicates no coral along the pipeline corridor.



7. Impacts to Sea Turtles: Both Hawksbill and Green Sea Turtles have been observed in San Juan Bay and/or Condado Lagoon. Use of a hopper dredge could impact sea turtles.

RESPONSE: A hopper dredge will not be used. We will include the NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions (Revised March 23, 2006) provided in the NMFS e-mail of March 18, 2013, (see appendix C of the EA).

8. Impact on Manatee: There is a potential to encounter a manatee.

RESPONSE: The contractor will follow the standard manatee protection measures for all in water work (see recommended manatee conservation measures of January 2012 attached to the U.S. Fish and Wildlife Service letter of May 5, 2014, in Appendix C, part 2).

9. Impacts on Essential Fish Habitat: Condado Lagoon and San Juan Harbor actually or potentially are habitat for managed species (sport/commercial fish, spiny lobster, queen conch, and aquarium trade species).

RESPONSE: The adverse impact of the pipeline and dredging/filling operation are expected to be minor and temporary. The 12 inch submerged pipeline would cross and impact sea grass. The pipeline would impact a narrow strip of sea grass. With no change in the underlying benthic habitat and with adjacent unharmed sea grass, any crushed sea grass should recover or re-colonize after the pipeline is removed. In addition, as part of the Essential Fish Habitat consultation, the NMFS recommended a pipeline corridor to minimize impacts to sea grass and that a portion of the pipeline be elevated over an area of sea grass. We plan to follow these recommendations. The project is expected to result in a net gain in habitat for sea grass and macro algae. The dredging of shoaled areas of La Esperanza would improve flow and circulation. It would temporarily counteract the active accumulation of sediment, conversion to dry land, and invasion by Australian Pine.

10. Disruption of Recreation: Condado Lagoon is used for recreational swimming and boating (non-motorized).

RESPONSE: The dredging and filling operation could last several months. To minimize disruption of recreational activities and risks to safety, much of the pipeline would be submerged. Project activities in Condado lagoon require permission from the Department of Natural and Environmental Resources and compliance with terms and conditions.

11. Solid Waste: Solid waste must be managed in accordance with local and commonwealth laws.

RESPONSE: The dredge contractor is required to comply with any solid waste management requirements. Vegetation waste from any clearing and grubbing operations at the La Esperanza borrow sites would be handled in compliance with local and commonwealth requirements.



12. Water Quality Certification, Coastal Zone Consistency, Permit Management: Following acceptance by the Office of Permit Management, the proposed activity must obtain a water quality certification and be determined consistent with Puerto Rico's enforceable policies under the Coastal Zone Management Act.

RESPONSE: We will comply with these requirements. The activity was categorically excluded by the Office of Permit management on October 14, 2014. Certification of water quality was provided by the Environmental Quality Board by letter of January 14, 2015.



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## **APPENDIX A - SECTION 404(B) EVALUATION**



## **SECTION 404(b) EVALUATION**

### **SAN JUAN HARBOR MITIGATION SAN JUAN, PUERTO RICO**

#### **I. Project Description**

- a. Location: Mitigation (fill) site in Dredged Holes, Condado Lagoon. Borrow sites in the La Esperanza Ecosystem Restoration Project.
- b. General Description: Fill dredged hole to -12 feet to -15 feet to support sea grass and other submerged aquatic vegetation (SAV).
- c. Authority and Purpose: Mitigation is for expansion of San Juan Harbor (Puerto Nuevo Channel) which impacted 1.2 acres of sea grass and other SAV.
- d. General Description of Dredged or Fill Material
  - (1) General Characteristics of Material: Shoaled material of medium grained sandy material from the La Esperanza borrow sites.
  - (2) Quantity of Material: Approximately 46,000 cubic yards.
  - (3) Source of Material: Dredging of La Esperanza shoaled areas.
- e. Description of the Proposed Discharge Site(s)
  - (1) Location: See maps in main text of the Environmental Assessment.
  - (2) Size: Approximately 4 acres of lagoon bottom resulting in approximately 1.2 acres at an elevation to support SAV.
  - (3) Type of Site: Dredged holes in open water in tidal lagoon.
  - (4) Type(s) of Habitat: Fill site is a dredged hole with poor circulation, poor light penetration to the bottom, and no coral or other hardground or SAV.
  - (5) Timing and Duration of Discharge: Duration of the discharge would vary depending on the type and size of equipment used. Not counting set-up, preparation and down time; the discharge would not likely take more than 6 months.
- f. Description of Disposal Method: Various dredging and dredged material transport methods could be used. To go under the bridge between Condado Lagoon and San Juan Harbor, the material would likely be pumped through a pipeline. The actual excavation from the borrow sites might involve a pipeline suction dredge or a mechanical dredge could be used to place the material into a barge or a pumpout station.

#### **II. Factual Determinations**

- a. Physical Substrate Determinations
  - (1) Substrate Elevation and Slope: See maps and drawings in EA for details.
  - (2) Sediment Type: The discharge would consist of dredged material containing a preponderance of sand to ensure stability (Tetra Tech. 2001a) and suitability for submerged aquatic vegetation. At this time, we expect the material will be suitable and we do not anticipate the need for capping.
  - (3) Dredged/Fill Material Movement: The fill material will achieve a slope such that approximately 4 acres of the dredge hole would be filled to provide 1.2 acres at an elevation suitable for Submerge Aquatic Vegetation.



- (4) Physical Effects on Benthos: The fill would cover about 4 acres of dredge holes to provide 1.2 acres of habitat.
- (5) Other Effects: The resulting habitat at the discharge site would be enhanced.
- (6) Actions Taken to Minimize Impacts: The fill site was selected to efficiently improve habitat with the least amount of dredging and fill material.
- b. Water Circulation. Fluctuation and Salinity Determinations
  - (1) Water. Consider effects on:
    - (a) Salinity: Minimal change.
    - (b) Water Chemistry: Improved oxygen levels.
    - (c) Clarity: Largely unchanged.
    - (d) Color: Largely unchanged.
    - (e) Odor: Largely unchanged. Anoxic waters in dredge hole displaced.
    - (f) Taste: Not applicable.
    - (g) Dissolved Gas Levels: Anoxic waters in dredge hole displaced.
    - (h) Nutrients: Better flushing of nutrients.
    - (i) Eutrophication: Anoxic waters in dredge hole displaced.
    - (j) Others as Appropriate
  - (2) Current Patterns and Circulation.
    - (a) Current Patterns and Flow: Largely unchanged.
    - (b) Velocity: Largely unchanged.
    - (c) Stratification: Largely unchanged.
    - (d) Hydrologic Regime: Largely unchanged.
  - (3) Normal Water Level Fluctuations: Largely unchanged.
  - (4) Salinity Gradients: Largely unchanged.
  - (5) Actions That Will Be Taken to Minimize Impacts: Except during the dredging and filling operation, no impacts. Actual improvement in water quality in the long term.
- c. Suspended Particulate/Turbidity Determinations
  - (1) Expected Changes in Suspended Particulates and Turbidity Levels in Vicinity of Disposal Site: Largely unchanged.
  - (2) Effects (degree and duration) on Chemical and Physical Properties of the Water Column
    - (a) Light Penetration: With filling of dredged hole, better light penetration to the bottom.
    - (b) Dissolved Oxygen: Better circulation and oxygenation.
    - (c) Toxic Metals and Organics: No release of harmful levels.
    - (d) Pathogens: None expected.
    - (e) Aesthetics: Some impact on turbidity during construction.
    - (f) Others as Appropriate
  - (3) Effects on Biota
    - (a) Primary Production, Photosynthesis: Create habitat for SAV.
    - (b) Suspension/Filter Feeders: Provide food and habitat.
    - (c) Sight Feeders: Provide food and habitat.



- (4) Actions taken to Minimize Impacts: See commitments in the Environmental Assessment (Executive Summary, 4.35 Environmental Commitments and 4.36 Compliance with Environmental Requirements).
  - d. Contaminant Determinations: No harmful release expected.
  - e. Aquatic Ecosystem and Organism Determinations
    - (1) Effects on Plankton: Minimal impact.
    - (2) Effects on Benthos: Will provide benthic habitat for SAV.
    - (3) Effects on Nekton: Would benefit as a result of benthic habitat improvements (food chain).
    - (4) Effects on Aquatic Food Web: Will contribute to food chain.
    - (5) Effects on Special Aquatic Sites
      - (a) Sanctuaries and Refuges. None affected.
      - (b) Wetlands. Minimal impact. No direct impact.
      - (c) Mud Flats. Minimal impact.
      - (d) Vegetated Shallows: Will create habitat for SAV
      - (e) Coral Reefs. Minimal impact. No direct impact.
      - (f) Riffle and Pool Complexes: No impact. None present.
    - (6) Threatened and Endangered Species: Could benefit the manatee and green sea turtle.
    - (7) Other Wildlife
    - (8) Actions to Minimize Impacts: See commitments in the Environmental Assessment (Executive Summary, 4.35 Environmental Commitments and 4.36 Compliance With Environmental Requirements).
  - f. Proposed Disposal Site Determinations
    - (1) Mixing Zone Determination: No affect once constructed.
    - (2) Determination of Compliance with Applicable Water Quality Standards: Will comply with water quality standards and the requirements of any Water Quality Certification pursuant to Section 401 of the Clean Water Act.
    - (3) Potential Effects on Human Use Characteristic
      - (a) Municipal and Private Water Supply: No affect.
      - (b) Recreational and Commercial Fisheries: Could benefit fishing.
      - (c) Water Related Recreation. No affect once constructed.
      - (d) Aesthetics: No affect once constructed.
      - (e) Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves: Minimal impact.
  - g. Determination of Cumulative Effects on the Aquatic Ecosystem: Action does not contribute to cumulative effects, but mitigates for impacts.
  - h. Determination of Secondary Effects on the Aquatic Ecosystem: Any secondary effects are likely not harmful.
- III. Findings of Compliance or Non-Compliance With the Restrictions on Discharge
- a. Adaptation of the Section 404(b)(1) Guidelines to this Evaluation
  - b. Evaluation of Availability of Practicable Alternatives to the Proposed Discharge Site Which Would Have Less Adverse Impact on the Aquatic Ecosystem: The earlier plan to mitigate for impacts presented concerns over confinement of the fill material.
  - c. Compliance with Applicable State Water Quality Standards: Will comply.



- d. Compliance with Applicable Toxic Effluent Standard or Prohibition Under Section 307 Of the Clean Water Act: No toxic substances involved.
- e. Compliance with Endangered Species Act of 1973. Complies.
- f. Compliance with Specified Protection Measures for Marine Sanctuaries Designated by the Marine Protection, Research, and Sanctuaries Act of 1972. None.
- g. Evaluation of Extent of Degradation of the Waters of the United States. Yes.
  - (1) Significant Adverse Effects on Human Health and Welfare. No.
    - (a) Municipal and Private Water Supplies
    - (b) Recreation and Commercial Fisheries
    - (c) Plankton
    - (d) Fish
    - (e) Shellfish
    - (f) Wildlife
    - (g) Special Aquatic Sites
  - (2) Significant Adverse Effects on Life Stages of Aquatic Life and Other Wildlife Dependent on Aquatic Ecosystems. No.
  - (3) Significant Adverse Effects on Aquatic Ecosystem Diversity, Productivity and Stability. No.
  - (4) Significant Adverse Effects on Recreational, Aesthetic, and Economic Values. No.
- h. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem: Yes
- i. On the Basis of the Guidelines the Proposed Disposal Site(s) for the Discharge of Dredged or Fill Material is specified as complying with the requirements of these guidelines, with the inclusion of appropriate and practical conditions to minimize pollution or adverse effects on the aquatic ecosystem. These include compliance with any conditions placed on the water quality certification and the environmental commitments indicated in the Environmental Assessment.



FINDING OF COMPLIANCE  
FOR  
THE SAN JUAN HARBOR MITIGATION EFFORT

1. No significant adaptations of the guidelines were made relative to this evaluation.
2. The proposed action would provide habitat for sea grass, other submerged aquatic vegetation, and associated organisms.
3. The planned disposal of dredged material at site two would not violate any applicable State/Commonwealth water quality standards. The disposal operation will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.
4. Use of the selected disposal site will not harm any endangered species or their critical habitat.
5. The Proposed disposal of dredged material will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreation and commercial fishing, plankton, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic life 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.
6. Appropriate steps to minimize potential adverse impacts of the discharge on aquatic systems include use of suitable dredged material to fill and cap the habitat creation site (if needed) and other measures indicated in the Environmental Assessment.
7. On the basis of the guidelines the proposed disposal site for the discharge of dredged material is specified as complying with the inclusion of appropriate and practical conditions to minimize pollution or adverse effects to the aquatic ecosystem.



## **APPENDIX B - COASTAL ZONE MANAGEMENT CONSISTENCY**



**COASTAL ZONE MANAGEMENT PROGRAM  
FEDERAL CONSISTENCY EVALUATION PROCEDURES**

**MITIGATION FOR  
SAN JUAN HARBOR PROJECT  
SAN JUAN, PUERTO RICO**

**Applicability of the Coastal Zone Management Act.**

The following table summarizes the process and procedures under the Coastal Zone Management Act for Federal Actions and for non-Federal Applicants\*.

<b>Item</b>	<b>Non-Federal Applicant (15 CFR 930, subpart D)</b>	<b>Federal Action (15 CFR 930, subpart C)</b>
Enforceable Policies	Reviewed and approved by NOAA	Same
Effects Test	Direct, Indirect (cumulative, secondary), adverse or beneficial	Same
Review Time	6 months from state receipt of Consistency Certification (30-days for completeness notice) Can be altered by written agreement between State and applicant	60 Days, extendable (or contractible) by mutual agreement
Consistency	Must be Fully Consistent	To Maximum Extent Practicable**
Procedure Initiation	Applicant provides Consistency Certification to State	Federal Agency provides "Consistency Statement" to State
Appealable	Yes, applicant can appeal to Secretary (NOAA)	No (NOAA can "mediate")
Activities	Listed activities with their geographic location (State can request additional listing within 30 days)	Listed or Unlisted Activities in State Program
Activities in Another State	Must have approval for interstate reviews from NOAA	Interstate review approval NOT required
Activities in Federal Waters	Yes, if activity affects state waters	Same

\* There are separate requirements for activities on the Outer Continental Shelf (subpart E) and for "assistance to an applicant agency" (subpart F).

\*\* Must be fully consistent except for items prohibited by applicable law (generally does not count lack of funding as prohibited by law, 15 CFR 930.32).





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

REPLY TO  
ATTENTION OF

May 23, 2014

Planning Division  
Environmental Branch

Ms. Rose Ortiz  
Coastal Zone Management Consistency Office  
Puerto Rico Planning Board  
P.O. Box 41119, Minillas Station  
San Juan, Puerto Rico 00940

Dear Ms. Ortiz:

I have enclosed seven copies of an application for Certification of Consistency with the Puerto Rico Coastal Management Program for the San Juan Harbor Mitigation Project in San Juan, Puerto Rico. This project involves the filling of 4 acres (including side slopes) of dredged holes in the Condado Lagoon with 46,000 cubic yards of dredged material to create 1.2 acres of habitat to an elevation of -12 feet to -15 feet for submerged aquatic vegetation. The dredged material would come from two shoaled areas in the La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor (see enclosed maps, drawings, and description).

The following additional information on this project is available on the internet  
[http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto\\_Rico](http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto_Rico):

- The Notice of Availability of the Draft Finding of No Significant Impact
- The Environmental Assessment
- Maps, drawings, and other information

If you have any questions, please contact Kenneth Dugger at 904-232-1686 (kenneth.r.dugger@usace.army.mil).

Sincerely,

/Signed/

Eric P. Summa  
Chief, Environmental Branch

Enclosures



Commonwealth 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: ☐ Objection ☐ Acceptance ☐ Negotiation

Technician: \_\_\_\_\_ Supervisor: \_\_\_\_\_

Comments: \_\_\_\_\_

1. Name of Federal Agency: U.S Army Corps of Engineers, Jacksonville, District
2. Federal Program Catalog Number: 12.107 (navigation) [www.cfda.gov]
3. Type of Action:
- ☒ Federal Activity ☐ License or permit ☐ Federal Assistance
4. Name of Applicant: Eric P. Summa, Chief Environmental Branch
- Postal Address: P.O. Box 4970, Jacksonville, Florida 32203-4412
- Telephone: 904 232-1665 Fax: 904 232-3442
5. Project name: San Juan Harbor Mitigation
6. Physical Description of Project Location (area, facilities such as vehicular access, drainage, storm and sanitary sewer placement, etc.): Fill dredged hole in Condado Lagoon using Borrow sites in La Esperanza and/or San Antonio Channel

Lambert Coordinates: X = 13007024.960 Y = 5116421.127



7. Type of construction or other work proposed:

- ☐ drainage
- ☐ channeling
- ☐ landfill
- ☐ sand extraction
- ☐ pier
- ☐ bridge
- ☐ residential
- ☐ tourist

others (specify and explain) Mitigation for Navigation Project

Description of proposed work: Fill 4 acres of dredged holes in Condado Lagoon to elevation -12 feet to -15 feet to create 1.2 acres of habitat for submerged aquatic vegetation.

Borrow of 46,000 cubic yards of suitable material from the La Esperanza restoration project and/or San Anatonio channel in San Juan Harbor

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	X			San Juan Estuary
marshes				
coral, reefs				
river, estuary				
bird sanctuary				
pond, lake, lagoon				
agricultural unit				
forest, wood				
cliff, breakwater				
cultural or tourist area				
other (explain)				

Describe the likely impact of the project on the identified system (s).

Positive ☒ Negative ☐

Explain: Project is to mitigate for 1.2 acres of impact from improvements to San Juan Harbor



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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
f. U.S. Army Corps of Engineers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
g. U.S. Coast Guard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
h. Other (s) (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

CERTIFICATION

I CERTIFY THAT (project name) the San Juan Harbor Mitigation Project is consistent with the Puerto Rico Coastal Zone Management Program, and that to the best of my knowledge the above information is true.

Eric P. Summa

Name (legible)

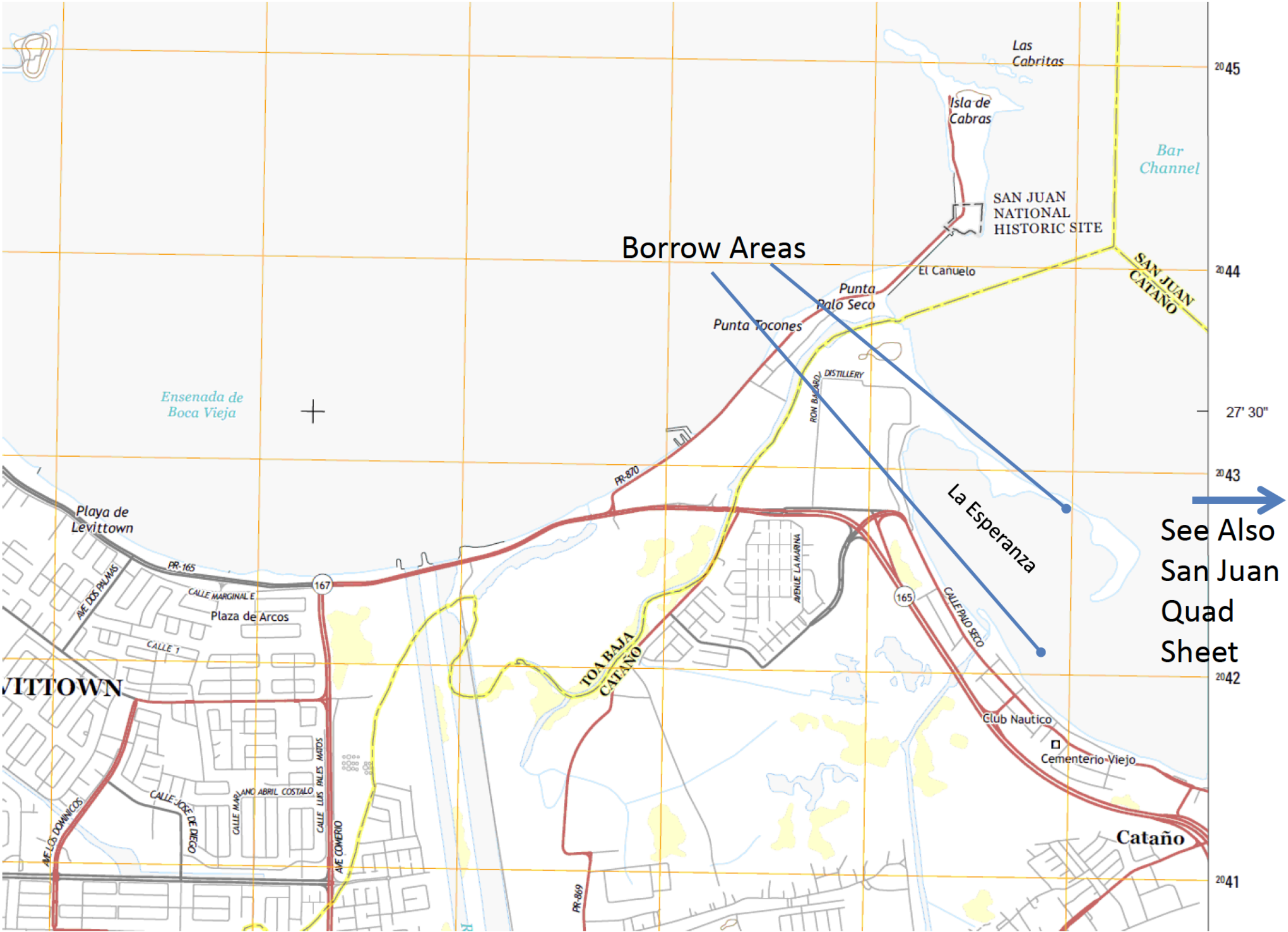
Chief, Environmental Branch

Position

Signature

Date







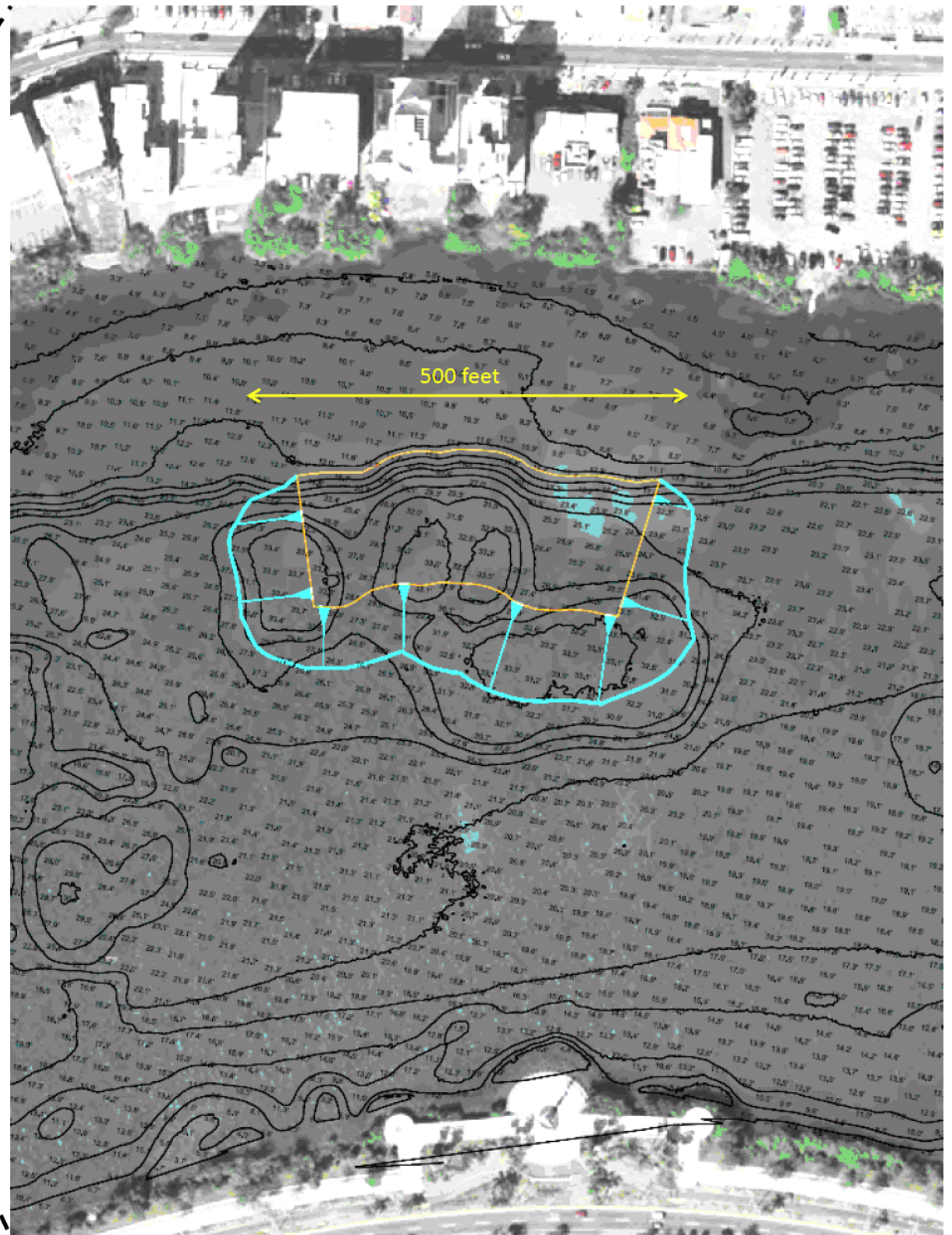








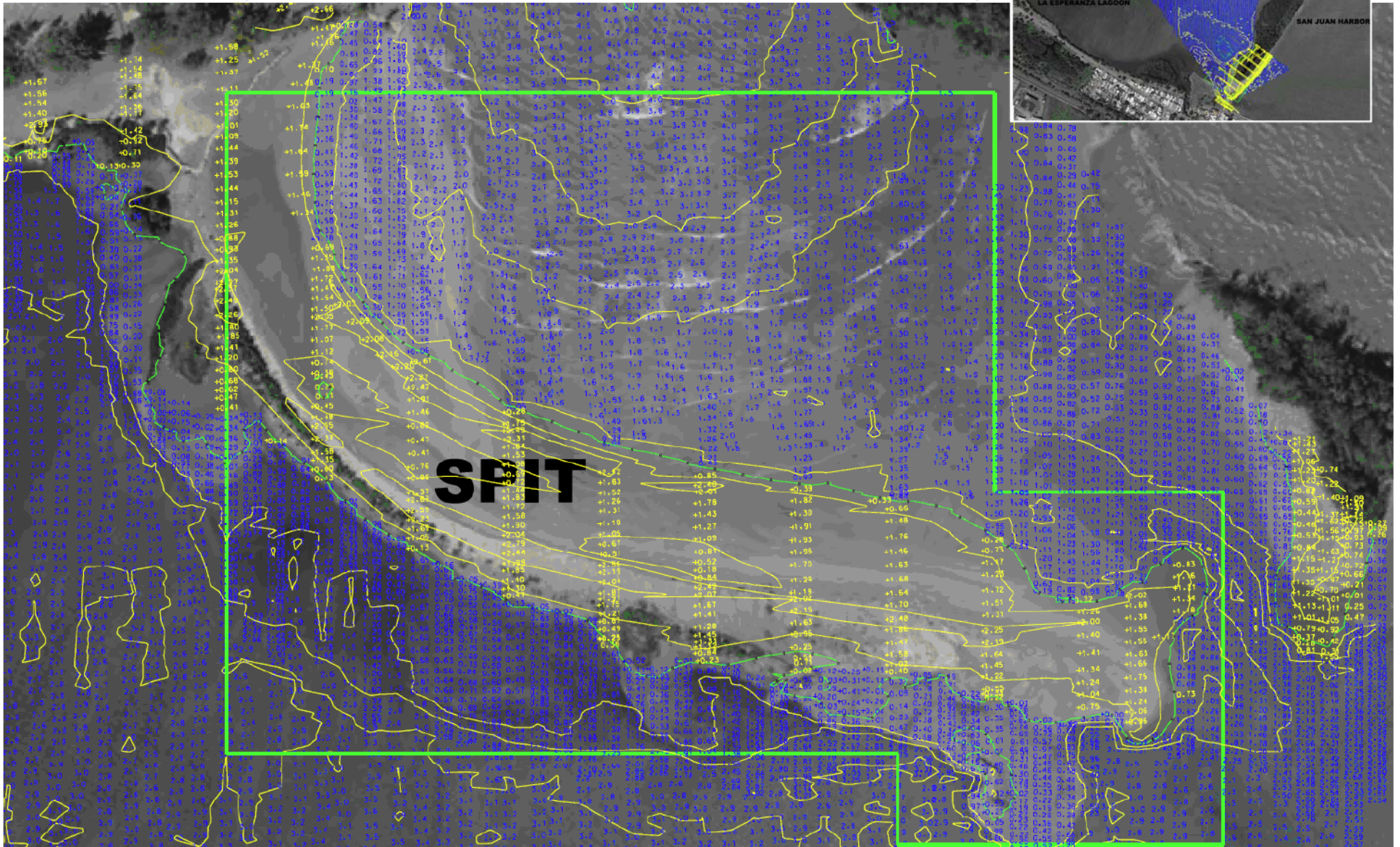
# Mitigation Site for San Juan Harbor in Condado Lagoon





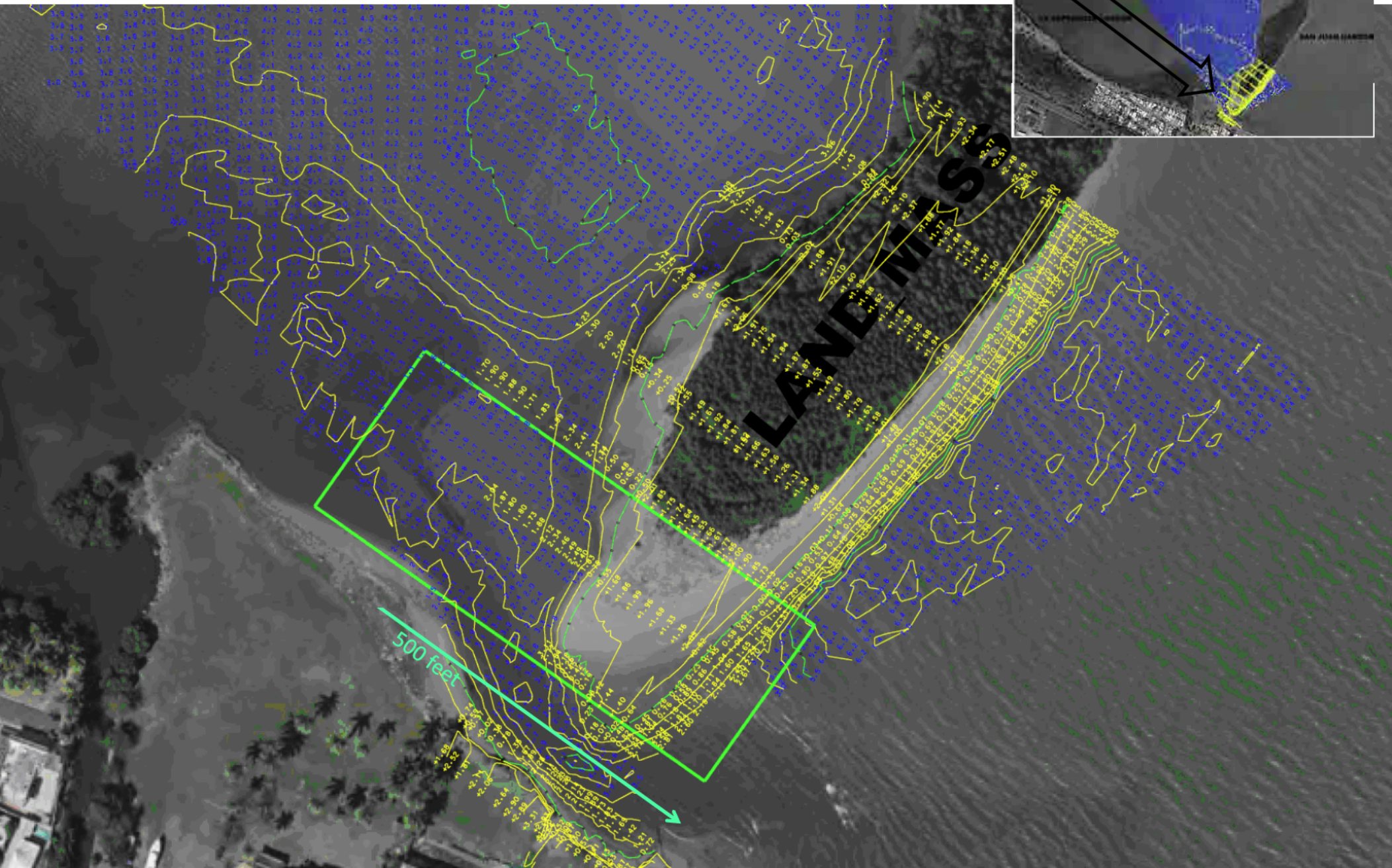
# Borrow Site, La Esperanza, North Opening

800 feet



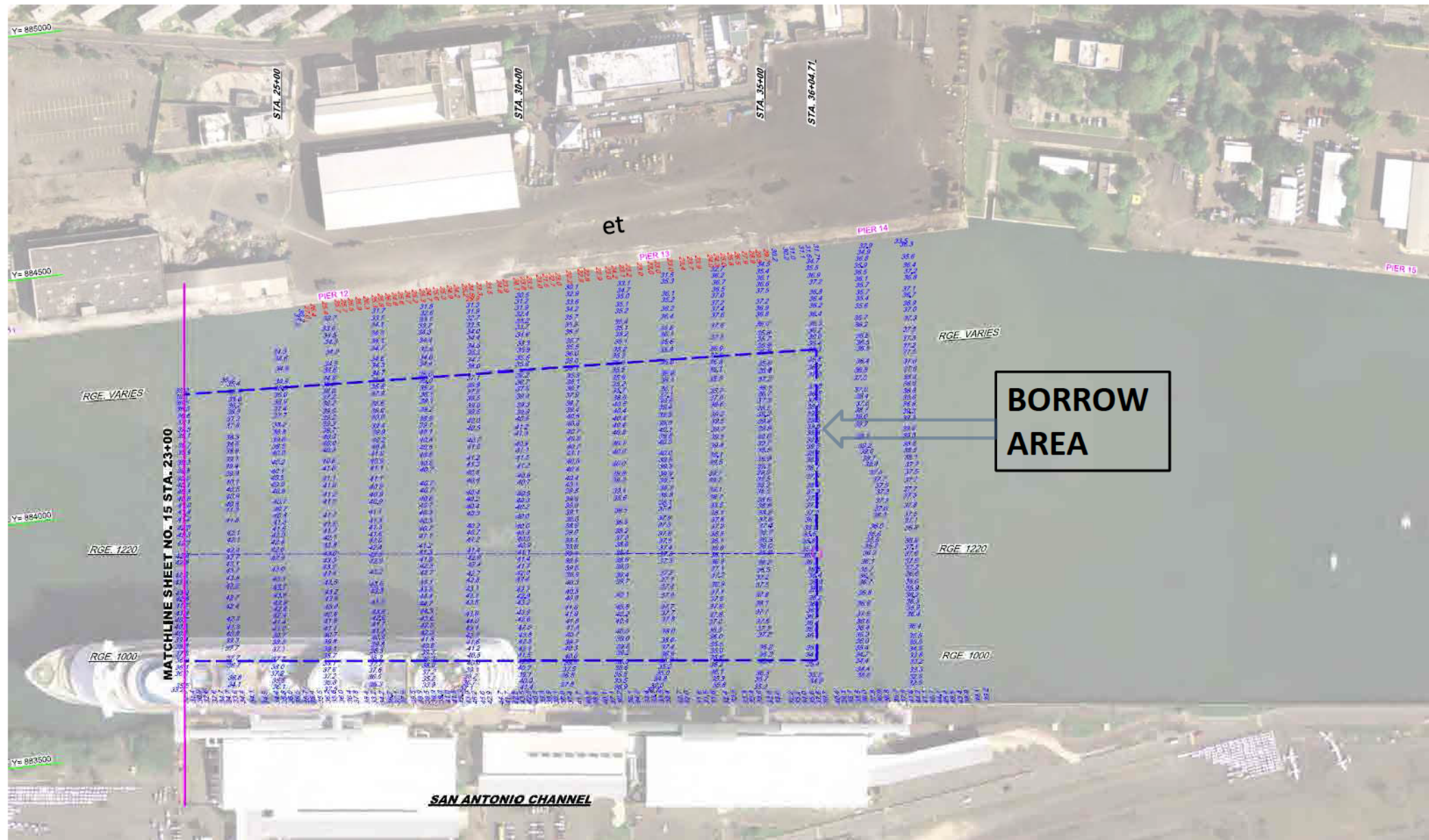


## Borrow Site, La Esperanza, East Opening



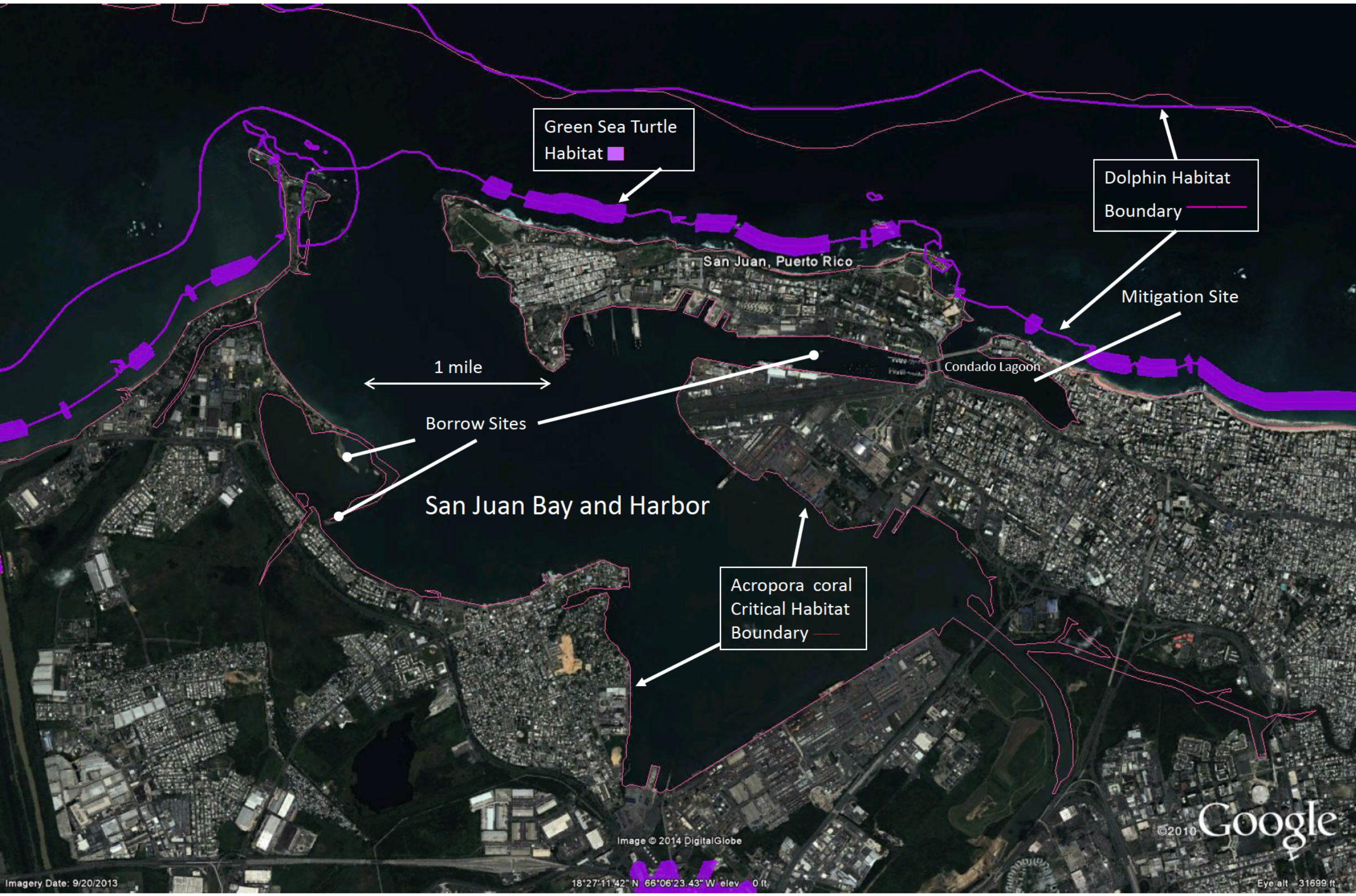


# Borrow Site, San Antonio Channel

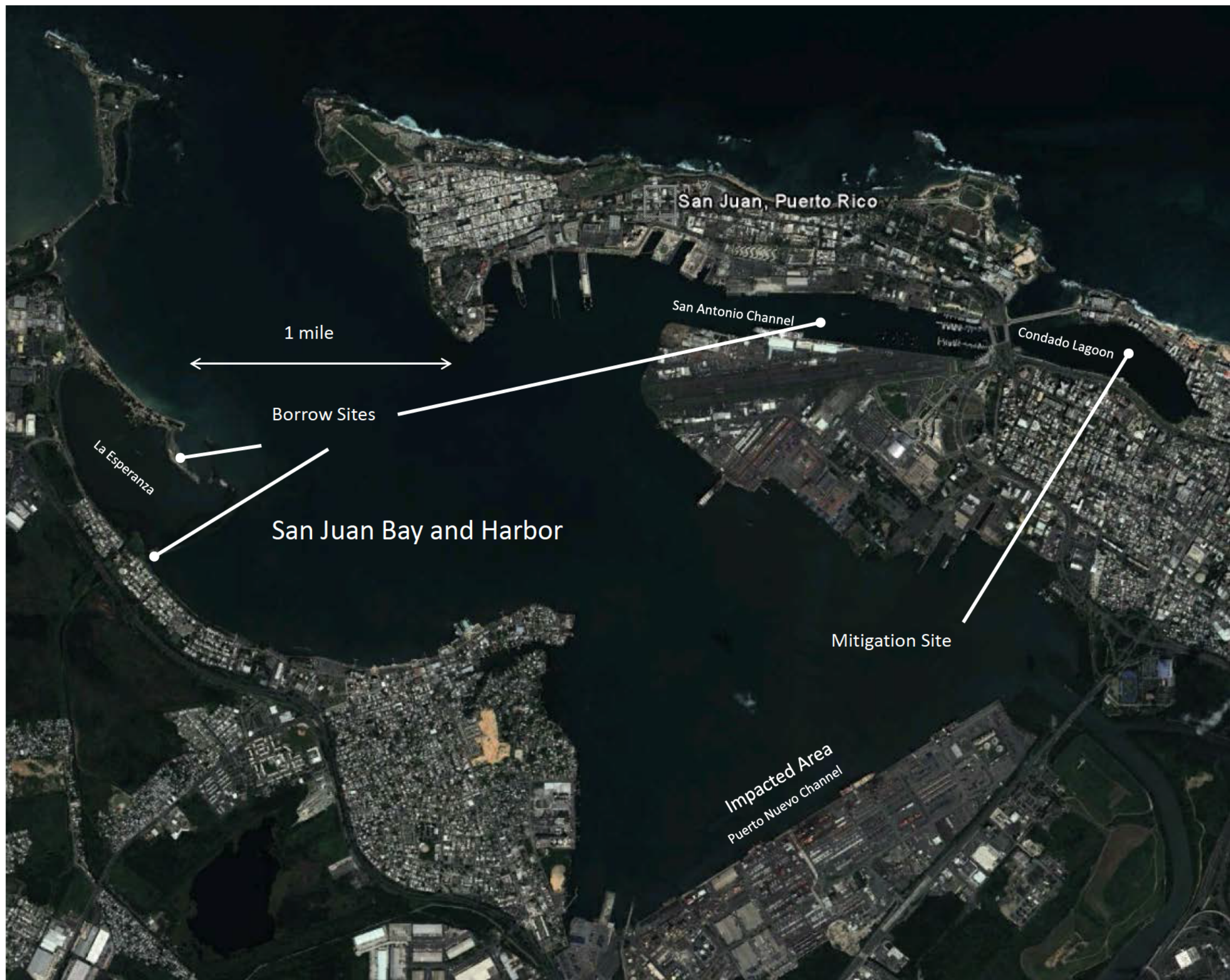




Resources: Sea Turtles, Marine Mammals, and Acropora Coral  
(from Resources at Risk (RAR), Google Earth Application)







San Juan, Puerto Rico

San Antonio Channel

Condado Lagoon

1 mile

Borrow Sites

La Esperanza

San Juan Bay and Harbor

Mitigation Site

Impacted Area  
Puerto Nuevo Channel





ESTADO LIBRE ASOCIADO DE  
**P U E R T O   R I C O**  
Junta de Planificación

June 26, 2014

Mr. Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineering  
PO Box 4970  
Jacksonville, Florida 32232-0019

**APPLICATION FOR FEDERAL CONSISTENCY CERTIFICATION**  
**CZ-2014-0528-087**  
**SAN JUAN HARBOR MITIGATION**

Dear Mr. Summa:

We acknowledge receipt of your application for Federal Consistency with the Coastal Management Program. We have assigned the number CZ-2014-0528-087 for the project at reference; please refer to it in your future communications. Considering the nature and public benefit of this project, we are performing the required Federal Consistency review and procedures, notwithstanding, the following requisites must be completed as soon as possible according to Federal Consistency Procedures at 15 CFR Part 930:

- 1- The proposed project must comply with the required environmental review process according to the Puerto Rico Environmental Policy Law (Law Number 416 of September 22, 2004). This process must be completed as a prerequisite to obtain the required Water Quality Certificate from the P.R. Environmental Quality Board (EQB). In order to comply with this requirement, the USACE must coordinate with the PR Permit Management Office (OGPe) in order to comply with the required local environmental review process. In order to receive orientation and assistance we recommend the following contact:

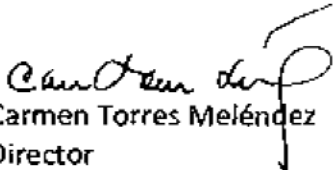
Mr. Luis Morales  
Director  
Environmental Compliance Division  
PR Permit Management Office  
(787)721-8282 ext. 16368  
e-mail: morales\_l@ogpe.pr.gov



- 2- As soon as the required coordination with OGPe and the Environmental Quality Board is completed, the USACE must inform the Puerto Rico Planning Board about the agreements or instructions provided by this agency to facilitate the local environmental review.
- 3- The proposed Federal Activity impact resources under local jurisdiction of the Department of Natural and Environmental Resources. Therefore, coordination with this agency is also required.

The Federal Consistency review period of the proposed Federal Activity began on May 27, 2014. In order to conclude the required evaluation according to Federal Consistency Regulations at 15 CFR Part 930, the above mentioned coordination must be completed on or before July 21, 2014. If you have any questions concerning this matter or need assistance do not hesitate to contact Rose A. Ortiz at (787) 722-0101, dial #3 and extension 16012 or email address: ortiz\_r@jp.pr.gov.

Cordially,

  
Carmen Torres Meléndez  
Director  
Land Use Planning Subprogram

c. Kenneth Dugger, USACE  
Ernesto Díaz, PRCZMP, DRNA





ESTADO LIBRE ASOCIADO DE  
PUERTO RICO  
Junta de Planificación

29 de julio de 2014

ERIC P. SUMMA, CHIEF ENV. BRANCH  
PO BOX 4970  
JACKSONVILLE, FL 32203-4412

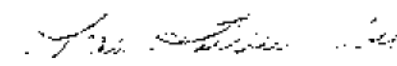
**Caso Número: CZ-2014-0528-087**

Estimado(a) señor(a):

Cumpliendo con las disposiciones de las Leyes Número 75 del 24 de junio de 1975 y 170 del 12 de agosto de 1988, según se formuladas, y para nuestra notificación oficial, le envío copia certificada de la aplicación pública emitida por la Junta de Planificación de Puerto Rico en relación con el asunto de epígrafe.

Le agradeceré acuse de recibo de esta notificación.

Cordialmente,

  
Myrna Martínez Hernández  
Secretaria Interina

Anejo









ESTADO LIBRE ASOCIADO DE PUERTO RICO  
OFICINA DEL GOBERNADOR  
JUNTA DE PLANIFICACION

**AVISO PUBLICO**

**Solicitud de Certificación de Compatibilidad Federal  
CZ-2014-0528-087**

**A quien pueda interesar:** En conformidad con las Secciones 306 (d) 14 y 307 (3) (A) de la Ley Federal de Manejo de la Zona Costanera del 27 de octubre de 1972 según enmendada, queremos informarle que la Junta de Planificación tiene ante su consideración la siguiente Certificación de Compatibilidad Federal con el Programa de Manejo de la Zona Costanera de Puerto Rico (PMZCPR):

**Proponente:** Cuerpo de Ingenieros del Ejército de Estados Unidos (USACE, por sus siglas en inglés)

**Descripción y Propósito del Proyecto:** Se propone un proyecto de mitigación que consiste en aprovechar 46,000 yardas cúbicas de material de dragado que será extraído como parte de un dragado de mantenimiento en el área de la Península Espenanza y/o el Canal San Antonio, para rellenar las depresiones artificiales existentes en la Laguna del Condado. Estas depresiones artificiales fueron creadas por actividades de extracción y dragado que se dieron durante la primera mitad y mediados del siglo XX, especialmente en la década de los 1950's. La alteración de los niveles naturales de la laguna ha causado degradación en la calidad del agua, el hábitat béntico y el hábitat de especies marinas. El propósito del proyecto es devolverle a la Laguna del Condado su profundidad natural de tal manera que se pueda establecer y prosperar la vegetación acuática, se restauren las condiciones ecológicas y mejore la calidad del agua en la misma. Las depresiones artificiales donde se llevará a cabo el depósito comprenden un área de cuatro (4) acres. Con el depósito de las 46,000 yardas cúbicas, esta área quedará a una profundidad de entre a -12 a -15 pies.

El USACE llevará a cabo este proyecto de mitigación para compensar por el impacto causado a 1.2 acres de *Halophila decipiens* y macro algas cuando se llevó a cabo el dragado de mantenimiento y ampliación del canal Puerto Nuevo en la Bahía de San Juan. El proyecto de mitigación propuesto cumplirá con el propósito de la Acción HW-2 propuesta bajo el "Plan Integral de Manejo y Conservación para el Estuario de la Bahía de San Juan". Esta acción se dirige a "Restablecer las praderas de yerbas marinas en la Laguna del Condado" mediante el relleno de las depresiones artificiales utilizando material apropiado.

**Localización del proyecto:** El área de depósito de relleno está ubicada en la parte norte-centro de la Laguna del condado, al sur de la Avenida Ashford y el Restaurante Chilis y al norte del paseo y área recreativa ubicada en el Expreso Balcónoty de Castro (PR-26), en San Juan, Puerto Rico.

**Posibles Impactos:** Los impactos del proyecto propuesto serán temporeros. No se espera un impacto significativo en la calidad del agua durante la fase operacional del proyecto considerando las condiciones naturales de circulación del agua que presenta la laguna. No obstante las actividades de recreación que se llevan a cabo regularmente podrían verse afectadas de manera temporera durante la fase operacional del proyecto. También puede haber impactos temporeros al hábitat de especies protegidas y en peligro de extinción.

**Beneficios esperados:** El aumento del área ocupada por las yerbas marinas mejorará los recursos pesqueros de la Laguna del Condado incluyendo las especies de importancia comercial. Las especies en peligro de extinción como el manatí antillano se beneficiarán por el aumento en la disponibilidad de alimento. El mejoramiento de los recursos vivos de la laguna redundará en un aumento de las actividades recreativas en la laguna. Se espera que la reducción en el volumen de agua de la laguna disminuya el tiempo de renovación de las aguas y de este modo, mejore la calidad del agua. La calidad del agua también mejorará con las funciones desempeñadas por las yerbas marinas, tales como estabilización de sedimento y la producción de oxígeno.



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OFICINA DEL GOBERNADOR  
JUNTA DE PLANIFICACION



2 | **Aviso Público**  
**Solicitud de Certificación de Compatibilidad Federal**  
**CZ-2014-0528-087**

La documentación radicada referente al proyecto propuesto estará disponible a partir de la fecha de notificación de este aviso para su revisión de compatibilidad con las políticas públicas del Programa de Manejo de Zona Costanera de P.R. en La documentación radicada referente al proyecto propuesto estará disponible a partir de la fecha de notificación de este aviso para su revisión de compatibilidad con las políticas públicas del Programa de Manejo de Zona Costanera de P.R. en el **Subprograma de Planes de Usos de Terrenos, Junta de Planificación, ubicado en el Piso 15 del edificio Norte del Complejo Gubernamental Roberto Sanchez Vilella (Minillas Norte), en un horario de 8:00 AM a 4:30 PM, de lunes a viernes.** Los documentos radicados bajo esta solicitud están disponibles para revisión a través del portal de la Junta de Planificación, *bajo el icono de Evaluación Ambiental en la dirección: [www.jp.pr.gov](http://www.jp.pr.gov)*


Para presentar comentarios referente a esta solicitud tendrá un periodo de **quince (15) días** a partir de la fecha de notificación de este aviso. Todo comentario deberá dirigirse por escrito a:

Oficina de la Secretaria  
Junta de Planificación  
P.O. Box 41119  
San Juan, Puerto Rico 00940-1119

Favor de hacer referencia al número de la solicitud en su correspondencia. Para cualquier pregunta referente a este asunto puede comunicarse con la Unidad de Zona Costanera al (787)-722-0101 ext. 16012 o a través de correo electrónico a: [ortiz\\_r@jp.pr.gov](mailto:ortiz_r@jp.pr.gov)

Certifico y Notifico hoy, 29 JUL 2014

  
Mylena Martínez Hernández  
Secretaria Ejecutiva

 **OFICINA DE LA SECRETARIA**  
**OFICINA DEL SECRETARIO**  
**JUNTA DE PLANIFICACIÓN**



**PUERTO RICO COMMONWEALTH  
GOVERNOR'S OFFICE  
PUERTO RICO PLANNING BOARD**

**PUBLIC NOTICE**

**Application for Federal Consistency Certification with the  
P.R. Coastal Zone Management Program  
CZ-2014-0528-087**

According to sections 306(d) 14 and 307(3)(A) of the Coastal Zone Management Act of 1972, as amended, and applicable Federal Consistency Regulations at 15 CFR Part 930, the Puerto Rico Planning Board informs that the following project is under Federal Consistency review with the P.R. Coastal Zone Management Program:

**Applicant:** U.S. Army Corps of Engineers (USACE)

**Project Description:** The USACE is proposing to perform a mitigation project that consists in taking advantage of 46,000 cubic yards of suitable material to be dredged from "Península La Esperanza" and/or San Antonio Channel, to fill two existing artificial depressions at the Condado Lagoon. These artificial depressions were created by mining and dredging that occurred during the first half and mid-twentieth century, especially in the decade of the 1950's. Alteration of the natural lagoon levels by these man made activities has caused degradation in water quality and benthic habitat. The purpose of the proposed mitigation is to restore the original depth of "Condado Lagoon" (around -12 to -14 feet) so as to promote the reestablishment of typical aquatic vegetation.

The proposed mitigation project will be performed to compensate for the impact 1.2 acres of *Halophila decipiens* and macro algae caused when carried out dredging and widening of Puerto Nuevo Channel at San Juan Bay. This project will meet the purpose of Action E1W-2 proposed under the "Comprehensive Conservation and Management Plan for Bay Estuary San Juan". This action is directed to restore seagrass beds in the Condado Lagoon by filling artificial depressions with appropriate material.

**Project Location:** the project site is located in the north-central part of Condado Lagoon, south of Ashford Avenue and Chilis restaurant and north of Baldorioty de Castro Avenue (PR-26) and public walkway, at San Juan, Puerto Rico.

**Project Impacts:** there will be temporary impacts during the operational phase of the project. Water quality impacts will not be significant taking into account the natural water circulation conditions present at the lagoon. Notwithstanding, recreation uses and activities will be temporarily affected. The project may also have temporary impacts on protected or endangered species habitat.

**Expected Benefits:** an increase of the area occupied by seagrasses will enhance fisheries at Condado Lagoon, including commercially important species. Endangered species such as the antillean manatee, which depend almost exclusively on seagrasses for their dietary needs, will benefit from an increase in their food supply. An increase in the living resources of the lagoon will enhance the recreational activities that can be performed (e.g., scuba diving, snorkeling) by local residents and the tourists staying at nearby hotels. Water quality will also be improved considering the ecological functions that will be performed by the reestablished aquatic vegetation among other positive factors associated with the restored natural lagoon level.



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OFICINA DEL SECRETARIO DE  
PLANEACION



2 Public Notice

Application for Federal Consistency Certificate

CZ-2014-0528-087

Application and submitted documents in reference to the above described project will be available for public review in the Land Use Planning Subprogram of the Puerto Rico Planning Board, located at floor 15 of the Roberto Sanchez Vilella North Building (Minillas Norte), during regular office hours, Monday to Friday from 8:00 AM to 4:30 PM. The documents will also be available at the Puerto Rico Planning Board web page, under the "Environmental Review" icon at [www.jp.pr.gov](http://www.jp.pr.gov)

Comments must be submitted within a period 15 days from this public notice notification date. Any comment or information in relation to this case must be submitted in writing by regular mail to the following address:

Secretary Office  
Puerto Rico Planning Board  
PO Box 4119  
San Juan, Puerto Rico 00940-1119

Please, make reference to the application number in your comment letter. For any question or orientation in relation to this case, you may contact Rose A. Ortiz at (787) 722-0101, dial #3 and extension 16012, or send an e-mail to: [ortiz\\_r@jp.pr.gov](mailto:ortiz_r@jp.pr.gov)

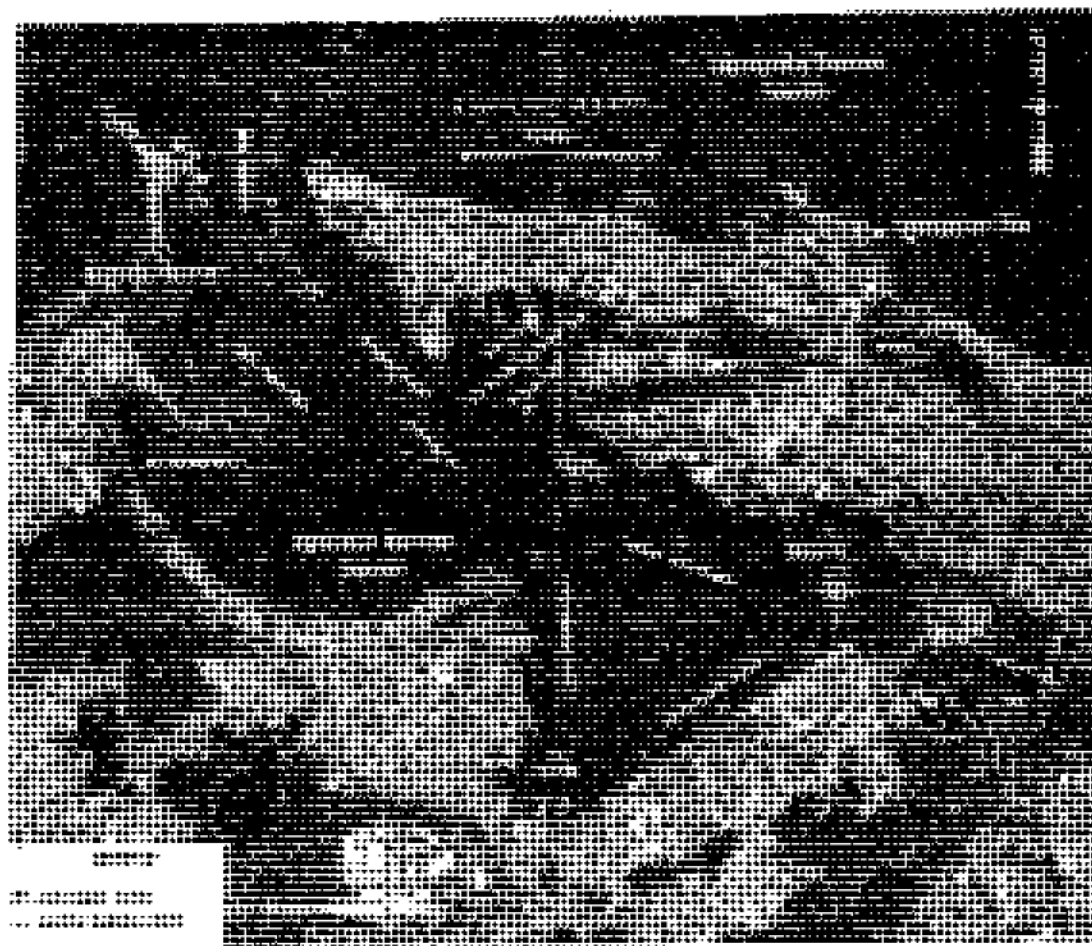
I Certify and Notify today: 29 JUL 2014

  
Mariana Martinez Hernandez  
Acting Secretary



SECRETARÍA ASISTENTE DE PLANEACIÓN  
OFICINA DEL GERENTE  
JUNTA DE PLANEACIÓN



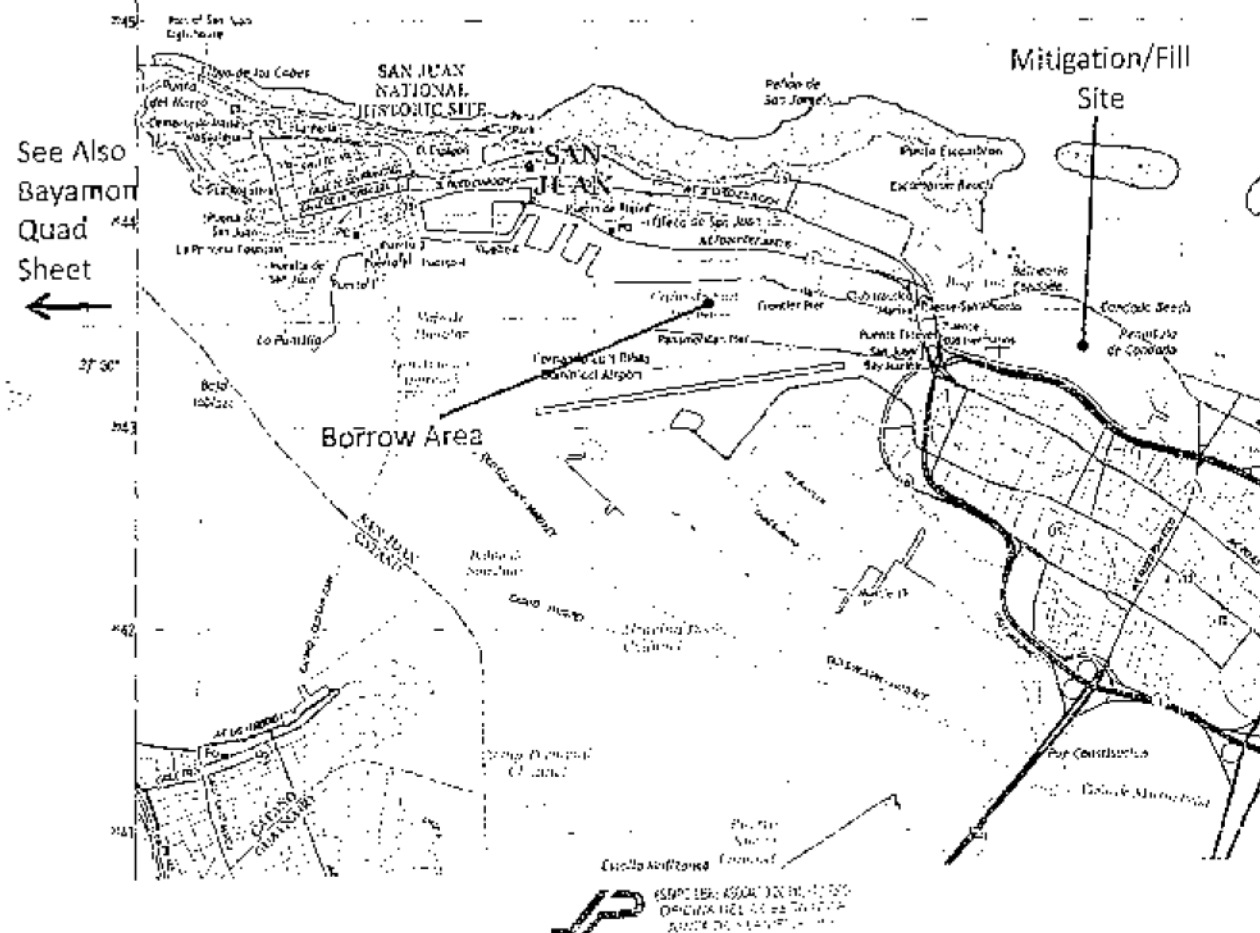


**PLAN DE MANEJO DEL MONUMENTO NATURAL DEL MONTE**



CONSEJO MUNICIPAL DE PUERTO RICO  
OFICINA DEL GOBERNADOR  
JUNTA DE PLANEACIÓN







Mitigation Site for  
San Juan Harbor  
in Condado Lagoon



ESTADO DE PUERTO RICO  
DEPARTAMENTO DE RECURSOS  
NATURALES  
JUNTA DE PLANEACION







August 12, 2014

Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineering  
PO Box 4970  
Jacksonville, Florida 32232-0019

Application for Federal Consistency Certification  
CZ-2014-0528-087  
San Juan Harbor Mitigation

Dear Mr. Summa:

We have been evaluating the project at reference. The application and submitted documents were sent to the Department of Natural and Environmental Resources (DNER), the Environmental Quality Board (EQB), the State Historic Preservation Office (SHPO), the Fish & Wildlife Service (FWS), the Puerto Rico Culture Institute (PRCI), the National Marine Fisheries Service (NMFS) and the Puerto Rico Permit Management Office (OGPe) for their review and comments. Public notices were also issued.

According to provided information and received comments, the following concerns must be addressed:

- 1- The Department of Natural and Environmental Resources (DNER) expressed the following:
  - Although the proposed project is a good management strategy, the DNER is concerned about the extraction source of the material to be used as filling. The presence of potential contaminants and fine sediments would deteriorate the ecosystems present at the lagoon (seagrasses, artificial reef modules project at the northeast side of the lagoon, existing fish population and other). The USACE mentioned that "superficial sediments collected in 2011 and 2013 from La Esperanza Peninsula suggest that this material is likely suitable for restoring the artificial depressions" and that "additional sampling and laboratory analysis to evaluate toxicity of material to be dredged will be performed prior to implementation of the project". The superficial sediment sampling do not necessarily represents the homogeneous composition of the proposed dredging material. Therefore, toxicity and granulometry studies must be performed within all levels deep of the proposed dredging area.
  - Considering that the contractor will be free to take the decision about the method used for transport and handling of the dredged and filling material, the DNER also expressed concern about which would be the sedimentation controls to be implemented in order to prevent the dispersion of sediments within the water column.
- 2- The Condado Lagoon is located within an urban and highly populated tourist zone. This lagoon is intensively used by citizens and tourists for recreation and sport activities. There are dealers that use to rent kayaks, pedal boats and others. There also use to celebrate public events as the Iron Man race, and others. Considering that the operational phase of this project would last up to three months, what measures will the USACE implement to minimize or avoid temporary impacts to public use and commercial activities?



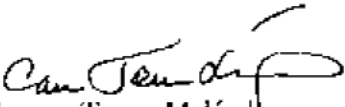
- 3- As it was expressed in our June 26, 2014 letter, the proposed mitigation project must comply with the required environmental review process according to the Puerto Rico Environmental Policy Law (Law Number 416 of September 22, 2004). This process must be completed as a prerequisite to obtain the required Water Quality Certificate from the P.R. Environmental Quality Board (EQB). Provide copy of the required environmental review endorsement or Categorical Exclusion from the P.R. Permit Management Office.

Copy of the agencies letters and received comments are submitted as enclosure for your review and consideration. The Puerto Rico Planning Board's (PRPB) consistency determination is based on the comments and recommendations received from the consulted agencies and the analysis of available information.

The PRPB will be concluding this Federal Consistency review on or before August 30, 2014. Additional comments or information to address the above mentioned concerns on or before August 22, 2014. If you have any question or need assistance, does not hesitate to contact Rose A. Ortiz at (787) 722-0101 dial #3 and extension 16012 or 16611.

We are in the best disposition to collaborate in this mitigation effort.

Cordially,

  
Carmen Torres Meléndez  
Director  
Land Use Planning Subprogram

Enclosures

- c Kenneth Dugger (copy sent by e-mail), Project Manager, USACE
- Nelson Colón (copy sent by e-mail), USACE
- Wanda E. García Hernández, Water Quality Area, EQB
- Luis Morales, Environmental Review and Compliance Division, OGPe
- Damaris Delgado, DRNA
- Ernesto Díaz, PRCZMP, DRNA

RAO





## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Caribbean Ecological Services

Field Office

P.O. Box 491

Boqueron, PR 00622



INFO COPY  
FILED BY MJC

In Reply Refer To:  
FWS/R4/CESFO/72127-002

MAY 05 2014

Eric P. Summa  
Chief, Environmental Branch  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Re: San Juan Harbor Mitigation Project.  
San Juan, Puerto Rico

Dear Mr. Summa:

Thank you for your letter dated April 22, 2014, requesting concurrence with your effect determination for the compliance with Section 7 of the Endangered Species Act. Our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), and the Marine Mammal Protection Act (86 Stat. 1027, as amended; 16 U.S.C. 1361 *et seq.*).

The project consists of the filling of 4 acres of dredged holes in the Condado Lagoon with dredged material to create 1.2 acres of habitat for submerged aquatic vegetation. The dredge material would come from La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor, San Juan, Puerto Rico.


Based on a review of the information provided and that available in our office, the proposed action lies within the range of the endangered Antillean manatee (*Trichechus manatus*). However, based on the nature of the project, the site characteristics and on the implementation of appropriate manatee conservation measures (enclosed) we concur with your determination that the proposed project may affect, but is not likely to adversely affect the Antillean manatee or its habitat. Therefore, no further consultation is required. Nevertheless, if the project is modified or if information on impacts to listed species becomes available this office should be contacted concerning the need for the initiation of consultation under section 7 of the Act.

Thank you for the opportunity to comment on this project. We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the



continuing benefit of our people. Please do not hesitate to contact Marelisa Rivera 787-851-7297, extension 206, should you have any questions concerning our comments.

Sincerely yours,

  
Edwin E. Muñiz  
Field Supervisor

mrh

Enclosure

cc: COF, San Juan



## **ORTIZ DIAZ, ROSE A.**

---

**From:** Lisamarie Carrubba - NOAA Federal <lisamarie.carrubba@noaa.gov>  
**Sent:** Wednesday, July 16, 2014 4:52 PM  
**To:** ORTIZ DIAZ, ROSE A.; FUENTES LACEN, MARYGUEL  
**Cc:** Anabel Padilla; Jose Rivera; Pace Wilber  
**Subject:** CZ-2014-0528-087, U.S. Army Corps of Engineers San Juan Harbor Mitigation Project  
**Attachments:** National Oceanic and Atmospheric Administration Mail - San Juan Harbor Mitigation Project.pdf

Saludos Rose y Maryguel!

This is in response to your June 30, 2014, letter regarding a request for a Certificate of Consistency with the Puerto Rico Coastal Zone Management Program by the U.S. Army Corps of Engineers (USACE), Planning Division, for the San Juan Harbor Mitigation Project. The San Juan Harbor Mitigation was never completed by the USACE and, after a review of the original plan, it was decided to instead fill a portion of the pit in Condado Lagoon that was used as a borrow area to obtain fill material decades ago.

Because the lagoon and the proposed borrow sites, as well as the barge and pipeline routes for transporting material between the borrow sites and the lagoon, contain habitat for or are within the range of hawksbill and green sea turtles, elkhorn and staghorn corals, and corals currently proposed for listing under the Endangered Species Act (ESA), the USACE has initiated an ESA Section 7 consultation with us for the project. I am attaching the email I recently sent to the USACE contact for the consultation. Please note that he responded to some of our concerns, but we still do not have any information regarding potential habitat impacts from the use of two areas in Cataño as borrow sites because a benthic survey of the areas were not conducted. In addition, we do not have details of the proposed pipeline use and the area from the Club Náutico to Condado Lagoon contains seagrass beds so there could be impacts depending on the method for piping material to the lagoon. We also remain concerned regarding the lack of sediment control measures in the water around dredging sites and in the lagoon. Therefore, we are still waiting for additional information from the USACE in order to complete the consultation. Once we receive this information and our consultation letter has been completed, I will send you a copy.

Thank you for the opportunity to provide comments on the proposed project.

Lee

--

Dr. Lisamarie Carrubba  
NOAA Fisheries  
Caribbean Field Office, PRD  
P.O. Box 1310  
Boquerón, PR 00622  
787-851-3700  
787-851-5588 (fax)





## San Juan Harbor Mitigation Project

Finalized by: Lisamarie Carrubba - NOAA Federal - lisamarie.carrubba@noaa.gov

Lisamarie Carrubba - NOAA Federal <lisamarie.carrubba@noaa.gov>

Thu, Jul 10, 2014 at 6:58 PM

To: "Dugger, Kenneth R SAJ" <Kenneth.R.Dugger@usace.army.mil>

Cc: "Acosta, Ivan SAJ" <Ivan.Acosta@usace.army.mil>, Anabel Padilla <Anabel.Padilla@noaa.gov>, Jose Rivera <jose.a.rivera@noaa.gov>, Pace Wilber <pace.wilber@noaa.gov>

Kenneth:

I am writing in regard to the consultation request received on May 5, 2014, regarding the San Juan Harbor Mitigation project and the Environmental Assessment (EA) prepared for the project that was received May 28, 2014. After reviewing all of the information provided, we are not able to concur with your effects determination and require additional information regarding the proposed project in its entirety in order to be able to analyze all potential effects to ESA-listed species and their habitat.

Specifically, we need the following information, most of which was also requested in our March 13, 2013, email to the USACE in response to a request for comments on the proposed mitigation project:

1. it is stated in the EA that the U.S. Army Corps of Engineers (USACE) does not specify the type of dredging equipment required for the project. However, we need to know whether hopper dredging is a possibility because the use of this type of equipment will require formal consultation. Otherwise, the USACE should indicate that you will prohibit the use of hopper dredges and we can continue with informal consultation.
2. your letter considers only green sea turtles, but both hawksbill and greens have been observed in areas of San Juan Bay, including near La Esperanza Peninsular, according to DNER information. In addition, as noted in the EA, leatherback and hawksbill nest on the beach in Condado Lagoon, and hawksbill and greens have been observed in the lagoon. Therefore, the effects analysis needs to include the potential impacts of dredging, transport of material, and filling of the holes on these three sea turtle species.
3. your consultation letter states that pipeline corridors will be surveyed during transport of materials and, if corals are observed, consultation will be reinitiated. We must consider all potential impacts of the project at the time of consultation so this strategy will not work. Instead, we need to know which borrow areas will be selected, what the pipeline or barge transport routes are, and whether or not ESA-listed or proposed corals are in these areas in order to analyze the potential effects.
4. details of proposed methodology in terms of pipeline routes and types of pipelines, timing of dredging and transport of dredged material, placement of dredged material in the pit, etc.
5. information regarding the benthic community in the area or areas that will serve as borrow sites for the material to be placed in the lagoon
6. information regarding all control measures that will be implemented during dredging, material transport, and placement of material in the lagoon to control sediment resuspension and transport and negative water quality impacts, in particular during discharge in the pit which could result in the displacement of a large volume of anoxic water
7. information regarding monitoring that will take place during placement of the material in the lagoon and following completion of the fill to determine whether avoidance and minimization measures are successful in minimizing impacts to water quality that could affect ESA-listed species and their habitat and to determine whether the project is successful in leading to SAV colonization in the filled area.



Please let me know if you have any questions regarding this information request. As soon as we receive the additional information, we will be able to proceed with the ESA Section 7 consultation for this project.

Thank you,  
Lee

—  
Dr. Lisamarie Carrubba  
NOAA Fisheries  
Caribbean Field Office, PRD  
P.O. Box 1310  
Boquerón, PR 00622  
787-851-3700  
787-851-5588 (fax)





ESTADO LIBRE ASOCIADO DE  
**PUERTO RICO**

Oficina Estatal de Conservación Histórica  
State Historic Preservation Office

*Recd*  
2014 JUL 30 PM 3:58



July 23, 2014

Carmen Torres Meléndez  
Director  
Land Use Program  
PR Planning Board  
P.O. Box 41119  
San Juan, PR 00940 1119

SHPO: 02-21-13-03 COMPENSATORY MITIGATION PROJECT, CONDADO LAGOON, SAN JUAN, PUERTO RICO/ CZ-2014-0528-087

Dear Ms. Torres:

Our Office received correspondence on July 2, 2014 regarding the above referenced project. We would like to inform you that this project had been previously reviewed by SHPO personnel and our comments presented in our letter dated May 23, 2014 (copy enclosed) remain in effect.

If you have any questions, please contact Miguel Bonini at (787) 721 3737 or [mbonini@prshpo.gobierno.pr](mailto:mbonini@prshpo.gobierno.pr).

Sincerely,

*Diana López Sotomayor*

Diana López Sotomayor, Archaeologist  
State Historic Preservation Officer

DLS/NPT/BRS/MB

Enclosure



RECIBIDO  
SECRETARIA  
JURIA DE  
COMUNICACION  
2014 JUL 29 PM 3:58





OFICINA ESTATAL DE  
CONSERVACIÓN HISTÓRICA  
OFICINA DEL GOBIERNO

STATE HISTORIC  
PRESERVATION OFFICE  
OFFICE OF THE GOVERNOR



May 23, 2014

Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineers  
P. O. Box 4970  
Jacksonville, Florida 32232-0019

**SHPO: 02-21-13-03 COMPENSATORY MITIGATION PROJECT, CONDADO  
LAGOON, SAN JUAN, PUERTO RICO**

Dear Mr. Summa:

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

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

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions, please contact Miguel Bonini at (787) 721-3737 or [mbonini@prshpo.gobierno.pr](mailto:mbonini@prshpo.gobierno.pr).

Sincerely,

Diana López Sotomayor, Archaeologist  
State Historic Preservation Officer

DLS/NPT/BRS/MB



[WWW.OECH.GOBIERNO.PR](http://WWW.OECH.GOBIERNO.PR)

2014 JUL 30 PM 3:59  
PPT-78

RECIBIDO  
SECRETARIA  
JUNTA DE GOBIERNO  
COMUNICACION

2014 JUL 29 PM 2:20





31 de julio de 2014

Miguel A. Nieves  
Oficial de Manejo DRNA

Re: Comentarios a propuesta

**San Juan Harbor submerged aquatic vegetation  
mitigation project,  
San Juan, Puerto Rico**

El proyecto de mitigación aquí presentado propone utilizar una estrategia identificada en el Plan de Manejo del Estuario de la Bahía de San Juan (San Juan Bay Estuary Program). La referida estrategia consiste en rellenar las depresiones causadas por previos dragados realizados en la Laguna del Condado, esto es así sugerido para los propósitos de restaurar las condiciones de calidad de agua, de hábitat para el desarrollo de las yerbas marinas y poblaciones de peces.

Aunque la intención que este proyecto esgrime es una magnífica estrategia de manejo, nos preocupa la fuente de la extracción del material de relleno a depositarse en la Laguna del Condado. La presencia potencial de contaminantes y sedimentos finos podría resultar en el deterioro de los ecosistemas que actualmente coexisten en la Laguna (Praderas de yerbas marinas, proyecto de finca de corales al noreste de la laguna y poblaciones de peces).

La fuente de extracción propuesta es la Península de La esperanza, situada en el noroeste de la Bahía de San Juan. El proponente menciona que tomaron muestras de sedimento superficial del lugar en los años 2011 y 2013 y sugieren que el material es adecuado para la restauración en la laguna del Condado. También mencionan que para evitar utilizar material contaminado, previo al comienzo del proyecto, se tomaran muestras adicionales para realizar análisis de laboratorio y evaluar la toxicidad del material a ser dragado.

"Superficial sediments collected in 2011 and 2013 from La Esperanza Peninsula suggest that this material is likely suitable for restoring the artificial depressions in Condado Lagoon, and could support restoration of a viable seagrass community. The presence of potential contaminants is a concern of all resource agencies. Disposal of contaminated dredged material may result in a deterioration of aquatic environment. To avoid using contaminated material, additional sampling and laboratory analysis to evaluate toxicity of material to be dredged will be performed prior to implementation of the project."





Las muestras superficiales de material no necesariamente indican la homogeneidad del material a extraer. Se deben realizar estudios de toxicidad y granulometría a todos los niveles de profundidad en donde se pretende extraer el material.

También nos preocupa el manejo y transportación del material de relleno y cuales serán las medidas de control de dispersión de sedimentos en la columna de agua se implementaran. La propuesta deja en manos del contratista la decisión de cómo mover los sedimentos dragados.

"Several methods to transport the dredged material from the La Esperanza Peninsula to the lagoon are available. The proposed handling of the dredged material could involve several methods for transporting all suitable material from the La Esperanza Peninsula to the artificial depression site in the lagoon. A combination of scow barge and pumping through a floating and/or submerged pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon. It should be noted that the Corps does not normally specify the type of dredging equipment to be used. This is generally left to dredging industry to offer the most appropriate and competitive equipment available at the time. Nevertheless, certain types of dredging equipment are normally considered more appropriate depending on the type of material, the depth of the channel, the depth of access to the disposal or placement site, the amount of material, the distance to the disposal or placement site, the wave-energy environment, etc. A more detailed description of types of dredging equipment and their characteristics can be found in Engineer Manual, EM 1110-2-5025, *Engineering and Design -Dredging and Dredged Material Disposal.*"





ESTADO LIBRE ASOCIADO DE  
**PUERTO RICO**  
OFICINA DE GERENCIA DE  
PERMISOS

12 de agosto de 2014

Sra. Carmen Torres Meléndez  
Directora  
Subprograma Planes de Usos de Terrenos  
Junta de Planificación  
P.O. Box 41119  
San Juan, Puerto Rico 00940-1119

Attn: Rose A. Ortiz/ortiz\_r@jp.pr.gov

Solicitud de Certificación de Compatibilidad Federal  
CZ-2014-0528-087  
Proyecto de Mitigación en la Laguna del Condado  
San Juan, Puerto Rico

Estimada señora Torres Meléndez:

Recientemente tuvimos la oportunidad de evaluar el proyecto que propone aprovechar el material a ser extraído, del área del Sector La Esperanza y/o el Canal San Antonio como parte de un dragado de mantenimiento, para rellenar unas depresiones artificiales existentes en la Laguna del Condado. Con este proyecto se busca devolver a la laguna su profundidad natural (de entre 12 a 15 pies) de forma tal que se pueda reestablecer la vegetación acuática y se mejoren las condiciones ecológicas en la misma.

Anteriormente hemos evaluado proyectos de dragado de mantenimiento en muelles localizados en el Canal San Antonio y en la Bahía de San Juan. Estas acciones han tenido como propósito restablecer las profundidades mínimas necesarias para mantener los límites de calado operacional de los muelles.

Dado que la acción propuesta es una que busca reestablecer la vegetación acuática y mejorar las condiciones ecológicas de la Laguna del Condado, entendemos esta acción podría cualificar como una exclusión categórica (EC), al amparo de la EC Núm: 119 de la Resolución R-11-17 de la Junta de Calidad Ambiental, del 21 de noviembre de 2011. Esta Resolución especifica que cualificará como EC, las "Acciones correctivas que incluyan una o varias medidas propuestas para mitigar o eliminar los daños que puedan ser ocasionados al ambiente o que presenten un riesgo inminente a la salud humana".

Se podrá hacer la radicación de la EC a través de la Página del Super SIP.

Cordialmente

Arq. Alberto Lastra Power  
Director Ejecutivo  
Oficina de Gerencia de Permisos

Centro Gubernamental Roberto Sánchez Vilella  
1<sup>er</sup> Ed. Norte, Piso 13  
Ave. De Diego, Pda. 22  
San Juan, PR 00940  
787 771-8782

**OGPE**  
Oficina de Gerencia de Permisos





19 de septiembre de 2014

ERIC P. SUMMA, CHIEF ENV. BRANCH  
PO BOX 4970  
JACKSONVILLE, FL 32203-4412

Caso Número: CZ-2014-0528-087

Estimado(a) señor(a):

Cumpliendo con las disposiciones de las Leyes Número 75 del 24 de junio de 1975 y 170 del 12 de agosto de 1988, según enmendadas, y para vuestra notificación oficial, le envío copia certificada de la notificación pública emitida por la Junta de Planificación de Puerto Rico en relación con el asunto de epígrafe.

Le agradeceré acuse de recibo de esta notificación.

Cordialmente,

Myrma Martínez Hernández  
Secretaria Interina

Anejo





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

August 22, 2014

CZ-2014-0528-087

Federal Consistency Determination with the  
Puerto Rico Coastal Zone Management Program

RESOLUTION

TO NOTIFY PARTIES ABOUT THE PUERTO RICO PLANNING BOARD  
CONCURRENCE WITH THE U.S. ARMY CORPS OF ENGINEERS FEDERAL  
CONSISTENCY WITH THE PUERTO RICO COASTAL ZONE MANAGEMENT  
PROGRAM ACCORDING TO 15 CFR PART 930

168  
The U.S. Army Corps of Engineers (USACE) submitted a Federal Consistency Determination for the San Juan Harbor Mitigation project. The purpose of the proposed mitigation is to compensate for 1.2 acres of *Halophila decipiens* and macro algae that were impacted during the dredging and widening of Puerto Nuevo Channel at San Juan Bay. The proposed mitigation consists in filling two (2) of the artificial depressions that exists at Condado Lagoon, with around 46,000 cubic yards of suitable material to be extracted from "Peninsula La Esperanza" area as part of a maintenance dredging. The artificial depressions at Condado Lagoon were created by mining and dredging that occurred during the first half and mid-twentieth century, especially in the decade of the 1950's. Alteration of the natural lagoon levels by these man made activities has caused degradation in water quality and benthic habitat. The purpose of the proposed mitigation is to restore the original depth (around -12 to -15 feet) of this area in order to promote the reestablishment of typical aquatic vegetation. This project meets the purpose of Action HW-2 proposed under the "Comprehensive Conservation and Management Plan for San Juan Bay Estuary". It establishes "restoring seagrass beds at Condado Lagoon filling artificial depressions with appropriate material".

Various dredging and dredged material transport methods could be used. A temporary pipeline of around 12" diameter will be used to pump the filling material and transport it under the bridge between Condado Lagoon and San Juan Harbor. The actual excavation from the borrow sites might involve a pipeline suction dredge or a mechanical dredge could be used to place the material into a barge or a pumpout station.

According to the Draft Environmental Evaluation document prepared by the USACE, the dredged and filling material will contain a preponderance of fine to coarse sand to ensure stability (Tetra Tech, 2001a) and suitability for submerged aquatic vegetation. Mineral particles less than 0.21 mm and organics will be no more than a minor fraction of the capping material. To ensure stability of the fill material excessive fines and organics will be avoided.

The filling material will be dredged from "La Esperanza" area, located south of Bacardi industrial facilities and north of the town of Cataño. The depressions to be filled are located in the north-central part of Condado Lagoon, south of Ashford Avenue and Chilis restaurant and north of Baldorioty de Castro Avenue (PR-26) and public walkway, at San Juan, Puerto Rico.

During the evaluation period, copy of the application and submitted documents were sent to the Fish & Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), Department of Natural and Environmental Resources (DRNA) the State Historic Preservation Office (SHPO), the Puerto Rico Culture Institute (PRCI) and the PR Permit Management Office (OGPe) for their review and comments. Public notices were also issued. A summary of the received comments follows:

- **FWS:** concluded that the proposed project may affect but is not likely to adversely affect the Antillean manatee. Application of standard manatee protection measures for all in water work will be required.



PUERTO RICO PLANNING BOARD  
OFFICE OF THE GOVERNOR  
SAN JUAN, PUERTO RICO



- **NMFS:** informed that additional information must be submitted to conclude the required Endangered Species Act Consultation.
- **SHPO:** this agency expressed that their records supports the USACE finding of no historic properties affected within the project's area of potential effects.
- **DNER:** Although the proposed project is a good management strategy, the DNER is concerned about the extraction source of the material to be used as filling. The presence of potential contaminants and fine sediments would deteriorate the ecosystems present at the lagoon (seagrasses, artificial reef modules project at the northeast side of the lagoon, existing fish population and other). The USACE mentioned that "superficial sediments collected in 2011 and 2013 from La Esperanza Peninsula suggest that this material is likely suitable for restoring the artificial depressions" and that "additional sampling and laboratory analysis to evaluate toxicity of material to be dredged will be performed prior to implementation of the project". The superficial sediment sampling do not necessarily represents the homogeneous composition of the proposed dredging material. Therefore, toxicity and granulometry studies must be performed within all levels deep of the proposed dredging area. Considering that the contractor will be free to take the decision about the method used for transport and handling of the dredged and filling material, the DNER also expressed concern about which would be the sedimentation controls to be implemented in order to prevent the dispersion of sediments within the water column.
- **OGPe:** considering that the purpose of the proposed activity is to reestablish the aquatic vegetation and improve the ecological conditions at Condado lagoon, the proposed project may qualify as a "Categorical Exclusion" according to the Environmental Quality Board resolution number R-11-17. This resolution specifies that corrective actions which include one or many measures to mitigate or eliminate environmental damages will qualify to comply with the P.R. Environmental Policy Law through a "Categorical Exclusion". The USACE will apply for it through the Puerto Rico Integrate Permit System web page at [www.sip.pr.gov](http://www.sip.pr.gov)

WSP

The Puerto Rico Planning Board sent a letter dated August 12, 2014 with copy of the agencies comments letters. In addition to the concerns and comments expressed by consulted agencies the PRPB presented the following concerns:

- 1- The Condado Lagoon is located within an urban and highly populated tourist zone. This lagoon is intensively used by citizens and tourists for recreation and sport activities. There are dealers that use to rent kayaks, pedal boats and others. There also use to celebrate public events as the Iron Man race, and others. Considering that the operational phase of this project would last up to three months, it is important to establish coordination with local government and stakeholders in order to minimize the temporary impacts to public, commercial and tourist use of the area.
- 2- The USACE must apply and obtain the PR Environmental Policy Law endorsement (through a Categorical Exclusion), this is a pre requisite to obtain a Water Quality Certificate from the Environmental Quality Board.

After reviewing the submitted Federal Consistency Determination, provided information and received comments, The Puerto Rico Planning Board in its meeting of August 22, 2014 determined to concur with the USACE determination that the proposed San Juan Harbor Mitigation project is Consistent with the Puerto Rico Coastal Zone Management Program. In order to facilitate the proposed mitigation project, the PRPB provides the following recommendations:

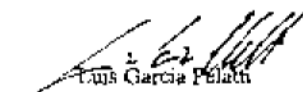
- A. Considering the special circumstances of the Condado Lagoon as a tourist and intensively used public area, it is very important to establish coordination with the local authorities, and notify stakeholders with sufficient time to avoid conflicts with the operational phase of the project and minimize the temporary impacts on public uses and activities. A contact list is provided as enclosure to facilitate coordination.



**B. Conclude the required process to obtain the local Environmental Policy Law Compliance from OGPe and the Water Quality Certificate from the PR Environmental Quality Board.**

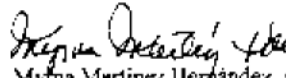
This Concurrence Determination does not exempt the project from compliance with other Federal or State requirements or permits.


The following parties shall be notified: Erik Summa, U.S. Army Corps Of Engineers, Jacksonville District; Carmen R. Guerrero Perez, Secretary, Department of Natural and Environmental Resources; Ernesto Diaz, Director, Puerto Rico Coastal Zone Management Program, Department of Natural and Environmental Resources; Annette Feliberty, Environmental Quality Board; Milagros Rodriguez Castro, PR Ports Authority; Other stakeholders included in the adjoined mailing list.

  
Luis Garcia Palath  
President

Certify: That this Resolution is copy of the agreement adopted by Puerto Rico Planning Board (PRPB) in its meeting of August 22, 2014. I expedite and notify this copy to the parties under my sign and official stamp of the Puerto Rico Planning Board stamp, for general use and knowledge.

In San Juan, Puerto Rico, today 19 SEP 2014

  
Mylena Martinez Hernandez  
Acting Secretary

 GOVERNMENT OF PUERTO RICO  
OFFICE OF THE SECRETARY  
JANUARY 2014



## **APPENDIX C - PERTINENT CORRESPONDENCE**

Part 1: Scoping letter of January 22, 2013, and resulting correspondence.

Part 2: Endangered Species Act, Essential Fish Habitat, and Cultural Resources coordination.

Part 3: Notice of Availability of the draft FONSI/EA and resulting correspondence.

Part 4: Categorical Exclusion (OGPe) and Water Quality Certification



Part 1: Scoping letter of January 22, 2013, and resulting correspondence.





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

REPLY TO  
ATTENTION OF

January 22, 2013

Planning and Policy Division  
Environmental Branch

**TO WHOM IT MAY CONCERN:**

The U.S. Army Corps of Engineers (Corps), Jacksonville District, is beginning to gather information which will aid in identifying issues and concerns to be addressed in an Environmental Assessment (EA) for the San Juan Harbor (SJH) Submerged Aquatic Vegetation (SAV) Compensatory Mitigation in the Condado Lagoon, San Juan, Puerto Rico. This project is a component of the San Juan Harbor Federal Navigation Project reauthorized by Section 301 of the Water Resources Development Act of 1996 (see enclosed Figure). The non-Federal sponsor for the project is the Puerto Rico Ports Authority.

The Corps is evaluating the feasibility of conducting the SJH SAV Compensatory Mitigation in the Condado Lagoon. It consists of the restoration of approximately 1.2 acres of SAV impacted during the SJH Navigation Channel improvements. Restoration of seagrass beds in the Condado Lagoon is one of the goals of the San Juan Bay Estuary Program (SJBEP) Comprehensive Conservation and Management Plan, Action Plan HW-2, completed in August 2000. The 102-acre (0.42 square kilometers) lagoon has suffered severe degradation of its water quality, benthic and fish habitat due to dredging operations during the 1950's. As a result, tidal currents and wind action are not often enough to produce the adequate water circulation between the 35 feet (10.8 meters) deep bottom and surface waters, impairing the lagoon's water quality and living resources. The natural depth of the lagoon was less than 15 feet (4.6 meters). The proposed compensatory mitigation consists of the beneficial use and placement of suitable dredged material from the SJH area into the artificial lagoon depressions to provide appropriate elevations to allow for natural recruitment and support maturation of SAV (e.g. seagrass). Although the main goal of the proposed project is to provide the required SAV mitigation (1.2 acres), additional areas within the lagoon may be restored to contribute to the overall purpose of the CCMP, Action Plan HW-2.

The proposed handling of the dredged material could involve several methods for transporting all suitable material from the SJH to the artificial depressions in the Condado Lagoon. A combination of scow barge and pumping through a floating pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon. Environmental considerations will include the effects of the proposed action on aesthetics, water quality, fish and wildlife habitats and values, endangered or threatened species, and historical or archeological resources.



We welcome your views, comments and information about resources, study objectives and important features within the study area, as well as any suggested improvements. If you know of anyone else who may wish to comment, please notify them of this opportunity. Letters of comments and/or inquiry should be addressed to the letterhead address to the attention of Wilberto Cubero, Planning Division, Environmental Branch and should be received by this office within 30 days of the date of this letter. E-mail comments can also be sent to Wilberto.Cubero-delToro@usace.army.mil.

Sincerely,

[signed]

Eric P. Summa  
Chief, Environmental Branch

Enclosure



**From:** [Lisamarie Carrubba - NOAA Federal](#)  
**To:** [Cubero-Deltoro, Wilberto SAJ](#)  
**Cc:** [Anabel Padilla](#); [Pace Wilber](#); [Jose Rivera](#)  
**Subject:** Re: SJH SAV Mitigation Project - Letter dated 22 Jan 2013 (UNCLASSIFIED)  
**Date:** Monday, March 18, 2013 6:08:20 PM  
**Attachments:** [Sea Turtle and Smalltooth Sawfish Construction Conditions 3-23-06.doc](#)  
[Vessel Strike Avoidance with Ship Strike Form-February 2008-web version.pdf](#)  
[pier 6 benthic condado reduced.pdf](#)  
[public notice pier 6 and condado.pdf](#)  
[maps condado reduced.pdf](#)

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Saludos, Wilberto:

As we discussed earlier, I did not receive a copy of the January 22, 2013, letter from the U.S. Army Corps of Engineers (USACE) regarding the proposed San Juan Harbor Compensatory Mitigation project. I have now sent you two of the documents from the previously proposed pilot project to fill a portion of the dredge pit in Condado Lagoon, which was then discarded as an alternative by the application, and am attaching some additional documents from that project for your reference to this message.

The San Juan Harbor mitigation was originally to be the expansion of an existing shoal in Puerto Nuevo Channel that is colonized by seagrass. However, the mitigation was never implemented, the federal harbor project was completed, and much of the dredge spoil that would have been suitable for expanding the shoal has been disposed of in the San Juan Harbor Offshore Disposal Site. In addition to navigation concerns associated with the expansion of the existing channel that were raised by the U.S. Coast Guard in the past, the majority of dredge spoil now available in the San Juan Harbor area are fine sediments that present a containment issue in terms of being able to stabilize them enough to create and maintain the shoal area. For these reasons, as well as to address a priority identified by the San Juan Bay Estuary Program related to the restoration of habitat in several of the lagoons that form part of the estuary system and were dredged in the past in order to fill mangrove wetlands around San Juan Bay and other portions of the estuary to construct urban, government, and commercial areas, as well as the airport, the USACE is proposing the filling of a portion of the dredge pit in the Condado Lagoon. The area would be equivalent to the 1.2 acres of seagrass mitigation originally proposed as part of the harbor project. The USACE has not yet determined the method of transport by which dredged material would be moved between dredging areas and the dredge pit.

The USACE is requesting information to be included in the Environmental Assessment (EA) being prepared for the mitigation project. In response to this request and in addition to the information I provided from the previous proposal to complete a similar project using dredge spoil from improvements to Pier 6 in the San Juan Harbor, I have the following comments:

1. the EA should identify the area or areas within the dredge pit in Condado Lagoon that would be filled and the target depth. This depth should include the depth to which dredge spoil would be placed, as well as any capping material. The EA should also identify the source of the dredged material and measures to be taken to prevent any contaminated sediments selected as fill material from being transported to waters of the lagoon, such as the use of geotubes and flocculants to contain dredge spoil. Similarly, the source of any capping material should also be identified. If dredging to obtain fill and cap material will involve additional impacts to benthic habitat, such as seagrass beds, then the mitigation area in Condado Lagoon would have to be expanded, different material source areas selected to avoid these impacts, or restoration of seagrass or other benthic habitat, if necessary, at the source sites should be part of the project.
2. the EA should contain details of all dredging, transport, and disposal methods, including all sediment control measures to ensure that contaminated sediments from dredge sites or contaminated and/or anoxic waters and sediments from the dredge pit are not transported to other areas within the lagoon or the estuary system. Measures should also include management of sediments during transport from source sites to the disposal site in the lagoon, whether transport is by land or by water, to minimize transport of dredge spoils to nearshore and estuarine waters during movement from the source location to the disposal site.
3. the EA should contain details regarding the selection of the disposal area within the pit in the lagoon. Selection should be based on depth of the pit versus amount of material that will be disposed of and depth of the surrounding lagoon floor, in particular areas with seagrass colonization. Selection



should also take into consideration the sources of contamination from untreated sewage, for example, that have been reported to be present in the lagoon, likely due to unauthorized combined sewer discharges, as these will affect the quality of the habitat to be created for seagrass in terms of nutrient concentrations and the possibility of algal dominance due to high nutrient loads. Disposal sites some distance from any of these discharge points should be selected to minimize the possibility that the mitigation site will be colonized by filamentous green algae or that any seagrass transplanted to the area would quickly be covered by sediment and algae due to high nutrient loads.

4. the EA should include information regarding existing benthic habitat in the area where filling of a portion of the dredge pit is proposed to determine the species of seagrass and at what depth they occur. In this way, once the controlling depth is established for the mitigation project, the USACE can also determine the species of seagrass to be transplanted to the area. If *Halophila* is the appropriate species due to final proposed depth, then bottom substrate from an area where this species is growing can be moved to the restoration area because the species itself is too fragile to be transplanted, but there is always a seed bank in beds of *Halophila* so the movement of substrate will also result in the movement of seeds to the mitigation site. If the depth is appropriate for turtle grass, then plugs can be transplanted from the dense beds present around most of the border of the lagoon.

5. The EA should include information regarding the presence or absence of species and habitat under the purview of NMFS PRD in the area of source and disposal sites and potential impacts to these resources as a result of the project, as well as avoidance and minimization measures to be incorporated in the project design and operation to protect ESA-listed species and their habitat. As an example, I have attached our sea turtle construction conditions and vessel strike avoidance guidelines. If all the information required to analyze the potential impacts of the project to ESA resources are included in the EA, then the EA can serve as the consultation document for any ESA Section 7 consultation to be completed as part of this federal action.

The project area also contains habitats designated as essential fish habitat (EFH) by the Caribbean Fishery Management Council pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Therefore, we refer you to Mr. José Rivera of NMFS Habitat Conservation Division, who was included in the distribution list for your January 22, 2013, letter, to provide guidance as to any information related to EFH resources and conservation measures that should be included in the EA and project design, as well as EFH consultation requirements for the project. Mr. Rivera may be reached via e-mail at [Jose.A.Rivera@noaa.gov](mailto:Jose.A.Rivera@noaa.gov) or by telephone at 787-405-3605.

Thank you for the opportunity to provide comments. If you have any questions regarding the contents of this message, please do not hesitate to contact me.  
Lee

On Mon, Mar 18, 2013 at 3:37 PM, Cubero-Deltoro, Wilberto SAJ <[Wilberto.Cubero-Deltoro@usace.army.mil](mailto:Wilberto.Cubero-Deltoro@usace.army.mil)> wrote:

Classification: UNCLASSIFIED  
Caveats: NONE

Lisamarie,

Please find attached an electronic copy of the letter dated 22 January 2013. We would like your comments/recommendations on the proposed action.

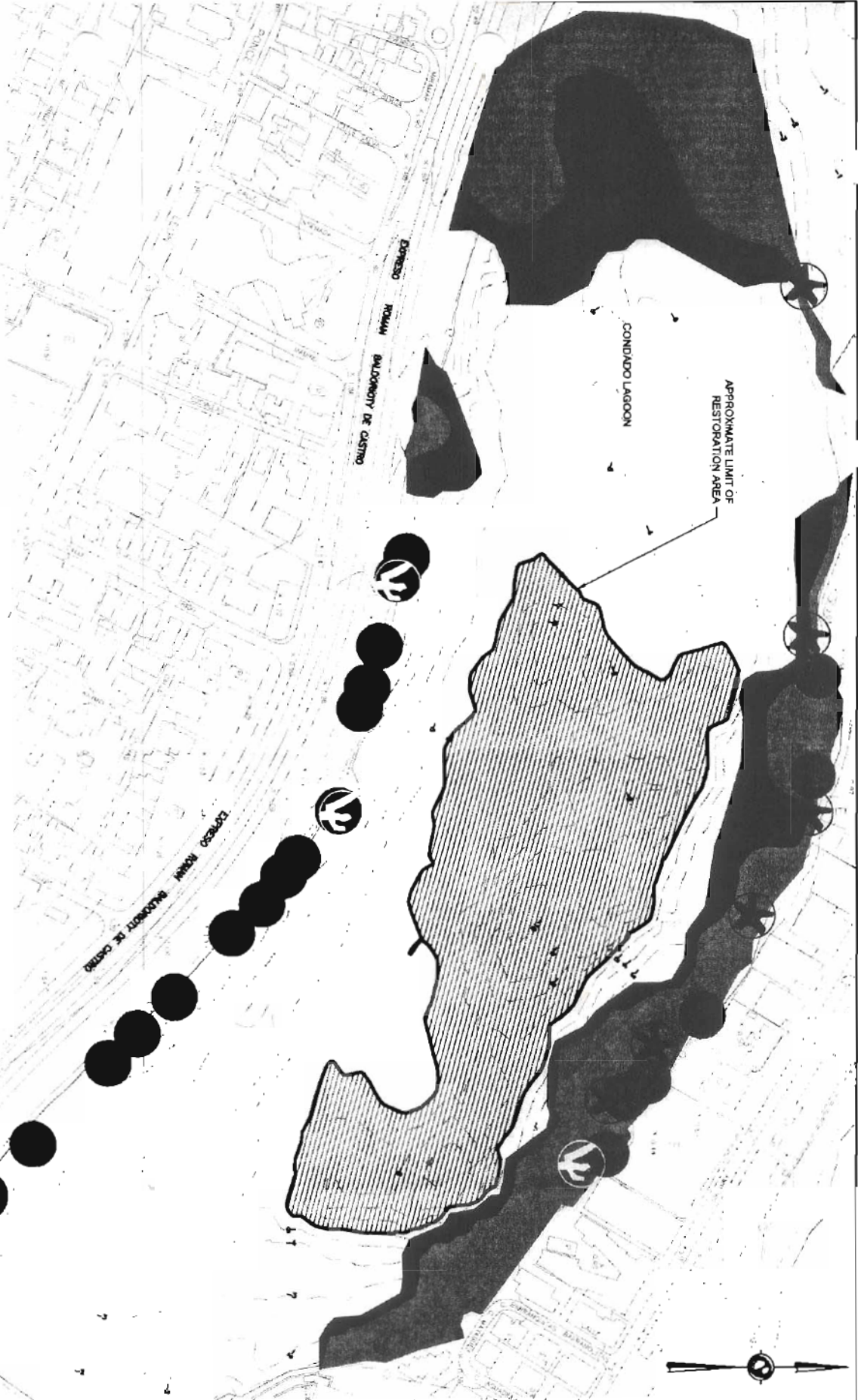
Thanks,  
Wilberto

Classification: UNCLASSIFIED  
Caveats: NONE



**LEGEND**

- SEAGRASS
- SEAGRASS AND ALGAE
- MANGROVE
- CORAL
- URCHIN
- LAGOON DEPTH (METERS)



**FIGURE 2**

**PUERTO RICO PORTS AUTHORITY**  
**SAN JUAN, PUERTO RICO**  
**ENGINEERING DEPARTMENT**

DESIGNED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

<b>PROJECT:</b> SAN JUAN WATERFRONT PROJECT SAN JUAN, PUERTO RICO		<b>AMEC E &amp; E Caribe, LLP</b> 100 AVE DE LA CONSTITUCION SAN JUAN, PUERTO RICO 00901-3304 PHONE (787) 255-7855 FAX (787) 380-6776 <a href="http://www.amec.com/america/centralamerica">www.amec.com/america/centralamerica</a>			
<b>TITLE:</b> BENTHIC HABITAT AREAS					
<b>DESIGNED BY:</b> S. FLORES	<b>CHECKED BY:</b> S. FLORES				
<b>PROJECT MANAGER:</b> S. FLORES	<b>PROJECT MANAGER:</b> S. FLORES				
<b>DATE:</b>	<b>DATE:</b>				

**PUERTO RICO PORTS AUTHORITY - DIRECTORATE OF PLANNING, ENGINEERING AND CONSTRUCTION: SAN JUAN PUERTO RICO**

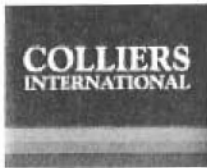












## MARINE BIOLOGY STUDY

### CONDADO LAGOON

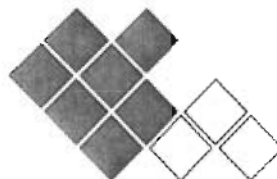
MARCH 2008

NOTE: This attachment is superseded  
and is omitted from this appendix.  
See CSA. 2008 in the references.

*Submitted to:*

**AMEC E&E Caribe, LLP**  
530 Ave de la Constitución  
San Juan, PR 00901-2304  
(787) 289-7835

*Submitted by:*



**CSA Group**  
Mercantil Plaza-Mezzanine Suite  
San Juan, PR 00918



NOTE: Except for the following 3 pages,  
This attachment to the NMFS document  
is not included in this appendix.





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
Southeast Regional Office  
263 13th Avenue South  
St. Petersburg, FL 33701

## **SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS**

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

O:\forms\Sea Turtle and Smalltooth Sawfish Construction Conditions.doc







## **Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region**

### **Background**

The National Marine Fisheries Service (NMFS) has determined that collisions with vessels can injure or kill protected species (e.g., endangered and threatened species, and marine mammals). The following standard measures should be implemented to reduce the risk associated with vessel strikes or disturbance of these protected species to discountable levels. NMFS should be contacted to identify any additional conservation and recovery issues of concern, and to assist in the development of measures that may be necessary.

### **Protected Species Identification Training**

Vessel crews should use an Atlantic and Gulf of Mexico reference guide that helps identify protected species that might be encountered in U.S. waters of the Atlantic Ocean, including the Caribbean Sea, and Gulf of Mexico. Additional training should be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

### **Vessel Strike Avoidance**

In order to avoid causing injury or death to marine mammals and sea turtles the following measures should be taken when consistent with safe navigation:

1. Vessel operators and crews should maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.
2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel should attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.



6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

#### **Additional Requirements for the North Atlantic Right Whale**

1. If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yards be maintained from the animal (50 CFR 224.103 (c)).
2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
3. Mariners should check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD).
4. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16.

#### **Injured or Dead Protected Species Reporting**

Vessel crews should report sightings of any injured or dead protected species immediately, regardless of whether the injury or death is caused by your vessel.

Report marine mammals to the Southeast U.S. Stranding Hotline: 877-433-8299

Report sea turtles to the NMFS Southeast Regional Office: 727-824-5312

If the injury or death of a marine mammal was caused by a collision with your vessel, responsible parties should remain available to assist the respective salvage and stranding network as needed. NMFS' Southeast Regional Office should be immediately notified of the strike by email ([takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov)) using the attached vessel strike reporting form.

#### **For additional information, please contact the Protected Resources Division at:**

NOAA Fisheries Service  
Southeast Regional Office

263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701

Tel: (727) 824-5312

Visit us on the web at <http://sero.nmfs.noaa.gov>





## United States Department of the Interior



### FISH AND WILDLIFE SERVICE

Caribbean Ecological Services

Field Office

P.O. Box 491

Boqueron, PR 00622

**FEB 25 2013**

In Reply Refer To:  
FWS/R4/CESFO/72127-002

Mr. Eric P. Summa  
Chief, Environmental Branch  
US Army Corps of Engineers  
Jacksonville District  
PO Box 4970  
Jacksonville, Florida 32207

Re: San Juan Harbor Mitigation Project, Puerto Rico

Dear Mr. Summa:

This is reply to your January 22, 2013, letter stating the Corps is gathering information for the proposed Environmental Assessment of the San Juan Harbor Submerged Aquatic Vegetation Compensatory Mitigation Project (SJH SAV). Our comments are provided as technical in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

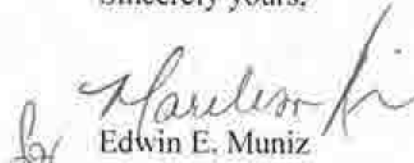
The Corps is evaluating the feasibility of conducting the SJH SAV mitigation project in Condado Lagoon. The project will consist of restoration of about 1.2 acres of submerged aquatic vegetation (SAV) habitat during the channel improvements. The lagoon has suffered degradation of its bottom habitat by dredging in the 1950's causing deep depressions in the relatively shallow lagoon. The purpose of the project is to use the suitable dredge spoil in a beneficial way to and place it into the depressions caused by previous dredging. By eliminating these depressions, it is expected that increased flushing and light penetration would foment natural recruitment of SAV into the restored area. In order to transport the sediment to the lagoon a combination of barge and floating pipeline could be implanted.

We recommend that once the restoration of the depressions is complete and monitoring shows that light penetration is adequate, the Corps should actively place plugs or patches of SAV in various locations of the restored area to form a nucleus of SAV that can then spread out and colonize the remaining restoration area.



Thank you for the opportunity to comment on this action. If you have any questions regarding our comments please feel free to contact Felix Lopez of my staff at 787 851-7297 x 210.

Sincerely yours,

  
Edwin E. Muniz  
Field Supervisor

fhf

cc:

COE, Planning, San Juan

DNER, San Juan

EPA, San Juan

NMFS, Boqueron

SJBE, San Juan





26 de febrero de 2013

Sr. Wilberto Cubero  
División de Planificación  
Área Ambiental Cuerpo Ingenieros  
PO Box 4970  
Jacksonville, Florida 32232-0019

**Re: San Juan Harbor Submerged Aquatic Vegetation Compensatory Mitigation Project  
Condado Lagoon, San Juan, Puerto Rico**

Estimado señor Cubero:

Recientemente, fue presentada ante nuestra consideración, la solicitud del Cuerpo de Ingenieros del Distrito (CDI) de Jacksonville, referente a nuestros comentarios en relación al proyecto de dragado de la Bahía de San Juan junto a un proyecto de mitigación de la Laguna del Condado. De acuerdo a la misiva, el CDI se encuentra evaluando la viabilidad del proyecto e interesa nuestros comentarios para la realización del documento ambiental.

La División de Planificación Operaciones e Ingeniería, requiere que la siguiente información forme parte del documento ambiental:

- a. Empleos a crearse (construcción y operación)
- b. Residuos sólidos generados (construcción y operación)
  - Indicar el tipo, cantidad y frecuencia
  - Recogido de éstos (si es por el municipio o una compañía privada)
- c. Lugar de disposición final
- d. Materiales reciclables a ser recuperados (construcción y operación)
  - Indicar el tipo, cantidad y frecuencia
- e. Duración del Proyecto

El CDI, además, debe identificar las regulaciones que puedan aplicar y presentar la forma en que se atenderá su cumplimiento. Estas regulaciones son, sin limitarse a:

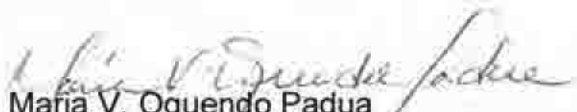
1. Ley Núm. 70 de 18 de septiembre de 1992, Ley para la Reducción y Reciclaje de los Desperdicios Sólidos, según enmendada, establece el desarrollo e implantación de estrategias económicamente viables y ambientalmente seguras que resulten en la disminución del volumen de desperdicios sólidos que requerirá disposición final. Como parte de estas estrategias, se considera necesario modificar las prácticas de manejo y disposición existentes para reducir la intensidad de uso de los Sistemas de Relleno Sanitario (SRS) del país.



- a. Los materiales a ser clasificados en la fuente de origen son: todo tipo de papel, cartón corrugado, aluminio, vidrio y plástico.
  - b. Todas las industrias, fábricas, tiendas, comercios y cualquier otro tipo de institución que emplee más de 10 personas, ya sea a tiempo completo o parcial, tendrán que implantar un Plan de Reciclaje. El mismo dispondrá el procedimiento para reducir y separar los materiales reciclables de los residuos sólidos generados por la institución.
  - c. Para acceder el Plan de Reducción, Reutilización y Reciclaje, para la fase de construcción, nuestra página electrónica [www.ads.pr.gov/Formularios/index.htm](http://www.ads.pr.gov/Formularios/index.htm) o comuníquese al 787-765-7575, Área de Mercados, Reciclaje y Educación.
2. Reglamento para la Reducción, Reutilización y Reciclaje de Desperdicios Sólidos según enmendado. Aplicará a toda persona, natural o jurídica, ya sea municipios, cooperativas, industrias, comunidades, condominios, complejos de vivienda vertical tipo "walk-up", residenciales públicos, agencias gubernamentales, empresas o instituciones privadas (comercios y organizaciones sin fines de lucro) y empresas comunitarias que generen o manejen desperdicios sólidos, que contengan material reciclable, dentro de la jurisdicción del Estado Libre Asociado de Puerto Rico.

Esperamos que esta información le sea de utilidad en la preparación del documento ambiental. En caso de tener alguna duda o pregunta sobre este o cualquier otro particular, puede comunicarse con la señora Rosalía Llanos, Especialista Ambiental III, al (787) 765-7575, extensión 4674.

Cordialmente,

  
Maria V. Oquendo Padua  
Directora  
División de Planificación, Operaciones e Ingeniería



February 26, 2013

Mr. Wilberto Cubero  
Planning Division  
Corps of Engineers Environmental Area  
PO Box 4970  
Jacksonville, Florida 32232-0019

**Re: San Juan Harbor Submerged Aquatic Vegetation Compensatory Mitigation Project  
Condado Lagoon, San Juan, Puerto Rico**

Dear Mr. Cubero:

Recently, it was brought to our consideration, a request from the U.S Army Corps of Engineers (COE) Jacksonville District, regarding our comments in relation to the San Juan Harbor dredging project in conjunction to a mitigation project at the Condado Lagoon. According to the letter, the COE is assessing the project viability and is interested in our comments towards the preparation of the environmental document.

The Planning, Operations, and Engineering Division, requires that the following information be part of the environmental document:

- a. Jobs to be created (construction and operation)
- b. Solid wastes to be generated (construction and operation)
  - Indicate the type, amount and frequency.
  - Collection of these (if the municipality or a private company will do so)
- c. Final disposal site.
- d. Recyclable materials to be recovered (construction and operation)
  - Indicate the type, amount and frequency.
- e. Project Duration.

The COE, also, must identify regulations that may apply and present how they will comply with them. These regulations are, not limited to:

1. Act No. 70 of September 18, 1992 (Ley Núm. 70 de 18 de septiembre de 1992) Act for the reduction and recycling of solid waste, as amended, provides for the development and implementation of economically viable and environmentally safe strategies resulting in the decrease of the volume of solid wastes that will require final disposition. As part of these strategies, it is considered necessary to modify the current management and disposal practices to reduce the use intensity of the Sanitary Landfill Systems (SRS) in the island.
  - a. The materials to be sorted at the source of origin are: all types of paper, cardboard, aluminum, glass and plastics.
  - b. All industries, factories, shops and any other institution that employs more than 10 people, either full or part time, will have to implement a recycling plan. The same will arrange the



procedure to reduce and separate recyclable materials from the solid waste generated by the institution.

- c. To access the Reduction, Reuse and Recycling Plan, for construction phase, our website is [www.ads.pr.gov/Formularios/index.htm](http://www.ads.pr.gov/Formularios/index.htm). or call 787-765-7575, Market, Recycling and Education Area.

- 2. Regulation for the Reduction, Reuse and Recycling of Solid Waste, as amended. Apply to any person, natural or juridical, whether municipalities, cooperatives, industries, communities, condominiums, vertical housing complex type "walk-up", public housing, government agencies, private companies or institutions (commercial and non-profit organizations ) and community enterprises that generate or handle solid waste, containing recyclable materials, within the jurisdiction of the Commonwealth of Puerto Rico.

We hope this information will be useful in the preparation of the environmental document. In case you have any questions about this or any other particular you may contact Mrs. Rosalia Llanos, Environmental Specialist III at (787) 765-7575, extension 4674.

Sincerely,

Maria V. Oquendo Padua  
Director  
Planning Operations and Engineering Division





ESTADO LIBRE ASOCIADO DE PUERTO RICO  
**DEPARTAMENTO DE AGRICULTURA**

P.O. BOX 10163, SAN JUAN, PR 00908-1163

February 7, 2013

Mr. Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineers  
PO Box 4970  
Jacksonville, Florida 32232-0019

Mister Summa:

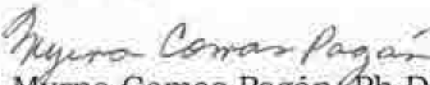
**ENVIRONMENTAL ASSESMENT  
SAN JUAN HARBOR (SJH) SUBMERGED AQUATIC VEGETATION (SAV)  
COMPENSATORY MITIGATION PROJECT (CMP)  
CONDADO LAGOON, SAN JUAN, PR**

In response to your letter dated January 22, 2013, regarding recommendations for the project on references.

In terms of the impact on agricultural land, we have no objection to this project.

If you require any other information do not hesitate to contact me at [mcomas@agricultura.pr.gov](mailto:mcomas@agricultura.pr.gov).

Sincerely,

  
Myrna Comas Pagán, Ph.D  
Secretaria Designada





**AUTORIDAD DE CARRETERAS Y TRANSPORTACIÓN**  
PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY  
FIDUCIARIA DEL ALFOMBRADO PUERTO RICO

Área de Programación y Estudios Especiales  
Programming and Special Studies Area  
Oficina de Estudios Ambientales  
Environmental Studies Office

April 5, 2013

Mr. Eric P. Summa  
Chief, Environmental Branch  
US Army Corps of Engineers  
Jacksonville District Corps of Engineers  
PO Box 4970  
Jacksonville, Florida 32232-0019

Attention: Mr. Wilberto Cubero

**SAN JUAN HARBOR SUBMERGED AQUATIC  
VEGETATION COMPENSATORY MITIGATION PROJECT  
IN THE CONDADO LAGOON, SAN JUAN, PUERTO RICO**

Dear Mr. Summa:

We make reference to your letter dated January 22, 2013, requesting comments or information related to the proposed mitigation project described above.

We are pleased to inform you that during 2011, the Puerto Rico Highway and Transportation Authority concluded the reconstruction and opened to the public the Dos Hermanos Bridge located at the entrance to the Laguna del Condado in San Juan near the area where you propose your compensatory mitigation.

For the reconstruction of this bridge, it was required an authorization from the US Army Corps of Engineers (Permit SAJ-1998-5848 (IP-CGR), granted on December 3, 2007, and several studies on the occurrence and distribution of the marine flora and fauna in the immediate area of the bridge.

The results of these studies showed the presence of the 4 species of marine seagrasses that inhabit the shores of the Island, as well as the presence of 10 species of macro-algae (green, red and brown), 42 species of invertebrates and 61 species of fish. Copies of these studies are part of the record on file for this project in the Regulatory Office of the Antilles Section in San Juan.

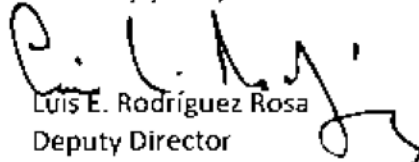


In May or June of this year, and as part of the special conditions required in the USACE's permit, we are contemplating to carry out a new survey plan of the benthic communities at the immediate area of the bridge and to manually remove solid wastes from the sea bottom at both sides of the bridge to enhance the growth and reproduction of the existing seagrasses.

In addition to the aforesaid information, we inform you that at the present time, the PRHTA does not have any project in construction that may impact the proposed mitigation area.

Should you need additional information, please contact our Environmental Studies Office, at telephone (787) 721-8787, extension 1527 or 1529.

Cordially yours,



Luis E. Rodríguez Rosa  
Deputy Director  
Programming and Special Studies Area





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

REPLY TO  
ATTENTION OF

22 JAN 2013

Planning and Policy Division  
Environmental Branch

2013 JAN 28 A 11:00

RECEIVED  
JAN 28 2013  
11:00 AM  
PLANNING AND POLICY DIVISION  
ENVIRONMENTAL BRANCH

TO WHOM IT MAY CONCERN:

The U.S. Army Corps of Engineers (Corps), Jacksonville District, is beginning to gather information which will aid in identifying issues and concerns to be addressed in an Environmental Assessment (EA) for the San Juan Harbor (SJH) Submerged Aquatic Vegetation (SAV) Compensatory Mitigation Project in the Condado Lagoon, San Juan, Puerto Rico. This project is a component of the San Juan Harbor Federal Navigation Project reauthorized by Section 301 of the Water Resources Development Act of 1996 (see enclosed Figure). The non-Federal sponsor for the project is the Puerto Rico Ports Authority.

The Corps is evaluating the feasibility of conducting the SJH SAV Compensatory Mitigation Project in the Condado Lagoon. It consists of the restoration of approximately 1.2 acres of SAV impacted during the SJH Navigation Channel improvements. Restoration of seagrass beds in the Condado Lagoon is one of the goals of the San Juan Bay Estuary Program (SJBEP) Comprehensive Conservation and Management Plan (CCMP), Action Plan HW-2, completed in August 2000. The 102-acre (0.42 square kilometers) lagoon has suffered severe degradation of its water quality, benthic and fish habitat due to dredging operations during the 1950's. As a result, tidal currents and wind action are not often enough to produce the adequate water circulation between the 35 feet (10.8 meters) deep bottom and surface waters, impairing the lagoon's water quality and living resources. The natural depth of the lagoon was less than 15 feet (4.6 meters). The proposed compensatory mitigation project consists of the beneficial use and placement of suitable dredged material from the SJH area into the artificial lagoon depressions to provide appropriate elevations to allow for natural recruitment and support maturation of SAV (e.g. seagrass). Although the main goal of the proposed project is to provide the required SAV mitigation (1.2 acres), additional areas within the lagoon may be restored to contribute to the overall purpose of the CCMP, Action Plan HW-2.

The proposed handling of the dredged material could involve several methods for transporting all suitable material from the SJH to the artificial depressions in the Condado Lagoon. A combination of scow barge and pumping through a floating pipeline could be implemented for transporting the material along the San Antonio Channel into the lagoon. Environmental considerations will include the effects of the proposed action on aesthetics, water quality, fish and wildlife habitats and values, endangered or threatened species, and historical or archeological resources.

JB: 6616 759



COMMONWEALTH OF PUERTO RICO  
PUERTO RICO ELECTRIC POWER AUTHORITY

SAN JUAN, PUERTO RICO

www.prepa.com



GPO BOX 364267  
SAN JUAN, PR 00936-4267

February 12, 2013

Mr. Wilberto Cubero  
Planning Division, Environmental Branch  
US Army Corps of Engineers  
Antilles Regulatory Section  
400 Fernández Juncos Ave.  
San Juan, PR 00901-3299

Dear Mr. Cubero:

**RE: SJH SAV Compensatory Mitigation Project  
Condado Lagoon**

The Puerto Rico Electric Power Authority (PREPA) reviewed the information regarding the Mitigation Project considered for the Condado Lagoon. PREPA has no comments about the resources, study objectives or other features within the study area.

If additional information is needed, please contact Ms. Ivelisse Sánchez Soultairé, Acting Manager, Projects and Licensing Department, at (787) 521-4969.

Cordially,

Rafael Marrero Carrasquillo, Acting Head  
Environmental and Quality Assurance Division



Part 2: Endangered Species Act, Essential Fish Habitat, and Cultural Resources Coordination.





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

REPLY TO  
ATTENTION OF

**APR 22 2014**

Planning Division  
Environmental Branch

Mr. Jose Rivera  
National Marine Fisheries Service  
Habitat Conservation Division  
400 Fernandez Juncos  
San Juan, Puerto Rico 00901-3299

Dear Mr. Rivera:

I am providing the Essential Fish Habitat Assessment for the San Juan Harbor Mitigation Project in San Juan, Puerto Rico. This project involves the filling of 4 acres (including side slopes) of dredged holes in the Condado Lagoon with 46,000 cubic yards of dredged material to create 1.2 acres of habitat to an elevation of -12 feet to -15 feet for submerged aquatic vegetation. The dredged material would come from two shoaled areas in the La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor (see enclosed maps, drawings, and description).

The mitigation site, borrow sites, possible pipeline routes, and transit areas are located in estuarine environments. The greater San Juan Estuary contains habitat for corals, other hard grounds, and sea grass which support (or potentially could support) associated sports/commercial fish, spiny lobster, queen conch, and aquarium trade species.

Neither the borrow sites nor the mitigation site currently provide quality habitat within the project footprint. The mitigation site is a dredged hole that is currently too deep to support sea grass or experience good water circulation. The La Esperanza borrow site is likely to benefit from removal of shoaled areas that tend to reduce flow and circulation to the lagoon and are susceptible to invasion by Australian pine. The San Antonio Channel borrow site is a navigation channel that is subject to frequent use and periodic maintenance. The proposed mitigation would improve habitat at the mitigation site, it would counteract shoaling at the La Esperanza borrow sites, and would have little impact on the San Antonio navigation channel borrow site.

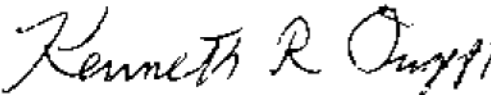



The pipeline impacts would be limited to a narrow corridor. We will survey any pipeline corridors in Condado Lagoon, San Juan Harbor, and the channel that connects the two for presence of coral. If listed or proposed threatened or endangered coral cannot be avoided (e.g., by re-routing or bridging over), we will re-initiate consultation with the protected resources element of your agency. Any impacts to sea grass from pipelines would be minor and temporary. Transit of the areas by dredges or other project vessels would have little impact on benthic habitat.

If you have any questions, please contact Kenneth Dugger at 904-232-1686 (kenneth.r.dugger@usace.army.mil).

The point of contact in Puerto Rico is Johann Sasso at 787-729-6893 (johann.m.sasso@usace.army.mil). Additional information on this project is available on our Environmental Documents web page <[http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto\\_Rico](http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto_Rico)>.

Sincerely,

  
 Eric P. Summa  
Chief, Environmental Branch

Enclosures

Copy Furnish:

Dr. Lisamarie Carrubba, National Marine Fisheries Service, Boqueron Field Office, P.O. Box 3323, Lajas, Puerto Rico 00667-3323





**UNITED STATES DEPARTMENT OF COMMERCE**

National Oceanic and Atmospheric Administration

**NATIONAL MARINE FISHERIES SERVICE**

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701-5505

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

February 4, 2015

F/SER47:JAR/pw

(Sent via Electronic Mail)

Eric P. Summa  
Chief, Environmental Branch  
Department of the Army Corps of Engineers  
Jacksonville District,  
PO Box 4970  
Jacksonville, Florida 32232

Attention: Nelson R. Colon and Ken R. Dugger

Dear Mr. Summa:

NOAA's National Marine Fisheries Service (NMFS) reviewed the letters from the Jacksonville District dated April 22, 2014, and May 23, 2014, regarding the mitigation for the San Juan Harbor Navigation Project. The mitigation is required as a result of widening the Puerto Nuevo Channel, which impacted an estimated 1.2 acres of sea grass (*Halophila decipiens*) and marine macro-algae. The mitigation originally proposed in the San Juan Harbor Mitigation Baseline Survey and Conceptual Design of July 11, 2003, involved raising the bottom elevation of a portion of San Juan Harbor to support sea grass. The Jacksonville District subsequently concluded this mitigation plan would require extensive and costly structures to contain the material and prevent its migration into the navigation channel. The new mitigation proposal involves filling approximately 4 acres (including side slopes) of dredged holes in the nearby Condado Lagoon to create 1.2 acres of habitat for seagrass and macro-algae. The 46,000 cubic yards of material needed would come from the shoaled areas of the La Esperanza Ecosystem Restoration project located along the southern shore of San Juan Bay. An alternative borrow source would be the San Antonio channel in San Juan Harbor. A hydraulic pipeline material would move the material to the dredged holes. The May 23, 2014, letter includes a finding of no significant impact (FONSI) for the proposed action.

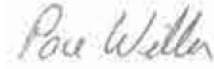
On January 17 and 26, 2015, a NMFS biologist made field visits to the Condado Lagoon and San Antonio Channel to ascertain the best route to place the dredge pipe while minimizing impact to Essential Fish Habitat (EFH). To ensure minimum impact on EFH, NMFS recommends the dredge pipe route proposed in the attached field trip report be used. In addition, the dredge pipe should be placed off bottom in the location identified in the reference map (Figure 1) included in the field report (just east of the Guillermo Esteves bridge for an approximate distance of 150 meters). Please notify our office when the deployment of the dredge pipe will take place so we can be on location to help advise on placement of the pipeline.





Thank you for the opportunity to provide these comments. Related questions or comments should be directed to the attention of Mr. José A. Rivera at NOAA HCD, c/o U.S. Army Corps of Engineers, 400 Fernandez Juncos Avenue, San Juan, Puerto Rico, 00901-3299. He may be reached by telephone at 787-729-6860 x3038 or by e-mail at Jose.A.Rivera@noaa.gov. Mr. Rivera also can provide GIS files to assist placement of the pipeline.

Sincerely,



/ for

Virginia Fay  
Assistant Regional Administrator  
Habitat Conservation Division

Attachment: *San Juan Harbor Mitigation Project in San Juan, Puerto Rico: Condado Lagoon and San Antonio Channel Field Trip Report*, dated July 28, 2015.

cc:

USACE, Nelson.R.Colon@usace.army.mil  
USACE, Kenneth.Dugger@usace.army.mil  
CFMC, Miguel.A.Rolon@noaa.gov  
F/SER3, Lisamarie.Carrubba@noaa.gov  
F/SER47, Jose.A.Rivera@noaa.gov



**San Juan Harbor Mitigation Project in San Juan, Puerto Rico: Condado Lagoon and San Antonio Channel Field Trip Report**

**Prepared by:**

**José A. Rivera**

**NOAA, National Marine Fisheries Service**

**Habitat Conservation Division**

**400 Fernandez Juncos Avenue**

**San Juan, Puerto Rico 00901-3299**

**Email: [jose.a.rivera@noaa.gov](mailto:jose.a.rivera@noaa.gov) Cell: 787-405-3605**

**January 28, 2015**



## Summary

A dredge pipe route to deposit sediments at the Condado Lagoon dredged holes has been identified that minimizes Submerged Aquatic Vegetation (SAV) impact. The route enables the dredge pipe to be placed on the bottom, except for a 150 m section just east of the Guillermo Esteves Bridge, where it is proposed to keep the pipe off bottom. It is suggested that a series of helicoid-auger screw anchors be used to attach a buoy that can hold the dredge pipe off bottom during the short project duration. A patch of *Syringodium filiforme*, manatee seagrass was located just NW of the Guillermo Esteves Bridge in 4 ft. of water depth. This species has not been reported for the Condado Lagoon in previous studies.

## Introduction

On January 10, 2015 at 5:52 pm a small 16ft Boston whaler boat with a 25HP outboard motor equipped with a Marine Sonics Technology, Ltd 600 KHz side scan sonar (SSS) leaves the USACE San Juan Office location boat ramp en route to the San Antonio Channel Bridge. The objective of this action is to start collection of sonar imagery to locate Submerged Aquatic Vegetation (SAV) areas in the channel and in the proposed dredge pipe route to the Condado Lagoon dredged holes. The sonar imagery is collected by 7:10 pm. The SSS methodology is used since it enables to detect features through a turbid seawater column as is typical of the Condado Lagoon and San Antonio Channel area.

A field trip to provide verification of sonar imagery feature identification was accomplished by the author on January 17, 2015 between 8-9:30 am. The main area surveyed was the San Antonio Channel under the three existent bridges and the area east of the Guillermo Esteves Bridge which opens into the Condado Lagoon. The survey was accomplished by snorkeling from shore and documented with photographs and GPS positions. Water column visibility was approximately 3.5 ft..

Additional land based photos of the San Antonio Channel Bridge were taken on January 26, 2015 at approximately 4:00 pm.

## Methods

### Side Scan Sonar Imagery

A Marine Sonics Technology, Ltd 600 KHz SSS towable transducer was connected to a tower PC which had installed a PCI sonar acquisition card. The PC had a TRU-VU Model SRM-11.6H monitor, a keyboard and serial mouse. The PC operating system is Windows XP. The sonar acquisition software was Sea Scan PC version 1.8.5. The sonar images were processed by applying the filter “median” to remove spurious noise in the image. A total of eight filtered .mst



files were utilized (files 7-14). Each file occupied 1,208 KB of disk space. The transducer collects data up to 50 m range on each side, for a total coverage of 100 m swath.

The PC was connected to a 120V UPS which was connected to a gasoline 2000 Watt four cycles Ryobi generator.

The SSS transducer was towed from the vessel bow at approximately 24-30 inches below the water surface. The vessel transited at approximately 2.5-3.5 knots when towing the SSS transducer.

### **Side Scan Sonar Mosaic**

The filtered SSS images were used to create a mosaic using the software SonarWeb v 3.12Y PRO by Chesapeake Technology, Inc. The SSS mosaic line length is 1,646 m. The mosaic width is 100 m. The mosaic image pixel resolution is .25 m. The mosaic is exported as a GeoTiff file.

The software provides a tool to digitize imagery features into .dxf and .shp files which was used to help identify SAV along the survey route.

### **Google Earth Image**

An image dated February 15, 2013 was utilized to help identify SAV location in the western and eastern side of the San Antonio Channel Bridge location.

### **GPS**

Horizontal control for SSS images were provided by a portable Garmin 72H GPS which was connected via a serial cable to the PC. Through the serial cable the GPS provided a NMEA serial data message every second which provided the Sea Scan PC program with the position data needed to geo-reference each image. The accuracy of the position data is  $\pm 3$  m. This portable GPS was located on the bow of the vessel right above the towed transducer center.

A second portable Garmin GPS 76CX was used by the vessel helmsman to maintain route alignment by steering to and from a waypoint.

The portable Garmin 72H GPS was also used to position ground truth features while snorkeling. For this purpose the GPS was inserted inside a waterproof plastic bag which maintained the unit at the sea surface. The unit was attached by a string to the diver.

Portable Garmin GPS positions were compiled using the UTM Zone 19 X and Y values in meters. The geodetic datum used is WGS84. Positions to identify the Condado Lagoon mitigation site were obtained from the USACE contractor report for the San Juan Harbor Construction Dredging- Mitigation report page 8. The station chosen was designated as SJH-CLG-3 with X= 778,844 and Y=883,302 under State Plane area 5200 for PR/VI, the units used are U.S. Ft. for NAD83. A conversion of State Plane coordinates in feet to UTM coordinates in meters was accomplished by utilizing the USACE software CORPSCON v 6.0.1 using NAD83 as the geodetic datum.



## Photography

A Sony DSC-T1, 5 megapixel digital camera with a submersible housing was utilized to document the ground truth SSS imagery features under the San Antonio Channel bridges and within Condado Lagoon.

## Results

A combination of Google Earth imagery for February 15, 2013 and the SSS imagery collected on January 10, 2015 was used to detect the location of SAV under the San Antonio Channel bridge and the west side of Condado Lagoon. The January 17, 2015 field trip helped verify the identification of the imagery features. See Figures 1 – 4 for the resultant analysis and Figures 5 – 7 for specific detail.



Figure 1. Google Earth image from February 15, 2013. Proposed dredge pipe route to minimize impacts on seagrass and algae habitat. The section of the route marked in red requires the pipe to be off bottom. The off bottom distance is approximately 150 m.





Figure 2. Larger scale of Google Earth image from February 15, 2013 to help SAV identification.

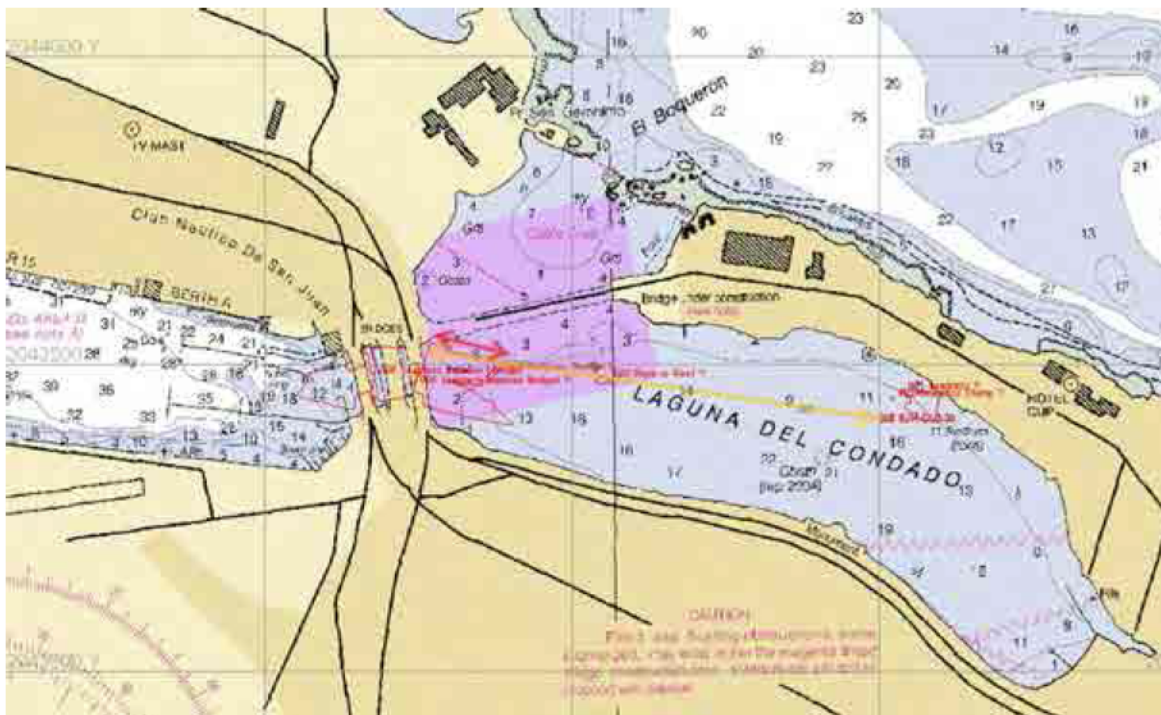


Figure 3. Condado Lagoon from NOAA chart 25670. Red polygons outline SAV areas along dredge pipe route. Orange line depicts proposed dredge pipe route. Red line depicts where dredge pipe needs to be off bottom to avoid impact on SAV habitat. SAV locations obtained from SSS mosaic (see Figure 4).



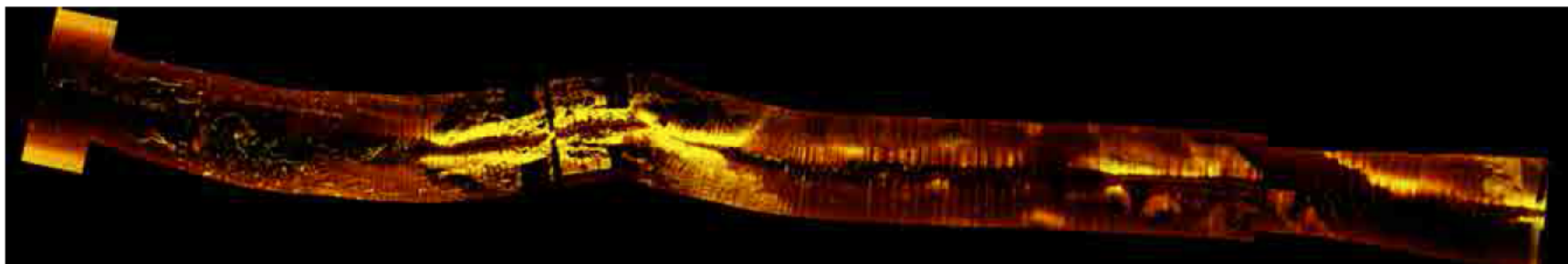


Figure 4. SSS mosaic from San Antonio Channel on the left side to Condado Lagoon, on the right side at .25 m pixel resolution. SSS imagery collected on January 10, 2015 with a 600 KHz transducer. Mosaic length is approximately 1,646 m while its width is approximately 100 m. The yellow area left of center is the bridges area.



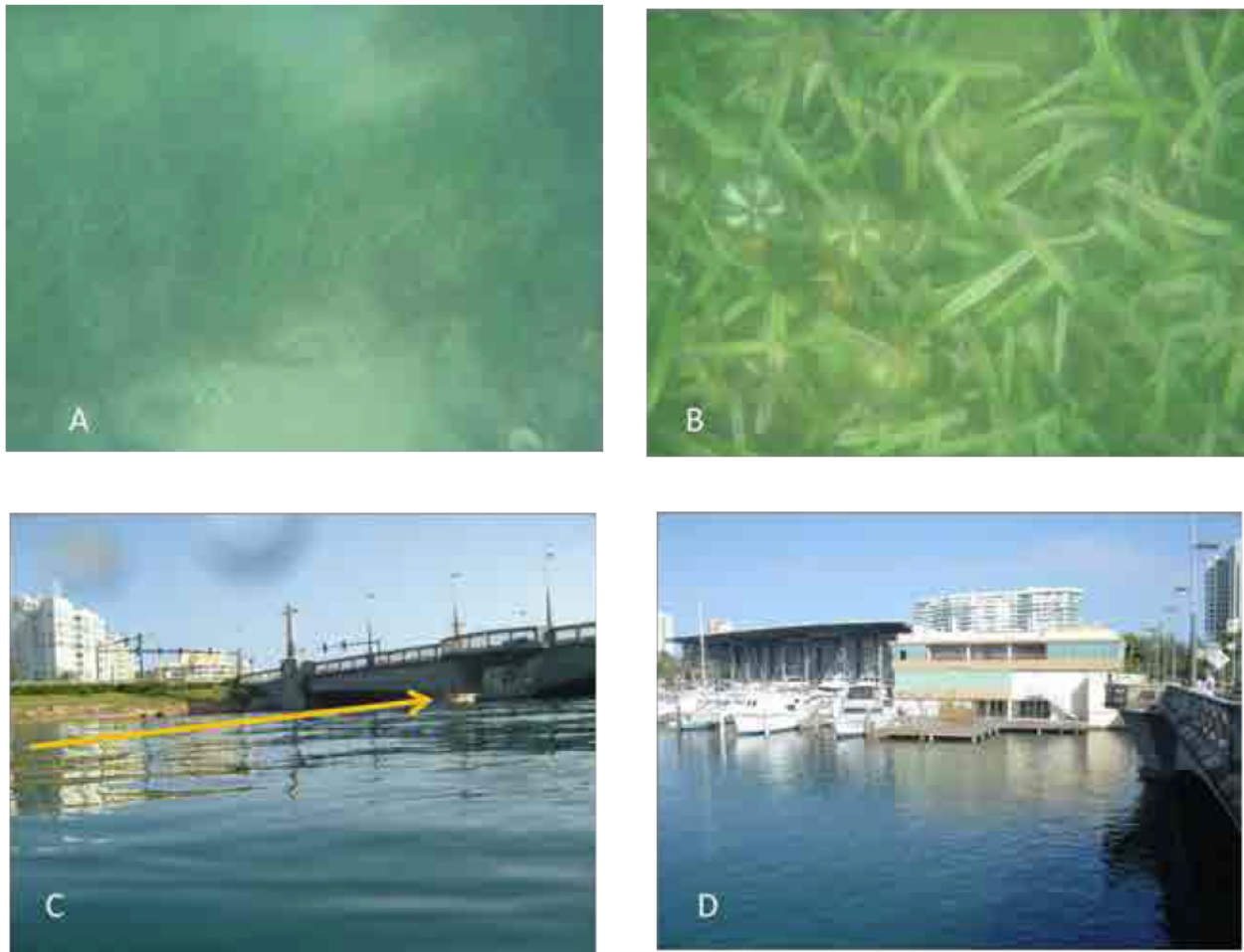


Figure 5. A. *Syringodium filiforme*, manatee seagrass on the northwest side of Esteves bridge at UTM Z19, 0807718, 2043517, WGS84. B. *Thalassia testudinum*, turtle seagrass on the east side of Esteves bridge at UTM Z19, 0807799, 2043497, WGS84, notice various sea urchins (*Lytechinus variegatus*) which inhabit the seagrass C. The northwest span of the Esteves bridge with arrow indicating proposed dredge pipe route location. D. The San Antonio channel area in front of the San Juan Yacht Club. All photos taken by JA Rivera on January 17, 2015 between 8-9:30 am.

The Auger pin anchor diagram (see Figure 8) is proposed to be used in the SAV area to attach a buoy and line that can be used to hang the dredge pipe off the SAV bottom. This strategy will minimize impact to SAV by setting the dredge pipe over the bottom directly, especially if the project duration exceeds various months.

Figure 1 depicts the proposed dredge pipe route which hugs the San Juan Yacht Club dolphin mooring post line and continues to the north side of the first column of the San Antonio Channel Bridge. The route continues under the San Antonio Channel Railroad Bridge to the north side of the first column of the Guillermo Esteves Bridge. Up to this point the dredge pipe is located on the sea floor bottom. Continuing east of the Guillermo Esteves Bridge towards the Condado



Lagoon dredged holes, the first 130-150 m are inhabited with SAV. It is in this section that I propose that the dredged pipe be placed off bottom to minimize impact to the SAV's. See Figure 8 to see what type of anchor pin is suggested to attach a buoy that can provide floatation that will keep the dredged pipe 6-12 inches off the bottom. A series of these anchors can be used with minimum impact to the SAV. After this SAV section, the dredged pipe can be placed on the Lagoon bottom until reaching the dredged hole area (see Figure 1).

Consideration for recreational use of San Antonio Channel and the passage under the bridges into Condado Lagoon needs to be taken into account (see Figure 7), especially during weekends and afternoons. Minimizing conflicting use of these waters will ensure successful completion of project objectives.

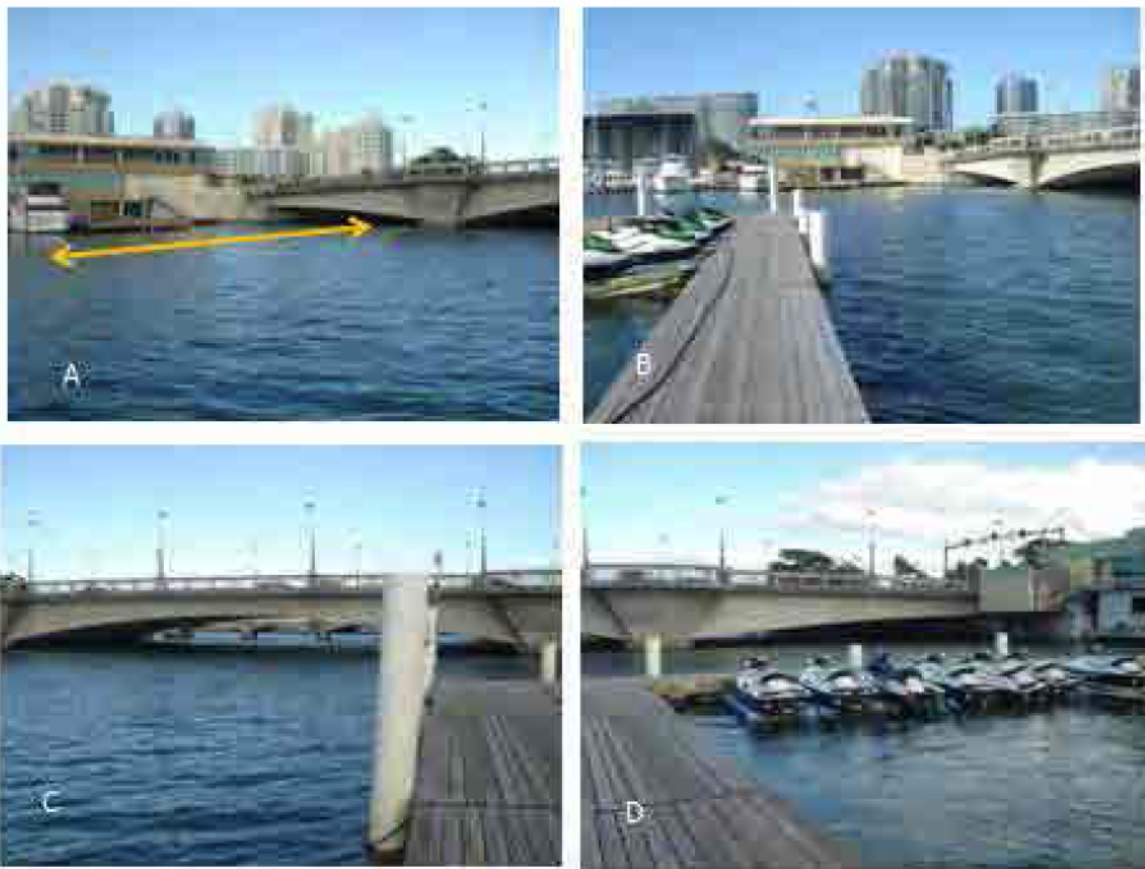


Figure 6. A. San Antonio bridge (Fernandez Juncos Avenue) northern span next to the San Juan Yacht Club. Orange arrow depicts proposed dredge pipe route. B. View of A from San Juan Bay Marina. C. San Antonio bridge center span viewed from San Juan Bay Marina floating pier. D. San Antonio bridge southern span viewed from SJBM floating pier. All photos taken by JA Rivera on January 26, 2015 at approximately 4 pm.





Figure 7. Paddleboard enthusiasts using San Antonio channel between marinas, via under bridges, towards Condado lagoon and back. Photo taken by JA Rivera from San Antonio Bridge on January 17, 2015 at approximately 9:30 am.



Preliminary Anchor Size:

$\frac{3}{4}$  inch shaft

48 inch length

6 inch helix screw

Auger pin to be installed in SAV area with line attached to buoy.



Figure 8. Example of Auger pin anchor proposed to be used in SAV to hold buoy and line that can be used to hold dredge pipe off SAV bottom.



## Species List

The species list was compiled primarily on the south side rock wall between the San Antonio Channel Railroad and the Guillermo Esteves bridges.

### **SAV:**

*Syringodium filiforme* – next to Esteves Bridge, on the NW side in 4 ft water depth, patchy.

*Thalassia testudinum* - next to Esteves Bridge on both sides, patchy on the NW side, continuous on the NE side facing the Condado Lagoon.

### **FISH:**

*Haemulon flavolineatum*- French grunt, most abundant between bridges on the south side rock wall, 20 individuals.

*Abudefduf saxatilis*- Sergeant major, 4 individuals.

*Abudefduf taurus*- Night sergeant, 2 individuals, one was at the surface.

*Sphyrna barracuda*- Barracuda, 2 small individuals (approximately 18 inches in length).

*Acanthurus bahianus*- Surgeonfish, 4 individuals by the SJYC, bottom feeding.

### **URCHINS:**

*Echinometra lucunter*- Between bridges, south side rock wall in-between rocks.

*Lytechinus variegatus*- On seagrass (*T. testudinum*) and between bridges, south side rock wall on sand covered by algae and bivalve dead shells.

### **CORALS:**

*Porites astreoides*- Between bridges, south side rock wall.

*Siderastrea radians*-Between bridges, south side rock wall.

### **ALGAE:**

*Dictyota divaricata*

*Sargassum spp*- Floating adrift, lots of it.

*Padina jamaicensis*- In front of Sizzler's on shallow rocks.

## Acknowledgements

The author would like to thank Mr. Nelson Colon and Mr. Kenneth Dugger from the USACE Jacksonville, Florida District Office for expediting the Puerto Rico DRNA permit to use a motor vessel in Condado Lagoon. I also appreciate the availability of the vessel on short notice that enables the SSS data collection which was provided by Dr. Edgardo Ojeda from Cabo Rojo.

## References

Humann, P., N. Deloach. 2002. Reef Fish Identification: Florida, Caribbean, Bahamas. New World Publications, Inc., Jacksonville, FL, USA. pp 512.



Humann, P., N. Deloach. 2002. Reef Creature Identification: Florida, Caribbean, Bahamas. New World Publications, Inc., Jacksonville, FL, USA. pp 448.

Humann, P., N. Deloach. 2002. Reef Coral Identification: Florida, Caribbean, Bahamas. New World Publications, Inc., Jacksonville, FL, USA. pp 272.

NOAA, 2005. Chart # 25670, San Juan Bay Harbor Chart at 1:10,000 scale, Puerto Rico. Digital raster file.

USACE, 2014. Section 00 31 32 Geotechnical Data Report for the San Juan Harbor Construction Dredging- Mitigation Puerto Rico. Prepared by the Geotechnical Branch, Engineering Division, Jacksonville District Corps of Engineers (Sept. 4, 2014). pp 111.



## APPENDIX I. Permit to operate a power boat in Condado Lagoon.



ESTADO LIBRE ASOCIADO DE  
**PUERTO RICO**  
Departamento de Recursos Naturales  
y Ambientales

DEC 22 2014

Sr. Nelson R Colón  
Project Manager  
Departamento de Defensa  
Cuerpo de Ingenieros del Distrito de Jacksonville  
PO Box 4970  
Jacksonville, Florida 32232-0019

Estimado señor Colón:

### **ENDOSO PARA EL USO DE EMBARCACIÓN FLETADA EN LA RESERVA ESTUARINA LAGUNA DEL CONDADO**

Nos referimos a su comunicación con fecha del 17 de diciembre de 2014, en donde solicita se le conceda una nueva fecha al endoso otorgado por Departamento de Recursos Naturales y Ambientales (DRNA) para utilizar una embarcación fletada con motores fuera de borda y con propulsión mayor a los 50 caballos de fuerza para entrar a la Reserva Estuarina Laguna del Condado. El propósito de la actividad es realizar unos estudios para el proyecto de restauración de la Laguna, específicamente el relleno de los hoyos que afectan la calidad del agua y el oxígeno disuelto en este cuerpo de agua durante los días 22 de diciembre de 2014 al 23 de enero de 2015

Evaluada su petición, el DRNA le informa que no tiene objeción alguna en conceder la nueva fecha para que puedan completar la actividad propuesta, siempre y cuando se cumpla con las siguientes condiciones:

- NVR
- El área de operación y sus alrededores se mantendrán en impecable estado y será responsable de la limpieza, mantenimiento y seguridad del área en todo momento. Deberá disponer adecuadamente de los escombros que resulten de la actividad propuesta.
  - En ningún momento podrá verse afectada la flora y la fauna.
  - Deberá cumplir con todas las leyes y reglamentos vigentes en el Departamento y con todas las leyes federales, estatales y municipales aplicables. En caso de requerir servicios de un concesionario, este deberá estar debidamente autorizado por el Departamento.





- La embarcación y sus operadores deberán cumplir con las disposiciones del Reglamento Número 6979 conocido como *Reglamento para la Inscripción, la Navegación y la Seguridad Acuática en Puerto Rico*.
- Será responsable de todos los riesgos de pérdida y/o daños y perjuicios a la propiedad y a todas las personas que resultaren afectadas como consecuencia de las operaciones aquí autorizadas, relevando así de toda clase de responsabilidad y/u obligación al Departamento por cualquier daño, litigio, sentencia, costos y/o gastos en relación con tal pérdida o daño, y en caso de iniciarse cualquier reclamación en la cual, bajo los términos de este Permiso el Departamento tenga derecho a protección y retribución, El Peticionario asumirá inmediatamente la defensa del Departamento en dicho litigio, obligándose a satisfacer cualquier sentencia.

Este endoso se otorga exclusivamente para la actividad antes mencionado.

Cordialmente,



Nelson Velázquez Reyes  
Secretario Auxiliar  
Secretaría Auxiliar de Permisos,  
Endosos y Servicios Especializados

ADR/adr

cc: Reservas y Refugios

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## APPENDIX II. Notes

1. The night of the SSS imagery collection, the images were full of *Sargassum* signatures due to such species been present floating at the sea surface.
2. Also, fish signatures in the water column which seem like sardinids.
3. In the marina area, boat hulls show nicely as well as the mooring dolphins and anchoring chains and boat propeller wash.
4. There were approximately three vessels moving about when our vessel passed at the end of transect.



5. I encountered approximately five recreational fishermen from the San Antonio Bridge, casting their lines towards the marina channel side. They prefer casting from the center span.



## Dugger, Kenneth R SAJ

---

**From:** Jose Rivera - NOAA Federal [jose.a.rivera@noaa.gov]  
**Sent:** Thursday, February 12, 2015 12:13 PM  
**To:** Dugger, Kenneth R SAJ  
**Cc:** Colon, Nelson R SAJ; Spinning, Jason J SAJ; DeMarco, Paul M SAJ  
**Subject:** Re: FW: [EXTERNAL] Condado DXF, SHP and Geotiff files (UNCLASSIFIED)

Hola Nelson and Kenneth:

As per telephone conversation this morning, I agree that your proposed re-alignment of the pipeline as attached meets our EFH Recommendations. However, the labeling of the bridges is inverted. Esteves bridge should be the bridge on the right (Condado lagoon side) and the left bridge should be the San Antonio bridge (San Antonio channel side). This photo is excellent !!!!! I assume that the red section of pipe route identifies where the pipe needs to be off bottom.

Saludos,

Jose

On Thu, Feb 12, 2015 at 11:45 AM, Dugger, Kenneth R SAJ <[Kenneth.R.Dugger@usace.army.mil](mailto:Kenneth.R.Dugger@usace.army.mil)> wrote:

Jose:

Pursuant to our telephone conversation this morning, the proposed re-alignment of the pipeline is attached.

Please verify that we remain in compliance with your EFH Conservation Recommendations.

Thanks for your efforts on this.

Kenneth Dugger  
Phone 904 232-1686 <<tel:904%20232-1686>>  
Cell 904 401-2894 <<tel:904%20401-2894>>  
Fax 904 232-3442 <<tel:904%20232-3442>>

-----Original Message-----

From: Bergen, Jeff E SAJ

Sent: Monday, February 09, 2015 1:54 PM  
To: Dugger, Kenneth R SAJ; Jose Rivera - NOAA Federal  
Cc: Colon, Nelson R SAJ; Conger, Stephen R SAJ  
Subject: RE: [EXTERNAL] Condado DXF, SHP and Geotiff files (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Kenneth,



Look at this pipe corridor location. This moves it away from the marina and leaving all of the marina functional while keeping it out of the center span of the bridge with the most vertical clearance. This will allow for the small survey boat (13' Boston Whaler) to still use the bridge if need be and not impede any of the paddle boarders.

Let me know what you all think,

Jeff Bergen, P.E.  
U.S. Army Corps of Engineers  
Engineering Division Design Branch  
Geomatics Section  
(904)-232-1602 <[tel:%28904%29-232-1602](tel:28904%29-232-1602)>

-----Original Message-----

From: Dugger, Kenneth R SAJ  
Sent: Monday, February 09, 2015 12:42 PM  
To: Jose Rivera - NOAA Federal  
Cc: Bergen, Jeff E SAJ  
Subject: FW: [EXTERNAL] Condado DXF, SHP and Geotiff files (UNCLASSIFIED)

Jose:

We are looking at realignment of the pipeline especially at the marina in the San Antonio Channel.

The move would be more to the south and presumably south of any mapped sea grass based on the image you provided.

We have been unable to open the .shp files you sent. Apparently, the full complement of companion files was not included.

Your opinion on the pipeline re-alignment would be appreciated.

We will provide a map or GIS layer with the proposed realignment when it is available.

Thanks!  
Kenneth  
Phone 904 232-1686  
Cell 904 401-2894  
Fax 904 232-3442

-----Original Message-----

From: Bergen, Jeff E SAJ  
Sent: Monday, February 09, 2015 12:33 PM  
To: Dugger, Kenneth R SAJ  
Subject: RE: [EXTERNAL] Condado DXF, SHP and Geotiff files (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE



The reason you can't use those \*.shp files is they are incomplete. There are more files generated with the same name but different extensions that define the shape. All are needed to be able to be accessed and viewed.

-----Original Message-----

From: Dugger, Kenneth R SAJ

Sent: Monday, February 09, 2015 11:15 AM

To: Bergen, Jeff E SAJ

Subject: FW: [EXTERNAL] Condado DXF, SHP and Geotiff files

Jeff:

Here is what NMFS sent me.

I was not able to open using Google Earth.

Thanks!

Kenneth

Phone 904 232-1686

Cell 904 401-2894

Fax 904 232-3442

-----Original Message-----

From: Jose Rivera - NOAA Federal [<mailto:jose.a.rivera@noaa.gov>]

Sent: Friday, February 06, 2015 12:05 PM

To: Dugger, Kenneth R SAJ

Subject: [EXTERNAL] Condado DXF, SHP and Geotiff files

10JAN2015\_025m.tif

<[https://docs.google.com/a/noaa.gov/file/d/0B7Timggd7FKlcFhDdFg40TFCa3M/edit?usp=drive\\_web](https://docs.google.com/a/noaa.gov/file/d/0B7Timggd7FKlcFhDdFg40TFCa3M/edit?usp=drive_web)>

10JAN2015\_wht\_025m.TFW

<[https://docs.google.com/a/noaa.gov/file/d/0B7Timggd7FKlVnNVS1Y3c2F0SzA/edit?usp=drive\\_web](https://docs.google.com/a/noaa.gov/file/d/0B7Timggd7FKlVnNVS1Y3c2F0SzA/edit?usp=drive_web)>

Hola Kenneth:

Attached are the files I generated for the Condado SAV Field Report as requested.

The location for the more discrete SAV patches under the bridges is best to obtain from the picture description in the report.

The TFW file is the SSS mosaic.

Let me know if you have any questions.

Saludos,

Jose

--

Jose A Rivera



-----  
NOAA, National Marine Fisheries Service  
Habitat Conservation Division  
400 Fernandez Juncos Avenue  
San Juan, Puerto Rico 00901  
Tel: 787-729-6860 x 3038 <<tel:787-729-6860%20x%203038>>  
Cell: 787-405-3605

Classification: UNCLASSIFIED  
Caveats: NONE

Classification: UNCLASSIFIED  
Caveats: NONE

--

Jose A Rivera

-----  
NOAA, National Marine Fisheries Service  
Habitat Conservation Division  
400 Fernandez Juncos Avenue  
San Juan, Puerto Rico 00901  
Tel: 787-729-6860 x 3038  
Cell: 787-405-3605





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

REPLY TO  
ATTENTION OF

APR 22 2014

Planning Division  
Environmental Branch

Mr. Edwin E. Muñiz  
U.S. Fish and Wildlife Service  
Post Office Box 491  
Boquerón, Puerto Rico 00622-0491

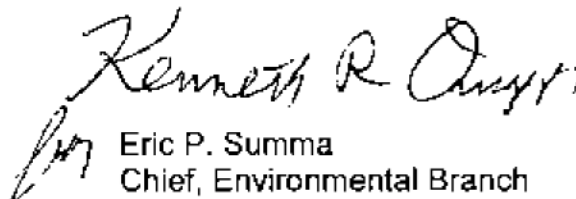
Dear Mr. Muñiz:

I am initiating consultation under the Endangered Species Act for the San Juan Harbor Mitigation Project in San Juan, Puerto Rico. This project involves the filling of 4 acres (including side slopes) of dredged holes in the Condado Lagoon with 46,000 cubic yards of dredged material to create 1.2 acres of habitat to an elevation of -12 feet to -15 feet for submerged aquatic vegetation. The dredged material would come from two shoaled areas in the La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor (see enclosed maps, drawings, and description).

The mitigation site, borrow sites, possible pipeline routes, and transit areas are within the habitat range of the Antillean manatee. We will require the standard manatee protection measures for all in water work. We conclude that the proposed action may affect but is not likely to adversely affect the Antillean manatee. No other listed species under your purview would be affected.

If you have any questions, please contact Kenneth Dugger at 904-232-1686 (kenneth.r.dugger@usace.army.mil). The point of contact in Puerto Rico is Johann Sasso at 787-729-6893 (johann.m.sasso@usace.army.mil). Additional information on this project is available on our Environmental Documents web page <[http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto\\_Rico](http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto_Rico)>.

Sincerely,

  
Eric P. Summa  
Chief, Environmental Branch

Enclosures





# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Caribbean Ecological Services  
Field Office  
P.O. Box 491  
Boqueron, PR 00622

In Reply Refer To:  
FWS/R4/CESFO/72127-002

**MAY 05 2014**

Eric P. Summa  
Chief, Environmental Branch  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Re: San Juan Harbor Mitigation Project,  
San Juan, Puerto Rico

Dear Mr. Summa:

Thank you for your letter dated April 22, 2014, requesting concurrence with your effect determination for the compliance with Section 7 of the Endangered Species Act. Our comments are provided under the Endangered Species Act (Act) (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), and in accordance with the Fish and Wildlife Coordination Act (47 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), and the Marine Mammal Protection Act (86 Stat. 1027, as amended; 16 U.S.C. 1361 *et seq.*).

The project consists of the filling of 4 acres of dredged holes in the Condado Lagoon with dredged material to create 1.2 acres of habitat for submerged aquatic vegetation. The dredge material would come from La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor, San Juan, Puerto Rico.


Based on a review of the information provided and that available in our office, the proposed action lies within the range of the endangered Antillean manatee (*Trichechus manatus*). However, based on the nature of the project, the site characteristics and on the implementation of appropriate manatee conservation measures (enclosed) we concur with your determination that the proposed project may affect, but is not likely to adversely affect the Antillean manatee or its habitat. Therefore, no further consultation is required. Nevertheless, if the project is modified or if information on impacts to listed species becomes available this office should be contacted concerning the need for the initiation of consultation under section 7 of the Act.

Thank you for the opportunity to comment on this project. We appreciate your interest in protecting endangered species and their habitats. It is the Service's mission to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the



continuing benefit of our people. Please do not hesitate to contact Marelisa Rivera 787-851-7297, extension 206, should you have any questions concerning our comments.

Sincerely yours,

  
Edwin E. Muñiz  
Field Supervisor

mrh

Enclosure

cc: COE, San Juan





U.S. FISH & WILDLIFE SERVICE  
CARIBBEAN ECOLOGICAL SERVICES FIELD OFFICE  
JANUARY 2012

## **TECHNICAL ASSISTANCE TO EVALUATE EFFECTS ON ANTILLEAN MANATEES**

The Service considers shallow coastal areas, bays, estuaries, river mouths and mangrove lagoon ecosystems as important for the conservation of the Antillean manatee because these areas contain all the natural elements preferred by manatees: abundant sea grass relatively calm waters, sheltered spots, and freshwater sources, as well as a relatively low number of boats within the bay. Actions proposed for these areas should be carefully examined, to ensure that elements required by this species are not compromised.

To evaluate the potential effect of proposed action on manatees, we need the applicants to address the following issues:

1. Type and amount of watercraft associated to the project
2. Amount of boat facilities (e.g. ramps, piers, dry-stacks, buoys, among others)
3. Amount of habitat to be affected (e.g. acres of sea grasses and/or mangroves)
4. Provisions / restrictions to be taken to prevent collisions with manatees (e.g. delineation of an entrance channel, marking buoys, navigation aids, among others).
5. Outreach efforts to be implemented concerning boat operation. One of the main components of a successful operation of facilities that implement mechanisms to safeguard threatened and endangered species is a comprehensive outreach program that clearly indicates to the public 1) the actions that the facility is undertaking to protect such species (including assurances on the implementation of protection measures), and 2) the activities that the public should take to minimize or prevent impacts to sensitive species and their habitats. Guidelines for safe operation of watercrafts should be included as part of the outreach/education component of the proposed project (example attached below).
6. Any other site-specific conservation measure applicable for the project.

## **EXAMPLE OF CONSERVATION MEASURES FOR IN-WATER PROJECTS (INCLUDING DREDGING ACTIVITIES)**

The following manatee conservation measures are recommended:

1. The contractor instructs all personnel associated with construction of the facility of the presence of manatees and the need to avoid collisions with manatees.
2. All construction personnel will be advised that there are civil and criminal penalties for harming, harassing, or killing manatees, which are protected under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The permit holder and/or contractor will be held responsible for any manatee harmed, harassed, or killed as a result of construction of the project.



3. The project work area shall be surveyed for the presence of manatees at least one hour before any dredging starts and prior to the installation of the silt fence. If manatees are found before any in-water project activity starts, the contractor shall wait for the manatee to leave the area by itself and be at least 100 feet from the project in-water area. Manatees must not be herded or harassed into leaving the area.
4. Siltation barriers will be made of material in which manatee cannot become entangled, are properly secured, and are regularly monitored to avoid manatee entrapment. Barriers must not block manatee entry to or exit from essential habitat.
5. All vessels associated with the project construction will operate at "no-wake/idle" speed at all times while in water within manatee areas and vessels will follow routes of deep water whenever possible.
6. If manatees are seen within 100 yards (300 feet) of the in-water work area, all appropriate precautions shall be implemented to ensure protection of the manatees. These precautions shall include operating all equipment in such a manner that moving equipment does not come any closer than 50 to 100 feet of any manatee. If a manatee is within 50 feet of in-water work, all in-water activities must shut down, until manatee moves on its own at least 100 feet away from the in-water work area. Manatees must not be herded or harassed into leaving the area.
7. Any collision with and/or injury to a manatee shall be reported immediately to the Department of Natural and Environmental Resources Law Enforcement (787-724-5700) and the USFWS Caribbean Ecological Services Field Office (787-851-7297).
8. The contractor shall keep a log detailing sightings, collisions, or injury to manatees, which have occurred during the contract period. Following project completion, a report summarizing the above incidents and sightings will be submitted to the U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office, P.O. Box 491, Boquerón, Puerto Rico 00622.
9. The permit holder and/or contractor shall install and maintain temporary and permanent manatee signs as recommended by the following guidelines:
  - a. Signs must be placed in a prominent location for maximum visibility. Areas that are recommended include: dock walkways, dock master offices, near restrooms or other high patron foot traffic areas.
  - b. Signs must be replaced when faded, damaged or outdated.
  - c. If the facility is large or has multiple docks with separate walkways that are a considerable distance apart, multiple signs should be installed.
  - d. These signs must not face the water, must never be attached to pilings or navigational markers in the water. Some exceptions to signs facing the water exist for temporary signs during in-water work.
  - e. For durability, all signs should be fiberglass, PVC or metal with rounded corners (hand-sanded to remove all sharp edges and burrs), constructed of 0.08 Gauge 5052-H38 Aluminum with an Alodine 1200 conversion coating and Engineer Grade Type I reflective sheeting. Signs constructed to other specifications may not provide durability acceptable to the consumer.
  - f. Signs other than depicted may be considered, but should be approved by USFWS.



**PRECAUCIÓN: HÁBITAT DE MANATÍ**  
**CAUTION: MANATEE HABITAT**

**Toda embarcación**  
**VELOCIDAD MÁXIMA 5MPH**  
All project vessels **IDLE SPEED/NO WAKE**

Si observa un manatí a 50 pies o menos del área de trabajo,  
toda actividad en el agua debe

**DETENERSE**

When a manatee is within 50 feet of work all in-water activities must **SHUT DOWN**

Informe cualquier accidente con un manatí.  
Report any collision with or injury to a manatee.



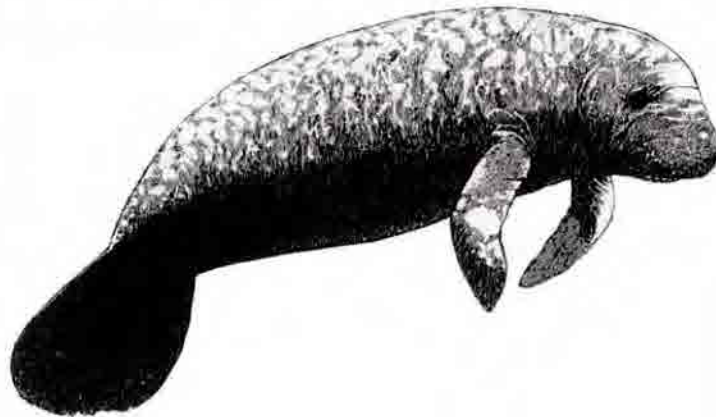
**Vigilantes DRNA**  
**(787)724-5700**

This **temporary** bilingual sign is required as part of the standard manatee construction conditions and is intended to be placed near dredge, tugboat and work boat operators. Minimum size should be at least 8½" inches tall by 11" inches wide, and besides the above recommendation, the sign may be in laminated paper. This sign shall be installed or distributed prior to the initiation of construction. Temporary signs will be removed by the permit holder upon completion of construction.

To obtain a ready to print copy of this sign, please contact the USFWS Caribbean Ecological Services Field Office at 787-851-7297 ext. 220 or by email at [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)



**PRECAUCIÓN**  
**Manatíes en el Área**  
Caution: Watch for Manatees



**VELOCIDAD MÁXIMA 5MPH**  
IDLE SPEED/NO WAKE

Informe cualquier accidente con un manatí.

**Vigilantes DRNA**  
**(787) 724-5700**

Report collisions, sick, dead or injured manatees.

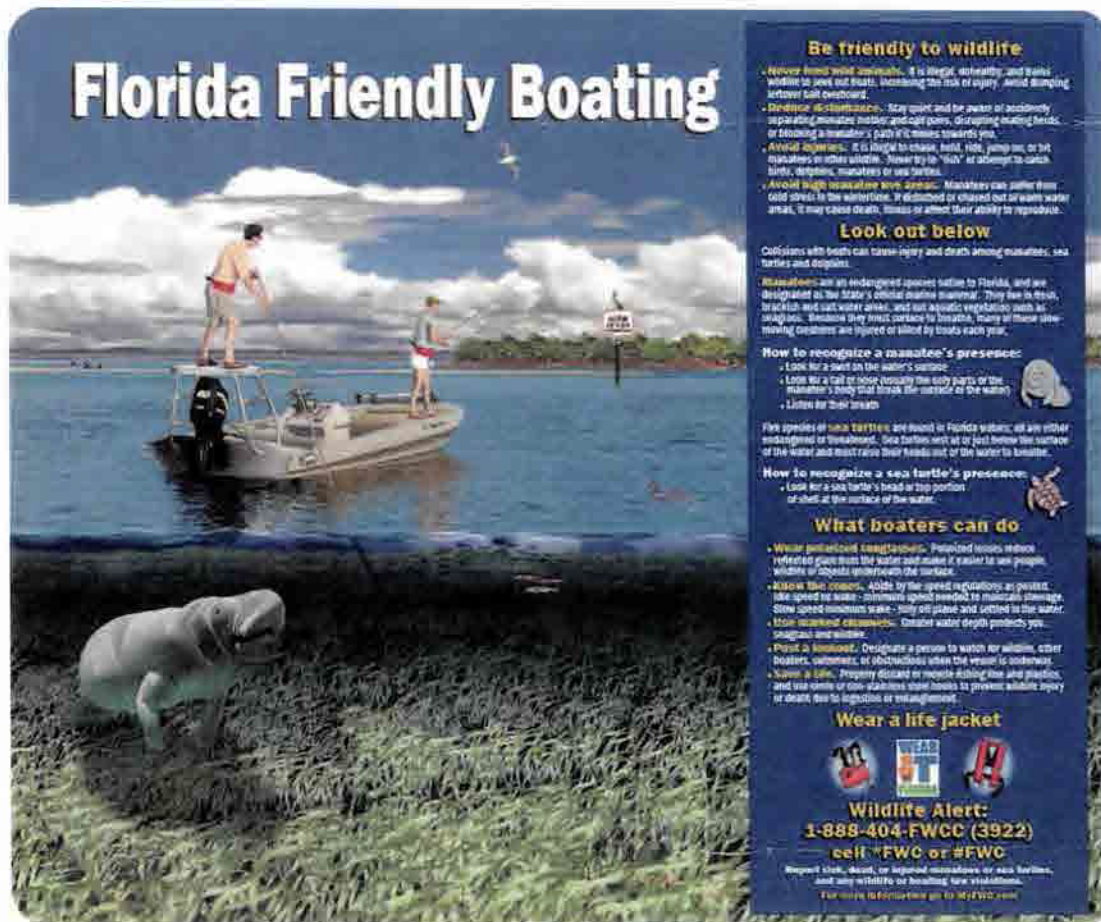
This **permanent** bilingual sign is required as part of the standard manatee construction conditions and is intended to be placed within docking and launching facilities. Minimum size should be at least 30" inches tall by 24" inches wide with rounded corners. This sign shall be installed prior, during or after project construction. This permanent sign may not be required for coastal projects that **do not** have docking and/or launching facilities.

To obtain a ready to print copy of this sign, please contact the USFWS Caribbean Ecological Services Field Office at 787-851-7297 ext. 220 or by email at [jan\\_zegarra@fws.gov](mailto:jan_zegarra@fws.gov)



10. A permanent bilingual manatee educational sign should be installed and maintained prior to mooring occupancy at a prominent location to increase the awareness of boaters using the facility of boats to these animals. The numbers of educational signs that may be installed will depend on the docking facility design. One manatee educational sign is recommended at each boat ramp or travel lift (if applicable). Manatee educational signs remain the responsibility of the owner(s) and the Service recommends the signs be maintained for the life of the docking facility in a manner acceptable to the Corps of Engineers.

#### EXAMPLE MANATEE EDUCATIONAL SIGN



This permanent educational sign should have a minimum size of at least 30" inches tall by 36" inches wide with rounded corners.



11. A notarized verification letter stating that permanent signs have been installed at designated locations shall be forwarded to the Corps of Engineers, Antilles Regulatory Section, as soon as they are installed. Signs and pilings remain the responsibility of the owner(s) and are to be maintained for the life of the docking and launching facility in a manner acceptable to the Corps of Engineers.
12. Signs other than depicted above may be considered, but should be approved by USFWS. Signs shall have at least the following minimal recommend information:

a. Temporary bilingual signs:

**PRECAUCIÓN**  
**MANATÍES EN EL ÁREA**  
Mantenga velocidad de 5 mph dentro del área de construcción  
Informe cualquier incidente con un manatí  
Vigilantes DRNA 787-724-5700

**CAUTION**  
**MANATEES IN THE AREA**  
Maintain idle speed/no wake (5 mph) within construction site  
Report any collisions with or injury to a manatee

b. Permanent bilingual signs:

**PRECAUCIÓN**  
**MANATÍES EN EL ÁREA**  
Velocidad máxima 5 mph  
Informe cualquier incidente con un manatí  
Vigilantes DRNA 787-724-5700

**CAUTION**  
**MANATEES IN THE AREA**  
Idle speed/No wake (5 mph) zone  
Report collisions, sick, dead or injured manatees

- c. Permanent bilingual educational sign and some of the of the recommended information it should include:

**GUÍA PARA LA PROTECCIÓN Y CONSERVACIÓN DEL MANATÍ**  
**(MANATEE PROTECTION AND CONSERVATION GUIDELINES)**

1. Utilice gafas polarizadas mientras navega. Estas ayudan a detectar mejor al manatí, las áreas llanas y cualquier obstáculo en el mar. (*Use polarized sunglasses while navigating. These help to detect any manatee, shallow waters and any other obstacle in the water.*)
2. Si usted ve un manatí en la trayectoria de su embarcación, reduzca la velocidad a 5 mph y conduzca la embarcación fuera del paso del manatí o espere a que el manatí salga del área poniendo su embarcación en neutro. (*If you see a manatee within the*





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

REPLY TO  
ATTENTION OF

APR 22 2014

Planning Division  
Environmental Branch

Mr. David Bernhart  
National Marine Fisheries Service  
Protected Resources Division  
263 13th Avenue South  
St. Petersburg, Florida 33701-5505

Dear Mr. Bernhart:

I am initiating consultation under the Endangered Species Act for the San Juan Harbor Mitigation Project in San Juan, Puerto Rico. This project involves the filling of 4 acres (including side slopes) of dredged holes in the Condado Lagoon with 46,000 cubic yards of dredged material to create 1.2 acres of habitat to an elevation of -12 feet to -15 feet for submerged aquatic vegetation. The dredged material would come from two shoaled areas in the La Esperanza Ecosystem Restoration Project and/or the San Antonio Channel of San Juan Harbor (see enclosed maps, drawings, and description).

The mitigation site, borrow sites, possible pipeline routes, and transit areas are within the habitat range of sea turtles and listed or proposed coral species (including designated Critical Habitat for *Acropora* coral). The mitigation site consists of dredged holes in Condado Lagoon. The borrow sites are either recently shoaled areas subject to invasion by Australian pine (La Esperanza) or an existing navigation channel in San Juan Harbor (San Antonio Channel). The pipeline impacts would be limited to a narrow corridor. Transit of the areas by dredges or associated vessels would have little impact on the bottom.

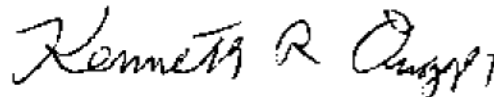
While sea turtles would be uncommon in the affected area, the Green Sea Turtle commonly feeds on sea grass and the proposed mitigation may benefit the species. We will follow the sea turtle and smalltooth sawfish construction conditions. We will survey any pipeline corridors in Condado Lagoon, San Juan Harbor, and the channel that connects the two for presence of coral. If listed or proposed species cannot be avoided (e.g., by re-routing or bridging over), we will re-initiate consultation.



We conclude that the proposed action may affect but is not likely to adversely affect Green Sea Turtles and may affect coral (listed or proposed). The proposed action would not destroy or adversely modify designated Critical Habitat for *Acropora* coral. No other listed species under your purview would be affected. If you have any questions, please contact Kenneth Dugger at 904-232-1686 (kenneth.r.dugger@usace.army.mil).

The point of contact in Puerto Rico is Johann Sasso at 787-729-6893 (johann.m.sasso@usace.army.mil). Additional information on this project is available on our Environmental Documents web page <[http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto\\_Rico](http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto_Rico)>.

Sincerely,



Eric P. Summa  
Chief, Environmental Branch

Enclosures

Copy Furnish:

Dr. Lisamarie Carrubba, National Marine Fisheries Service, Boqueron Field Office,  
P.O. Box 3323, Lajas, Puerto Rico 00667-3323





UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

263 13th Avenue South

St. Petersburg, Florida 33701-5505

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

F/SER31:LC

SER-2013-10961

OCT 31 2014

Chief, Environmental Branch  
Jacksonville District Corps of Engineers  
Department of the Army  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Ref.: U.S. Army Corps of Engineers, San Juan Harbor Submerged Aquatic Vegetation  
Mitigation Project, San Juan, Puerto Rico

Dear Sir or Madam:

This letter responds to the April 22, 2014, letter requesting National Marine Fisheries Service (NMFS) concurrence with the U.S. Army Corps of Engineers' (USACE) project-effect determinations submitted pursuant to Section 7 of the Endangered Species Act (ESA) and supplemental information provided via emails dated July 14, August 6, and August 21, 2014, for the San Juan Harbor mitigation project. You determined that the project activities may affect, but are not likely to adversely affect, green sea turtles and elkhorn and staghorn corals. You also determined that there would be no destruction or adverse modification of coral critical habitat and no effect to any other ESA-listed species under NMFS's purview. NMFS's findings on the project's potential effects are based on the project description in this response. Any changes to the proposed actions may negate the findings of this consultation and may require reinitiation of consultation with NMFS.

The San Juan Harbor project impacted seagrass in the area of the Puerto Nuevo Channel when the federal channel was dredged. The original mitigation plan for the federal navigation project contemplated the expansion of an existing seagrass-colonized shoal in the same area (Figure 1). This plan has now been changed to backfill 4 acres of previously-dredged holes in Condado Lagoon, San Juan, Puerto Rico, to provide habitat for seagrass (approximate position 18.4301°N, 66.1104°W, North American Datum of 1983 [NAD83], Figure 2). The fill material will be taken from the Esperanza Ecosystem Restoration area in the San Juan Bay, Cataño, Puerto Rico (approximate position 18.4301°N, 66.1104°W, NAD83, Figure 3). These borrow sites are entrances to La Esperanza Ecosystem Restoration Project that have recently shoaled and fall largely within the impact footprint of that project. Opening of the shoals is needed to restore flow and circulation in the area. The material is sand in the area of the shoals. Note that the alternative borrow site in the San Antonio Channel (approximate position 18.4301°N, 66.1104°W, NAD83, Figure 3) is no longer a proposed source of fill material because testing indicated that the material is largely silt and would not be suitable for the intended use.

The USACE selected the placement of fill in 4 acres of Condado Lagoon as the preferred alternative to the previously-proposed mitigation due to USACE's engineering concerns related





[illegible]

The project will require the dredging and transport of approximately 50,000 cubic yards (yd<sup>3</sup>) of material from the borrow site or sites to the lagoon. The USACE is proposing the use of a barge-mounted mechanical dredge, such as a clamshell dredge, or a hydraulic dredge. The barge would then transport the material to the easternmost portion of the San Antonio Channel where it would be pumped through a 12-inch-diameter pipeline to the dredged pit in the lagoon. The pipeline will be submerged due to recreational activity in the area and related safety concerns. This could result in impacts to the seagrass beds at the easternmost end of the San Antonio Channel and in the Condado Lagoon, but the USACE anticipates that these impacts would be temporary and that seagrass would recover naturally due to the small size of the pipeline and the short time line for project completion. The USACE anticipates that 500-5,000 yd<sup>3</sup> of material will be dredged each



day. This will translate to between 30-120 days of dredging and fill placement in Condado Lagoon unless there are weather or equipment failure delays that would increase the time needed to complete the work.

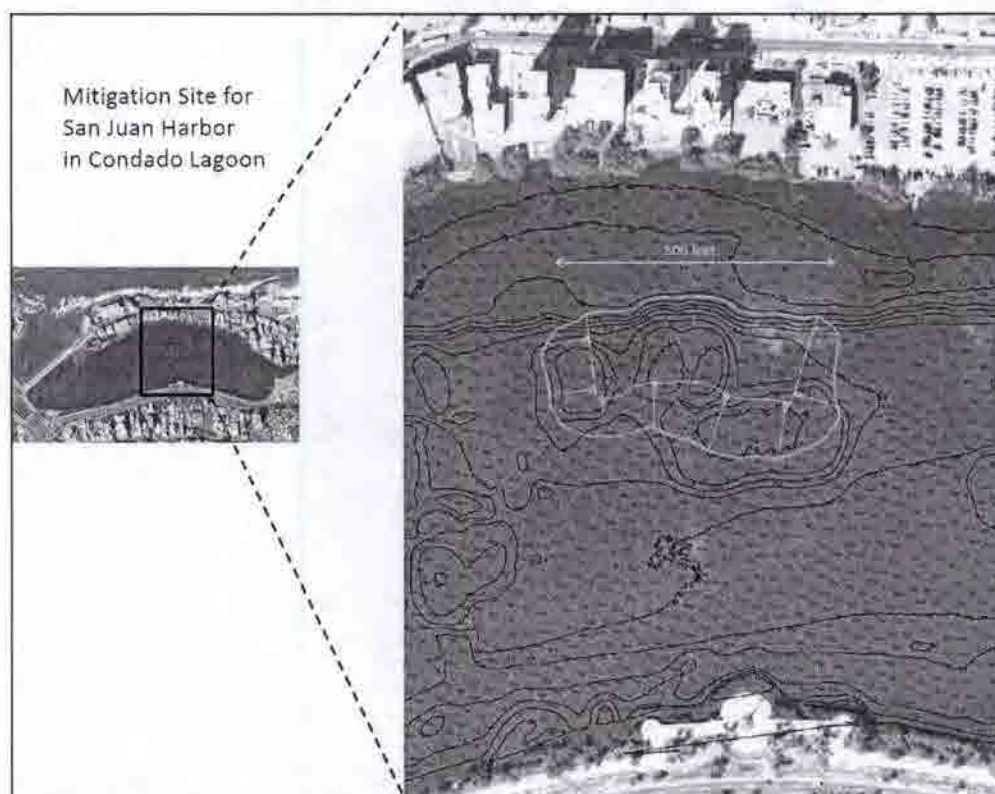


Figure 2. Figure from DEA showing the proposed location of the dredged pit that will be filled under the new mitigation plan (USACE 2014)

The USACE will include the following requirements for protection of ESA-listed species as special conditions of the contract for completion of the work:

1. Compliance with the National Marine Fisheries Service's (NMFS) *Sea Turtle and Smalltooth Sawfish Construction Conditions* (dated March 23, 2006, enclosed).
2. Compliance with NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* (revised February 2008, enclosed).
3. Compliance with Section 401 requirements of the Clean Water Act related to turbidity controls, including required monitoring of turbidity in the lagoon where dredged material will be deposited.





Figure 3. Figure from DEA showing the locations of the borrow sites (the alternative borrow source in San Antonio Channel is no longer proposed) and fill area in the lagoon (USACE 2014)

ESA-listed species under our purview that may occur in the area include green (*Chelonia mydas*) and hawksbill (*Eretmochelys imbricata*) sea turtles. Hawksbill and green sea turtles are reported in various portions of San Juan Bay by the Puerto Rico Department of Natural and Environmental Resources, based on information provided as part of previous ESA Section 7 consultations for the project area. In addition, hawksbill sea turtles are known to nest on the beach to the northeast of the proposed fill location, in the area adjacent to the Condado Plaza Hotel in Condado Lagoon. The USACE project-effects analysis did not consider the potential impacts to hawksbill sea turtles from the proposed action, but we consider them in this response because they are present in the action area.

#### *Dredging and Sedimentation Effects on Corals and Critical Habitat*

The project is located within ESA-designated *Acropora* coral critical habitat and areas containing the essential features of coral critical habitat<sup>1</sup> are present at the mouth of Condado Lagoon. ESA-listed elkhorn (*Acropora palmata*) and staghorn (*Acropora cervicornis*) coral colonies have not been reported inside the lagoon, but are present on nearshore hard bottom areas outside the mouth of the lagoon and along portions of the north coast in this area, based on information in our files. On September 10, 2014, we issued a final rule listing 5 Atlantic coral species as

<sup>1</sup>The essential feature of critical habitat for listed corals is substrate of suitable quality and availability, in water depths from the mean high water line to 30 m, to support successful larval settlement, recruitment, and reattachment of fragments. Substrate of suitable quality and availability means consolidated hard bottom or dead coral skeletons free from fleshy macroalgae and sediment cover.



threatened: lobed star (*Orbicella* [formerly *Montastraea*] *annularis*), mountainous star (*Orbicella faveolata*), boulder star (*Orbicella franksi*), pillar (*Dendrogyra cylindris*), and rough cactus corals (*Mycetophyllia ferox*). These 5 recently listed coral species have not been reported inside the lagoon, based on a review of our project files. The USACE did not provide any information regarding the presence of ESA-listed corals or their critical habitat in the area of the borrow sites or fill site because they have not conducted benthic surveys for this project. However, a review of our project files, including benthic surveys from other projects, indicates that the dredged pits where fill will be placed are uncolonized though there are some areas with mangroves and seagrass in shallow waters outside the pits. Fill placement will take place further into the lagoon where circulation is poor, according to information provided by the USACE. The fill material will be mainly sand, which is heavier (than silt) and settles quickly to the bottom versus drifting long distances in the water column. The USACE will require water quality monitoring and compliance with turbidity standards during fill placement to ensure that areas outside the dredged pit are not affected by the re-suspension of material as fill material is deposited in the pit. Therefore, we do not anticipate impacts to areas at the mouth of the lagoon containing coral critical habitat or to ESA-listed corals from the proposed placement of fill in the dredged pit.

Information in our project files indicates that hard corals may be present on the bridge piles between the San Antonio Channel and the Condado Lagoon, but we do not have reports of ESA-listed coral colonies being present in these areas. Based on information in our project files, the area does not contain the essential feature for staghorn and elkhorn coral critical habitat as the marine bottom is sand with seagrass. The pipeline used to pump dredged sediments to the fill site will pass through this area, but it will be anchored on the sea bottom so that it does not shift during the course of the project. We do not have any information indicating that ESA-listed corals or their critical habitat are present in the area of La Esperanza where the borrow sites are located. Although many of these areas were altered as part of the ecosystem restoration project, the USACE reported no coral impacts. In addition, the peninsula was created using dredge spoil material consisting of sand and shells from dredging of the San Juan Harbor several decades ago. This indicates that corals and the essential feature of elkhorn and staghorn coral critical habitat are not present in the area where dredging will take place. Based on prior experience during the original La Esperanza restoration project, the USACE also expressed 2 expectations for the current project: (1) as the dredged material is sand with low silt content, dredging activities will not result in increases in background turbidity; (2) although naturally high due to the high-energy environment, they do not expect suspended sediment levels to increase. For the reasons stated above, we do not anticipate impacts to coral critical habitat or ESA-listed corals from the proposed dredging of the borrow areas. The USACE will require a benthic survey for the route prior to any installation of the pipeline. The survey results will be shared with NMFS in the event hard corals are found in order to cooperatively select the best route to avoid coral impacts.

#### *Risk of Vessel Strikes and Dredging Impacts to Sea Turtles*

Hawksbill and green sea turtles have been reported in waters of San Juan Bay. Hawksbill and green sea turtles may also be present in Condado Lagoon and hawksbills are known to nest on the beach near the lagoon mouth. There is refuge and foraging habitat in Condado Lagoon, particularly in the area between the Dos Hermanos Bridge and the Condado Hilton where dense seagrass beds occur. There is also colonized hard bottom in this area, toward the sea portion of the lagoon. In the San Juan Bay, there is no nesting habitat, but there are areas containing



estuarine habitat; particularly mangroves and some seagrass beds in the eastern portion of the San Antonio Channel. There may be a risk of sea turtles being struck by work vessels transiting to and from the borrow sites, particularly in the area of La Esperanza and the point in the San Antonio Channel where the dredging pipeline will be located. Dredging will be done using a barge-mounted dredge such as a clamshell or hydraulic dredge from the San Juan Bay side of the peninsula (see Figure 3). Dredging will take place only in one or both of the shoaled areas at the openings of La Esperanza peninsula into the San Juan Bay. No sea turtles have been reported inside the peninsula, likely because the area is characterized by shallow waters and soft, uncolonized bottom. Also, it is presumed that if a sea turtle were in the action area, undetected, when dredging commenced, it would leave the area of its own volition, as there are no physical impediments to prevent it from leaving. No barriers are proposed around the area to be dredged that would interfere with the movement of sea turtles away from the dredge. The use of a clamshell or hydraulic dredge enables sea turtles to move away from the area being dredged because of the slow movement of these types of dredges<sup>2</sup>. The USACE will require that NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* be implemented during all vessel transit associated with the project, including that of the dredge barge. Thus we believe that the risk of vessel strikes from work vessel transits will be discountable. We also believe the risk of dredging equipment impacts to sea turtles will be discountable. Required compliance with NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* will provide additional protection by requiring work to stop if a sea turtle is seen within 50 ft of operating machinery.

#### *Construction Turbidity Effects on Sea Turtle Foraging Habitat*

During the dredging of borrow areas to provide fill material, sediments could be re-suspended and transported to the few areas within the San Juan Bay containing seagrass beds and estuarine habitat potentially used by sea turtles, resulting in indirect adverse effects to the species. A report prepared for the USACE as part of the mitigation planning for the past federal navigation project in San Juan Bay indicates that there are few areas in the bay where seagrasses occur, likely due to the highly turbid nature of deeper water areas within the bay associated with port activities.<sup>3</sup> It is likely that any sediment re-suspension and transport resulting from the proposed dredging would not be distinguishable from turbidity and suspended sediments already in the water column due to port activities. In the Condado Lagoon, the USACE anticipates that the material placed in the dredged pit will remain there because the lagoon is not a high-energy environment. If any fine sediments are re-suspended during periods of high winds, the USACE anticipates that they will be contained within the larger dredged pit as the area is composed of a series of depressions created by the dredging activities in the 1950s. In addition, the USACE is proposing the use of sandy material rather than any material with large amounts of organics or fine-grain particles. The USACE believes that the small volume of sandy material, 500-5,000 yd<sup>3</sup> (compared to the total area of the dredged pits in this portion of the lagoon), deposited daily for up to 120 days in the fill site within the lagoon is unlikely to cause dispersion of sediment or displacement of anoxic water into shallower areas. The USACE will comply with the Puerto

<sup>2</sup> U.S. Army Engineer Waterways Experiment Station. 1990. Environmental Effects of Dredging. Technical Note EEDP-09-6. 14 pp.

<sup>3</sup> Dial Cordy and Associates, Inc. 2003. San Juan Harbor Mitigation Baseline Survey and Conceptual Design. Prepared for the U.S. Army Corps of Engineers Jacksonville District. Dial Cordy and Associates, Inc., Jacksonville Beach, FL. 14 pp.



Rico Water Quality Standards related to turbidity monitoring as required by the Clean Water Act. The finished elevations of the fill area will also be surveyed to ensure that depth specifications were met. Therefore, we believe that construction turbidity effects to potential sea turtle foraging habitat are discountable.

Because the overall goal of the project is to provide sufficient elevation to enable seagrass to naturally recolonize the filled area, thus beginning the re-establishment of seagrass in the areas of the lagoon that were impacted by historic dredging activities. Given this objective, we recommend that the USACE require periodic monitoring of the filled area to determine whether seagrass colonization occurs. If monitoring indicates that no colonization has occurred after 6 months, then the USACE should propose an alternate mitigation to compensate for the loss of 1.2 acres of seagrass that may serve as foraging habitat for green sea turtles due to the federal navigation project completed in the area of the Puerto Nuevo Channel.

Finally, we concur with USACE's determination that the proposed action may affect, but is not likely to adversely affect, green sea turtles. We have also determined that the project may affect, but is not likely to adversely affect, hawksbill sea turtles. The action will have no effect on ESA-listed corals. We also conclude the action will have no effect on coral critical habitat. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Be advised that a new consultation must be initiated if a take occurs or new information reveals effects of the action not previously considered, or the identified action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the identified action.

We have enclosed additional relevant information for your review. We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions regarding this consultation, please contact Dr. Lisamarie Carrubba, Consultation Biologist, at (787) 851-3700, or by email at [Lisamarie.Carrubba@noaa.gov](mailto:Lisamarie.Carrubba@noaa.gov).

Sincerely,



for Roy E. Crabtree, Ph.D.  
Regional Administrator

- Enc.: 1. *Sea Turtle and Small Tooth Sawfish Construction Conditions*  
(Revised March 23, 2006)  
2. *Vessel Strike Avoidance Measures and Reporting for Mariners*  
(Revised February 2008)  
3. *PCTS Access and Additional Considerations for ESA Section 7 Consultations*  
(Revised June 11, 2013)



cc: USACE – Kenneth Dugger  
F/SER4 – José Rivera, Pace Wilber

File: 1514.22.F.9



## SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006





## **Vessel Strike Avoidance Measures and Reporting for Mariners NOAA Fisheries Service, Southeast Region**

### **Background**

The National Marine Fisheries Service (NMFS) has determined that collisions with vessels can injure or kill protected species (e.g., endangered and threatened species, and marine mammals). The following standard measures should be implemented to reduce the risk associated with vessel strikes or disturbance of these protected species to discountable levels. NMFS should be contacted to identify any additional conservation and recovery issues of concern, and to assist in the development of measures that may be necessary.

### **Protected Species Identification Training**

Vessel crews should use an Atlantic and Gulf of Mexico reference guide that helps identify protected species that might be encountered in U.S. waters of the Atlantic Ocean, including the Caribbean Sea, and Gulf of Mexico. Additional training should be provided regarding information and resources available regarding federal laws and regulations for protected species, ship strike information, critical habitat, migratory routes and seasonal abundance, and recent sightings of protected species.

### **Vessel Strike Avoidance**

In order to avoid causing injury or death to marine mammals and sea turtles the following measures should be taken when consistent with safe navigation:

1. Vessel operators and crews shall maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.
2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel shall attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.



6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

#### **Additional Requirements for the North Atlantic Right Whale**

1. If a sighted whale is believed to be a North Atlantic right whale, federal regulation requires a minimum distance of 500 yards be maintained from the animal (50 CFR 224.103 (c)).
2. Vessels entering North Atlantic right whale critical habitat are required to report into the Mandatory Ship Reporting System.
3. Mariners shall check with various communication media for general information regarding avoiding ship strikes and specific information regarding North Atlantic right whale sighting locations. These include NOAA weather radio, U.S. Coast Guard NAVTEX broadcasts, and Notices to Mariners. Commercial mariners calling on United States ports should view the most recent version of the NOAA/USCG produced training CD entitled "A Prudent Mariner's Guide to Right Whale Protection" (contact the NMFS Southeast Region, Protected Resources Division for more information regarding the CD).
4. Injured, dead, or entangled right whales should be immediately reported to the U.S. Coast Guard via VHF Channel 16.

#### **Injured or Dead Protected Species Reporting**

Vessel crews shall report sightings of any injured or dead protected species immediately, regardless of whether the injury or death is caused by your vessel.

Report marine mammals to the Southeast U.S. Stranding Hotline: 877-433-8299

Report sea turtles to the NMFS Southeast Regional Office: 727-824-5312

If the injury or death of a marine mammal was caused by a collision with your vessel, responsible parties shall remain available to assist the respective salvage and stranding network as needed. NMFS' Southeast Regional Office shall be immediately notified of the strike by email ([takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov)) using the attached vessel strike reporting form.

#### **For additional information, please contact the Protected Resources Division at:**

NOAA Fisheries Service  
Southeast Regional Office

263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701  
Tel: (727) 824-5312

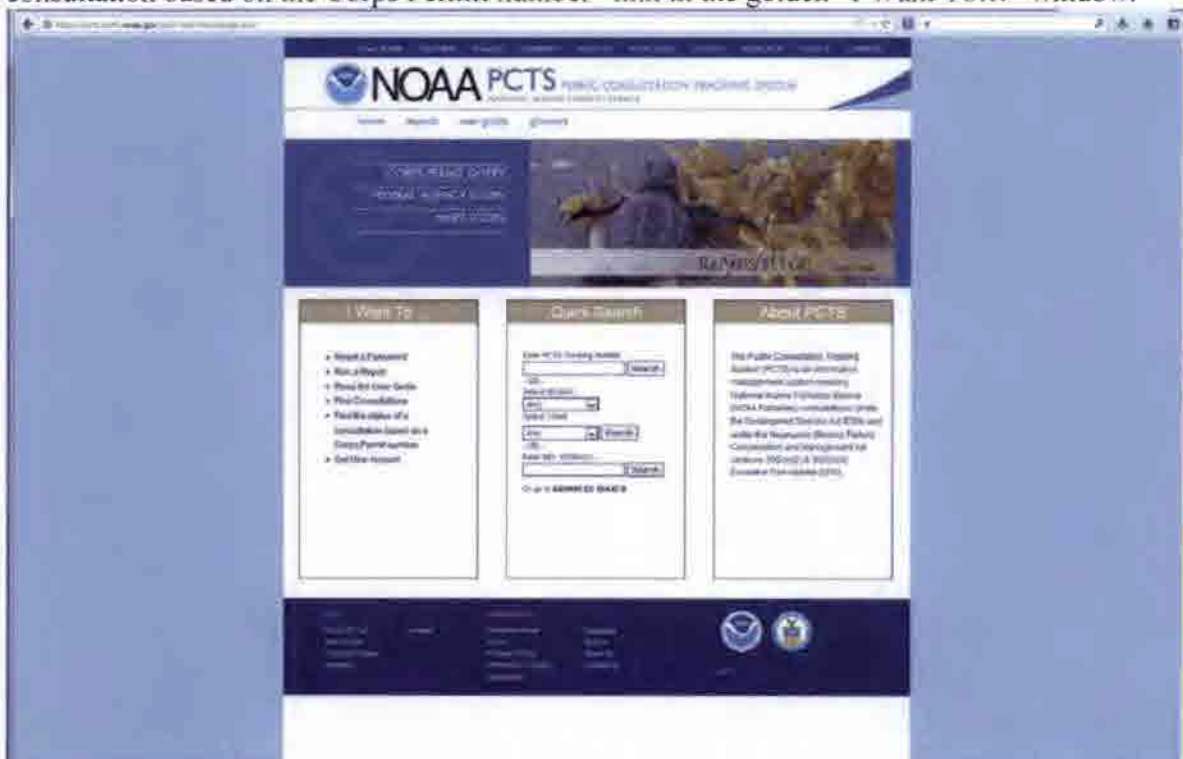
Visit us on the web at <http://sero.nmfs.noaa.gov>



## PCTS Access and Additional Considerations for ESA Section 7 Consultations (Revised 6-11-2013)

Public Consultation Tracking System (PCTS) Guidance: PCTS is a Web-based query system at <https://pcts.nmfs.noaa.gov/> that allows all federal agencies (e.g., U.S. Army Corps of Engineers - USACE), project managers, permit applicants, consultants, and the general public to find the current status of NMFS's Endangered Species Act (ESA) and Essential Fish Habitat (EFH) consultations which are being conducted (or have been completed) pursuant to ESA Section 7 and the Magnuson-Stevens Fishery Conservation and Management Act's (MSA) Sections 305(b)2 and 305(b)(4). Basic information including access to documents is available to all.

The PCTS Home Page is shown below. For USACE-permitted projects, the easiest and quickest way to look up a project's status, or review completed ESA/EFH consultations, is to click on either the "Corps Permit Query" link (top left); or, below it, click the "Find the status of a consultation based on the Corps Permit number" link in the golden "I Want To..." window.



Then, from the "Corps District Office" list pick the appropriate USACE district. In the "Corps Permit #" box, type in the 9-digit USACE permit number identifier, with no hyphens or letters. Simply enter the year and the permit number, joined together, using preceding zeros if necessary after the year to obtain the necessary 9-digit (no more, no less) number. For example, the USACE Jacksonville District's issued permit number SAJ-2013-0235 (LP-CMW) must be typed in as 201300235 for PCTS to run a proper search and provide complete and accurate results. For querying permit applications submitted for ESA/EFH consultation by other USACE districts, the procedure is the same. For example, an inquiry on Mobile District's permit MVN201301412 is entered as 201301412 after selecting the Mobile District from the "Corps District Office" list. PCTS questions should be directed to Eric Hawk at [Eric.Hawk@noaa.gov](mailto:Eric.Hawk@noaa.gov) or (727) 551-5773.



EFH Recommendations: In addition to its protected species/critical habitat consultation requirements with NMFS' Protected Resources Division pursuant to Section 7 of the ESA, prior to proceeding with the proposed action the action agency must also consult with NMFS' Habitat Conservation Division (HCD) pursuant to the MSA requirements for EFH consultation (16 U.S.C. 1855 (b)(2) and 50 CFR 600.905-.930, subpart K). The action agency should also ensure that the applicant understands the ESA and EFH processes; that ESA and EFH consultations are separate, distinct, and guided by different statutes, goals, and time lines for responding to the action agency; and that the action agency will (and the applicant may) receive separate consultation correspondence on NMFS letterhead from HCD regarding their concerns and/or finalizing EFH consultation.

Marine Mammal Protection Act (MMPA) Recommendations: The ESA Section 7 process does not authorize incidental takes of listed or non-listed marine mammals. If such takes may occur an incidental take authorization under MMPA Section 101 (a)(5) is necessary. Please contact NMFS' Permits, Conservation, and Education Division at (301) 713-2322 for more information regarding MMPA permitting procedures.





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
P.O. BOX 4870  
JACKSONVILLE, FLORIDA 32232-0019

Planning and Policy Division  
Environmental Branch

APR 22 2014

Diana López Sotomayor, Archaeologist  
State Historic Preservation Officer  
P.O. Box 9023935  
San Juan, Puerto Rico 00902-3935

Dear Arq. López Sotomayor:

I am writing in reference to our proposed project of Compensatory Mitigation, Condado Lagoon, San Juan, Puerto Rico (SHPO 02-21-13-03). Mitigation is required as a result of widening the Puerto Nuevo Channel in San Juan Harbor, which impacted an estimated 1.2 acres of sea grass. The proposed mitigation would involve filling of approximately 4 acres (including side slopes) of certain dredged holes in the Condado Lagoon with approximately 46,000 cubic yards of suitable material to a depth of -12 feet to -15 feet resulting in 1.2 acres at an elevation suitable for sea grass. The fill material would come from the recently shoaled areas of the La Esperanza Ecosystem Restoration project located along the western shore of San Juan Bay. In La Esperanza, one borrow source would be the north-facing opening into San Juan Bay. The east-facing opening could also provide some material if needed. Both of these areas have experienced substantial shoaling since the completion of the La Esperanza Ecosystem Restoration Project on May 20, 2005. Removal of the shoals would enhance the function of the Ecosystem Restoration Project, and restoration of sea grass beds in Condado Lagoon would support a goal of the San Juan Bay Estuary Program's Comprehensive Conservation and Management Plan. Some minimal amount of clearing and grubbing will likely be required on La Esperanza, with the proper disposal of the associated vegetative materials in a permitted or licensed location.

If there is not sufficient material to in the La Esperanza shoals, an alternative borrow source would be the San Antonio channel in the San Juan Harbor Federal Navigation Channel. Enclosure 1 shows the location of the borrow source, the optional borrow source, the alternative borrow source the mitigation site. Enclosures 2 and 3 show the La Esperanza North and East opening borrow areas in detail, and Enclosure 4 shows the progression of the shoaling since the restoration project was completed.

In your previous letter dated March 27, 2013, responding to our Scoping Letter, you asked us to review information on earlier modifications to the Condado Lagoon to determine whether the mitigation project will affect previously undisturbed areas within the lagoon. An image from the Condado Lagoon Bathymetric Survey (Enclosure 5) clearly shows deep rectangular shaped dredged holes that will be filled, as shown in Enclosure 6.



An additional source of information is the U.S. Geological Survey, Water Resources Division document titled History of Dredging and Filling of Lagoons in the San Juan Area, Puerto Rico (Ellis 1976). A copy of this document is on file in our Jacksonville Office. Figure 19 from the document is included here as Enclosure 7, showing our placement area within the dredged area of Condado Lagoon.

It is unlikely that a contractor will bury the pipeline from La Esperanza and below the Federal Channel for such a long distance. We anticipate that the contractor will barge material from La Esperanza to a pumpout location on the east end of the San Antonio Channel. That leaves the anticipated pipeline route as only the distance between a pumpout location, under the Dos Hermanos Bridge and across the Condado Lagoon to the placement location.

Based on the information provided, the Corps has determined that the proposed mitigation will not affect historic properties eligible for inclusion on the National Register of Historic Places. We seek your concurrence with this determination. If you have questions or require additional information, please contact archeologist David McCullough by email at [david.l.mccullough@usace.army.mil](mailto:david.l.mccullough@usace.army.mil) or by phone at 904-232-3685.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Summa', with a stylized flourish at the end.

Eric P. Summa  
Chief, Environmental Branch

Enclosure



Alridge/CESAJ-PD-E/1867  
DM McCullough/CESAJ-PD-EP  
Acosta/CESAJ-PD-EP  
Summa/CESAJ-PD-E



OFICINA ESTATAL DE  
CONSERVACIÓN HISTÓRICA  
OFICINA DEL GOBERNADOR

STATE HISTORIC  
PRESERVATION OFFICE  
OFFICE OF THE GOVERNOR



May 23, 2014

Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineers  
P. O. Box 4970  
Jacksonville, Florida 32232-0019

**SHPO: 02-21-13-03 COMPENSATORY MITIGATION PROJECT, CONDADO  
LAGOON, SAN JUAN, PUERTO RICO**

Dear Mr. Summa:

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

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

Please note that should the Agency discover other historic properties at any point during project implementation, you should notify the SHPO immediately. If you have any questions, please contact Miguel Bonini at (787) 721-3737 or [mbonini@prshpo.gobierno.pr](mailto:mbonini@prshpo.gobierno.pr).

Sincerely,

Diana López Sotomayor, Archaeologist  
State Historic Preservation Officer

DLS/NPT/BRS/MB

[WWW.OECH.GOBIERNO.PR](http://WWW.OECH.GOBIERNO.PR)

P.O. Box 9023935  
San Juan, PR 00902-3935

Teléfono/Phone | 787.721-3737  
Fax | 787.721-3773





Part 3: Notice of Availability of the draft FONSI/EA and resulting correspondence.





REPLY TO  
ATTENTION OF

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

May 23, 2014

Planning Division  
Environmental Branch

**TO WHOM IT MAY CONCERN:**

I refer to the proposed mitigation for the San Juan Harbor Navigation Project in San Juan, Puerto Rico. Mitigation is required as a result of widening the Puerto Nuevo Channel, which impacted an estimated 1.2 acres of sea grass (*Halophila decipiens*) and marine macro-algae. The mitigation originally proposed in the San Juan Harbor Mitigation Baseline Survey and Conceptual Design of July 11, 2003, involved raising the bottom elevation of a portion of San Juan Harbor to support sea grass. This mitigation plan presents engineering concerns over the confinement of the material used for raising the elevation. Extensive and costly structures would be needed to contain the material and prevent migration of material into the navigation channel.

The new mitigation proposal would involve filling of approximately 4 acres (including side slopes) of dredged holes in the nearby Condado Lagoon to create 1.2 acres of habitat for submerged aquatic vegetation (to approximately -12 feet to -15 feet below the surface with approximately 46,000 cubic yards of suitable material). The fill material would come from the shoaled areas of the La Esperanza Ecosystem Restoration project located along the southern shore of San Juan Bay. An alternative borrow source would be the San Antonio channel in San Juan Harbor. In La Esperanza, one borrow source would be the north-facing opening into San Juan Bay. The east-facing opening could also provide some material if needed. See enclosed maps and drawings for additional details.

Pursuant to the National Environmental Policy Act and U.S. Army Corps of Engineers Regulation (ER 200-2-2), this letter constitutes the Notice of Availability of the enclosed Draft Finding of No Significant Impact. This letter (along with its enclosures and referenced documents) also follows the public notice requirement of Section 404(a) of the Clean Water Act. Evaluation of the impact of the proposed action on the public interest includes application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, pursuant to Section 404(b) of the Clean Water Act (40 CFR part 230). Any person may request, in writing, within the comment period specified herein, that a public hearing be held to consider the proposed action (which involves the placement of dredged or fill material into wetlands or other waters of the United States). Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.



The comment period ends 30 days from the date of this notice. Questions and comments concerning this letter should be directed to Kenneth Dugger, Environmental Branch, at the letterhead address, 904-232-1686, or fax 904-232-3442. A copy of the Environmental Assessment, high resolution drawings, and other information is available on our Environmental Documents web page  
<<http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx>>.

Sincerely,

/signed/

Eric P. Summa  
Chief, Environmental Branch

Enclosures



Enclose Plan Views (high resolution):

- San Juan Harbor Navigation Project
- Mitigation Site in Condado Lagoon
- Borrow Site, La Esperanza, North Opening
- Borrow Site, La Esperanza, East Opening
- San Antonio Channel Borrow Site

.

Enclose draft/unsigned FONSI



**DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)**  
**MITIGATION FOR**  
**SAN JUAN HARBOR NAVIGATION PROJECT**  
**SAN JUAN, PUERTO RICO**

I have reviewed the Environmental Assessment (EA) for the proposed action. This finding incorporates by reference all discussions and conclusions contained in the EA enclosed hereto. Based on information analyzed in the EA, reflecting pertinent information obtained from agencies having jurisdiction by law and/or special expertise, I conclude that the proposed action will not significantly impact the quality of the human environment and does not require an Environmental Impact Statement (EIS). Reasons for this conclusion are in summary:

a. The proposed action would provide habitat for sea grass and other submerged vegetation to mitigate for the unavoidable impacts of the expansion of the San Juan Harbor Navigation Project.

b. The proposed action would not jeopardize the continued existence of any listed threatened or endangered species and would not destroy or adversely modify designated critical habitat (*Acropora* coral). No incidental take of any listed species is anticipated.

c. The proposed action is consistent with the Coastal Zone Management program of Puerto Rico (see Appendix B of the EA for the Coastal Zone Consistency Statement) and Section 404(b) of the Clean Water Act (see Appendix A of the EA).

d. The proposed action would not impact any property eligible for inclusion in the National Register of Historic Places.

e. Measures to eliminate, reduce, or avoid potential impacts to environmental and cultural resources include the following: (1) locating the borrow and fill sites outside of established coral reef areas, (2) providing a net gain of habitat for sea grass and other submerged vegetation, (3) avoiding eligible historic resources, (4) following standard manatee protection measures for any water based activity in manatee habitat, (5) following the sea turtle and smalltooth sawfish construction conditions, (6) monitor for and avoid destruction of migratory birds (including eggs, chicks, and active nests) in nesting habitat, (7) survey any pipeline corridor to avoid impacts to coral, (8) monitor and manage turbidity as required and (9) sampling and testing to ensure suitability of borrow material.

f. The contractor is required to obtain a "permit or license for and the location of the solid waste disposal area" and "the Contractor shall comply with Federal, State Commonwealth Territorial and local regulations pertaining to the use of the solid waste disposal site." In addition, "the Contractor shall comply with all applicable Federal, State Commonwealth Territorial, or local laws and regulations". This may include, but is not limited to, applicable requirements for an approved solid waste management plan in Puerto Rico.



The point of contact for this finding is Kenneth Dugger at 904 232-1686 ([kenneth.r.dugger@usace.army.mil](mailto:kenneth.r.dugger@usace.army.mil)) .

A scoping letter was coordinated with the public and agencies on January 22, 2013. Comments received from the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and the Solid Waste Management Authority of Puerto Rico (Autoridad de Desperdicios Sólidos) have been addressed in the EA.

The draft FONSI was coordinated with the public and agencies on May 23, 2014, with a 30-day comment period pursuant to 40 CFR 1501.4(e) and 1508.13. Comments from coordination of the draft FONSI have been addressed.

[un-signed draft]

---

Alan M. Dodd  
Colonel, U.S. Army  
District Engineer

---

Date



## EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers proposes to fill approximately 4 acres of certain dredged holes in Condado Lagoon to create habitat as mitigation for impacts of widening the Puerto Nuevo Channel in San Juan Harbor in 2001. The project would involve placing approximately 46,000 cubic yards of suitable material to a depth of -12 feet to -15 feet to create 1.2 acres of habitat for sea grass (*Halophila decipiens*) and marine macro-algae.

An earlier mitigation plan involved raising the bottom elevation of a portion of San Juan Harbor to support sea grass. This earlier mitigation plan presents (among other concerns) engineering concerns over the confinement of the material used for raising the elevation. Extensive and costly structures would be needed to contain the material and prevent migration of material into the navigation channel.

The fill material for the currently proposed mitigation plan would come from the recently shoaled areas of the La Esperanza Ecosystem Restoration project located along the western shore of San Juan Bay. In La Esperanza, one borrow source would be the north-facing opening into San Juan Bay. The east-facing opening could also provide some material if needed. Both of these areas have experienced substantial shoaling since the completion of the La Esperanza Ecosystem Restoration Project on May 20, 2005.

The filling of dredged holes in the Condado Lagoon was previously proposed in 2004 as a “beneficial use of dredged material” project under Section 204 of the Water Resources Development Act of 1992 (a Continuing Authority Program). In addition, restoration of sea grass beds in Condado Lagoon would support a goal of the San Juan Bay Estuary Program’s Comprehensive Conservation and Management Plan.

The mitigation project would involve the use of pipelines, boats, and other equipment. Activities in Condado Lagoon would be subject to the requirements and restrictions imposed by the Department of Natural and Environmental Resources (DNER). The placement of pipeline and the use of boats and equipment for the proposed mitigation project could conflict with other uses for portions of Condado Lagoon. Portions of the lagoon and other project areas may experience a temporary increase in sedimentation and turbidity but this would be mostly limited to the deeper areas (the dredged holes).

The proposed action would not jeopardize the continued existence of any listed threatened or endangered species and would not destroy or adversely modify designated critical habitat (*Acropora* coral). Subject to concurrence by the Commonwealth of Puerto Rico, the proposed action is consistent with the Coastal Zone Management program (see Appendix B of the Environmental Assessment). The proposed action would comply with the guidelines pursuant to Section 404(b) of the Clean Water Act (see Appendix A of the Environmental Assessment). The proposed action would not impact any property eligible for inclusion in the National Register of Historic Places.

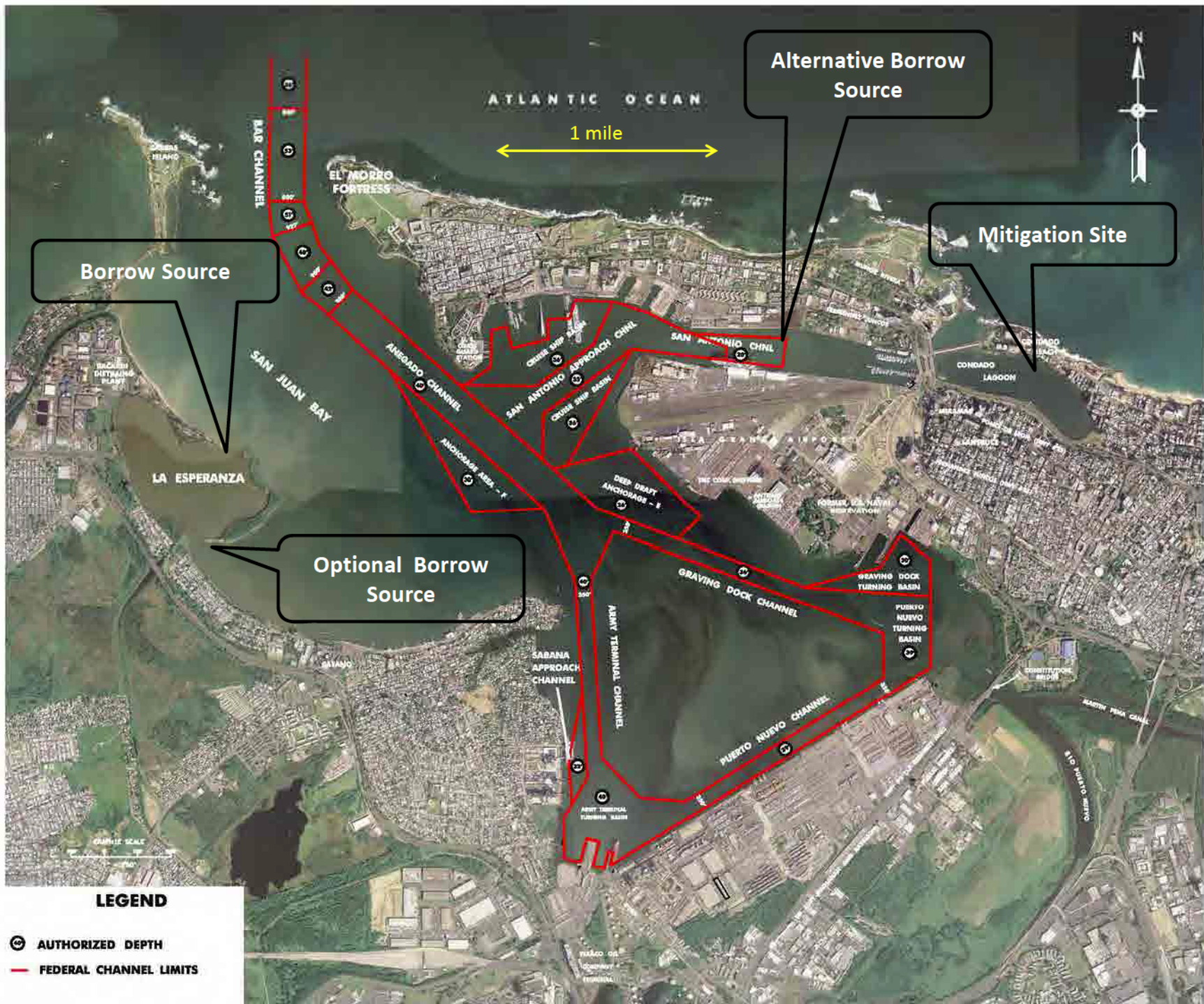
Measures to eliminate, reduce, or avoid potential impacts include the following: (1) locating the borrow and fill sites outside of established coral reef areas, (2) providing a net gain of habitat



for sea grass and other submerged vegetation, (3) avoiding eligible historic resources, (4) following standard manatee protection measures for any water based activity in manatee habitat, (5) following the sea turtle [and smalltooth sawfish] construction conditions (NMFS, March 23, 2006), (6) follow the “Vessel Strike Avoidance Measures and Reporting form Mariners” (NMFS, Southeast Region, February 2008), (7) monitor for and avoid destruction of migratory birds (including eggs, chicks, and active nests) in nesting habitat, (8) surveying any pipeline corridor to avoid impacts to coral, (9) monitoring and managing turbidity, (10) sampling and testing to ensure suitability of borrow material, and (11) following the requirements of DNER for activities in Condado Lagoon.

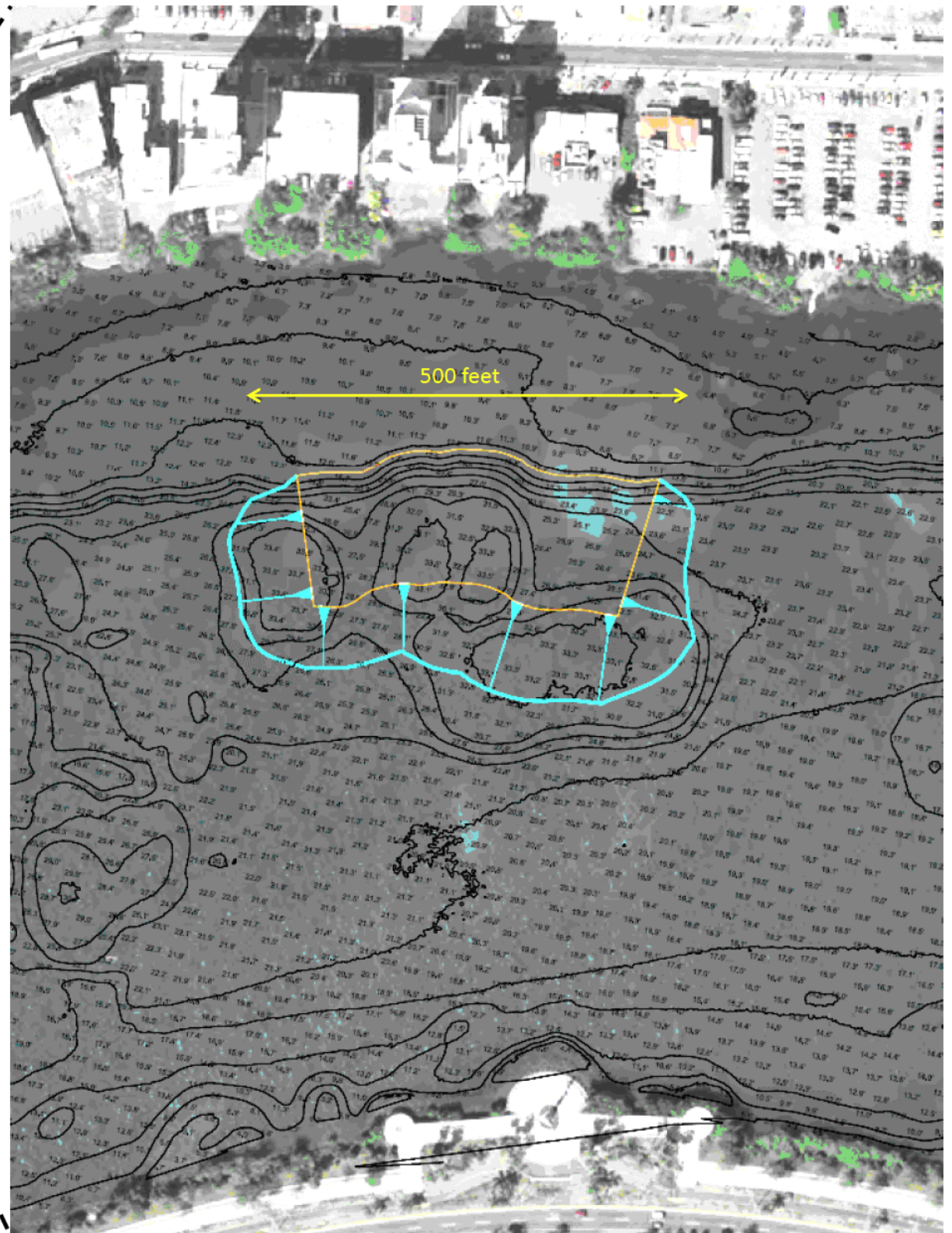
The Notice of Availability of the draft Finding of No Significant Impact and Environmental Assessment was issued on May 23, 2014, to Federal, commonwealth, and local agencies and governmental officials. Also a scoping letter was issued on January 22, 2013. A public meeting was held on July 31, 2014 at the Museum of Contemporary Art (Museo de Arte Contemporáneo) in Santurce, Puerto Rico. Once project plans and schedules are further developed, they will be announced to the affected public and governing officials.







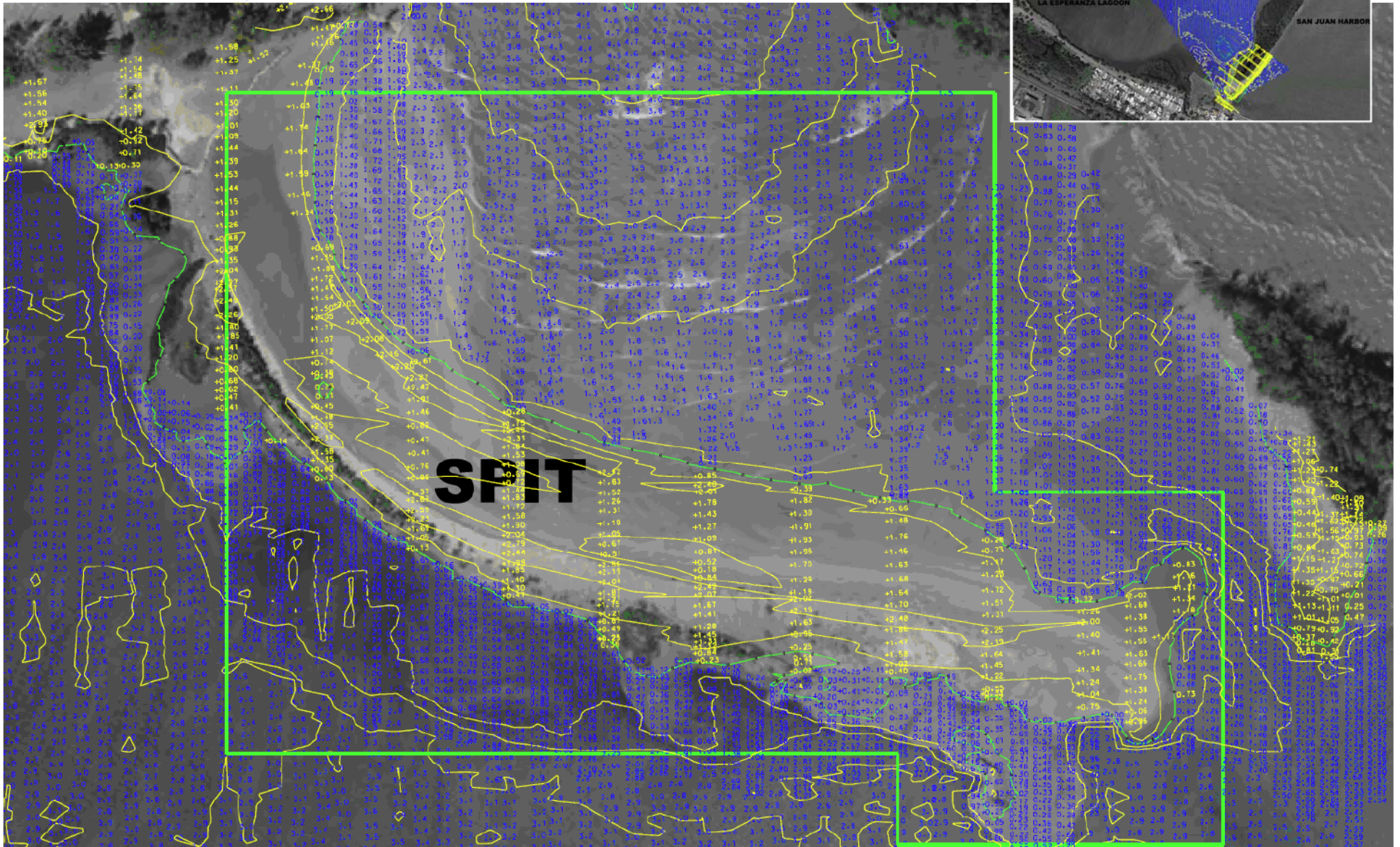
# Mitigation Site for San Juan Harbor in Condado Lagoon





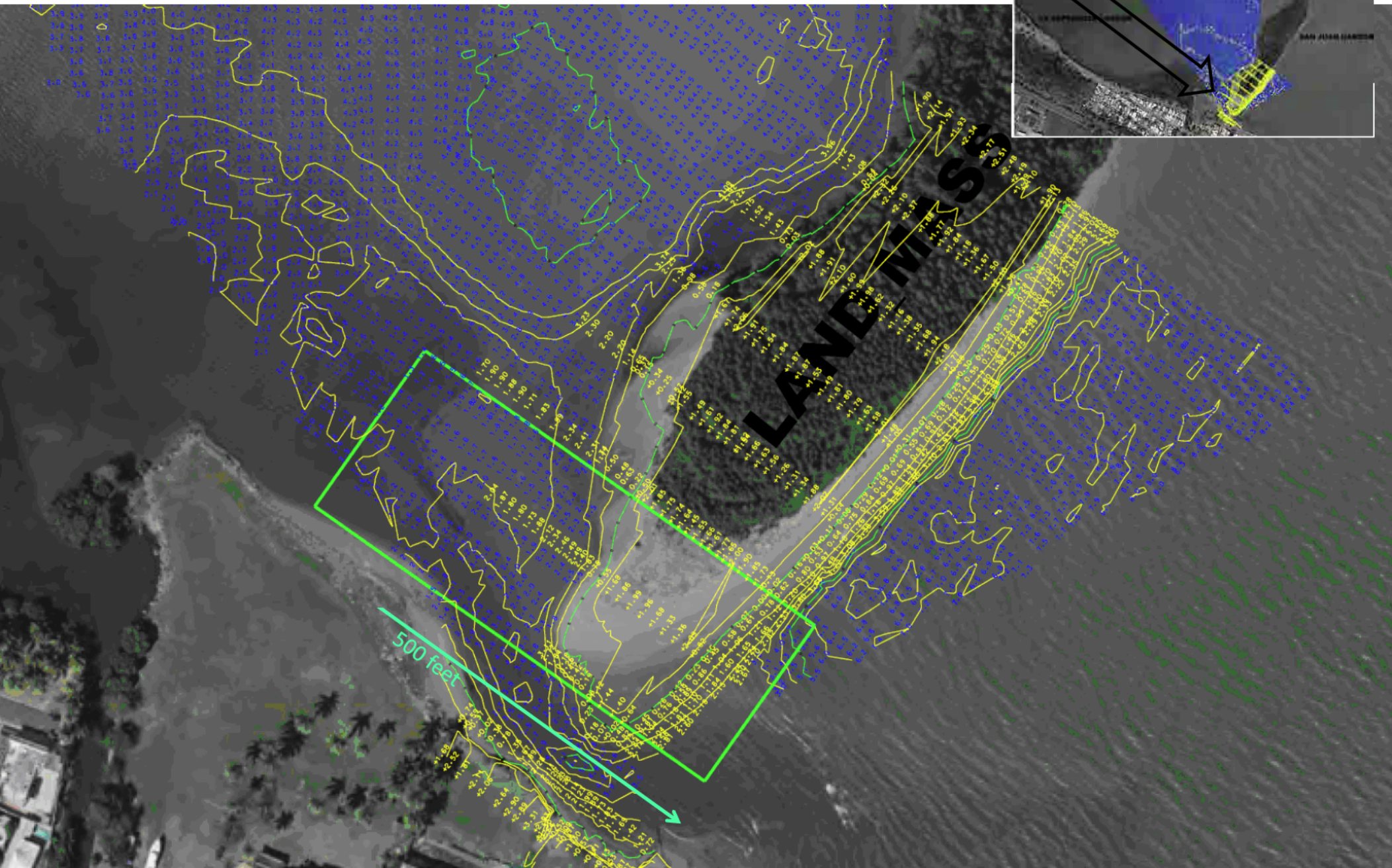
# Borrow Site, La Esperanza, North Opening

800 feet



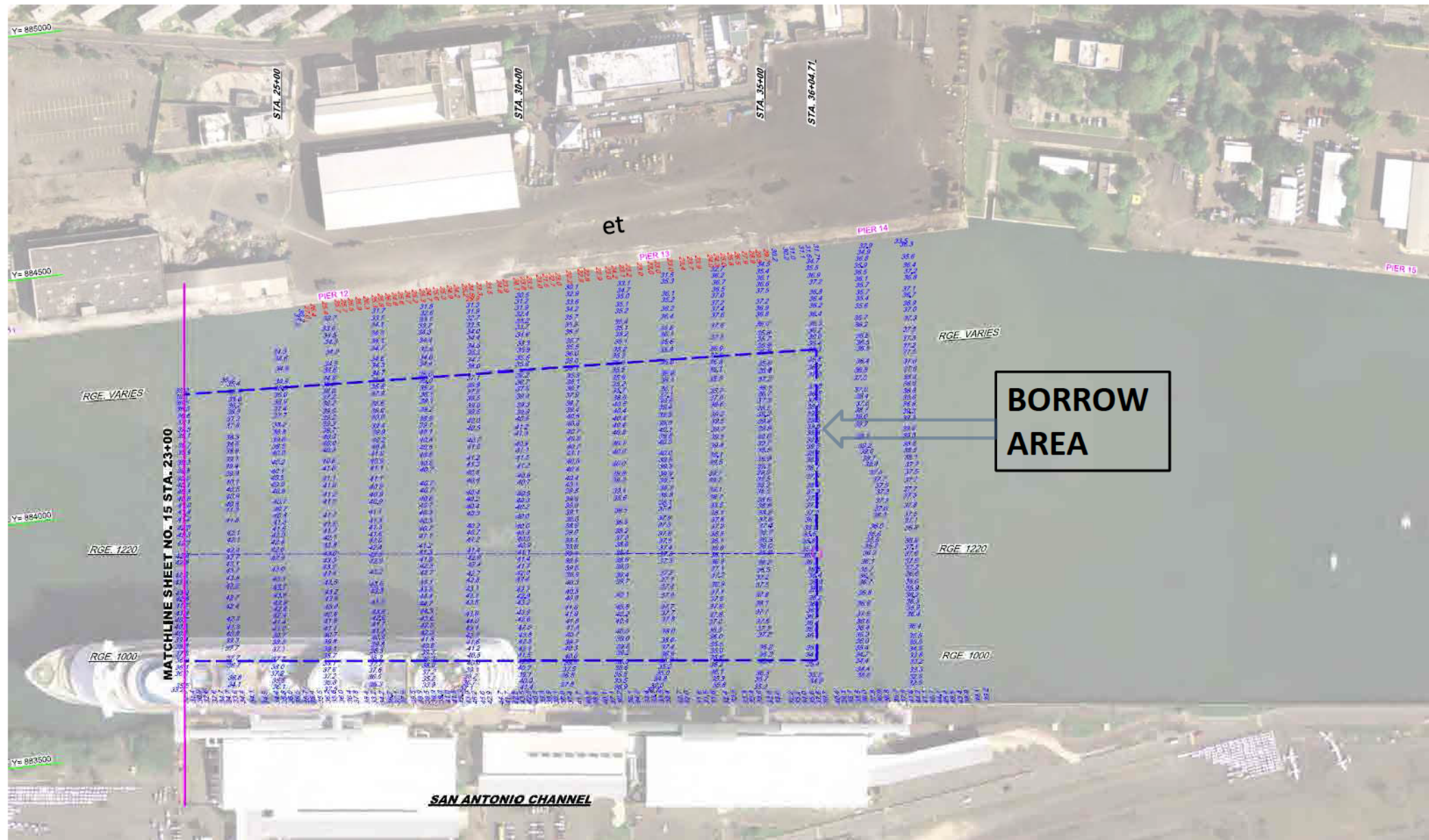


## Borrow Site, La Esperanza, East Opening



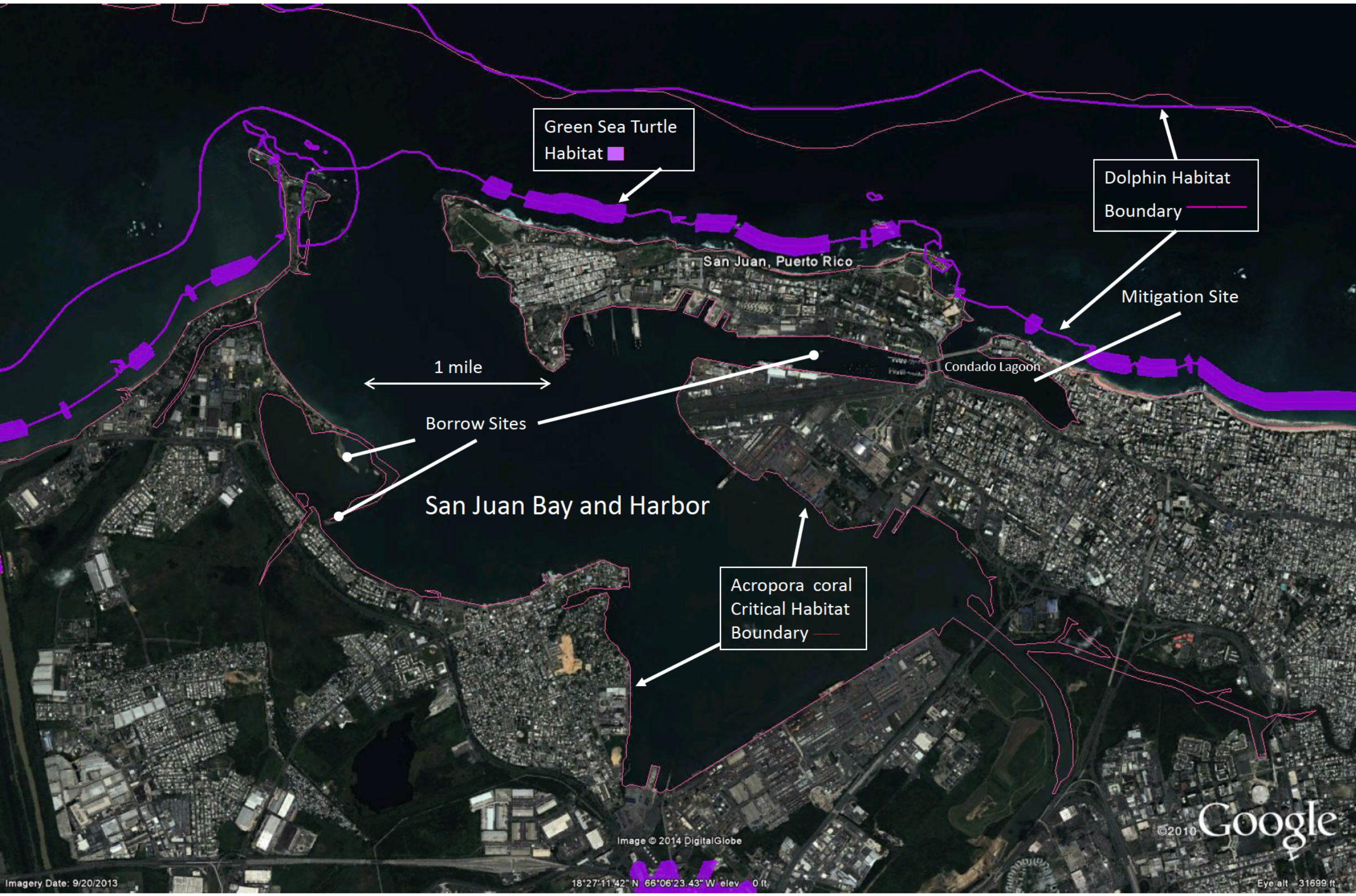


# Borrow Site, San Antonio Channel

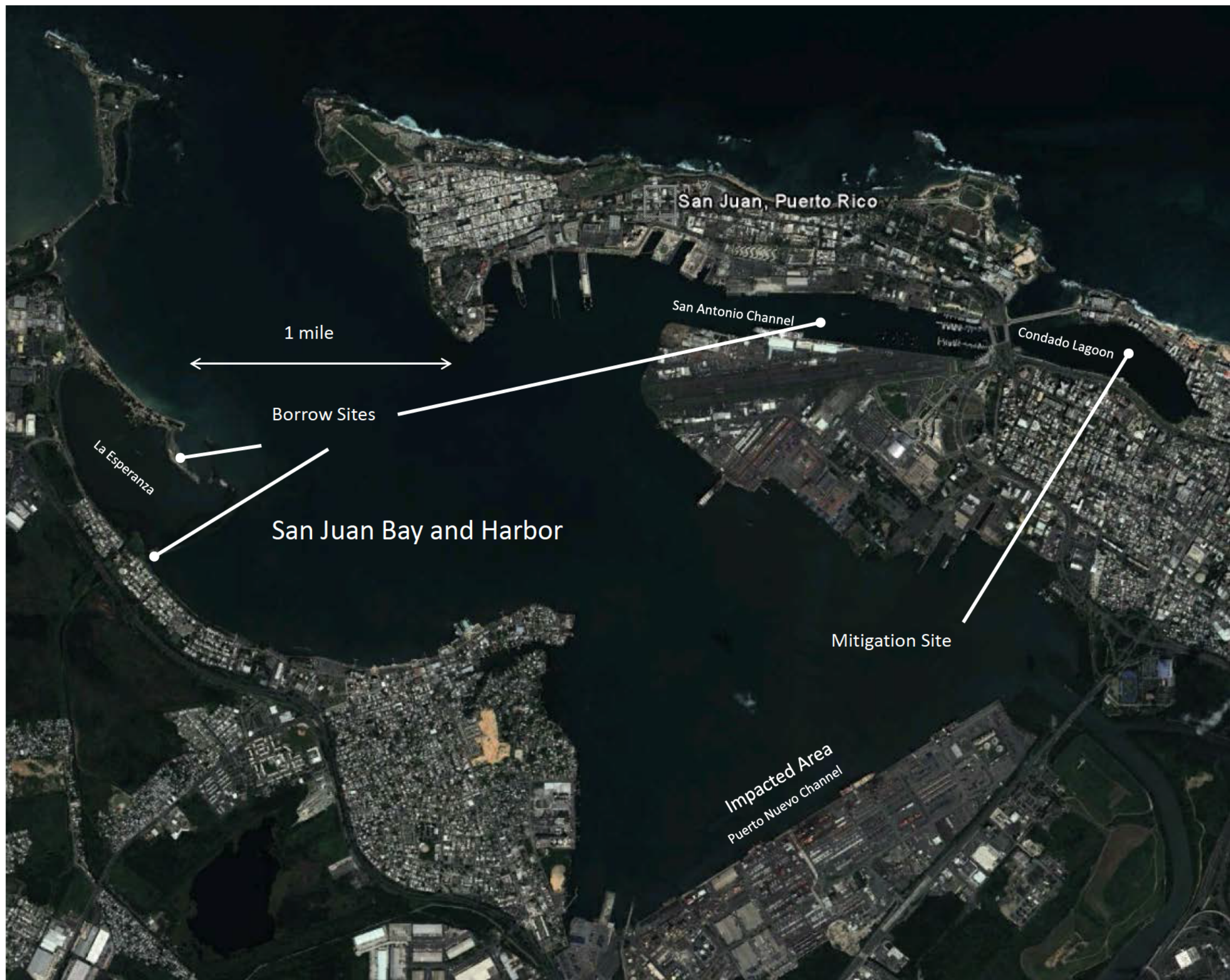




Resources: Sea Turtles, Marine Mammals, and Acropora Coral  
(from Resources at Risk (RAR), Google Earth Application)







San Juan, Puerto Rico

San Antonio Channel

Condado Lagoon

1 mile

Borrow Sites

La Esperanza

San Juan Bay and Harbor

Mitigation Site

Impacted Area  
Puerto Nuevo Channel



Honorable Alejandro Garcia Padilla  
Governor of Puerto Rico  
P.O. Box 9020082  
San Juan, Puerto Rico 00902-0082

Honorable Pedro Pierluisi,  
Resident Commissioner of Puerto Rico  
Ave. de la Constitucion,  
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San Juan, Puerto Rico 00901

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Environmental Manager Puerto Rico Ports  
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Ms. Rose Ortiz  
Coastal Zone Management Consistency Office  
Puerto Rico Planning Board  
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Puerto Rico Highway Transportation Authority  
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Puerto Rico Land Administration  
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Agro. Salvador Ramirez, Executive Director  
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Mayor of San Juan  
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Honorable Victor Suarez  
Executive Director  
Puerto Rico Ports Authority  
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Honorable Carmen R. Guerrero, Secretary  
Department of Natural & Environmental Resources  
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San Juan, Puerto Rico 00936

Honorable Laura M. Velez Velez, President  
Environmental Quality Board  
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Ms. Wilmarie Rivera  
Federal Facilities Coordinator  
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Executive Director  
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Puerto Rico Electric Power Authority  
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Ms. Mercedes Gomez Marrero, Executive Director  
Institute of Puerto Rican Culture  
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Esq. Agustín Carbo Lugo, President  
Puerto Rico Solid Waste Management Authority  
P.O. Box 40285  
San Juan, Puerto Rico 00940-0285

Mr. Miguel A. Rios Torres, Executive Director  
Puerto Rico Emergency Management Agency  
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Esq. Javier D. Ferrer, President  
Government Development Bank of Puerto Rico  
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Eng. Antonio L. Medina, President  
Puerto Rico Industrial Development Company  
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Esq. Juan Eugenio Hernandez Mayoral  
Executive Director  
Puerto Rico Federal Affairs Administration  
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Esq. Alberto Baco Bague, Secretary  
Puerto Rico Department of Economic Development  
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San Juan, Puerto Rico 00936-2350

Honorable David Bernier  
Secretary of State  
Puerto Rico Department of State  
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Mr. Ramon Orta, Secretary  
Puerto Rico Department of Sports and Recreation  
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Eng. Miguel Torres, Secretary  
Puerto Rico Department of Transportation and  
Public Works  
P.O. Box 42007  
San Juan, Puerto Rico 00940

Dr. Lisamarie Carrubba  
NOAA Fisheries  
Caribbean Field Office  
P.O. Box 1310  
Boqueron, PR 00622

Arq. Alberto Lastra Power, Director  
Permits Management Office  
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San Juan, PR 00940-1179

Mr. Jose Rivera,  
Habitat Conservation Division  
National Marine Fisheries Service  
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San Juan, Puerto Rico 00901-3299

Mr. Miles Croom, Assistant Regional Administrator  
Habitat Conservation Division  
National Marine Fisheries Service  
263 13th Avenue South  
St. Petersburg, Florida 33701

Mr. Edwin Almodovar, State Director  
Natural Resources Conservation Service  
Caribbean Area State Office  
P.O. Box 364868  
San Juan, Puerto Rico 00936-4868

U.S. Coast Guard  
Sector San Juan  
#5 Calle La Puntilla Final  
San Juan, PR 00901-1800

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Division of Environmental Planning and Protection  
U.S. Environmental Protection Agency, Region II  
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New York, New York 10007-1866

U.S. Geological Survey  
Caribbean Water Science Center  
651 Federal Drive, Suite 400-15  
Guaynabo, Puerto Rico 00965

Eng. Carl Soderberg, Director  
Environmental Protection Agency  
Centro Europa Building, Suite 417  
1492 Ponce de Leon Avenue, Stop 22  
Santurce, Puerto Rico 00909



**Caribbean Fishery Management Council  
270 Luis Munoz Rivera Ave., 4th Floor, Suite 401  
San Juan, Puerto Rico 00918**

**Mr. Edwin E. Muniz, Field Supervisor  
U.S. Fish and Wildlife Service  
Carr. 301, Km. 5.1, Bo. Corozo  
Boqueron, Puerto Rico 00662**

**Mr. Alejandro De La Campa, Director, Caribbean Office  
Federal Emergency Management Office  
PO Box 70105  
San Juan, Puerto Rico 00936-8105**

**Mr. Johann Sasso  
CESAJ-DS-PD  
400 Fernandez Juncos Ave.  
San Juan, Puerto Rico 00901-3299**

**Mr. Sindulfo Castillo  
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400 Fernandez Juncos Ave.  
San Juan, Puerto Rico 00901-3299**

**Eng. Yamil Castillo  
CESAJ-DS-CD  
U.S. Army Corps of Engineers  
400 Fernandez Juncos Ave.  
San Juan, Puerto Rico 00901-3299**

**San Juan Bay Estuary Program  
Department of Natural and Environmental Resources  
P.O. Box 366147  
San Juan, Puerto Rico 00936**

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LRR\NEPA\MailListApr2014.doc





COMMONWEALTH OF  
PUERTO RICO  
DDEC • Puerto Rico Tourism Company

May 28, 2014

Mr. Eric P. Summa  
Chief, Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineers  
PO Box 4970  
Jacksonville FL, 32232-0019

#### **PROPOSED MITIGATION FOR THE SAN JUAN HARBOR NAVIGATION PROJECT**

Dear Mr. Summa:

We are pleased to greet you. The Puerto Rico Tourism Company (PRTC) is a public corporation created by Law No. 10 of 1970, tasked with the development and strengthening of the tourism industry in Puerto Rico. We have received the US Army Corps of Engineers (USACOE) mitigation proposal for the above mentioned project. This mitigation is required for the widening of the Puerto Nuevo Chanel which will impact an estimated 1.2 acres of sea grass. The mitigation consists in filling approximately 4 acres of dredged holes in the Condado Lagoon, in order to create 1.2 acres of habitat for submerged aquatic vegetation. The fill material would come from the shoal areas in La Esperanza Ecosystem Restoration Project in the western side of the San Juan Harbor. An alternative site for the fill material is the San Antonio Chanel.

The PRTC does not oppose the mitigation proposed by the USACOE. Nonetheless, we are concerned about the possible short terms impacts of the mitigation. Our concerns are the following:

- Possible noise pollution and the impact on the guest of nearby hotels.
- Short term impacts on the current recreational uses in the Lagoon.

If these issues have been addressed in the Environmental Assessment (EA), we do not oppose the draft Finding of No Significant Impact (FONSI). If these concerns were not address in the EA, then we ask that they be incorporated.



Mr. Eric Summa  
San Juan Harbor Project  
Page 2 of 2  
May 23, 2014

Should you have any questions you may contact me, or our planner William Pitre-Cipolla at (787) 721-2400, extension 2063.

Cordially,

A handwritten signature in black ink, appearing to read "Edgardo M. Afanador-Garcia". The signature is written in a cursive style with a large, stylized initial "E".

Edgardo M. Afanador-Garcia, March  
Director  
Planning and Development

WP:md



ESTADO LIBRE ASOCIADO DE PUERTO RICO  
AUTORIDAD DE ENERGÍA ELÉCTRICA DE PUERTO RICO

SAN JUAN, PUERTO RICO

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APARTADO 364267  
CORREO GENERAL  
SAN JUAN, PR 00936-4267

August 14, 2014

Mr. Eric P. Summa, Chief  
Environmental Branch  
Department of the Army  
Jacksonville District Corps of Engineers  
PO Box 4970  
Jacksonville, FL 32232-0019

Dear Mr. Summa:

**RE: San Juan Harbor Navigation Project  
Request for Comments to the Proposed Mitigation Measures**

On May 28, 2014, the Puerto Rico Electric Power Authority (PREPA) received your request to submit comments regarding the above reference project. From the environmental perspective, PREPA has no objection to the proposed project, but in the mitigation proposal does not specify what type of access will be required for the transfer and deposit of the dredge material to the Condado Lagoon. This information is essential to evaluate and determine if there will be any permanent or temporary impact on our infrastructure.

According to Rules 115.D.2 and 115.D.3 of the Regulation of Evaluation and Processing of Environmental Documents, the proponent should discuss the environmental impact of each proposed activity affecting our infrastructure and determine its availability before the submission of an environmental document. The corresponding recommendations of an electrical evaluation by PREPA must be incorporated into the environmental document, which will be obtained through the application of Recommendation (REC) from the *Oficina de Gerencia de Permisos (OGPe)*.



Mr. Eric. P. Summa

Page 2

August 14, 2014

PREPA reminds that electrical evaluation expires after a year from the date it was issued. Failure to begin work during this period will result in that the proponent must request a new electrical evaluation. This letter does not constitute an endorsement of the above action. Once you meet the conditions established in the corresponding electrical evaluation, the proposed action will be considered endorsed.

For additional information regarding this matter, please contact Eng. Rafael Marrero Carrasquillo, Head, Environmental Protection and Quality Assurance Division, at (787) 521-4959.

Cordially,



Sonia Miranda Vega, Director  
Planning and Environmental Protection



#### Part 4: Categorical Exclusion (OGPe) and Water Quality Certification.





REPLY TO  
ATTENTION OF

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

Planning and Policy Division  
Environmental Branch

OCT 17 2014

Ms. Wanda Garcia  
Gerente, Area de Calidad de Agua  
Junta de Calidad Ambiental  
Edificio de Agencias Ambientales Cruz A. Matos  
Urbanización San José Industrial Park  
1375 Avenida Ponce de León  
San Juan, PR 00926-2604

Dear Ms. Garcia:

This letter is to request Water Quality Certification under the Clean Water Act, for the San Juan Harbor Mitigation Project. The project is located inside the Condado Lagoon in a dredged hole in the north portion of the lagoon (Enclosure 1). The US Army Corps of Engineers (Corps) plans to deposit approximately 46,000 cubic yards (35,170 cubic meters) of fill in the north slope of the dredged hole covering approximately 4 acres of side slope inside the hole and creating approximately 1.2 acres at 12 to 15 feet deep. The new area will be connecting to already existing bottom at similar depth extending the submerge bottom for natural development of aquatic vegetation. The fill, mostly sand, to be used in the project will come from naturally accumulated deposit found at La Esperanza (Enclosure 2). During the project planning other sources of fill were considered (sediment from San Antonio Channel), but found not to be suitable for the main purpose of the project.

The Corps has complied with Law Number 75, and obtained the Coastal Zone Management Consistency Concurrence (Enclosure 3), and complied Law Number 416, Article 4-B(3) and obtained a categorical exclusion for this project (Enclosure 4).

Our environmental documents can be found at:  
[http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto\\_Rico](http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx#Puerto_Rico)



If you have any question regarding the project, please contact Mr. Javier Cortes at (904)-232-1896 or Mr. Kenneth Dugger at (904)-232-1686.

Sincerely

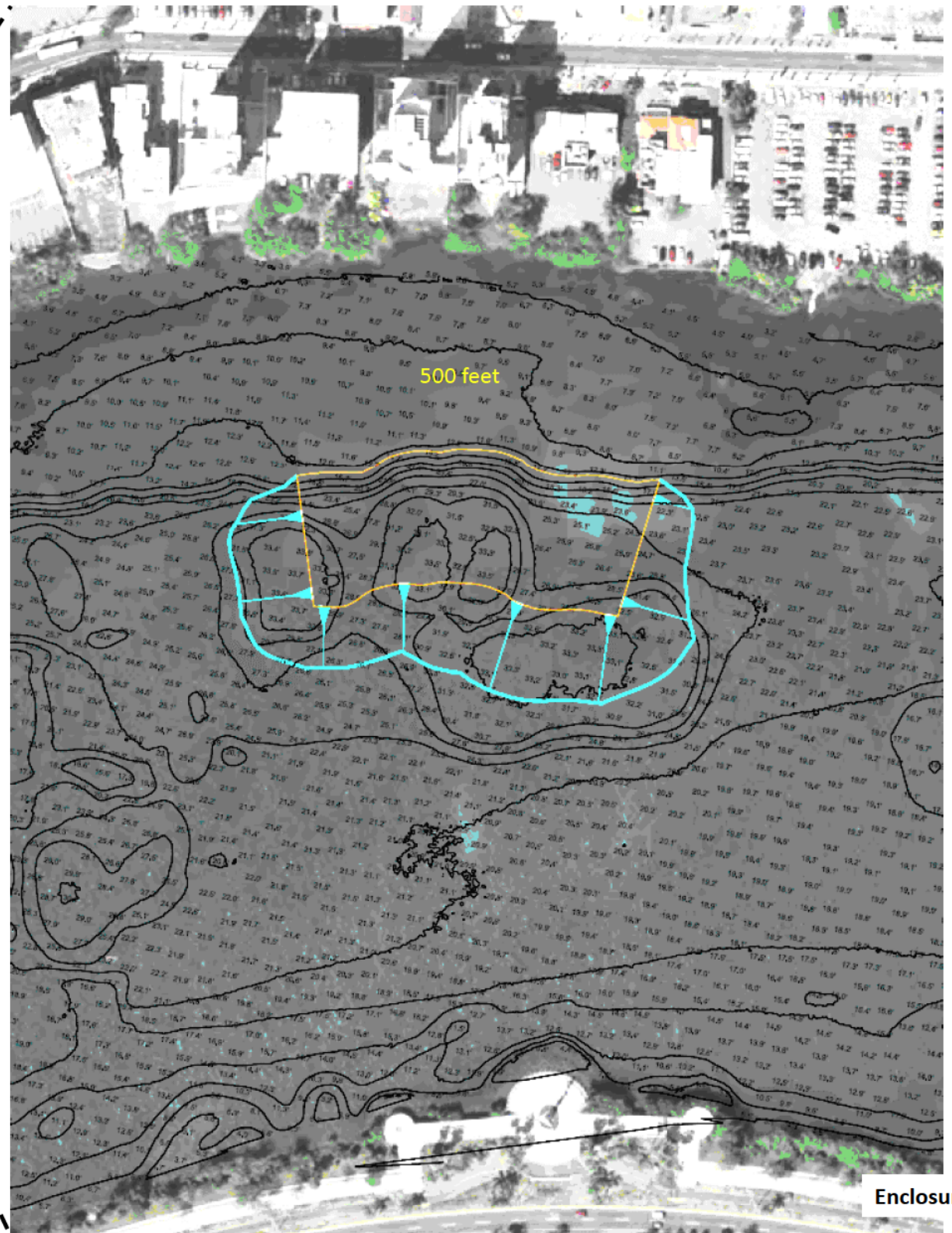


Eric P. Summa  
Chief, Environmental Branch

Enclosure



# Mitigation Site for San Juan Harbor in Condado Lagoon











ESTADO LIBRE ASOCIADO DE  
PUERTO RICO  
Junta de Planificación

19 de septiembre de 2014

ERIC P. SUMMA, CHIEF ENV. BRANCH  
PO BOX 4970  
JACKSONVILLE, FL 32203-4412

Caso Número: CZ-2014-0528-087

Estimado(a) señor(a):

Cumpliendo con las disposiciones de las Leyes Número 75 del 24 de junio de 1975 y 170 del 12 de agosto de 1988, según enmendadas, y para vuestra notificación oficial, le envío copia certificada de la notificación pública emitida por la Junta de Planificación de Puerto Rico en relación con el asunto de epígrafe.

Le agradeceré acuse de recibo de esta notificación.

Cordialmente,

Myrma Martínez Hernández  
Secretaria Interina

Anexo





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

August 22, 2014

CZ-2014-0528-087

Federal Consistency Determination with the  
Puerto Rico Coastal Zone Management Program

RESOLUTION

TO NOTIFY PARTIES ABOUT THE PUERTO RICO PLANNING BOARD  
CONCURRENCE WITH THE U.S. ARMY CORPS OF ENGINEERS FEDERAL  
CONSISTENCY WITH THE PUERTO RICO COASTAL ZONE MANAGEMENT  
PROGRAM ACCORDING TO 15 CFR PART 930

WEP  
The U.S. Army Corps of Engineers (USACE) submitted a Federal Consistency Determination for the San Juan Harbor Mitigation project. The purpose of the proposed mitigation is to compensate for 1.2 acres of *Halophila decipiens* and macro algae that were impacted during the dredging and widening of Puerto Nuevo Channel at San Juan Bay. The proposed mitigation consists in filling two (2) of the artificial depressions that exists at Condado Lagoon, with around 46,000 cubic yards of suitable material to be extracted from "Peninsula La Esperanza" area as part of a maintenance dredging. The artificial depressions at Condado Lagoon were created by mining and dredging that occurred during the first half and mid-twentieth century, especially in the decade of the 1950's. Alteration of the natural lagoon levels by these man made activities has caused degradation in water quality and benthic habitat. The purpose of the proposed mitigation is to restore the original depth (around -12 to -15 feet) of this area in order to promote the reestablishment of typical aquatic vegetation. This project meets the purpose of Action HW-2 proposed under the "Comprehensive Conservation and Management Plan for San Juan Bay Estuary". It establishes "restoring seagrass beds at Condado Lagoon filling artificial depressions with appropriate material".

Various dredging and dredged material transport methods could be used. A temporary pipeline of around 12" diameter will be used to pump the filling material and transport it under the bridge between Condado Lagoon and San Juan Harbor. The actual excavation from the borrow sites might involve a pipeline suction dredge or a mechanical dredge could be used to place the material into a barge or a pumpout station.

According to the Draft Environmental Evaluation document prepared by the USACE, the dredged and filling material will contain a preponderance of fine to coarse sand to ensure stability (Tetra Tech. 2001a) and suitability for submerged aquatic vegetation. Mineral particles less than 0.21 mm and organics will be no more than a minor fraction of the capping material. To ensure stability of the fill material excessive fines and organics will be avoided.

The filling material will be dredged from "La Esperanza" area, located south of Bacardi industrial facilities and north of the town of Cataño. The depressions to be filled are located in the north-central part of Condado Lagoon, south of Ashford Avenue and Chilis restaurant and north of Baldorioty de Castro Avenue (PR-26) and public walkway, at San Juan, Puerto Rico.

During the evaluation period, copy of the application and submitted documents were sent to the Fish & Wildlife Service (FWS), the National Marine Fisheries Service (NMFS), Department of Natural and Environmental Resources (DRNA) the State Historic Preservation Office (SHPO), the Puerto Rico Culture Institute (PRCI) and the PR Permit Management Office (OGPe) for their review and comments. Public notices were also issued. A summary of the received comments follows:

- FWS: concluded that the proposed project may affect but is not likely to adversely affect the Antillean manatee. Application of standard manatee protection measures for all in water work will be required.



- **NMFS:** informed that additional information must be submitted to conclude the required Endangered Species Act Consultation.
- **SHPO:** this agency expressed that their records supports the USACE finding of no historic properties affected within the project's area of potential effects.
- **DNER:** Although the proposed project is a good management strategy, the DNER is concerned about the extraction source of the material to be used as filling. The presence of potential contaminants and fine sediments would deteriorate the ecosystems present at the lagoon (seagrasses, artificial reef modules project at the northeast side of the lagoon, existing fish population and other). The USACE mentioned that "superficial sediments collected in 2011 and 2013 from La Esperanza Peninsula suggest that this material is likely suitable for restoring the artificial depressions" and that "additional sampling and laboratory analysis to evaluate toxicity of material to be dredged will be performed prior to implementation of the project". The superficial sediment sampling do not necessarily represents the homogeneous composition of the proposed dredging material. Therefore, toxicity and granulometry studies must be performed within all levels deep of the proposed dredging area. Considering that the contractor will be free to take the decision about the method used for transport and handling of the dredged and filling material, the DNER also expressed concern about which would be the sedimentation controls to be implemented in order to prevent the dispersion of sediments within the water column.
- **OGPE:** considering that the purpose of the proposed activity is to reestablish the aquatic vegetation and improve the ecological conditions at Condado lagoon, the proposed project may qualify as a "Categorical Exclusion" according to the Environmental Quality Board resolution number R-11-17. This resolution specifies that corrective actions which include one or many measures to mitigate or eliminate environmental damages will qualify to comply with the P.R. Environmental Policy Law through a "Categorical Exclusion". The USACE will apply for it through the Puerto Rico Integrate Permit System web page at [www.sip.pr.gov](http://www.sip.pr.gov)

The Puerto Rico Planning Board sent a letter dated August 12, 2014 with copy of the agencies comments letters. In addition to the concerns and comments expressed by consulted agencies the PRPB presented the following concerns:

- 1- The Condado Lagoon is located within an urban and highly populated tourist zone. This lagoon is intensively used by citizens and tourists for recreation and sport activities. There are dealers that use to rent kayaks, pedal boats and others. There also use to celebrate public events as the Iron Man race, and others. Considering that the operational phase of this project would last up to three months, it is important to establish coordination with local government and stakeholders in order to minimize the temporary impacts to public, commercial and tourist use of the area.
- 2- The USACE must apply and obtain the PR Environmental Policy Law endorsement (through a Categorical Exclusion), this is a pre requisite to obtain a Water Quality Certificate from the Environmental Quality Board.

After reviewing the submitted Federal Consistency Determination, provided information and received comments, The Puerto Rico Planning Board in its meeting of August 22, 2014 determined to concur with the USACE determination that the proposed San Juan Harbor Mitigation project is Consistent with the Puerto Rico Coastal Zone Management Program. In order to facilitate the proposed mitigation project, the PRPB provides the following recommendations:

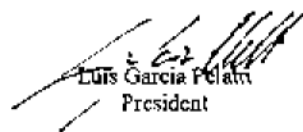
- A. Considering the special circumstances of the Condado Lagoon as a tourist and intensively used public area, it is very important to establish coordination with the local authorities, and notify stakeholders with sufficient time to avoid conflicts with the operational phase of the project and minimize the temporary impacts on public uses and activities. A contact list is provided as enclosure to facilitate coordination.



- B. Conclude the required process to obtain the local Environmental Policy Law Compliance from OGPe and the Water Quality Certificate from the PR Environmental Quality Board.

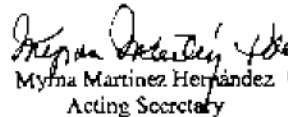
This Concurrence Determination does not exempt the project from compliance with other Federal or State requirements or permits.


The following parties shall be notified: Erik Summa, U.S. Army Corps Of Engineers, Jacksonville District; Carmen R. Guerrero Perez, Secretary, Department of Natural and Environmental Resources; Ernesto Díaz, Director, Puerto Rico Coastal Zone Management Program, Department of Natural and Environmental Resources; Annette Feliberty, Environmental Quality Board; Milagros Rodríguez Castro, PR Ports Authority; Other stakeholders included in the adjoined mailing list.

  
Luis Garcia Pelaez  
President

Certify: That this Resolution is copy of the agreement adopted by Puerto Rico Planning Board (PRPB) in its meeting of August 22, 2014. I expedite and notify this copy to the parties under my sign and official stamp of the Puerto Rico Planning Board stamp, for general use and knowledge.

In San Juan, Puerto Rico, today 19 SEP 2014

  
Myrna Martinez Hernandez  
Acting Secretary

 DEPARTAMENTO DE RECURSOS NATURALES Y AMBIENTALES  
OFFICE OF THE SECRETARY



**Certificación de Cumplimiento Ambiental por Exclusión Categórica**

San Juan Harbor Mitigation Project

**Fecha de Expedición:**

14/OCT/2014

**Datos de Localización**

De conformidad con las disposiciones contenidas en las leyes y los reglamentos vigentes, se expide la presente Certificación de Exclusión Categórica para la acción(es) antes descrita(s):

**Dirección Física:**

Dirección: P.R. CONVENTION CENTER ANTIGUA BASE NAVAL

Municipio: San Juan

Estado: Puerto Rico

Código Postal: 00907

**Dueño:**

Nelson R Colon

**Sometido por:**

Kenneth Dugger

**Calificación**

Distrito(s) de Calificación: DV

Distrito en el Mapa de Inundabilidad: AE (90.1%), VE

Tipo de Suelo: SNS

**Número(s) de Catastro:**

040-028-017-AV

**Datos de determinación****Exclusión Categórica**

Números de exclusión categórica aplicables de acuerdo a la R-11-17 de la JCA\*:

119

**Fecha de Expedición:**

14/OCT/2014

**Condiciones Generales**

De acuerdo con la solicitud de esta Determinación, se certificó cumplimiento con los siguientes requisitos, cuyo incumplimiento podrá repercutir en la revocación de esta Determinación:

- Las actividades de uso o de construcciones livianas de nuevas estructuras no están ubicadas o desarrolladas en:
  - Áreas especiales de riesgo de inundaciones, derrumbes o marejadas.
  - Áreas en las que la Junta de Calidad Ambiental (JCA) u otras agencias gubernamentales estatales o federales hayan determinado que existe un grado de contaminación que excede el permitido por los reglamentos vigentes.
  - Áreas ecológicamente sensitivas o protegidas, según establecido por el Departamento de Recursos Naturales y Ambientales (DRNA), en las que existan especies únicas de fauna o flora o que estén en peligro de extinción o en las que puedan afectarse ecológicamente sistemas naturales o artificiales, ya sea en forma directa o indirecta.
  - Áreas en las que existan problemas de infraestructura o de deficiencias en los sistemas de servicios de suministro de agua potable, disposición de las aguas sanitarias, suministro de energía eléctrica o capacidad vial para el manejo adecuado del tránsito de vehículos de motor.
  - Áreas que constituyan yacimientos minerales, conocidos o potenciales.
  - Áreas en las que existen yacimientos arqueológicos o de valor cultural, según determinado por el Instituto de Cultura Puertorriqueña (ICP).
  - Áreas de topografía escarpada, en cuencas hidrográficas donde se puedan afectar fuentes de abasto de agua potable.
  - Cualquier otra acción que la JCA haya establecido mediante Resolución.
- No descargarán contaminantes a cuerpos de agua, ni generará desperdicios peligrosos o emisiones al aire que excedan dos (2) toneladas al año de contaminantes de aire criterio, o cinco (5) toneladas de cualquier combinación de contaminantes criterios, ni emitirá al aire contaminantes peligrosos o tóxicos u olores objetables.



## Certificación de Cumplimiento Ambiental por Exclusión Categórica

4. Que existe la infraestructura necesaria (agua potable y alcantarillado sanitario suministrado por la AAA, energía eléctrica, alcantarillado pluvial, vías de acceso) para servir a la operación del proyecto o actividad propuesta, con excepción de los proyectos agrícolas que se ubican por regla general en las áreas rurales, así como las residencias unifamiliares asociadas en las que las instalaciones de esa naturaleza son limitadas.
5. La operación de la actividad no afectará áreas residenciales o zonas de tranquilidad por contaminación sónica según establecido por el Reglamento para el Control de la Contaminación por Ruido.
6. Que el desarrollo de la instalación comercial, industrial, de servicio, institucional y de desarrollo de terrenos para uso turístico y proyectos recreativos no excede de cinco mil (5,000) pies cuadrados de construcción en área total de ocupación y área bruta de piso y que cumple con las condiciones de ubicación y operación establecidas por la OGPe u otra agencia con jurisdicción, según sean aplicables.
7. El uso de edificios o estructuras existentes para facilidades comerciales, almacenes y usos industriales o de servicios no excederán de cien mil (100,000) pies cuadrados en área total de ocupación y área bruta de piso. Dicha operación deberá cumplir con las condiciones de ubicación y operación establecidas por la OGPe u otra agencia con jurisdicción, según sean aplicables, y las establecidas para las exclusiones categóricas en este Reglamento.
8. Para la ejecución o desarrollo de las acciones aprobadas como exclusiones categóricas, se requerirá la obtención de los permisos aplicables de las agencias gubernamentales para las etapas de construcción y operación.
9. La acción no ha sido fragmentada o segmentada para fines de la evaluación y será determinación de la agencia proponente si la misma satisface o no los requisitos para ser considerada y ejecutada bajo una exclusión categórica.
10. Que ha cumplido con el requisito de publicación de un Aviso Público de conformidad con la Regla 122 del Reglamento de Evaluación y Trámite de Documentos Ambientales de la JCA, en el caso que la acción propuesta esté relacionada al uso u otorgamiento de fondos federales que requieran un proceso de

### Aviso

Si luego de haberse aquí dado cumplimiento con el Artículo 4(B) de la Ley Núm. 416 surgieran variaciones sustanciales en la acción propuesta que requieran la evaluación a los impactos ambientales, habrá que presentar el correspondiente documento ambiental, de conformidad con la Ley sobre Política Pública Ambiental.

### Condiciones Especiales

### Firma / Sellos

**Fecha de Expedición:**

14/OCT/2014







ESTADO LIBRE ASOCIADO DE  
**P U E R T O   R I C O**  
JUNTA DE CALIDAD AMBIENTAL

18 de noviembre de 2014

Sr. Nelson R. Colón  
Gerente de Proyecto  
Cuerpo de Ingenieros del Ejército de los  
Estados Unidos de América  
Distrito de Jacksonville  
701 San Marco Blvd.  
Jacksonville, Florida 32207

Re:   Aviso Público sobre la Intención de Emitir un  
      Certificado de Calidad de Agua  
      Proyecto de Mitigación para el Puerto de San Juan  
      San Juan, Puerto Rico

Estimado Sr. Colón:

La Sección 401 de la Ley Federal de Agua Limpia (*Federal Clean Water Act*), según enmendada (33 U.S.C. 466 *et seq.*) (la Ley), requiere que antes de que alguna agencia federal, en este caso el Cuerpo de Ingenieros del Ejército de los Estados Unidos, pueda expedir un permiso bajo la Sección 404, se obtenga un Certificado de Calidad de Agua de la agencia estatal que tenga jurisdicción sobre el control de la contaminación de las aguas. En Puerto Rico dicha responsabilidad recae sobre la Junta de Calidad Ambiental (JCA).

Le estamos enviando copia del aviso público relacionado con el asunto en referencia. Se requiere que el mismo sea publicado en un (1) periódico de circulación general en Puerto Rico por espacio de un (1) día para cumplir con los requisitos de participación pública exigidos por la ley. Las dimensiones de dicho aviso no deberán ser menores de 7 pulgadas de largo por 5 pulgadas de ancho y deberá incluir el logo de la JCA. Además, deberá tramitar un affidavit de publicación de parte del periódico en que dicho aviso sea publicado. El original de este documento deberá estar en nuestro poder con la mayor brevedad posible. A los treinta (30) días a partir de la fecha de publicación y de no recibir esta junta objeción alguna sobre la Intención de Emitir el Certificado de Calidad de Agua correspondiente para el proyecto, procederemos a emitir el Certificado de Calidad de Agua Final.

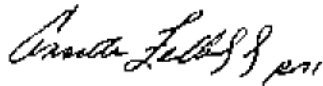


Sr. Nelson R. Colón  
Proyecto de Mitigación para el Puerto de San Juan  
Página 2

En caso de tener alguna duda referente a la publicación del mencionado aviso público, favor de comunicarse con la Sra. Sara Justicia Doll, Gerente de la Oficina de Educación Ambiental y Comunicaciones de la JCA al (787) 767-8181 extensión 6148. Deseamos aclarar que todo costo relacionado con la publicación del mencionado aviso público, deberá ser sufragado por el solicitante.

En caso de tener alguna duda o necesitar información adicional sobre este particular, favor de comunicarse con esta servidora al teléfono (787) 767-8073 o designar algún representante para que se comuniqué con el Ing. Hery J. Correa Alvarado, de la División de Permisos para Fuentes Precisadas, al teléfono (787) 767-8181 extensión 3458, o mediante correo electrónico a [herycorrea@jca.gobierno.pr](mailto:herycorrea@jca.gobierno.pr), a su mejor conveniencia.

Cordialmente,



Wanda E. García Hernández  
Gerente Interina  
Área de Calidad de Agua

HJCA/dcc





## DETERMINACIONES PRELIMINARES PARA CERTIFICADO DE CALIDAD DE AGUA

### Proyecto de Mitigación para el Puerto de San Juan

La Junta de Calidad Ambiental (JCA) ha recibido una petición de Certificado de Calidad de Agua (CCA) de:

Nombre: Sr. Nelson R. Colón, Gerente de Proyecto  
Cuerpo de Ingenieros del Ejército de los Estados Unidos de América  
Distrito de Jacksonville

Dirección: 701 San Marco Blvd.  
Jacksonville, Florida 32207

Cuerpo de Agua: Bahía de San Juan      Lugar: Sur de las facilidades de Bacardi  
Cataño, Puerto Rico  
18°26'59.39" N  
66°07'59.98" O

Laguna del Condado      Sur de la Avenida Ashford y norte de la  
Avenida Baldorioty  
San Juan, Puerto Rico  
18°27'29.71" N  
66°04'44.56" O

### Descripción del proyecto:

El peticionario, Cuerpo de Ingenieros del Ejército de los Estados Unidos de América, solicita autorización para realizar actividades de dragado y depósito de material en aguas de los Estados Unidos como parte del proyecto de mitigación para el Puerto de San Juan. El proyecto de mitigación consiste en rellenar las depresiones artificiales que existen en la porción norte de la Laguna del Condado. El peticionario propone depositar aproximadamente 46,000 yardas cúbicas de material dragado para rellenar aproximadamente 4 acres de las depresiones antes mencionadas.



## Determinaciones Preliminares

### Proyecto de Mitigación para el Puerto de San Juan

#### Página 2

y así crear aproximadamente 1.2 acres de hábitat para el desarrollo natural de vegetación acuática a una profundidad de 12 a 15 pies. El material de relleno que se utilizará, el cual en su mayoría es arena, se extraerá del material acumulado naturalmente en el área de la Península La Esperanza en la Bahía de San Juan.

Para el dragado y transporte del material dragado se considera utilizar varios métodos. Para la extracción del material en el área de la Península La Esperanza se podría estar utilizando tuberías de succión o equipo mecánico. El transporte del material se considera realizar mediante una combinación de barcaza y el bombeo a través de una tubería flotante y/o sumergida a lo largo del Canal de San Antonio hasta la Laguna del Condado. Cabe señalar que el Cuerpo de Ingenieros normalmente no especifica el tipo de equipo de dragado que se utilizará para llevar a cabo las actividades y el método que se utilizará finalmente, ya que el mismo estará determinado por el equipo más adecuado y competitivo disponible al momento de realizar la actividad.

Los objetivos del proyecto son restaurar la profundidad original en la zona de la Laguna del Condado con el fin de promover el restablecimiento de la vegetación acuática típica de la zona y compensar los 1.2 acres de hiervas marinas (*Halophila decipiens*) y macro algas que fueron afectados durante el dragado y la ampliación del Canal de Puerto Nuevo en la Bahía de San Juan.

El área de extracción de material estará localizado en el área de la Península La Esperanza al sur de las facilidades de Bacardi y al norte del pueblo de Cataño, Puerto Rico, en la latitud 18°26'59.39" Norte y longitud 66°07'59.98" Oeste. Las depresiones artificiales a ser rellenadas están localizadas en la porción norte de la Laguna del Condado al sur de la Avenida Ashford y norte de la Avenida Baldorioty en el municipio de San Juan, Puerto Rico, en la latitud 18°27'29.71" Norte y longitud 66°04'44.56" Oeste

Los cuerpos de agua donde se llevara a cabo el proyecto, Bahía de San Juan y la Laguna del Condado, están clasificados como SC y SB, respectivamente por el Reglamento de Estándares de Calidad de Agua de Puerto Rico, según enmendado.

La Ley Pública 95-217 estipula que para estos casos la JCA deberá recomendar e imponer condiciones y límites que aseguren el cumplimiento con los estándares de calidad de agua que aplican en el Estado Libre Asociado de Puerto Rico.

La JCA propone emitir un certificado de calidad de agua para el proyecto antes mencionado, sujeto a que se cumplan las siguientes condiciones:



TABLA A-1

PARÁMETRO	LIMITACIÓN
Aceite y Grasa	Las aguas de Puerto Rico deberán estar sustancialmente libres de aceites y grasas flotantes no derivados del petróleo, así como de aceites y grasas derivados del petróleo.
Agentes Tensioactivos como Sustancias Reactivas con Azul de Metileno	No excederá 500 µg/L.
Color	No deberá ser alterado, excepto por causas naturales.
Oxígeno Disuelto	Contendrá no menos de 4.0 mg/L excepto cuando causas naturales ocasionen una depresión en este valor.
pH	En ningún momento el pH estará fuera del rango de 7.3 a 8.5 unidades estándares de pH, excepto cuando sea alterado por causas naturales.
Sólidos Suspendedos, Coloidales o Sedimentables	Los sólidos provenientes de las actividades no deberán ocasionar asentamientos, o perjudicar los usos existentes o designados de los cuerpos de agua.
Sólidos y Otras Materias	No deberán contener escombros flotantes, desechos u otros materiales flotantes atribuibles a descargas en cantidades suficientes que resulten desagradables o puedan perjudicar los usos existentes o designados del cuerpo de agua.
Substancias que Provocan sabor u Olor	No deberán estar presentes en cantidades que interfieran con el uso de la fuente de agua potable, o le impartan cualquier sabor u olor indeseable a la vida acuática comestible.



<u>PARÁMETRO</u>	<u>LIMITACIÓN</u>
Sulfatos	No excederá 2,800 mg/L, excepto por causa de fenómenos naturales.
Temperatura	Excepto por causas naturales, no se le transferirá calor a las aguas de Puerto Rico que pueda ocasionar que la temperatura en cualquier lugar exceda los 90°F o 32.2°C. Además, ninguna descarga termal o combinación de descargas termales en o dentro de las aguas costanceras, estuarinas y superficiales será perjudicial a la vida acuática, o al cultivo o propagación de una comunidad indígena balanceada de las mismas, ni de ninguna otra forma afectará los usos designados.
Turbiedad	No excederá de las 10 unidades nefelométricas de turbiedad (NTU), excepto por causa de fenómenos naturales.

#### Condiciones Especiales

1. La Junta de Calidad Ambiental (JCA) al emitir este Certificado de Calidad de Agua (CCA), no releva al solicitante, Cuerpo de Ingenieros del Ejército de los Estados Unidos de América, de su responsabilidad de obtener permisos y/o autorizaciones adicionales de la JCA, según requerido por Ley. La emisión del CCA no puede considerarse como una autorización para llevar a cabo actividades que no estén específicamente cubiertas en el CCA.
2. El solicitante, deberá:
  - a. Obtener la aprobación de un Permiso General Consolidado conforme al Reglamento para el Trámite de los Permisos Generales, si aplica.
  - b. Tomar las medidas necesarias durante la fase de construcción, para evitar que residuos de sustancias orgánicas e inorgánicas, tales como aceites, combustibles u otras sustancias químicas, puedan ser arrastradas por la escorrentía y ganen acceso a un cuerpo de agua.



## Determinaciones Preliminares

### Proyecto de Mitigación para el Puerto de San Juan

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- c. Para la descarga de aguas de escorrentía a cualquier cuerpo de agua, durante la fase de construcción, deberán consultar con la Agencia Federal para la Protección Ambiental para determinar si dicha descarga requiere un permiso *NPDES* conforme al 40 CFR, Parte 122.26 (b)(14)(X).
3. Las limitaciones y condiciones especiales establecidas en este CCA entrarán en vigencia a partir de la Fecha de Efectividad del Permiso emitido por el Cuerpo de Ingenieros (*COE*, por sus siglas en inglés) y expirará en el tiempo designado por el *COE*. El mismo podrá ser renovado, a solicitud del peticionario, conforme a las Reglas y Reglamentos Aplicables a la fecha de radicación de la nueva solicitud.
4. Las condiciones de este CCA son consideradas cada una independientemente de las demás. Por lo tanto, si la aplicabilidad de cualquier condición de este CCA quedara sin efecto debido a cualquier circunstancia, las restantes condiciones no se verán afectadas.
5. El solicitante deberá cumplir con las condiciones especiales antes mencionadas. De no hacerlo así, el CCA concedido por la JCA será nulo inmediatamente.









## *A VISO AMBIENTAL*

### INTENCIÓN DE EMITIR CERTIFICADO DE CALIDAD DE AGUA

#### Proyecto de Mitigación para el Puerto de San Juan

La Junta de Calidad Ambiental (JCA) ha recibido una petición de Certificado de Calidad de Agua (CCA) para las actividades asociadas al proyecto de mitigación para el Puerto de San Juan, en el municipio de San Juan, Puerto Rico

El peticionario, Cuerpo de Ingenieros del Ejército de los Estados Unidos de América, solicita autorización para realizar actividades de dragado y depósito de material en aguas de los Estados Unidos como parte del proyecto de mitigación para el Puerto de San Juan. El proyecto de mitigación consiste en rellenar las depresiones artificiales que existen en la porción norte de la Laguna del Condado. El peticionario propone depositar aproximadamente 46,000 yardas cúbicas de material dragado para rellenar aproximadamente 4 acres de las depresiones antes mencionadas y así crear aproximadamente 1.2 acres de hábitat para el desarrollo natural de vegetación acuática a una profundidad de 12 a 15 pies. El material de relleno que se utilizará, el cual en su mayoría es arena, se extraerá del material acumulado naturalmente en el área de la Península La Esperanza en la Bahía de San Juan.

Para el dragado y transporte del material dragado se considera utilizar varios métodos. Para la extracción del material en el área de la Península La Esperanza se podría estar utilizando tuberías de succión o equipo mecánico. El transporte del material se considera realizar mediante una combinación de barcaza y el bombeo a través de una tubería flotante y/o sumergida a lo largo del Canal de San Antonio hasta la Laguna del Condado. Cabe señalar que el Cuerpo de Ingenieros normalmente no especifica el tipo de equipo de dragado que se utilizará para llevar a cabo las actividades y el método que se utilizará finalmente, ya que el mismo estará determinado por el equipo más adecuado y competitivo disponible al momento de realizar la actividad.

Los objetivos del proyecto son restaurar la profundidad original en la zona de la Laguna del Condado con el fin de promover el restablecimiento de la vegetación acuática típica de la zona y compensar los 1.2 acres de hierbas marinas (*Halophila decipiens*) y macro algas que fueron afectados durante el dragado y la ampliación del Canal de Puerto Nuevo en la Bahía de San Juan.



El área de extracción de material estará localizado en el área de la Península La Esperanza al sur de las facilidades de Bacardi y al norte del pueblo de Cataño, Puerto Rico, en la latitud 18°26'59.39" Norte y longitud 66°07'59.98" Oeste. Las depresiones artificiales a ser rellenadas están localizadas en la porción norte de la Laguna del Condado al sur de la Avenida Ashford y norte de la Avenida Baldorioty en el municipio de San Juan, Puerto Rico, en la latitud 18°27'29.71" Norte y longitud 66°04'44.56" Oeste

Los cuerpos de agua donde se llevara a cabo el proyecto, Bahía de San Juan y la Laguna del Condado, están clasificados como SC y SB, respectivamente por el Reglamento de Estándares de Calidad de Agua de Puerto Rico, según enmendado.

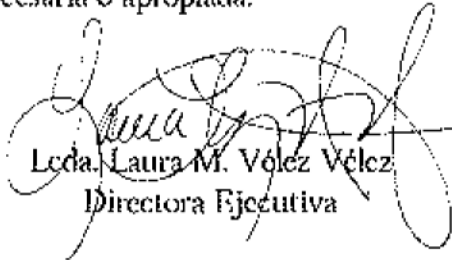
La Sección 401 de la Ley Federal de Agua Limpia PL 95-217 (*Federal Clean Water Act*) requiere que antes de que alguna agencia federal, en este caso el Cuerpo de Ingenieros del Ejército de los Estados Unidos (*U.S. Army Corps of Engineers*), pueda expedir un permiso bajo la Sección 404, se deberá obtener un Certificado de Calidad de Agua de la agencia estatal que tenga jurisdicción sobre el control de la contaminación de las aguas. En Puerto Rico dicha responsabilidad recae sobre la Junta de Calidad Ambiental.

El Certificado de Calidad de Agua se expide a los efectos de asegurarse que la actividad cumplirá con las Secciones 301, 302, 303, 306 y 307 de la ley antes mencionada. La Sección 301 define los límites de efluente para fuentes precisadas, incluyendo instalaciones de tratamiento públicas y privadas y las fechas en que deben ser implementados, así como los estándares de calidad de agua que le sean aplicables. La Sección 302 se refiere a los límites de efluente más estrictos relacionados con calidad de agua. La Sección 303 concierne a los estándares de calidad de agua promulgados por cada estado. La Sección 306, concierne a los límites de efluente para fuentes nuevas (*New Sources*), según se define en esa misma sección. La Sección 307 trata sobre límites de descarga para sustancias tóxicas y los requisitos de pre-tratamiento para aguas usadas que descargan en sistemas de tratamiento.

Copia de la solicitud del CCA y otros documentos relevantes están a la disposición del público para ser examinados en la División de Permisos para Fuentes Precisadas del Área de Calidad de Agua de la Junta de Calidad Ambiental, sita en el Piso 3, Ala A, Oficina 301 del Edificio de Agencias Ambientales Cruz A. Matos, Urb. San José Industrial Park, 1375 Ave. Ponce de León, San Juan, Puerto Rico. Copia de dichos documentos se pueden adquirir en el lugar antes mencionado entre las 8:00 a.m. y las 4:00 p.m., de lunes a viernes o escribiendo a la siguiente dirección: Junta de Calidad Ambiental, P.O. Box 11488, San Juan, Puerto Rico 00910.



Las partes interesadas o afectadas pueden someter sus comentarios o solicitar una vista pública por escrito al Gerente del Área de Calidad de Agua y a la Directora Ejecutiva de la JCA, respectivamente, no más tarde de treinta (30) días a partir de la publicación de este aviso. La fecha límite para someter comentarios puede ser extendida si se estima necesario o apropiado para el interés público. La solicitud para una vista pública deberá señalar la razón o las razones que en la opinión del solicitante ameritan la celebración de la misma. De realizarse vista pública los interesados o afectados tendrán una oportunidad razonable para presentar evidencia o testimonio sobre si se emite o deniega el Certificado de Calidad de Agua, si la Directora Ejecutiva determina que dicha vista es necesaria o apropiada.



Lcda. Laura M. Vélez Vélez  
Directora Ejecutiva

Este anuncio se publicó conforme a lo requerido por la Ley sobre Política Pública Ambiental, Ley Núm. 416 del 22 de septiembre de 2004, según enmendada. El costo del Aviso Público es sufragado por la entidad peticionaria.





14 de enero de 2015

Sr. Nelson R. Colón  
Gerente de Proyecto  
Cuerpo de Ingenieros del Ejército de los  
Estados Unidos de América  
Distrito de Jacksonville  
701 San Marco Blvd.  
Jacksonville, Florida 32207

Re: Certificado de Calidad de Agua  
Proyecto de Mitigación para el Puerto de San Juan  
San Juan, Puerto Rico

Estimado Sr. Colón:

Hemos recibido y evaluado la solicitud de Certificado de Calidad de Agua para un permiso del Cuerpo de Ingenieros del Ejército de los Estados Unidos para realizar actividades de dragado y depósito de material en aguas de los Estados Unidos como parte del proyecto de mitigación para el Puerto de San Juan en el municipio de San Juan, Puerto Rico. El proyecto de mitigación consiste en rellenar las depresiones artificiales que existen en la porción norte de la Laguna del Condado. Como parte del proyecto se depositarán aproximadamente 46,000 yardas cúbicas de material dragado para rellenar aproximadamente 4 acres de las depresiones antes mencionadas y así crear aproximadamente 1.2 acres de hábitat para el desarrollo natural de vegetación acuática a una profundidad de 12 a 15 pies. El material de relleno que se utilizará, el cual en su mayoría es arena, se extraerá del material acumulado naturalmente en el área de la Península La Esperanza en la Bahía de San Juan.

Para el dragado y transporte del material dragado se considera utilizar varios métodos. Para la extracción del material en el área de la Península La Esperanza se podría estar utilizando tuberías de succión o equipo mecánico. El transporte del material se considera realizar mediante una combinación de barcaza y el bombeo a través de una tubería flotante y/o sumergida a lo largo del Canal de San Antonio hasta la Laguna del Condado. Cabe señalar que el Cuerpo de Ingenieros normalmente no especifica el tipo de equipo de dragado que se utilizará para llevar a cabo las



Sr. Nelson R. Colón

Proyecto de Mitigación para el Puerto de San Juan

Página 2

actividades y el método que se utilizará finalmente, ya que el mismo estará determinado por el equipo más adecuado y competitivo disponible al momento de realizar la actividad.

Los objetivos del proyecto son restaurar la profundidad original en la zona de la Laguna del Condado con el fin de promover el restablecimiento de la vegetación acuática típica de la zona y compensar los 1.2 acres de hierbas marinas (*Halophila decipiens*) y macro algas que fueron afectados durante el dragado y la ampliación del Canal de Puerto Nuevo en la Bahía de San Juan.

El área de extracción de material estará localizado en el área de la Península La Esperanza al sur de las facilidades de Bacardí y al norte del pueblo de Cataño, Puerto Rico, en la latitud 18°26'59.39" Norte y longitud 66°07'59.98" Oeste. Las depresiones artificiales a ser rellenadas están localizadas en la porción norte de la Laguna del Condado al sur de la Avenida Ashford y norte de la Avenida Baldorioty en el municipio de San Juan, Puerto Rico, en la latitud 18°27'29.71" Norte y longitud 66°04'44.56" Oeste

Los cuerpos de agua donde se llevara a cabo el proyecto, Bahía de San Juan y la Laguna del Condado, están clasificados como SC y SB, respectivamente por el Reglamento de Estándares de Calidad de Agua de Puerto Rico, según enmendado.

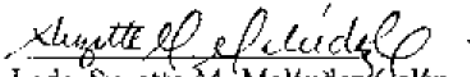
Conforme a la Sección 401 (a) (1) de la Ley Federal de Agua Limpia (la Ley), posterior a la debida consideración de los límites de efluente o estándares establecidos bajo las Secciones 301, 302, 303, 306 y 307 de la Ley, si alguno, y luego de tomar en consideración la clasificación aplicable y estándares que regulan la calidad de las aguas de Puerto Rico, se certifica que existe una seguridad razonable, según determinado por la Junta de Calidad Ambiental, de que el proyecto permitido no causará violaciones a los estándares de calidad de agua aplicables si se cumplen con las limitaciones de la Tabla A-1. Las condiciones especificadas en la tabla antes mencionada, deberán ser incorporadas en el permiso federal para satisfacer las disposiciones de la Sección 401 (d) de la Ley.

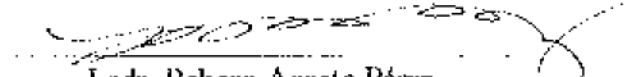
Esta certificación aplica solamente a los efectos que esta actividad pudiera tener en la calidad de las aguas, y no a otros efectos ecológicos, biológicos o ambientales que puedan resultar del proyecto.

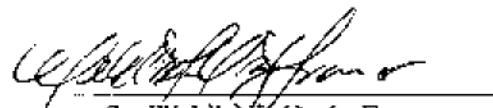


Sr. Nelson R. Colón  
Proyecto de Mitigación para el Puerto de San Juan  
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Esta Junta se reserva el derecho de comentar en fecha posterior sobre algún otro aspecto ambiental del proyecto.

  
Lcda. Suzette M. Meléndez Colón  
Vice-Presidenta

  
Lcda. Rebecca Acosta Pérez  
Miembro Asociado

  
Sr. Weldon F. Ortiz Franco  
Presidente

HJCA/dec

c: Sr. Sindulfo Castillo, COH





Sr. Nelson R. Colón

Proyecto de Mitigación para el Puerto de San Juan

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TABLA A-1

<u>PARÁMETRO</u>	<u>LIMITACIÓN</u>
· Aceite y Grasa	Las aguas de Puerto Rico deberán estar substancialmente libres de aceites y grasas flotantes no derivados del petróleo, así como de aceites y grasas derivados del petróleo.
Agentes Tensoactivos como Sustancias Reactivas con Azul de Metileno	No excederá 500 µg/L.
Color	No deberá ser alterado, excepto por causas naturales.
 Oxígeno Disuelto	Contendrá no menos de 4.0 mg/L, excepto cuando causas naturales ocasionen una depresión en este valor.
 pH	En ningún momento el pH estará fuera del rango de 7.3 a 8.5 unidades estándares de pH, excepto cuando sea alterado por causas naturales.
Sólidos Suspendidos, Coloidales o Sedimentables	Los sólidos provenientes de las actividades no deberán ocasionar asentamientos, o perjudicar los usos existentes o designados de los cuerpos de agua.
Sólidos y Otras Materias	No deberán contener escombros flotantes, desechos u otros materiales flotantes atribuibles a descargas en cantidades suficientes que resulten desagradables o puedan perjudicar los usos existentes o designados del cuerpo de agua.



Sr. Nelson R. Colón

Proyecto de Mitigación para el Puerto de San Juan

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## PARÁMETRO

## LIMITACIÓN

Substancias que Provocan Sabor u Olor

No deberán estar presentes en cantidades que interfieran con el uso de recreación de contacto primario, o que pueda ocasionar cualquier sabor u olor indeseable a la vida acuática comestible.

Sulfatos

No excederá 2,800 mg/L, excepto por causa de fenómenos naturales.

Temperatura

Excepto por causas naturales, no se le transferirá calor a las aguas de Puerto Rico que pueda ocasionar que la temperatura en cualquier lugar exceda los 90°F o 32.2°C. Además, ninguna descarga termal o combinación de descargas termal o dentro de las aguas costancras, estuarinas y superficiales será perjudicial a la vida acuática, o al cultivo o propagación de una comunidad indígena balanceada de las mismas, ni de ninguna otra forma afectará los usos designados.

Turbiedad

No excederá de las 50 unidades nefelométricas de turbiedad (NTU), excepto por causa de fenómenos naturales.

## Condiciones Especiales

1. La Junta de Calidad Ambiental (JCA) al emitir este Certificado de Calidad de Agua (CCA), no releva al solicitante, Cuerpo de Ingenieros del Ejército de los Estados Unidos de América, de su responsabilidad de obtener permisos y/o autorizaciones adicionales de la JCA u otras agencias estatales o federales, según requerido por ley. La emisión del CCA no puede considerarse como una autorización para llevar a cabo actividades que no estén específicamente cubiertas en el CCA.



Sr. Nelson R. Colón

Proyecto de Mitigación para el Puerto de San Juan

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2. El solicitante, deberá:

- a. Obtener la aprobación de un Permiso General Consolidado conforme al Reglamento para el Trámite de los Permisos Generales.
- b. Tomar las medidas necesarias durante la fase de construcción, para evitar que residuos de sustancias orgánicas e inorgánicas, tales como aceites, combustibles u otras sustancias químicas, puedan ser arrastradas por la escorrentía y ganen acceso a un cuerpo de agua.
- c. De tener alguna descarga de escorrentía proveniente de una actividad de construcción a cualquier cuerpo de agua, deberán consultar con la Agencia Federal para la Protección Ambiental para determinar si dicha descarga requiere un permiso *NPDES* conforme al 40 CFR Sección 122.26 (b)(14)(X).

3. Las limitaciones y condiciones especiales establecidas en este CCA entrarán en vigencia a partir de la Fecha de Efectividad del Permiso emitido por el Cuerpo de Ingenieros (COE, por sus siglas en inglés) y expirará en el tiempo designado por el COE. El mismo podrá ser renovado, a solicitud del peticionario, conforme a las Reglas y Reglamentos Aplicables a la fecha de radicación de la nueva solicitud.

4. Las condiciones de este CCA son consideradas cada una independientemente de las demás. Por lo tanto, si la aplicabilidad de cualquier condición de este CCA quedara sin efecto debido a cualquier circunstancia, las restantes condiciones no se verán afectadas.

5. El solicitante deberá cumplir con las condiciones especiales antes mencionadas. De no hacerlo así, el CCA concedido por la JCA será nulo inmediatamente.



## **APPENDIX D – MITIGATION PLAN**

### **1.00 Monitoring.**

The construction contract will be subject to survey of final elevations at the end of construction.

### **2.00 Criteria for Ecological Success.**

The primary criteria for success is the creation of 1.2 acres at elevation -12 feet to -15 feet as habitat suitable for Submerged Aquatic Vegetation (SAV). The natural recruitment and establishment of SAV is anticipated. The amount and nature of recruitment will depend, in part, on water quality at the time (turbidity and nutrient load).

### **3.00 Lands and Interests.**

Mitigation would occur on 4 acres of publicly owned submerged lands.

### **4.00 Description of Mitigation.**

#### **4.01 Types and Amount.**

1.2 acres of In-kind mitigation in the near-by and hydrologically connected Condado Lagoon.

#### **4.02 Physical Action Undertaken.**

Approximately 4 acres of dredged holes in the Condado Lagoon would be filled with about 46,000 cubic yards of material to create 1.2 acres at elevation -12 feet to -15 feet.

#### **4.03 Resulting Functions and Values.**

Once the specified elevation is achieved, recruitment of SAV is expected.

### **5.00 Contingency Plan.**

The construction contractor will be required to correct deficiencies in finished product (final elevation with suitable material).

### **6.00 Entity Responsible for Monitoring.**

The Corps will require a survey of the finished product to ensure proper elevation with suitable material.

### **7.00 Annual Monitoring and Consultation with Federal and State/Commonwealth Agencies.**



#### 7.01 Monitoring Frequency and Schedule.

Once constructed, the mitigation effort will be surveyed for proper finished elevation with suitable material. This information will be coordinated with appropriate Federal and state/commonwealth agencies.

#### 7.02 List of Federal and State/Commonwealth Agencies to be Consulted.

The fish and wildlife resource agencies listed below will be consulted for their views on the success of the mitigation, the likelihood of achieving the mitigation goal, the projected timeline for success, and any recommendations for improving the likelihood of success.

Appropriate Federal and state/commonwealth agencies:

1. US Fish and Wildlife Service Boqueron, Puerto Rico Field Office.
2. NOAA Fisheries, Southeast Regional Office.
3. Puerto Rico Department of Natural and Environmental Resources.

#### 7.03 Public Involvement.

The mitigation plan as part of this EA is available to the public through posting on the Environmental Documents Web

<http://www.saj.usace.army.mil/About/DivisionsOffices/Planning/EnvironmentalBranch/EnvironmentalDocuments.aspx>

See Appendix C and Chapter 6 of the EA concerning public and agency coordination.

#### 8.00 Use of Mitigation Bank.

There are no mitigation banks for SAV in Puerto Rico.

9.00 Unsuccessful or Unimplemented Mitigation. Once constructed at the specified elevation with suitable material, the probability of success is good.