

1 ***DRAFT***

2 ***Environmental Assessment for the Replacement of***  
3 ***the Pier and Boat Ramp at the***  
4 ***U.S. Border Patrol & Air and Marine Facility,***  
5 ***Ponce, Puerto Rico***



7 **U.S. Customs and Border Protection**

8 **October 2018**

**DRAFT**

**Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico**

**Lead Agency:** U.S. Customs and Border Protection (CBP)

**Proposed Action:** The demolition and removal of the temporary structure, removal of the original pier, construction of a new pier, and replacement of the boat ramp at 41 Bonaire Street in the municipality of Ponce, Puerto Rico. The replacement boat ramp would be constructed in the same location as the existing boat ramp, and the pier would be constructed south of the Ponce Marine Unit facility.

**For Further Information:** Joseph Zidron  
Real Estate and Environmental Branch Chief, Acting  
Border Patrol & Air and Marine Program Management Office  
24000 Avila Road, Suite 5020  
Laguna Niguel, CA 92677  
[joseph.zidron@cbp.dhs.gov](mailto:joseph.zidron@cbp.dhs.gov)

**Date:** October 2018

**Abstract:** CBP proposes to remove the original concrete pier, demolish and remove the temporary structure, construct a new pier, replace the existing boat ramp, and continue operation and maintenance at its Ponce Marine Unit facility at 41 Bonaire Street, Ponce, Puerto Rico. As a part of CBP's Ramey Sector, the Ponce Marine Unit supports vessel inspection of foreign ships and small passenger vessels, safety and security inspections at waterfront facilities, and pollution incident investigations.

CBP requires the ability to safely and efficiently launch boats from the Ponce Marine Unit to support mission-critical operations. CBP uses Midnight Express vessels, each at 39 feet in length. Larger SAFE 410 Apostle vessels, at 41 feet in length, may replace the Midnight Express vessels in the near future. Following Hurricane Maria, which hit the island of Puerto Rico in September 2017, the original concrete pier at the facility was displaced and is now unusable. CBP constructed a temporary structure in the location of the original pier in order to continue operations. The temporary structure and the boat ramp at the facility are inadequate in size and length to support two CBP vessels and, when needed, one seized vessel. CBP proposes to remove the original pier and temporary structure, replace the existing boat ramp, and construct a new pier to enable CBP to carry out its mission by providing adequate infrastructure to support boating operations. Specifically, Ponce Marine Unit must support operations of two SAFE 410 Apostle vessels docked at the same time.

CBP evaluated two alternatives in this Environmental Assessment: the No-Action and the Proposed Action alternatives. CBP's proposed action includes the demolition and removal of the original pier and temporary structure, construction of a new pier, and replacement of the existing boat ramp. The replacement boat ramp would be constructed in the same location as the existing boat ramp and the pier would be constructed south of the Ponce Marine Unit facility.

## Executive Summary

U.S. Customs and Border Protection (CBP) prepared this Environmental Assessment (EA) to analyze the potential impacts of the Proposed Action: demolition and removal of the temporary structure, removal of the original concrete pier, construction of a new pier, replacement of the boat ramp, and continued operation and maintenance of CBP's Ponce Marine Unit facility in Ponce, Puerto Rico. The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. § 4321 et seq.); Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500–1508); DHS Implementation Manual 023-01-001-01, rev. 01 "Implementation of the National Environmental Policy Act (NEPA)" (DHS 2014); the Environmental Public Policy Act of Puerto Rico; the Puerto Rico Environmental Quality Board's Regulation for Evaluation and Processing of Environmental Documents; and the Puerto Rico Joint Regulation for Construction and Land Use Permits.

## Background

CBP's proposed action includes demolition and removal of the temporary structure, removal of the original concrete pier, construction of a new pier, replacement of the boat ramp, and continued operation and maintenance of CBP's Ponce Marine Unit facility located at 41 Bonaire Street in the municipality of Ponce, Puerto Rico. CBP is a Federal law enforcement organization within DHS dedicated to serving and protecting the American people. The mission of CBP is "To safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the Nation's global economic competitiveness by enabling legitimate trade and travel." The Ponce Marine Unit, leased and operated by CBP, is part of a Border Patrol & Air and Marine (BPAM) facility in CBP's Ramey Sector. It is a part of the Caribbean Air and Marine Branch (CAMB) within the Southeast Region of Air and Marine Operations. The facility supports vessel inspection of foreign ships and small passenger vessels, safety and security inspections at waterfront facilities, and pollution incident investigations. The original concrete pier was displaced by Hurricane Maria and is unusable. A temporary structure was constructed in the location of the original pier in order to continue CBP operations and meet mission requirements. The temporary structure and boat ramp are inadequate in size and length to support two CBP vessels and, when needed, one seized vessel. CBP uses Midnight Express vessels, which total 39 feet in length. Larger SAFE 410 Apostle vessels, which total 41 feet in length, may replace the Midnight Express vessels in the near future.

## Purpose and Need

CBP needs to provide a sufficient docking and launch capability for the maintenance and repair of CAMB's marine assets in accordance with their mission needs. The purpose of the proposed action is to replace the existing insufficient pier and boat ramp facility to fulfill the marine basing and operations and maintenance requirements for the Ponce Marine Unit.

The site's pier and boat ramp are used 24 hours per day, 365 days per year to access the adjacent inlet to the Caribbean Sea. As a result of age and use, the condition of the facilities has deteriorated to the point that they no longer adequately support CBP's mission requirements. Hurricane Maria

also caused severe damage to the facility, rendering the original concrete pier unusable. The Proposed Action would afford CBP with

- more efficient and effective means of launching, loading, and unloading boats;
- rapid detection and accurate characterization of potential threats;
- increased efficiency in surveillance and interdiction;
- long-term viability of critical infrastructure; and
- enhanced safety and security of CBP agents and personnel.

## Proposed Action and Alternatives

CBP evaluated two alternatives in this EA: the No-Action and Proposed Action alternatives. Under the No-Action Alternative, a new pier would not be constructed and the boat ramp would not be replaced, and the CBP Ponce Marine Unit would continue its operation from the Ponce Marine Unit in its current conditions. Under the Proposed Action, the replacement boat ramp would be constructed in the same location as the existing boat ramp, and the pier would be constructed south of the Ponce Marine Unit facility.

## Alternatives Considered but Eliminated from Further Consideration

**Location and layout Alternatives:** During the project planning phase, CBP considered additional pier locations, including construction of the replacement pier in the same location as the original concrete pier and temporary structure to be removed as part of this action. CBP also considered an “L” shaped pier in the original pier location to allow for additional space for maneuver CBP vessels. However, due to the shallow waters and limited space within the small cove where the original pier and temporary structure are located, CBP determined that constructing a replacement pier in this location would not allow adequate space for vessels to maneuver and access the pier. In addition, the pier would not be long enough to accommodate two docked vessels at the same time.

**Sea Wall Alternative:** CBP also considered developing a sea wall for wave attenuation as part of the Proposed Action. However, a CBP-conducted wave study determined that a sea wall was not needed to support the project. Neither of these alternatives or components were carried forward for further analysis in this EA.

**Design Alternative:** CBP also considered various materials (i.e., concrete, metal, and/or slatted design) to be used for the top of the pier. Due to operational constraints, a concrete top was the preferred material that was carried forward for analysis. A pier with slats or a grate was not carried forward for analysis in this EA due to the safety and security risks that could be imposed upon CBP agents and personnel during the transport of detainees.

## Impact Comparison Matrix

This EA evaluates the potential impact on the environmental conditions from implementing the No-Action Alternative and Proposed Action Alternative. Implementation of either alternative is not expected to result in major environmental or socioeconomic effects. For each resource analyzed in the EA, the expected consequences of the alternatives are summarized in Table ES-1.

*Table ES-1: Comparison of Analyzed Impacts*

Resource Area	Alternative 1—No-Action	Alternative 2—Proposed Action
<b>Geology and Soils</b>	Short term: No impact	Short term: Negligible, adverse
	Long term: No impact	Long term: No impact
<b>Water Resources</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
<b>Biological Resources</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: Minor, adverse
<b>Cultural, Historical, and Archaeological Resources</b>	Short term: No impact	Short term: No impact
	Long term: No impact	Long term: No impact
<b>Air Quality</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
<b>Noise</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
<b>Utilities and Infrastructure</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: Moderate, beneficial
<b>Hazardous Materials</b>	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
<b>Human Health and Safety</b>	Short term: No impact	Short term: Minor, adverse
	Long term: Moderate, adverse	Long term: Minor, beneficial



## 1 Acronyms and Abbreviations

2	ACM	asbestos-containing material
3	AHPA	Archaeological and Historic Preservation Act
4	APE	area of potential effect
5	ARPA	Archaeological Resources Protection Act
6	BCR	bird conservation region
7	BMP	Best Management Practice
8	BPAM	Border Patrol & Air and Marine
9	CAA	Clean Air Act
10	CAMB	Caribbean Air and Marine Branch
11	CBP	U.S. Customs and Border Protection
12	CEQ	Council on Environmental Quality
13	CERCLA	Comprehensive Environmental, Response, Compensation, and Liability Act
14	CFR	<i>Code of Federal Regulations</i>
15	CO	carbon monoxide
16	CO <sub>2</sub>	carbon dioxide
17	CWA	Clean Water Act
18	CZMA	Coastal Zone Management Act
19	dBA	A-weighted decibels
20	DHS	Department of Homeland Security
21	EA	Environmental Assessment
22	EO	Executive Order
23	EPA	U.S. Environmental Protection Agency
24	EQB	Environmental Quality Board
25	ESA	Endangered Species Act
26	FERC	Federal Energy Regulatory Commission
27	FONSI	Finding of No Significant Impact
28	IPaC	Information for Planning and Consultation (USFWS tool)
29	LBP	lead-based paint
30	m <sup>2</sup>	meters squared
31	MBTA	Migratory Bird Treaty Act
32	Mgal/d	million gallons per day
33	µg/m <sup>3</sup>	micrograms per cubic meter
34	NAAQS	National Ambient Air Quality Standards
35	NEPA	National Environmental Policy Act
36	NFPA	National Fire Protection Association
37	NHPA	National Historic Preservation Act
38	NOAA Fisheries	NOAA National Marine Fisheries Service
39	NO <sub>2</sub>	nitrogen dioxide
40	NOAA	National Oceanic and Atmospheric Administration
41	NO <sub>x</sub>	nitrogen oxide
42	NPDES	National Pollutant Discharge Elimination System
43	NRHP	National Register of Historic Places
44	O <sub>3</sub>	ozone
45	OECH	Oficina Estatal de Conservación Histórica
46	OSHA	Occupational Safety and Health Administration

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1	Pb	lead
2	PCB	polychlorinated biphenyl
3	PM <sub>2.5</sub>	particulate matter, 2.5 microns
4	PM <sub>10</sub>	particulate matter, 10 microns
5	POL	petroleum, oil, and lubricants
6	ppb	parts per billion
7	ppm	parts per million
8	PRASA	Puerto Rico Aqueduct and Sewer Authority
9	PREC	Puerto Rico Energy Commission
10	PREPA	Puerto Rico Electric Power Authority
11	RCRA	Resource Conservation and Recovery Act
12	ROI	region of influence
13	SHPO	State Historic Preservation Office
14	SO <sub>2</sub>	sulfur dioxide
15	SO <sub>x</sub>	sulfur oxide
16	SPCC	spill prevention, control, and countermeasure
17	SWPPP	Stormwater Pollution Prevention Plan
18	USACE	U.S. Army Corps of Engineers
19	USBP	U.S. Border Patrol
20	U.S.C.	<i>United States Code</i>
21	USCB	U.S. Census Bureau
22	USCG	U.S. Coast Guard
23	USDA	U.S. Department of Agriculture
24	USFS	U.S. Forest Service
25	USFWS	U.S. Fish and Wildlife Service
26	USGS	U.S. Geological Survey
27	WoUS	Waters of the United States

## Contents

Executive Summary .....	iii
Background .....	iii
Purpose and Need .....	iii
Proposed Action and Alternatives .....	iv
Alternatives Considered but Eliminated from Further Consideration .....	iv
Impact Comparison Matrix .....	iv
Acronyms and Abbreviations .....	vi
1 Introduction.....	1-1
1.1 Background .....	1-1
1.2 Purpose and Need.....	1-1
1.3 Location and Description of the Ponce Marine Unit.....	1-2
1.4 Public Involvement .....	1-5
1.5 Organization of This EA .....	1-7
2 Proposed Action and Alternatives .....	2-1
2.1 No-Action Alternative.....	2-1
2.2 Proposed Action Alternative—Replacement of Existing Boat Ramp and Pier .....	2-1
2.3 Alternatives Considered but Eliminated from Further Consideration .....	2-3
2.4 Impact Comparison Matrix .....	2-4
3 Affected Environment and Environmental Consequences .....	3-1
3.1 Analytical Methods .....	3-1
3.2 Resources Not Carried Forward for Analysis .....	3-2
3.2.1 Land Use .....	3-2
3.2.2 Socioeconomics .....	3-2
3.2.3 Environmental Justice.....	3-2
3.2.4 Protection of Children.....	3-2
3.2.5 Roadways and Traffic .....	3-3
3.2.6 Aesthetics and Visual Resources .....	3-3
3.3 Geology and Soils .....	3-3
3.3.1 Affected Environment.....	3-4
3.3.2 Environmental Consequences .....	3-4
3.4 Water Resources .....	3-5
3.4.1 Affected Environment.....	3-6
3.4.2 Environmental Consequences .....	3-10



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1	3.5	Biological Resources.....	3-11
2	3.5.1	Affected Environment.....	3-11
3	3.5.2	Environmental Consequences.....	3-19
4	3.6	Cultural, Historical, and Archaeological Resources .....	3-19
5	3.6.1	Affected Environment.....	3-20
6	3.6.2	Environmental Consequences .....	3-21
7	3.7	Air Quality .....	3-22
8	3.7.1	Affected Environment.....	3-23
9	3.7.2	Environmental Consequences .....	3-23
10	3.8	Noise .....	3-24
11	3.8.1	Noise Metrics .....	3-25
12	3.8.2	Noise Regulations .....	3-26
13	3.8.3	Affected Environment.....	3-26
14	3.8.4	Environmental Consequences .....	3-27
15	3.9	Utilities and Infrastructure .....	3-28
16	3.9.1	Affected Environment.....	3-28
17	3.9.2	Environmental Consequences .....	3-28
18	3.10	Hazardous Materials.....	3-29
19	3.10.1	Affected Environment.....	3-30
20	3.10.2	Environmental Consequences .....	3-30
21	3.11	Human Health and Safety .....	3-31
22	3.11.1	Affected Environment.....	3-31
23	3.11.2	Environmental Consequences .....	3-32
24	4	Cumulative Impacts .....	4-1
25	4.1	CBP Activities Included in the Cumulative Impacts Analysis .....	4-1
26	4.2	Non-CBP Activities Included in the Cumulative Impacts Analysis .....	4-2
27	4.3	Resources Evaluated for Cumulative Impacts .....	4-2
28	4.4	Cumulative Impacts: Geology and Soils.....	4-3
29	4.5	Cumulative Impacts: Water Resources .....	4-3
30	4.6	Cumulative Impacts: Biological Resources .....	4-3
31	4.7	Cumulative Impacts: Cultural, Historical, and Archaeological Resources .....	4-3
32	4.8	Cumulative Impacts: Air Quality .....	4-3
33	4.9	Cumulative Impacts: Noise .....	4-3
34	4.10	Cumulative Impacts: Utilities and Infrastructure .....	4-4

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1	4.11	Cumulative Impacts: Hazardous Materials .....	4-4
2	4.12	Cumulative Impacts: Human Health and Safety .....	4-4
3	4.13	Incomplete or Unavailable Information .....	4-4
4	5	Mitigation Measures and Best Management Practices .....	5-1
5	5.1	General Construction Activities .....	5-2
6	5.2	Geology and Soils .....	5-2
7	5.3	Water Resources.....	5-2
8	5.4	Biological Resources.....	5-3
9	5.5	Cultural, Historical, and Archaeological Resources .....	5-4
10	5.6	Air Quality.....	5-4
11	5.7	Noise.....	5-4
12	5.8	Utilities and Infrastructure .....	5-5
13	5.9	Hazardous Materials.....	5-5
14	5.10	Human Health and Safety .....	5-5
15	6	Agencies, Organizations, and Persons Consulted.....	6-1
16	6.1	Introduction .....	6-1
17	6.2	Draft Environmental Assessment.....	6-1
18	6.3	Consultations.....	6-1
19	6.4	Distribution.....	6-2
20	7	References.....	7-1
21	7.1	Code of Federal Regulations .....	7-6
22	7.2	Executive Orders .....	7-7
23	7.3	United States Code.....	7-7
24	8	List of Preparers.....	8-1

25

## 26 Appendices

27	Appendix A. Consultation and Coordination Letters .....	1
28	A.1 U.S. Fish and Wildlife Service (USFWS).....	2
29	CBP Letter to USFWS .....	2
30	USFWS Response to CBP, March 2017.....	6
31	A.2 NOAA Fisheries.....	15
32	CBP Letter to NOAA Fisheries .....	15
33	A.3. National Marine Fisheries Service.....	19
34	CBP Letter to NOAA Fisheries .....	19

A.4. Puerto Rico Oficina Estatal de Conservación Historica .....	23
CBP Letter to Puerto Rico Oficina Estatal de Conservación Historica .....	23
Response to CBP, April 2017 .....	30
CBP Response Transmitting Underwater Survey, 2018.....	32
Response to CBP, April 2018 .....	34

## Figures

Figure 1-1. Location of the Ponce Marine Unit in Ponce, Puerto Rico .....	1-3
Figure 1-2. Facilities at CBP’s Ponce Marine Unit .....	1-4
Figure 1-3. Current Ponce Marine Unit Pier and Ramp Facilities.....	1-5
Figure 2-1. Ponce Marine Unit Proposed Action Alternative.....	2-2
Figure 2-2. Bollard-Style LED Lighting along the Pier .....	2-3
Figure 3-1. Delineation of WoUS .....	3-8
Figure 3-2. Delineation of WoUS for the Ponce Marine Unit, Ponce, Puerto Rico .....	3-9
Figure 3-3. Southern and Western Shorelines of the Ponce Marine Unit.....	3-12
Figure 3-4. Park Adjacent to the Basin .....	3-13
Figure 3-5. Habitat Types Mapped during Biological Survey.....	3-14
Figure 3-6. Coral Presence near the Proposed Action Alternative Structures .....	3-15
Figure 4-1. Ponce Marine Unit Area of Potential Effect for the Proposed Action .....	4-1

## Tables

Table 2-1. Comparison of Analyzed Impact.....	2-4
Table 3-1. MBTA Species with the Potential to Occur in Puerto Rico .....	3-17
Table 3-2. Federally Threatened or Endangered Species Listed by USFWS as Potentially Occurring at the Ponce Marine Unit, Puerto Rico .....	3-18
Table 3-3. National Ambient Air Quality Standards .....	3-22
Table 3-4. Estimated Emissions Associated with the Proposed Action .....	3-24
Table 3-5. Sound Levels and Human Response .....	3-25
Table 3-6. Predicted Noise Levels for Maintenance and Repair Equipment.....	3-25
Table 3-7. Noise Level Limits (dBA) .....	3-26
Table 3-8. Noise Emission Levels for Construction Equipment .....	3-27
Table 5-1. Resource Area BMPs and Associated Mitigation Resource Area.....	5-1

1

2

This page intentionally left blank.

## 1 Introduction

U.S. Customs and Border Protection (CBP) prepared this Environmental Assessment (EA) to analyze the potential impacts of the Proposed Action: demolition and removal of the original pier and temporary structure, replacement of the boat ramp, construction of a pier, and continued operation and maintenance of CBP's Ponce Marine Unit facility in Ponce, Puerto Rico. The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. § 4321 et seq.); Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500–1508); DHS Implementation Manual 023-01-001-01, rev. 01 "Implementation of the National Environmental Policy Act (NEPA)" (DHS 2014); the Environmental Public Policy Act of Puerto Rico; the Puerto Rico Environmental Quality Board's Regulation for Evaluation and Processing of Environmental Documents; and the Puerto Rico Joint Regulation for Construction and Land Use Permits.

### 1.1 Background

CBP is a Federal law enforcement organization within DHS dedicated to serving and protecting the American people (CBP 2017a). Its mission is "To safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the Nation's global economic competitiveness by enabling legitimate trade and travel." CBP interdiction agents are authorized to enforce U.S.C. Title 8 (Aliens and Nationality) and U.S.C. Title 19 (Customs), in addition to the general law enforcement powers bestowed upon Federal law enforcement agents. Operating throughout the United States, Puerto Rico, and U.S. Virgin Islands, CBP interdicts unlawful people and cargo approaching U.S. borders, investigates criminal networks, and provides domain awareness in the air and maritime environments. CBP's specialized law enforcement capabilities enable it to make significant contributions to DHS efforts, as well as to Federal, state, local, and tribal agencies (CBP 2017a).

The Ponce Marine Unit, leased and operated by CBP, is part of a Border Patrol & Air and Marine (BPAM) facility in CBP's Ramey Sector, within the Caribbean Air and Marine Branch within the Southeast Region of Air and Marine Operations, and supports vessel inspection of foreign ships and small passenger vessels, safety and security inspections at waterfront facilities, and pollution incident investigations (HDR 2013). The original concrete pier was displaced by Hurricane Maria and is unusable. A temporary structure was constructed in the location of the original pier in order to continue CBP operations and meet mission requirements. The temporary structure and boat ramp are inadequate in size and length to support two CBP vessels and, when needed, one seized vessel. CBP uses Midnight Express vessels, which total 39 feet in length. Larger SAFE 410 Apostle vessels, which total 41 feet in length, may replace the Midnight Express vessels in the near future.

### 1.2 Purpose and Need

CBP's mission is "To safeguard America's borders thereby protecting the public from dangerous people and materials while enhancing the Nation's global economic competitiveness by enabling legitimate trade and travel." The purpose of the Proposed Action is to facilitate the primary goals and objectives of CBP's strategy: to enhance enforcement activities while providing safe working conditions for CBP agents.

Constructing a new pier and boat ramp is needed to continue to support CBP's mission: "to detect, interdict, and apprehend those who attempt to illegally enter or smuggle any person or contraband across and identify, classify, respond, and resolve emerging threats along the sovereign borders of the United States." Ponce Marine Unit's pier and boat ramp are used 24 hours per day, 365 days per year to access the adjacent inlet to the Caribbean Sea. As a result of age and use, the condition of the facilities has deteriorated to the point that they no longer adequately support CBP's mission requirements. In addition, Hurricane Maria caused severe damage to the facility, rendering the original concrete pier unusable. The Proposed Action would afford CBP with

- more efficient and effective means of launching, loading, and unloading boats;
- rapid detection and accurate characterization of potential threats;
- increased efficiency in surveillance and interdiction;
- long-term viability of critical infrastructure; and
- enhanced safety and security of CBP agents and personnel.

### 1.3 Location and Description of the Ponce Marine Unit

CBP's Ponce Marine Unit operates from facilities located at 41 Calle Bonaire (Bonaire Street) in Ponce, Puerto Rico (Figure 1-1). The coordinates of the project area are N 17°58'44", W 66°37'12", at sea level. The property is owned by the U.S. Coast Guard (USCG) and leased by CBP and consists of 1.05-acres of land on the south side of Calle Bonaire adjacent to the Caribbean Sea (HDR 2013). The property is in an area known alternately as Playa de Ponce and Playa Barrio, approximately 2 miles south of the Ponce town center. The property is located in the original wharf (muelle) area of Playa de Ponce and is surrounded by warehouses and administrative buildings. To the east is a waterfront park and parking area used for events and concerts (HDR 2013).

The project area is enclosed by a security fence, with a vehicle gate entrance located on Calle Bonaire. The project area is approximately 2.65 acres – comprised of 1.05 acres of land and 1.6 acres of water. Most of the land area is covered in asphalt paving or structures, except for a 2.8 square meter (m<sup>2</sup>) strip of grassy sand located behind a fence along a beach west of the facility and an 85 m<sup>2</sup> strip of landscaped lawn east of the facility's main parking lot (HDR 2013). As shown in Figure 1-2, the facility consists of four buildings and seven structures: a main office building, a security booth, two modular offices, three shipping cargo containers used for storage, a flat-roof vehicle shelter in front of the containers, a vehicle wash canopy, a metal-clad storage shed, and the Playa Ponce Rear Range Light (a 25-foot cast iron and steel tower capped by a navigation light).

Adjacent to the east of the Ponce Marine Unit is a small cove where the original concrete pier and boat ramp are located. The original pile design concrete pier extended approximately 15 feet east into the cove, but was displaced by Hurricane Maria, which hit the island of Puerto Rico on September 20, 2017. The concrete pier is currently turned over on the riprap shore, but remains partly in the water (Lenz & Whalon 2018) (Figure 1-3). A temporary structure was constructed following Hurricane Maria in order to fulfill the immediate operational need of deploying CBP assets from the Ponce Marine Unit. The temporary structure is a wooden pier approximately 3 feet by 18 feet and supported by three polyvinyl chloride (PVC) pipes. North of the original concrete pier is a boat ramp totaling 15 feet in length. The ramp is in severely deteriorated condition;

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



Source: Stell Environmental Enterprises/HDR 2013, Air and Marine Facility, Ponce Cultural Resources Inventory.

*Figure 1-1. Location of the Ponce Marine Unit in Ponce, Puerto Rico*





Source: HDR 2013.

*Figure 1-2. Facilities at CBP's Ponce Marine Unit*

extremely worn and broken where it extends into the water. South of the original concrete pier consists of riprap protected shoreline extending to Ponce Bay. The replacement of the pier and boat ramp are necessary to support CBP's operations from the site.

Also due to damage caused by Hurricane Maria, the entire fence surrounding the perimeter of the facility was replaced in April 2018. As part of the fence replacement, the pedestrian and main entrance gates were also replaced. The fence was secured with a new combination lock and equipped with a security camera for adequate observation of the area.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



1 Source: HDR 2016a, HDR 2018, Lenz & Whalon 2018.

2 *Figure 1-3. Current Ponce Marine Unit Pier and Ramp Facilities*

3 **1.4 Public Involvement**

4 CBP is committed to communicating with the public to help ensure that potentially affected  
5 communities and other interested parties understand proposed actions and are given opportunities  
6 to participate in decisions that may affect them. Consideration of the views and information of all  
7 interested persons promotes open communication and enables better decision making. CBP urges  
8 all agencies, organizations, and members of the public with an interest in the proposed action to  
9 participate in the NEPA decision-making process.

10 **Review of the Draft EA.** Public involvement for this Draft EA began with publication of the  
11 Notice of Availability in two newspapers, *La Perla del Sur* (serving southern communities in  
12 Puerto Rico) and *Caribbean Business* (a regional newspaper), on October 31, 2018 announcing  
13 the availability of the Draft EA and draft Finding of No Significant Impact (FONSI) for public  
14 review and the beginning of the 30-day review period. Copies of the Draft EA and Draft FONSI  
15 can be downloaded from the Internet at [http://www.cbp.gov/about/environmental-cultural-](http://www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/docs-review)  
16 [stewardship/nepa-documents/docs-review](http://www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/docs-review); hard copies can be reviewed at this public location:

17 Ponce Municipal Library (Mariana Suarez De Longo Municipal)  
18 Miguel Pou Boulevard  
19 Ponce, PR 00733

20 Pursuant to the CEQ's regulations and DHS Implementation Manual 023-01-001-01, rev. 01  
21 "Implementation of the National Environmental Policy Act (NEPA)" CBP invites public  
22 participation in the NEPA process through its solicitation of comments on the Draft EA and Draft  
23 FONSI. To be considered for inclusion in the Final EA, comments on the Draft EA and Draft  
24 FONSI must be received by November 30, 2018. Comments can be provided using the following  
25 methods:

26 *U.S. Mail:*  
27 Joseph Zidron  
28 Real Estate and Environmental Branch Chief  
29 Border Patrol & Air and Marine Program Management Office  
30 24000 Avila Road, Suite 5020  
31 Laguna Niguel, CA 92677

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

*Email:*

Comments may also be emailed to [joseph.zidron@cbp.dhs.gov](mailto:joseph.zidron@cbp.dhs.gov). The email subject line should read, "CBP Ponce Pier and Boat Ramp EA."

CBP will present the comments received on the Draft EA and Draft FONSI and its responses in an appendix in the Final EA. If CBP determines that the project will not have significant environmental impacts, it will then make the Final EA and Final FONSI available to the public and execute the project. If CBP determines that implementing the Proposed Action would likely result in significant effects, CBP may elect to (a) publish a Notice of Intent to prepare an Environmental Impact Statement within the Federal Register, (b) revise the EA to commit to mitigation actions sufficient to reduce the effects below significance levels, or (c) reevaluate its needs and terminate the proposed project direction and accompanying NEPA process. Coordination and consultation with Federal and state agencies occurred during preparation of this EA (copies of correspondence are provided in Appendix A). CBP Coordinated with the following stakeholders:

- National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries or NMFS), Southeast Regional Office, Protected Resources Division
- NOAA Fisheries, Habitat Conservation Division
- NOAA Fisheries, Protected Resources Division, MMPA Branch
- U.S. Department of Transportation/Federal Highway Administration
- USACE Jacksonville District, Antilles Regulatory Section
- U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office
- Natural Resources Conservation Service (NRCS)
- Puerto Rico State Historic Preservation Office (Oficina Estatal de Conservación Histórica)
- Puerto Rico Aqueduct and Sewer Authority
- Puerto Rico Department of Agriculture (Departamento de Agricultura)
- Puerto Rico Department of Economic Development and Commerce
- Puerto Rico Department of Natural and Environmental Resources (Departamento de Recursos Naturales y Ambientales)
- Puerto Rico Department of Transportation and Public Works
- Puerto Rico Electric Power Authority
- Puerto Rico Environmental Quality Board (Junta de Calidad Ambiental)
- Puerto Rico Planning Board
- Puerto Rico Ports Authority
- Archeology and Ethnohistory program of the Puertorican Institute of Culture (Programa de Arqueología y Etnohistoria del Instituto de Cultura Puertorriqueña)
- Historical built heritage program of the Puertorican Institute of Culture (Programa de Patrimonio Histórico Edificado del Instituto de Cultura Puertorriqueña)
- Municipality of Ponce

## 1.5 Organization of This EA

This Draft EA contains Chapters 1 through 8, and one appendix:

- Chapter 1, Introduction, provides background information on the purpose and need for the Proposed Action, summarizes the public involvement in developing this EA, and provides an overview of its organization.
- Chapter 2, Proposed Action and Alternatives, describes the Proposed Action and alternatives and summarizes impacts of the alternatives.
- Chapter 3, Affected Environment and Environmental Consequences, describes the potentially affected resources within the project site and the environmental consequences of the proposed alternatives.
- Chapter 4, Cumulative Impacts, describes the cumulative impacts of the proposed alternatives.
- Chapter 5, Mitigation Measures and Best Management Practices, describes the measures to mitigate consequences of the Proposed Action and best management practices to be undertaken.
- Chapter 6, Agencies, Organizations, and Persons Consulted.
- Chapter 7, References.
- Chapter 8, List of Preparers.
- Appendix A, Consultation and Coordination Letters.

1

2

This page intentionally left blank.

## 2 Proposed Action and Alternatives

This chapter describes the two alternatives evaluated in this EA. These alternatives are the No-Action Alternative and the Proposed Action for the replacement of the pier and boat ramp and continued operation and maintenance of the CBP Ponce Marine Unit facility in Ponce, Puerto Rico.

### 2.1 No-Action Alternative

This alternative is required by the CEQ to identify the baseline conditions against which the potential effects of implementing the alternatives are evaluated. The No-Action Alternative must be described because it represents the benchmark condition of the environment if the proposed actions are not implemented. Under the No-Action Alternative, a new pier would not be constructed and the boat ramp would not be replaced, and the CBP Ponce Marine Unit would continue its operation from the facility in its current conditions. If the No-Action Alternative were chosen, CBP's requirements for an updated facility in compliance with mission requirements, as well as safety and security requirements, would not be met. The existing facilities would continue to deteriorate and would not adequately support CBP's mission requirements.

### 2.2 Proposed Action Alternative—Replacement of Existing Boat Ramp and Pier

CBP's proposed action includes demolition and removal of the temporary structure, removal of the original concrete pier, construction of a new pier, replacement of the boat ramp, and continued operation and maintenance at 41 Bonaire Street in the municipality of Ponce, Puerto Rico. The replacement boat ramp would be constructed in the same location as the existing boat ramp, and the pier would be constructed south of the Marine Unit facility, as shown in Figure 2-1. Construction activities associated with the proposed action would be contained within an area of approximately 2.65 acres (comprised of 1.05 acres of land and 1.6 acres of water) where the CBP Ponce Marine Unit is located. The Proposed Action is anticipated to take 7 months to complete.

Under the proposed action, a concrete boat ramp lengthened from 36 feet to 56 feet would replace the existing boat ramp. The new ramp would have varying slope from 7 percent to 13 percent, whereas the maximum slope of the existing ramp is 12.6 percent. The steeper slope would increase the depth at the end of the ramp by about 2.5 feet, allowing the ramp to be used across a broader range of tides. The minimum thickness of the ramp, 8 inches, was determined based on the launch type, towing vehicle, and boat and trailer (SAFE 410 Apostle vessel and Ford F-550 crew cab, respectively). Prior to demolition and construction of the boat ramp, a single-row coffer dam would be installed across the inlet to remove water from the area. Dredging is not anticipated as part of this project element.

The temporary structure and the original concrete pier would be removed. This includes first removing the top of the temporary structure and then removing the PVC pipes using a nominal-size backhoe and chain, and hauling the original concrete pier away from the project area. The new pier, constructed south of the Ponce Marine Unit, would total approximately 205 feet from the landward curb and fence line, not including the sloping entrance ramp and fenced entry point (USACE 2018a). The pier would measure approximately 10–13 feet in width. The new pier would consist of 18 hollow cylindrical steel piles (14 pier piles and 4 mooring piles), all 18 inches in diameter, that would be pointed, driven, and coated in bitumen and filled with grout once driven.





Sources: Imagery - DigitalGlobe (2010); Waters of the U.S. Delineation - HDR (2018); Habitat & Coral Surveys - CSA Ocean Sciences Inc. (2018); Design - Baskerville-Donovan, INC (2-2018).

Source: HDR 2018.

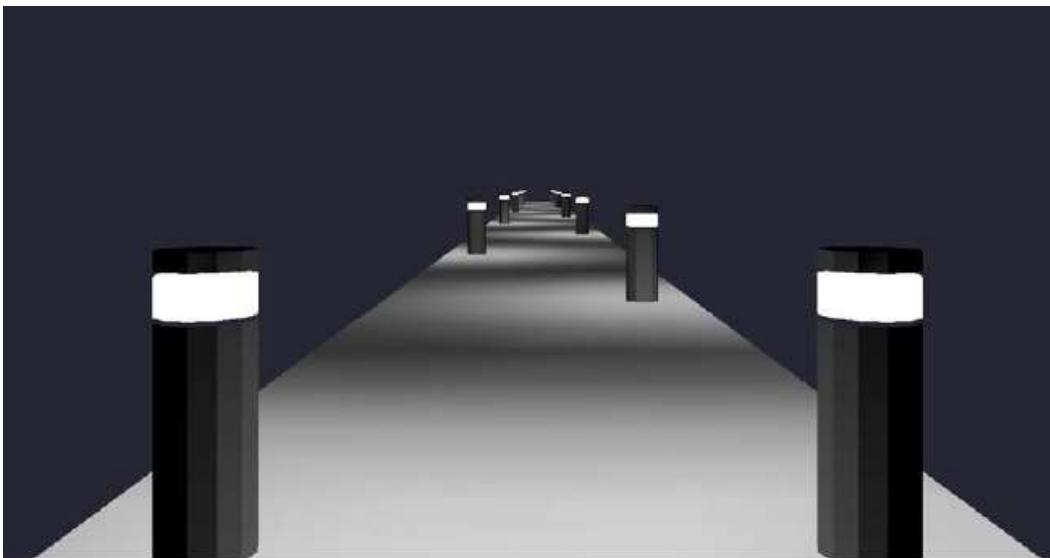
Figure 2-1. Ponce Marine Unit Proposed Action Alternative



Each pile would be approximately 100 feet in length, but the final length would be dictated by the project's specifications. The pile driving method is unknown at this time and would be determined prior to construction. Best management practices (BMPs) and mitigation measures would be implemented to minimize impacts on aquatic species (i.e., mammals, fish, sea turtles) to the maximum extent practicable. The top 19 feet of the piles would be reinforced with a cage extending into the cast-in-place concrete pile caps. These pile caps would be 50 inches high from underside to the top deck, 53 inches wide, and approximately 11 feet long. The pilings would be inserted into the subsurface floor using a barge-mounted diesel pile-driving rig, tugboat, and other tending boats as required.

The pier top would be constructed from several precast, pre-stressed concrete spans. The first span would start at the pier entry point and end at the first over-water pile cap, totaling 48 feet in length. All subsequent pier spans would measure 30 feet in length. The first span (48 feet) would have modular aluminum tube guardrails for fall protection, and the sides and ends of the 30-foot spans would include horizontal rubber fenders and deck cleats for vessel mooring.

In addition to mooring piles, cleats, and boat whips, the pier would be equipped with three power and freshwater service kiosks, LED bollard lighting, and video surveillance. Utilities would be routed from the main facility to the pier via a new utility trench originating at the main facility, crossing the parking lot and ending at the beginning of the pier. Installation of the trench requires saw cutting along the parking lot and the installation of 6 inches of concrete on either side of the trench frame. A 1-inch waterline would run inside the trench. A system to increase water pressure would be used to ensure water reaches the end of the pier. Low-profile light bollards would be placed along the pier (see Figure 2-2), minimizing spill light and glare into the surrounding water.



Source: USACE 2018a.

*Figure 2-2. Bollard-Style LED Lighting along the Pier*

### **2.3 Alternatives Considered but Eliminated from Further Consideration**

**Location and layout Alternatives:** During the project planning phase, CBP considered additional pier locations, including construction of the replacement pier in the same location as the original concrete pier and temporary structure to be removed as part of this action. CBP also considered an

“L” shaped pier in the original pier location to allow for additional space for maneuver CBP vessels. However, due to the shallow waters and limited space within the small cove next to the original pier and temporary structure, CBP determined that constructing a replacement pier in this location would not meet the purpose and need of the Proposed Action.

**Sea Wall Alternative:** CBP also considered developing a sea wall for wave attenuation as part of the Proposed Action. However, a CBP-conducted wave study determined a sea wall was not needed to support the project. Neither of these alternatives or components was carried forward in the analysis in this EA.

**Design Alternative:** CBP also considered various materials (i.e., concrete, metal, and/or slatted design) to be used for the top of the pier. Due to operational constraints, a concrete top was the preferred material that was carried forward for analysis. A pier with slats or a grate was not carried forward for analysis in this EA due to the safety and security risks that could be imposed upon CBP agents and personnel during the transport of detainees.

## 2.4 Impact Comparison Matrix

This EA evaluates the potential impact on the environmental conditions from implementing the No-Action Alternative and Proposed Action Alternative. Implementing any of the alternatives is not expected to result in major environmental or socioeconomic effects. For each resource analyzed in the EA, the expected consequences of the alternatives are summarized in Table 2-1.

*Table 2-1. Comparison of Analyzed Impact*

Resource Area	Alternative 1—No-Action	Alternative 2—Proposed Action
Geology and Soils	Short term: No impact	Short term: Negligible, adverse
	Long term: No impact	Long term: No impact
Water Resources	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
Biological Resources	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: Minor, adverse
Cultural, Historical, and Archaeological Resources	Short term: No impact	Short term: No impact
	Long term: No impact	Long term: No impact
Air Quality	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
Noise	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
Utilities and Infrastructure	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: Moderate, beneficial
Hazardous Materials	Short term: No impact	Short term: Minor, adverse
	Long term: No impact	Long term: No impact
Human Health and Safety	Short term: No impact	Short term: Minor, adverse
	Long term: Moderate, adverse	Long term: Minor, beneficial

### 3 Affected Environment and Environmental Consequences

This chapter describes the affected environment and potential environmental and human health impacts that might be associated with implementation of the Proposed Action considered in this EA, including the No-Action Alternative. This EA considers all potentially relevant resource areas: geology and soils, water, biological, cultural, historical, and archaeological, air quality, noise, utilities and infrastructure, hazardous materials, and human health and safety. We analyzed these resources in a manner commensurate with their importance or the relative expected level of impact by using a sliding-scale assessment approach. The general impact assessment method used to evaluate each resource area, and applicable mitigation and monitoring, are also discussed in this chapter.

#### 3.1 Analytical Methods

This section characterizes the potential direct and indirect effects of each alternative on the affected environment. Each alternative was evaluated for its potential to affect physical, biological, and socioeconomic resources. Cumulative and other effects are discussed in Chapter 4. The following are possible characteristics of impacts:

- *Short-term or long-term.* These characteristics are determined case by case and do not refer to any rigid time period. In general, short-term effects are those expected to occur only with respect to a particular activity, for a finite period, or during the time required for maintenance and repair activities. Long-term effects are more likely to be persistent and chronic.
- *Direct or indirect.* A direct effect is caused by and occurs contemporaneously at or near the location of the action. An indirect effect is caused by a Proposed Action and might occur later in time or be farther removed in distance but still be a reasonably foreseeable outcome of the action. For example, a direct effect of erosion on a stream might include sediment-laden waters in the vicinity of the action, whereas an indirect effect of the same erosion might lead to lack of spawning and result in lowered reproduction rates of indigenous fish downstream.
- *Negligible, minor, moderate, or major.* These terms characterize the relative magnitude or intensity of an impact:
  - Negligible effects might be perceptible but are at the lower level of detection.
  - A minor effect is slight but detectable.
  - A moderate effect is readily apparent.
  - A major effect is one that is severely adverse or exceptionally beneficial.
- *Adverse or beneficial.* An adverse effect has unfavorable or undesirable outcomes on the manmade or natural environment, while a beneficial effect produces at least one positive outcome. A single act might result in adverse effects on one environmental resource and beneficial effects on another resource.
- *Significance.* Significant effects meet the thresholds set forth in CEQ regulations (40 CFR § 1508.27).
- *Context.* The context of an effect can be localized or more widespread (e.g., regional).
- *Intensity.* The intensity of an effect reflects several factors, including whether an alternative might have an adverse impact on the unique characteristics of an area (i.e., historical resources or ecologically critical areas), public health or safety,

threatened or endangered species, or designated critical habitat. Effects are also considered in terms of their potential for violation of Federal, state, or local environmental laws; their controversial nature; the degree of uncertainty or unknown effects, or unique or unknown risks; whether there are precedent-setting effects; and their cumulative impacts (see Chapter 4).

## 3.2 Resources Not Carried Forward for Analysis

### 3.2.1 Land Use

No effects on land use plans or policies are anticipated from the Proposed Action or No-Action Alternative. Puerto Rico's Land Use Plan classifies the proposed project area as urban land (PR 2017). Although a waterfront park exists to the east of the proposed project site, the Proposed Action is compatible with historical and current land use in the area and would not result in changes to land use. Therefore, a detailed discussion of land use was eliminated from further consideration in this EA.

### 3.2.2 Socioeconomics

Impacts on socioeconomic conditions would be considered significant if they included displacement or relocation of residences or commercial buildings, increases in long-term demands for public services in excess of existing and projected capacities, or disproportionate impacts on minority and low-income families. Construction and operation activities as described by the Proposed Action would not result in impacts on the region's economy, residential areas, populations, or minority or low-income families. Therefore, an analysis of the impacts on socioeconomic factors was not carried forward in this EA.

### 3.2.3 Environmental Justice

Impacts on environmental justice would be considered significant if an action had a disproportionately high and adverse effect on minority and low-income populations. Estimates from 2012–2016 U.S. Census data for the municipality of Ponce state that 99 percent of the population self-identified as Hispanic or Latino (USCB 2016a). The poverty level for Puerto Rican residents and Ponce are 45.1 percent and 51.3 percent, respectively, both significantly higher than the national level of 15.1 percent (USCB 2016b–d). Further, Ponce, at \$16,561, is below both the national (\$55,322) and state (\$19,606) median household income. However, the Ponce Marine Unit is located within an industrial area and is not likely to affect minority and low-income populations due their proximity to the project area. The Proposed Action involves the replacement or construction of existing infrastructure at the facility and supports CBP's mission. A discussion of environmental justice was eliminated from further analysis in this EA due to the lack of potential impact on minority and low-income populations.

### 3.2.4 Protection of Children

Impacts on protection of children would be considered significant if an action had a disproportionately high and adverse effect on children. Executive Order (EO) 13045, Protection of Children from Environmental Health Risks and Safety Risks, requires each Federal agency "to identify and assess environmental health risks and safety risks that may disproportionately affect children" and "ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks." This EO was prompted by the recognition that children, still undergoing physiological growth and development, are more

sensitive to adverse environmental health and safety risks than adults. The potential for impacts on the health and safety of children is greater for projects located near residential areas.

The Proposed Action would not occur close to neighborhoods, as the project area borders warehouses and administration buildings. Part of this area borders a waterfront park used for concerts and events; using BMPs (Chapter 5) to limit speed on the roadways should protect children. The Proposed Action would not require additional demands on public services, such as schools or daycare facilities, during or after its activities. Construction and maintenance crews would stop work if children were observed approaching the project area and would safely guide them away from the site before resuming. Therefore, the Proposed Action would not pose a threat to the health of children in the project area, and discussion of the protection of children was eliminated from further consideration in this EA.

### 3.2.5 Roadways and Traffic

The Proposed Action area is located at 41 Calle Bonaire (Bonaire Street), a short side road along Route 123 in Ponce, Puerto Rico. An unpaved driveway on Calle Bonaire leads to CBP's Ponce Marine Unit. Construction-related activities would cause a temporary increase in local traffic from construction equipment and vehicles during the 7-month period. During this construction period, we anticipate that construction vehicles would make two trips per day as they enter and leave the project area. The short-term increase in local traffic would not be expected to adversely affect road and traffic conditions. Facility operations under the Proposed Action would not increase traffic as the project is intended to improve the existing facility, and major staffing increases are not expected. Under the No-Action Alternative, CBP would continue operating from the facility. Therefore, an analysis of the impacts on roadways and traffic was not carried forward in this EA.

### 3.2.6 Aesthetics and Visual Resources

All existing structures within the facility would be maintained, and the pier and boat ramp would be replaced with an improved pier and boat ramp. The Proposed Action area is closed to public access and used only by CBP personnel, so there is no impact to public enjoyment or appreciation of resources. Removal of the original concrete pier, temporary structure, and boat ramp would benefit the project location's aesthetics. No major effect on aesthetic and visual resources would be anticipated. Therefore, a detailed discussion of aesthetics and visual resources was eliminated from further consideration in this EA.

## 3.3 Geology and Soils

Geological resources consist of the Earth's surface and subsurface materials. Puerto Rico is a volcanic island that lies entirely within the Caribbean Plate. The North American Plate is to the north and the South American Plate to the south. Along the boundary at the northeast corner of the Caribbean and North American plates is the Puerto Rico Trench, the deepest part of the Atlantic Ocean at depths of up to 28,000 feet. The trench was created as the two plates slid past one another (USGS 2003).

Topography and physiography pertain to the general shape and arrangement of a land surface, including its height and the position of its features. Topographic features can be important determiners of successful construction as well as used to predict potential for effects from given

activities. For example, “steep slopes” is a topographic term; disturbing steep slopes by removing vegetation can result in erosion and sedimentation.

Soils, the unconsolidated materials overlying bedrock or other parent material, are typically described in terms of their complex type, slope, and physical characteristics. Differences among soil types regarding their structure, elasticity, strength, shrink-swell potential, and erosion potential affect their abilities to support certain applications and uses. The U.S. Department of Agriculture (USDA) performs soil mapping as part of its mission; soil maps exist for every county in the United States. When considered together, geology, topography, physiography, and soils critically influence water resources, habitat, wildlife success, and many more resources.

### 3.3.1 Affected Environment

#### 3.3.1.1 Geology

Puerto Rico is approximately 35 miles wide and 100 miles long (USGS 2003). The center of the island contains a mountain range with elevations of more than 3,000 feet above mean sea level. Tectonic activity in the Puerto Rico Trench is capable of producing earthquakes with a magnitude of greater than 8.0 and tsunamis. Puerto Rico is composed mainly of limestone sediments and volcanic and sedimentary rocks. The Ponce Marine Unit is located in a tertiary limestone—dominant area along the southern coast of Puerto Rico. The southern coastline can also be characterized by recent unconsolidated deposits, alluvial plains, sand dunes, and beach rock (Morelock et al. 2000).

#### 3.3.1.2 Topography and Physiography

The Ponce Marine Unit, located along the southern coast, is less than 10 feet above mean sea level (Rivera 1998). The project area has been built up by fill and armoring to its current elevation above sea level. Part of the project involves a boat ramp that would extend into shallow marine areas where sediments and biological structures (corals) are important parts of the physiography.

#### 3.3.1.3 Soils

Soils adjacent to and potentially underlying the project area are the Constancia-Jacaquas-San Anton association. These soils are nearly level, somewhat poorly drained to well drained, neutral to moderately alkaline, loamy and clayey soils that are deep or shallow to sand and gravel on the coast and river floodplains. The specific soil types include Constancia clay, tidal flats, and hydraquents. These soils have developed in a combination of topographic situations: floodplains, basin floors, fans, terraces, and valleys. The field work at the site indicates that the area is heavily filled and armored with no native soils at the surface.

### 3.3.2 Environmental Consequences

Adverse effects on geological or soil resources may occur when an activity directly or indirectly alters the geology or soil characteristics of a given site or requires the alteration of other areas to provide materials for the Proposed Action. Examples of adverse effects include destroying or damaging all or part of the resource (such as changing the slope or load-bearing characteristics at the site or at a remote site), altering characteristics of the resource (changing the site or a remote site so that it can no longer perform its normal function, such as prime farmland), and neglecting the resource that results in its deterioration.



**3.3.2.1 No-Action Alternative**

Under this alternative, existing conditions and operations at the Ponce Marine Unit would remain unchanged, and no construction activities would occur. No rock, gravel, or other materials would be required from a remote site. Therefore, geological and soil resources would not be affected.

**3.3.2.2 Proposed Action Alternative**

Short-term or long-term effects on geological or soil resources would be limited to the immediate areas associated with the removal of original piles, utility trenching, and boat ramp replacement. The site is almost completely armored by riprap at the shoreline and concrete throughout most of the remainder of the site. No dredging would occur. Limited excavation would occur, primarily to remove the existing boat ramp. Additional trenching would occur to place power and water supply cabling across the property to the proposed new pier. No new rock or soil materials would be required from a remote site. Aggregate would be a required component of the concrete used to replace the boat ramp, fill the pilings at the proposed pier, fabricate the precast concrete panels for the proposed pier, and cover the utilities trench across the property to contain the power and water supply lines for the proposed pier. The aggregate for these purposes is not a critical commodity and would be obtained from regularly used sources; it would not have an effect on geological or soil resources.

**3.4 Water Resources**

Water resources are typically described in terms of water use, water quality, groundwater, surface water, and the regulatory aspects of waters of the United States (WoUS). Groundwater, which flows beneath the Earth's surface and recharges surface water sources or is available for withdrawal, is stored in and moves throughout soil, sand, and rocks (i.e., aquifers). Surface water resources include lakes, rivers, streams, and wetlands. When considered together, these water resources are dependent on geology, topography, and soils and, in turn, critically influence habitat, wildlife success, endangered species, human behaviors, and many other resources.

Water use patterns in a region are tied to the supply of water, which in turn is dependent on rainfall, groundwater, and surface water availability. Changes in usage can drastically affect the total supply of water available for continued human activities as well as habitat.

Water quality affects the amount of water available for a given use, because the quality of water drives its availability for given uses. Land use practices can influence water quality by direct contamination from runoff or by contaminant release.

Water in a region exists as groundwater or surface water. These interconnected water sources depend on drainage features and hydrology, which recharge the aquifer that both provides water for extraction from wells and can flow into surface water in gaining streams or rivers. Evaluation of hydrology requires a study of the occurrence, distribution, and movement of water and its relationship with the environment. Many factors affect the hydrology of a region, including natural precipitation and evaporation rates and outside influences such as groundwater withdrawals. Groundwater is a subsurface hydrologic resource that can recharge, or be recharged by, surface water. It is used for drinking, irrigation, and industrial processes. Groundwater can typically be described in terms of its depth from the surface, aquifer or well capacity, water quality, recharge rate, and surrounding geologic formations.



The laws and regulations of the United States recognize certain water features as WoUS, which require specific analyses to ensure their protection. Projects cannot impair these waters' ability to attain their designated uses under the Clean Water Act (CWA) of 1972, 33 U.S.C. § 1251 et seq., the primary law governing water quality in the United States and its territories. Changes that affect the flow of water require coordination with the U.S. Army Corps of Engineers (USACE) Regulatory Branch. WoUS include recognized surface waters, wetlands, ephemeral streams, and other types of water that have a significant nexus to traditionally navigable waters.

The CWA provides for the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters. CWA Section 301(a) specifies that the discharge of any pollutant is unlawful unless it is in compliance with the act. Section 402 establishes the Federal limits (through the National Pollutant Discharge Elimination System) on the quantity of pollutants discharged into surface waters from point (e.g., a vessel) and nonpoint (e.g., stormwater runoff) sources. It emphasizes technology-based control strategies and requires dischargers to have permits to use public resources for waste discharge. The CWA also limits the amount of pollutants that may be discharged and requires wastewater to be treated with the best technology economically achievable, regardless of receiving water conditions.

The Coastal Zone Management Act of 1972, 16 U.S.C. § 1451 et seq., authorizes the National Coastal Zone Management Program, which comprehensively addresses the Nation's coastal issues through a voluntary partnership between the Government and coastal and Great Lakes states and territories. This program is administered at the Federal level by NOAA, Office for Coastal Management. Section 307 of the act requires that Federal actions having reasonably foreseeable effects on any coastal use (land or water) or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program. Federal actions include agency activities, license or permit activities, and financial assistance activities. Such agency activities must be consistent to the maximum extent practicable with the enforceable policies of a state coastal management program; license, permit, and financial assistance activities must be fully consistent.

### 3.4.1 Affected Environment

#### 3.4.1.1 Water Use

Most public drinking water used in the area of Ponce is withdrawn from the south coast aquifer or from surface water and provided by the Puerto Rico Aqueduct and Sewer Authority (PRASA) (USGS 2014). The water requirements were more than 4.48 million gallons per day (Mgal/d) in 2010, of which 1.14 Mgal/d were withdrawn from surface water and 3.34 Mgal/d from groundwater. Estimated water usage for non-PRASA-supplied water is only 0.2 Mgal/d, with 0.07 Mgal/d from surface water and 0.13 Mgal/d from groundwater (USGS 2014). Less than 1 percent of Puerto Rico depends on private wells or springs for household water needs. Water for irrigation is predominantly withdrawn from surface water features and characterized as the Juana Diaz Irrigation District.

The project area lies at the farthest south edge of any sources used for water supply. The coastal area of Ponce is among the lowest rainfall-receiving areas in Puerto Rico, with an annual mean precipitation rate of 35–40 inches (USFS 2009).

3.4.1.2 *Water Quality*

No impaired waters are listed for the Southern Puerto Rico Watershed within the Ponce Marine Unit project area (EPA 2018). Groundwater is not currently impaired, but further groundwater development in Ponce could be hindered by the potential water quality deterioration caused by brackish and saline groundwater intrusion, particularly in the coastal plain (USGS 2005).

3.4.1.3 *Groundwater and Surface Water*

There are two subsurface aquifers in Puerto Rico: the South Coast aquifer and the North Coast Limestone aquifer system. East of Ponce, the South Coast aquifer is composed of clay, silt, and sand deposited by flowing streams. It is the principal source of potable water for the towns of Santa Isabel; Coamo; Salinas; and parts of Ponce, Juana Díaz, and Guayama. The Ponce Marine Unit is not located directly within either of these aquifers (USGS 2016).

The Portugués River is approximately 2,000 feet west of the Ponce Marine Unit. The river flows from the steep mountain slopes southward to the Caribbean Sea. Prior to the construction of a dam completed in 2014, frequent flooding occurred in residential and urban areas after significant rainfall events (Water Technology 2016). The Caribbean Sea borders Puerto Rico on the western and southern sides of the island; the Atlantic Ocean borders Puerto Rico on the eastern and northern sides.

3.4.1.4 *Regulated Waters*

Although the area surrounding the Ponce Marine Unit is lowland coastal plain, the project area has historically been a filled shoreline. The site is shaped and protected by hardened surfaces, including concrete rubble riprap and a small area of poured concrete for the boat ramp, adjacent concrete pier, and adjoining water edges. Portions of the concrete and rock riprap along the shoreline were displaced as a result of Hurricane Maria (Lenz & Whalon 2018). The project is located within U.S. territorial waters near the northern limit of the Caribbean Sea, and the area associated with the boat ramp and original pier is contiguous with these waters (HDR 2016b). The USCG facility is entirely covered by buildings and concrete pavement.

According to the Waters Delineation letter report prepared by CBP (HDR 2016a), no hydrophytic vegetation, mangrove fringe, or individual mangrove shrubs were found along the shoreline for use in interpretation of a wetland delineation (Figure 3-1). The delineation of WoUS relied on the interpretation of mean high-water indicators, particularly water stains and algal growth, which were used to locate the landward limits of USACE's jurisdiction. The delineation of WoUS was overlaid on current aerial photography, as shown in Figure 3-2. A second mean high water delineation was conducted in July 2018 because of the disruption of the shoreline by Hurricane Maria (HDR 2018). This re-delineation revealed that the southwest site shoreline edge was reduced by the hurricane.

The U.S. Fish and Wildlife Service (USFWS) considers the waters just off the Ponce Marine Unit, where the pier construction would occur, to be deep-water estuarine and marine (USFWS 2018); see Figure 3-2.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



Sources: Imagery - DigitalGlobe (2010); Survey Area and Waters of the U.S. Delineation - HDR (2016).

Source: HDR 2016a.

*Figure 3-1. Delineation of WoUS*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



*Figure 3-2. Delineation of WoUS for the Ponce Marine Unit, Ponce, Puerto Rico*

3.4.1.5 *Coastal Zone Management Area*

The Puerto Rico Department of Natural and Environmental Resources administers the Coastal Zone Management Program for the island (Climate Adaptation Knowledge Exchange 2018). The designated coastal zone extends to 1,000 meters from the coastline and includes coastal natural systems, territorial waters, and the submerged lands beneath them. The Proposed Action would occur in the coastal zone management area; CBP would coordinate with the Puerto Rico Department of Natural and Environmental Resources regarding work within this area. Specific details regarding floodplains and hydrology would be discussed in the Puerto Rico OGP Environmental Permit application.

3.4.2 *Environmental Consequences*

Adverse effects on aquatic resources may occur when an activity directly or indirectly alters the water demand, quality, or characteristics of a given site or requires the alteration of other areas to provide materials for the Proposed Action. Examples of adverse effects include overuse of a scarce water supply either at the site or to provide materials for the action, destroying or damaging all or part of the resource (such as changing the slope, or a stream rerouting a surface water body or filling a wetland or other WoUS), altering any characteristic of the resource (changing the site or a remote site so that it can no longer perform its normal function such as WoUS), contaminating any WoUS, or neglecting the resource that results in its deterioration.

3.4.2.1 *No-Action Alternative*

Under this alternative, conditions and operations at the Ponce Marine Unit would remain unchanged, and no construction activities would occur. No water would be required from a remote site. Because the site is armored at the shoreline and paved, no erosion is reasonably expected that may change the characteristics of the marine environment or contaminate the water. Boats operated by CBP would continue from the Ponce Marine Unit facility and the risk of contamination due to mishap or during fueling operations would remain as is.

3.4.2.2 *Proposed Action Alternative*

Under the Proposed Action, short-term, minor, adverse effects would be expected during construction, but no long-term effects would be expected during continued operation. During construction, there would be temporary increased demand for water use, both at the site of the Proposed Action to wash equipment and work spaces and at a remote location to provide water to make the concrete used to construct the replacement boat ramp, fill the pilings at the proposed pier, fabricate the concrete panels for the proposed pier, and cover the utilities trench across the property to the proposed pier. Water quality would not be degraded at the site because adequate silt fences and typical construction sedimentation and erosion control devices would be employed, as required by the BMPs and described in a spill prevention control and countermeasure (SPCC) plan.

Issues related to WoUS would arise during the construction phase of the Proposed Action. Construction of the replacement boat ramp would occur at the water's edge and in water within the jurisdictional control of USACE. A coffer dam would be installed to enable water to be pumped from the boat ramp construction area. A short-term effect during construction is this dewatering. CBP would coordinate with USACE and has BMPs in place for this activity. In addition, the proposed pier would be constructed within WoUS designated as shallow or deepwater marine or estuarine.

### 3.5 Biological Resources

Biological resources include plants, animals, and the habitat (i.e., forests, wetlands, seagrasses, coral systems) in which they live. Protected resources include federally threatened and endangered, candidate, and proposed species; designated or proposed critical habitat; state-listed species; species of concern; and migratory bird species. Together, these resources form the ecological character of a given site. While the other discussed resources such as geology, soils, and water have a large influence on which biological resources can be present, it is the vegetation that helps decide which animal species can be present and how many individuals can be supported. These factors constitute habitat. Critical habitat is described by USFWS as necessary to support the special needs of protected species.

Vegetation resources include all plants found within the region of analysis. Vegetation analysis and descriptions were conducted using Bailey's multi-tiered classification of ecoregions contained in the U.S. Forest Service's *Descriptions of the Ecoregions of the United States* (USFS 1995). In addition, the U.S. Geological Survey's Gap Analysis Program Level 3 data and associated NatureServe descriptions of the ecological systems were used to describe the vegetation in the region of analysis (USGS 2018). Site visits and surveys were made and discussed in a report prepared by CBP (HDR 2016a).

The Migratory Bird Treaty Act (MBTA) implements a series of treaties into which the United States has entered with Canada, Mexico, Japan, and Russia for the conservation of migratory birds. USFWS has statutory authority and responsibility to enforce the MBTA, under which it is federally prohibited, unless permitted by regulations, to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport or cause to be transported, carry or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention... for the protection of migratory birds... or any part, nest, or egg of any such bird" (16 U.S.C. § 703). The Secretary of the Interior is authorized, subject to limitations, to allow exceptions to these regulations. If Federal actions are likely to negatively affect migratory bird populations, the Federal agency must consult with USFWS.

The Endangered Species Act of 1973, 16 U.S.C. § 1531 et seq. (ESA) establishes policy to protect and conserve threatened and endangered species and the habitat in which they are found and on which they depend. The ESA is administered by USFWS and NOAA Fisheries. Section 7 of the ESA requires Federal agencies to consult with USFWS, NOAA Fisheries, and the appropriate state agencies to determine whether a proposed action might affect listed or candidate species or designated critical habitat. Pursuant to the ESA, certain areas are designated as critical habitat for species listed under the ESA.

#### 3.5.1 Affected Environment

A biological survey was completed on August 1–3, 2016, to scan the project area for the presence of habitat, wildlife, and threatened and endangered species. During the survey, no native or natural habitat were identified in the Proposed Action area or on adjoining parcels to the east, west, and north. The study area appears to be part of the larger developed commercial and residential land uses associated with the old shoreline area of the City of Ponce (HDR 2016a).



A follow-up Biological Resources survey was completed in August 2018 to examine the area for potentially changed site conditions following the impacts of Hurricane Maria (HDR 2018). Updated findings from the second survey are discussed below in the corresponding sub-section.

#### *3.5.1.1 Vegetation*

An ecoregion contains geographically distinct environmental communities and conditions based on several tiers of classification. These include domains, divisions, and provinces. Domains are the largest geographic level of ecoregional classification and generally defined by climate. Domains are split into divisions, which are defined according to climate and vegetation. Divisions are subsequently split into provinces that are typically defined by their major plant formations. Because ecoregions are defined by their shared biotic and abiotic characteristics, they represent practical units on which to base conservation planning.

##### *3.5.1.1.1 Terrestrial Vegetation*

Most trees in Puerto Rico are tropical evergreen hardwoods. The southern coastal area is characterized as subtropical dry forest (USFS 2009) and, like most dry tropical and subtropical forests worldwide, has been highly altered by human interactions due in part to the favorable conditions for human habitation and industry. The Ponce area is highly altered, and the project area consists of mostly paved surfaces within an industrial area.

The shoreline at the Ponce Marine Unit is shaped and protected by hardened surfaces, including concrete rubble riprap and a small area of poured concrete for the boat ramp, adjacent dock, and adjoining water edges. Hurricane Maria removed portions of the concrete and rock riprap along the site shoreline, but minor fill placement was added in the uplands since the hurricane (Lenz & Whalon 2018). The trees and shrubs on and adjacent to the Ponce Marine Unit include ten *Portia* trees (*Thespesia populnea*), two lebbeck trees (*Albizia lebbeck*), and one *Ficus* sp. Most specimens are multi-trunk shrubs or small trees present along the eastern and southeastern site edges, with the exception of one lebbeck tree at the southwest property corner.

Groundcover is present on the upland fringe between the property fence and the concrete riprap that slopes to the water (see Figure 3-3). Predominate plant species on the upland fringe include buffelgrass (*Cenchrus ciliaris*) and guinea grass (*Panicum maximum*), along with limestone sandmat (*Chamaesyce blodgettii*), sensitive pea (*Chamaecrista nictitans*), rose natalgrass (*Melinis repens*), swollen fingergrass (*Chloris barbata*), and desert horsepurshlane (*Trianthema portulacastrum*) (HDR 2016a).



Source: HDR 2018.

*Figure 3-3. Southern and Western Shorelines of the Ponce Marine Unit*

The adjacent community park to the east, Parque Pasivo Enrique Gonzalez, supports landscape trees, including black olive (*Terminalia buceras*), coconut palm, and Australian pine (*Casuarina equisetifolia*), with a maintained grass and weed groundcover. The northern basin edge is formed by concrete stairs that descend from the park into the water to the basin bottom (see Figure 3-4) (HDR 2016a).



Source: HDR 2016a.

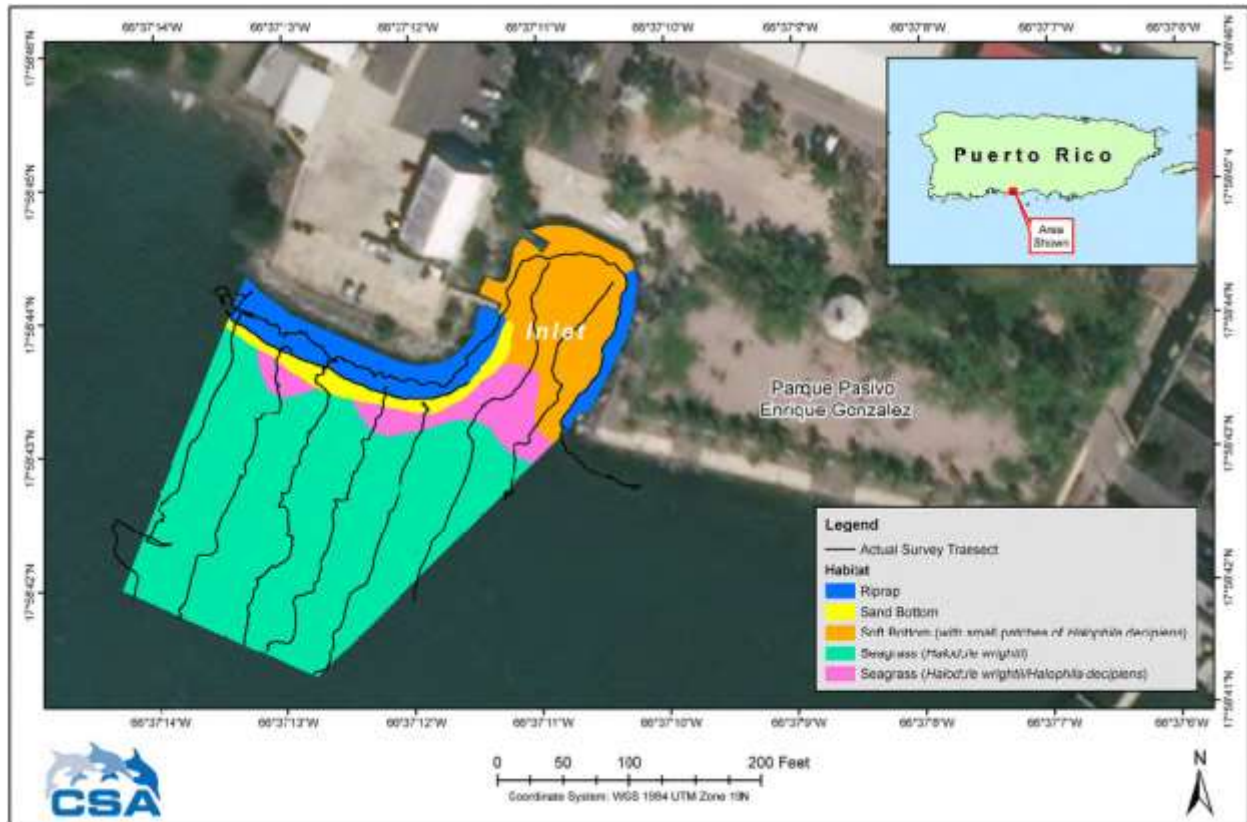
*Figure 3-4. Park Adjacent to the Basin*

#### 3.5.1.1.2 Aquatic Vegetation

A survey of biological resources and benthic habitat at the Ponce Marine Unit basin was conducted in August 2016. Three habitat types were identified during the survey: soft bottom, seagrass, and riprap (see Figure 3-5). The basin is relatively disturbed and predominately soft-bottom habitat, with loose, silty clays and minimal sand. The basin is adjacent to a public park and fishing area (Parque Pasivo Enrique Gonzalez) and contains small areas of litter and debris (see Figure 3-5) (HDR 2016a).

The area south of the basin is characterized by less silty sediments with fine sand waves adjacent to marginal seagrass habitat (*Halodule wrightii*) blades. Further south, the seagrass habitat is more prominent, including *Halodule wrightii* and *Halophila decipiens*. Approximately 60 percent of the surveyed area was covered with *Halodule wrightii* seagrass. Overall, the seagrass habitat appeared healthy, with no appreciable harmful growth (HDR 2016b). While the distribution of seagrass was similar between the 2016 and 2018 surveys, the average percent cover of *Halodule wrightii* was slightly lower in 2018 and the distribution of *Halophila decipiens* was more closely confined to the shore in 2018 than in 2016 (HDR 2018).

The third habitat type, riprap, is found along the southern boundary of the Ponce Marine Unit facility's fence line, southwest of the basin and along the eastern edge of the basin. The riprap is composed of various-sized boulders and concrete pieces. The riprap embankment slopes down to the water line, with submerged sections extending up to more than 30 feet from water level (HDR 2016b).



Source: HDR 2018.

Figure 3-5. Habitat Types Mapped during Biological Survey

### 3.5.1.2 Aquatic Wildlife and Terrestrial Wildlife

Because WoUS, surface waters, and traditionally navigable waters (but no wetlands) are known to exist in the area of this project, surveys were performed for terrestrial and aquatic wildlife. Parts of the project area are classified as marine or estuarine deepwater; therefore, coral is discussed. Corals are especially imperiled due to climate change and afforded special protections by Federal and Puerto Rico regulations. The Coral Reef Conservation Act of 2000 protects coral reefs within refuges and affords certain protections to other coral reefs outside protected areas under Federal law, and Puerto Rico protects corals and coral reefs under No. 147 of the Act for the Protection, Conservation and Management of the Coral Reefs in Puerto Rico.

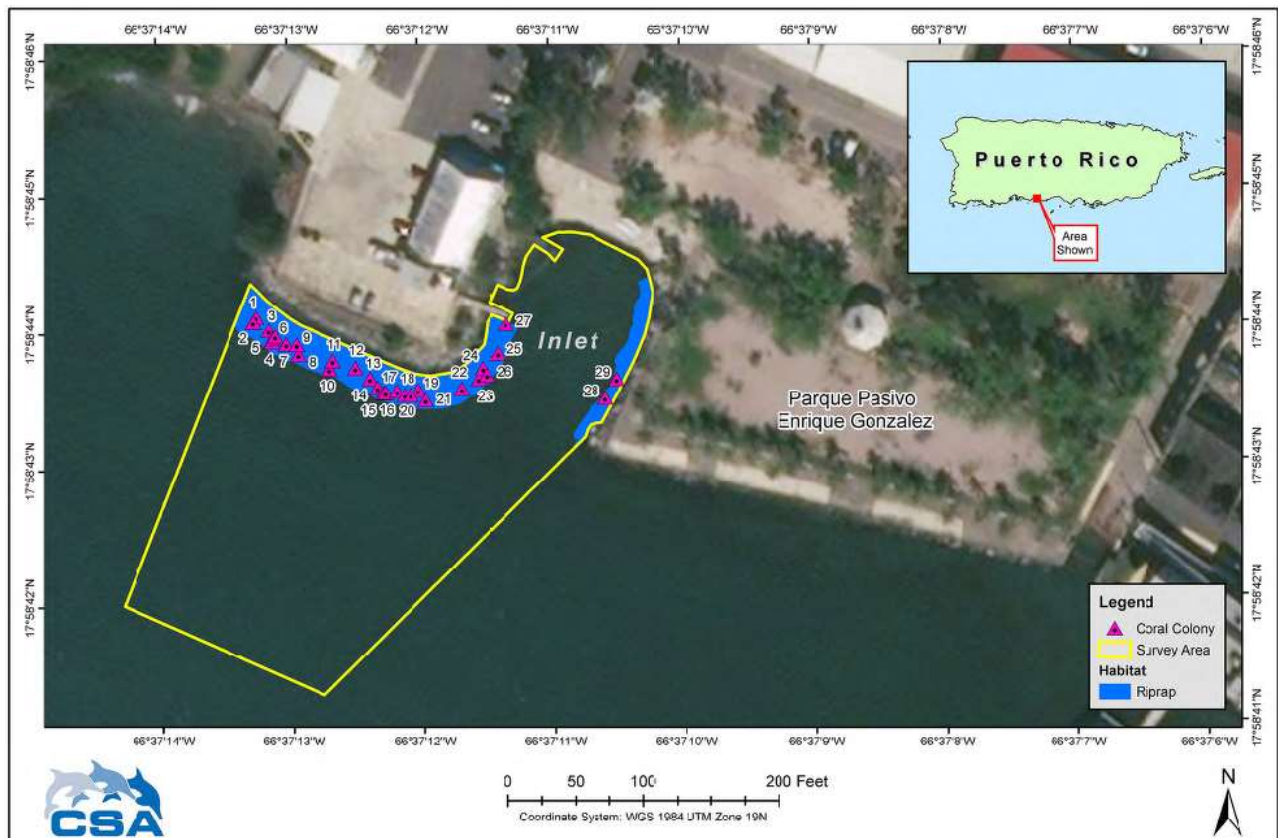
#### 3.5.1.2.1 Aquatic Wildlife

Twenty-two macroinvertebrate species were identified during the 2016 survey, with the majority (18 species) occurring in the riprap habitat. Species commonly observed in the riprap habitat area were rock boring sea urchin (*Echinometra lacunter*), mat zoanthid (*Zoanthus pulchellus*), and two species of anemones (*Actinoporus elegans* and *Bartholomea annulata*), conspicuous spiny lobster (*Panulirus argus*), and long-spine sea urchin (*Diadema antillarum*). Ten macroinvertebrate taxa were recorded in the seagrass and sand/mud substrate types, including several red cushion sea stars (*Oreaster reticulatus*), elegant anemones, cerith snails (*Cerithium* sp.), and two corallimorphs. Non-coral invertebrate richness was similar between the 2016 and 2018 surveys. The 2018 survey identified twenty-four macroinvertebrate species, most of which were again observed within the riprap habitat (HDR 2018).



Forty-two species of fish were identified during the 2016 survey. The majority of these species were observed near the submerged riprap habitat along the shoreline, as this area provided shelter and food sources. Fewer species were observed in the soft-bottom and seagrass habitat. The most commonly seen fish were the ocean surgeonfish (*Acanthurus tractus*), snapper, grunt, and a variety of wrasse and parrotfish (HDR 2016b). The 2018 survey identified forty-one fish species; twenty-five of these species occurred during both the 2016 and 2018 surveys (HDR 2018).

Also within the riprap habitat area were coral colonies attached to boulders or hard substrate. Fifty-four hard-coral and three soft-coral colonies were found across 25 locations within the survey area (see Figure 3-6). The hard-coral colonies primarily consisted of two species, *Siderastrea sidereal* and *Solenastrea bournoni*. The three soft-coral colonies were *Pseudopterogorgia bipinnata*. Fifty hard-coral colonies were identified during the 2018 survey. The majority of the hard-corals were described as relatively healthy during both surveys, but more corals showed small areas of damaged tissue with fouling algae growth during the 2018 survey (HDR 2018). The proposed location for the pier is close to one colony of hard coral (labeled as coral #12 in Figure 3-6). Five of the hard-coral colonies were described as detached, which may have resulted from strong wave activity during the hurricane. Two of the soft-coral colonies identified during the 2016 survey were dead and the third colony was missing during the 2018 survey (HDR 2018).



Source: HDR 2018.

*Figure 3-6. Coral Presence near the Proposed Action Alternative Structures*

#### 3.5.1.2.2 Terrestrial Wildlife

Terrestrial wildlife resources include native and naturalized terrestrial animals and the habitat in which they exist. Species addressed in this section include those not listed as federally threatened or endangered.

The Ponce Marine Unit's grounds were surveyed August 1–3, 2016. The area was surveyed by walking meandering transects around the Ponce Marine Unit's perimeter and adjoining parcels to the east and west, including adjacent streets to the north to identify terrestrial habitat at the site and document the presence of wildlife. No native or natural habitats were present at the site or on adjoining parcels to the east, west, and north. The study area appears to be part of the larger developed commercial and residential land uses associated with the old shoreline area of the City of Ponce. Green iguanas (*Iguana iguana*) were present along the southern shoreline, and Puerto Rican crested anoles (*Anolis cristatellus cristatellus*) were present in the upland vegetation and trees at the southwest corner and western side of the site (HDR 2016a).

#### 3.5.1.3 Migratory Bird Treaty Act

In 2008, USFWS published Birds of Conservation Concern, a listing that established several bird conservation regions and the birds found within those regions. A listing of birds expected to be found in the U.S. Caribbean Islands (Puerto Rico and the U.S. Virgin Islands) was also established (USFWS 2008). MBTA species lists are generally kept up to date by USFWS at the Information for Planning and Conservation (IPaC) website, although a current list of MBTA birds is not available for Puerto Rico at this time (USFWS 2018). Table 3-1 lists species (common name and scientific name) provided by USFWS in 2008 that are expected to be found in Puerto Rico.

During the 2016 survey, a variety of birds were observed flying over or near the project area, including the little blue heron (*Egretta caerulea*), green heron (*Butorides virescens*), brown pelican (*Pelecanus occidentalis*), sandwich tern (*Thalasseus sandvicensis*), magnificent frigatebird (*Fregata magnificens*), bank swallow (*Riparia riparia*), and black swift (*Cypseloides niger*). In addition, Monk parakeets (*Myiopsitta monachus*) had a communal nest in the tallest coconut palm (*Cocos nucifera*) just outside the property front gate at the northeast corner of the site (HDR 2016a).

Migratory birds protected under the MBTA identified in the park during the 2016 survey included white-crowned pigeon (*Patagioenas leucocephala*), greater Antillean grackle (*Quiscalus niger*), and gray kingbird (*Tyrannus dominicensis*). The rock dove (*Columba livia*) and house sparrow (*Passer domesticus*) were also observed (HDR 2016a).

No active bird nests or nesting behavior of MBTA-protected species was observed during the 2016 survey. No breeding activity was observed for any of the avian species present. CBP would conduct additional nesting surveys in advance of project execution.



Table 3-1. MBTA Species with the Potential to Occur in Puerto Rico

Common Name	Scientific Name
West Indian Whistling Duck	<i>Dendrocygna arborea</i>
White-Cheeked Pintail	<i>Anas bahamensis</i>
Masked Duck; Ruddy Duck (jamaicensis ssp.)	<i>Nomonyx dominicus</i>
Audubon's Shearwater	<i>Puffinus lherminieri</i>
Masked Booby	<i>Sula dactylatra</i>
Brown Booby	<i>Sula leucogaster</i>
Red-Footed Booby	<i>Sula</i>
Magnificent Frigatebird	<i>Fregata magnificens</i>
Least Bittern	<i>Ixobrychus exilis</i>
American Flamingo	<i>Phoenicopterus ruber</i>
Black Rail	<i>Laterallus jamaicensis</i>
Yellow-Breasted Cuckoo	<i>Hapalocrex flaviventer</i>
Caribbean Coot	<i>Fulica caribaea</i>
Limpkin	<i>Aramus guarauna</i>
Snowy Plover <sup>(c)</sup>	<i>Charadrius nivosus</i>
Wilson's Plover	<i>Charadrius wilsonia</i>
American Oystercatcher	<i>Haematopus palliatus</i>
Red Knot (rufa ssp.) <sup>(a), (nb)</sup>	<i>Calidris canutus</i>
Semipalmated Sandpiper (Eastern) <sup>(nb)</sup>	<i>Calidris pusilla</i>
White-Crowned Pigeon	<i>Patagioenas leucocephala</i>
Bridled Quail-Dove	<i>Geotrygon mystacea</i>
Antillean Mango <sup>(d)</sup>	<i>Anthracothorax dominicus</i>
Loggerhead Kingbird	<i>Tyrannus caudifasciatus</i>
Puerto Rican Vireo	<i>Vireo latimeri</i>
Elfin Woods Warbler <sup>(a)</sup>	<i>Setophaga angelae</i>
Greater Antillean Oriole	<i>Icterus portoricensis</i>

Notes: (a) ESA candidate, (c) non-listed subspecies or population of threatened or endangered species, (d) MBTA protection uncertain or lacking, (nb) non-breeding in this bird conservation region.

Source: USFWS 2008.

#### 3.5.1.4 Threatened and Endangered Species

CBP is currently conducting informal ESA Section 7 consultation with NOAA Fisheries and USFWS to consider impacts on threatened and endangered species that have the potential to occur in the project area. CBP consulted with the NOAA Fisheries Habitat Conservation Division, NOAA Fisheries Caribbean Field Office, and USFWS Caribbean Ecological Services Field Office on January 26, 2017, in compliance with the ESA (see Appendix A). USFWS responded on March 2, 2017, stating that the project lies within the habitat of the endangered Antillean manatee (*Trichechus manatus manatus*), a sub-species of the West Indian manatee (*Trichechus manatus*). USFWS provided several recommendations to be implemented during the project and included in the project's permit conditions, but concluded the Proposed Action is not likely to adversely affect any federally listed species within their jurisdiction.

In addition to the consultation, elemental occurrence data from NatureServe were used to determine the presence of species within the region of analysis. NatureServe defines an elemental occurrence as an area of land or water wherein a species or natural community is or was present and has conservation value. These occurrence data require that a species is in appropriate habitat,

at the appropriate time of the year, and is naturally occurring (NatureServe 2013). This section presents those federally listed species known to occur or that have the potential to occur within the region of analysis.

Federally threatened or endangered species that have the potential to occur in the project area, based on the USFWS IPaC website, are presented in Table 3-2. None of the listed species or suitable habitat for these species was observed in the survey area (HDR 2016a, HDR 2016b, HDR 2018).

The hawksbill sea turtle (*Eretmochelys imbricata*) and West Indian manatee (*Trichechus manatus*) could use the nearshore areas adjacent to the site, including seagrass meadows and submerged riprap shoreline for foraging. However, sea turtles are not expected to nest on rocky shorelines (HDR 2016a, HDR 2016b).

*Table 3-2. Federally Threatened or Endangered Species Listed by USFWS as Potentially Occurring at the Ponce Marine Unit, Puerto Rico*

Common Name	Scientific Name	Federal Status	Observed during Survey?
<b>Reptiles</b>			
Puerto Rican Boa	<i>Epicrates inornatus</i>	Endangered	No
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	Endangered	No
<b>Mammals</b>			
West Indian Manatee	<i>Trichechus manatus</i>	Endangered	No
<b>Birds</b>			
Puerto Rican Broad-Winged Hawk	<i>Buteo platypterus brunnescens</i>	Endangered	No
Puerto Rican Nightjar	<i>Caprimulgus noctitherus</i>	Endangered	No
Puerto Rican Plain Pigeon	<i>Columba inornata wetmorei</i>	Endangered	No
Puerto Rican Sharp-Shinned Hawk	<i>Accipiter striatus venator</i>	Endangered	No
Roseate Tern	<i>Sterna dougallii</i>	Threatened	No
Yellow-Shouldered Blackbird	<i>Agelaius xanthomus</i>	Endangered	No
<b>Ferns and Allies</b>			
Cordillera Maiden Fern	<i>Thelypteris inabonensis</i>	Endangered	No
Elfin Tree Fern	<i>Cyathea dryopteroides</i>	Endangered	No
no common name	<i>Elaphoglossum serpens</i>	Endangered	No
<b>Flowering Plants</b>			
Bariaco	<i>Trichilia triacantha</i>	Endangered	No
Cook's Holly	<i>Ilex cookii</i>	Endangered	No
Higo Chumbo	<i>Harrisia portoricensis</i>	Threatened	No
Palo de Nigua	<i>Cornutia obovata</i>	Endangered	No

### 3.5.2 Environmental Consequences

Adverse effects on biological resources may occur when an activity directly or indirectly alters habitat or results in take of an organism with special protections, such as marine mammals, endangered corals, or species of birds protected by the MBTA. Examples of adverse effects include destroying or damaging all or part of the resource or habitat for the resource, altering any characteristic of the resource, interrupting breeding activities, or causing the death or wounding of a protected species.

#### 3.5.2.1 No-Action Alternative

Under this alternative, conditions and operations at the Ponce Marine Unit would remain unchanged, and no construction activities would occur. Therefore, no effects are expected for vegetation, terrestrial or aquatic wildlife, MBTA species, corals, or ESA-protected species.

#### 3.5.2.2 Proposed Action Alternative

As the site is highly disturbed, it contains little vegetation or habitat for terrestrial wildlife or MBTA-protected species. No species protected by the ESA or critical habitat for ESA species were identified as potentially present during literature searches or as actually present during terrestrial and aquatic site surveys. However, wildlife in adjacent areas may be temporarily displaced during construction activities due to noise disturbances and increased human activity. BMPs would be employed during construction activities to limit the noise disturbances to biological species in the area. Through consultation, USFWS concluded that the Proposed Action is not likely to adversely affect any federally listed species within their jurisdiction.

A series of transects were surveyed for the presence of corals and identified in the area where the pier would be located under the Proposed Action Alternative. Hard coral colonies were identified and observed during the 2018 survey and primarily consist of two species, *Siderastrea sidereal* and *Solenastrea bournoni*. No soft corals were identified during the 2018 survey. Figure 3-6 shows that the proposed location for the pier is close to a colony of hard coral. No other coral colonies are close to the proposed pier or berthing areas.

Corals enjoy a symbiotic relationship with algae and require sunlight to thrive. Shadows from the proposed pier would not affect the close coral colonies, with the possible exception of the single colony identified. In-water surveys would be conducted prior to the onset of this construction to ensure no colonies would be affected. CBP has determined that there is the potential for long-term minor adverse impacts on corals.

### 3.6 Cultural, Historical, and Archaeological Resources

“Cultural resources” is a broad term that encompasses resources defined in several Federal laws and EOs, including the National Historic Preservation Act (NHPA), the Archaeological and Historic Preservation Act (AHPA), and the Archaeological Resources Protection Act (ARPA). The NHPA focuses on the preservation of a wide range of historical and archaeological cultural resources that may include buildings, structures, objects, or sites. Resources deemed eligible are added to the National Register of Historic Places (NRHP) and are thus protected by the NHPA.

To be listed as eligible for the NRHP, a cultural resource must possess one of these four criteria (36 CFR § 60.4):

1. The resource is associated with events that have made a significant contribution to the broad patterns of our history.
2. The resource is associated with the lives of persons significant in our past.
3. The resource embodies the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction.
4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

Archaeological resources are defined as material remains of human life or activities that are at least 100 years old and capable of providing insight into past human behavior and cultural adaptation (40 CFR § 7.3). Resources that align with this definition are eligible for inclusion in the NRHP. More recent resources may warrant protection if they are deemed to be of high importance or have the potential to gain significance.

### 3.6.1 Affected Environment

The area of potential effect (APE) for visual impacts on historic resources includes a 1-mile radius around the project area. The APE for direct impacts on archaeological resources includes 1.05 acres on land and 1.6 acres in water, encompassing the area where construction would occur. The cultural, historical, and archaeological resources of the 1-mile radius APE were evaluated through a cultural resources inventory and a Phase 1B survey. The objective of the survey was to identify and evaluate the eligibility of cultural resources at this facility for the NRHP. The cultural resources survey involved a pedestrian walkover with shovel testing by an archaeologist and an NRHP evaluation of all buildings and structures at the facility (HDR 2013).

The cultural resources inventory, conducted at the Oficina Estatal de Conservación Histórica (OECH)—the Puerto Rico State Historic Preservation Office in San Juan, Puerto Rico—revealed no previously listed archaeological sites within a 1-mile radius of the facility (HDR 2013). Two unnumbered underwater resources were listed just off the coast from the project site, approximately 1,125 feet and 1 mile to the southeast, but no other information could be found regarding these listings (HDR 2013). A NRHP-listed U.S. Customs House, built in 1841, is located across Calle Bonaire and is a separate CBP-owned facility.

The ground survey revealed that the facility has been “heavily impacted by construction” and the presence of undisturbed ground surface is nonexistent (HDR 2013). The majority of the facility’s ground surface is disturbed, with the exception of a narrow strip of landscaping along the northern half of the eastern perimeter and built-up sand dunes behind the retaining wall in the southwest corner. Two soil tests were excavated in these locations.

Four buildings and seven structures were surveyed at the Ponce Marine Unit. One building and one structure date between 1952 and 1958, the timing of the first USCG establishment in Ponce, Puerto Rico. The remaining buildings were constructed just prior to or after 1998. None of the

buildings or structures assessed is eligible for NRHP listing, as the landscaping and siting of the facility is not significant, and no other historic or cultural landscapes were found (HDR 2013).

CBP consulted with OECH on April 28, 2017, in compliance with Section 106 of the NHPA and 36 CFR Part 800 (see Appendix A). OECH responded on May 10, 2017, requesting that an underwater archeological survey of the archaeological resources APE be conducted to determine the presence of archaeological material remains. The Phase I maritime survey, conducted by an outside contractor, SEARCH, was completed in July 2017 (SEARCH 2017). SEARCH conducted background research and a remote-sensing survey, which included the collection of magnetic data and acoustic imagery of the 0.6 acres of water within the APE. The investigation did not identify potential submerged cultural resources; therefore, cultural resource clearance for this project is recommended (SEARCH 2017).

CBP delayed the submittal of the Phase I maritime survey findings to OECH until March 13, 2018, due to disruption in operations caused by Hurricane Maria, which struck the island of Puerto Rico on September 20, 2017. Consultation with OECH was completed on April 5, 2018, with OECH concluding no adverse effect to archaeological resources.

### 3.6.2 Environmental Consequences

Adverse effects on cultural, historical, or archaeological resources may occur when an activity “directly or indirectly alters characteristics of a historic property that qualify it for inclusion” in the NRHP (36 CFR § 800.5). Examples of adverse effects include destroying or damaging all or part of the resource; altering any characteristic of the resource; relocating the property; changing the use or physical features of a property’s setting; neglecting the resource that results in its deterioration; or transferring, leasing, or selling the property out of Federal ownership without adequate protections.

#### 3.6.2.1 No-Action Alternative

Under this alternative, conditions and operations at the Ponce Marine Unit would remain unchanged, and no construction activities would occur. Therefore, no cultural, historical, or archaeological resources would be affected.

#### 3.6.2.2 Proposed Action Alternative

No adverse impacts on archaeological or historical resources would be expected under the Proposed Action. Cultural, historical, and archaeological resources within the APE were assessed through a Phase IB survey and Phase I maritime survey. The Phase 1B survey concluded that no surface or subsurface archaeological sites exist in the proposed project area. The soil tests concluded that because it is likely the area was modified prior to construction and paving, the potential for buried resources is minimal. The project-specific study concluded that the potential for intact cultural resources within the proposed project area is low, and no historic buildings or structures are located within the proposed project area. The Phase I maritime survey found no presence of potential submerged cultural resources. Therefore, the Proposed Action is not likely to adversely affect the surrounding historic district, including any cultural, historical, or archaeological resources. In the event that any historical resources are discovered during construction, all work would cease, the local police department would be immediately notified, and CBP would contact OECH.



### 3.7 Air Quality

The Clean Air Act (CAA), last amended in 1990, grants the U.S. Environmental Protection Agency (EPA) the authority to regulate existing and new sources of emissions through set limits, stringent control technology, and permitting requirements for new sources (EPA 2018b). Although the CAA is primarily administered at the state and local levels, EPA established National Ambient Air Quality Standards (NAAQS) for the six criteria air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM). The NAAQS is split into primary standards, which provide public health protection (especially for the protection of asthmatics, children, and the elderly) and secondary standards, which provide public welfare protection, including against decreased visibility and damage to animals, crops, vegetation, and buildings (EPA 2016a). The NAAQS is shown in Table 3-3.

*Table 3-3. National Ambient Air Quality Standards*

Pollutant		Primary/Seco ndary	Averaging Time	Level	Form
Carbon monoxide		Primary	8 hours	9 parts per million (ppm)	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead		Primary and secondary	Rolling 3-month average	0.5 micrograms per cubic meter (µg/m³)	Not to be exceeded
Nitrogen dioxide		Primary	1 hour	100 parts per billion (ppb)	98th percentile, averaged over 3 years
		Primary and secondary	1 year	53 ppb	Annual mean
Ozone		Primary and secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Sulfur dioxide		Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year
Particle pollution	PM <sub>2.5</sub>	Primary	1 year	12.0 µg/m³	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m³	Annual mean, averaged over 3 years
		Primary and secondary	24 hours	35 µg/m³	98th percentile, averaged over 3 years
	PM <sub>10</sub>	Primary and secondary	24 hours	150 µg/m³	Not to be exceeded more than once per year on average over 3 years

Source: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>, as of December 20, 2016.

Areas that do not meet NAAQS are called nonattainment areas, which are regulated by the General Conformity Rule, under 40 CFR Parts 51 and 93. The General Conformity Rule requires that Federal agencies work with state, tribal, and local governments in nonattainment areas to ensure that proposed Federal actions conform to state, tribal, and local air quality plans. If the Proposed Action would exceed established limits, the agency must implement mitigation measures.

Regarding emissions from marine vessels, the EPA published the gasoline marine final rule in 1996 that established emission standards for spark-ignition gasoline marine engines (EPA 1996a). This rule applies to outboard and gasoline engines used in personal watercraft and jet boat applications; it focuses on emissions of hydrocarbons, a greenhouse gas and carcinogen. The final rule requires marine vessel manufacturers to use cleaner technology in all vessels manufactured after 1998 to meet EPA standards (40 CFR Part 91).

### 3.7.1 Affected Environment

There is only one non-attainment area in Puerto Rico, in the municipality of Arecibo, located approximately 50 miles north of Ponce, on the northern shore of the island (EPA 2018a). Arecibo is in nonattainment with the 2008 standards for lead. The proposed project area in Ponce is in attainment for all NAAQS. Therefore, a general air conformity analysis under 40 CFR Parts 51 and 93 is not required for this project.

Puerto Rico's Environmental Quality Board (EQB) monitors air quality through several stations throughout the island. There is one monitoring station in the municipality of Ponce, Site ID 72-113-0004, which measures CO concentrations. It is located approximately 3 miles to the northwest of the project site. The annual CO 8-hour max at this station for 2011 through 2016 ranged from 0.8 ppm to 4.4 ppm (EPA 2017a).

### 3.7.2 Environmental Consequences

Impacts associated with air quality would be considered significant if conditions resulting from construction or operation resulted in the violation of Federal, state, or local standards and regulations. The air quality impact analysis is based on estimates of emissions from the combustion of fossil fuels as part of construction and operational activities. It is assumed that construction would take place during a 7-month period, for 8 hours each day, 5 days a week.

Operational emissions would occur from the use of the pier and boat ramp, including CBP marine vessels and ground vehicles that would service the dock. With the intent to replace the original concrete pier, the temporary structure, and boat ramp to improve safety and functionality, the Proposed Action would not result in increases in operational emissions. Therefore, the analysis focuses only on construction activities required to replace the original pier and boat ramp.

#### 3.7.2.1 No-Action Alternative

Under this alternative, no construction activities would occur at the proposed project site. In addition, the type and intensity of operations and the emissions associated with the use of vehicles and marine vessels at the Ponce Marine Unit would remain the same. Therefore, no impacts on ambient air quality under the No-Action Alternative would be expected.

#### 3.7.2.2 Proposed Action Alternative

Under the Proposed Action, there would be short-term, temporary, minor adverse impacts on local air quality due to emissions from the equipment used during project construction. Air emissions were calculated using the method described in EPA's AP-42 document and only for NAAQS—nitrogen oxide (NO<sub>x</sub>), CO, sulfur oxide (SO<sub>x</sub>), PM<sub>10</sub>—and greenhouse gases (specifically carbon dioxide [CO<sub>2</sub>]) with known emission factors (EPA 1996b). Table 3-4 estimates the emissions under the Proposed Action for pollutants with emissions factors listed in AP-42 (EPA 1996b).

Construction activities associated with the Proposed Action were separated into pier and ramp removal and pier and ramp construction.

*Table 3-4. Estimated Emissions Associated with the Proposed Action*

Pollutant		Emissions (tons/year)
NAAQS	NO <sub>x</sub>	19.52
	CO	4.21
	SO <sub>x</sub>	1.29
	PM <sub>10</sub>	1.38
	sum	<b>26.40</b>
Greenhouse gases	CO <sub>2</sub>	723.96

Puerto Rico's EQB follows EPA's definition of a major stationary source, a facility or source with the potential to emit 100 tons per year or more of any air pollutant, except greenhouse gases (EQB 1995; 42 U.S.C. § 7401 et seq.). Emissions would be substantial if they exceed this threshold. Table 3-4 demonstrates that the potential air emissions associated with the Proposed Action would not exceed pollutant thresholds as established by EPA. Greenhouse gases and air pollutants would be emitted during construction activities as a result of burning fossil fuels used by construction equipment (e.g., impact hammer, boat emissions, and crane). Construction activities for the Proposed Action would likely require electrical tools, which contribute significantly to emissions. The use of tugboats to tow barges during the removal of the original pier and temporary structure and construction of the new pier are also included in the air emissions calculations.

Construction activities are expected to be minimal and temporary (lasting 7 months), and no additional long-term emissions would be expected. CBP would follow construction BMPs outlined in Section 5.6 to minimize impacts from construction equipment emissions and dust particles. In addition, minor emissions from the operation of the Ponce Marine Unit and associated vehicles and marine vessels would continue as currently operated. CBP intends to replace two Midnight Express vessels with two SAFE 410 Apostle vessels. Although slightly larger in size, the SAFE 410 Apostle vessels have the same engine size as the Midnight Express vessels; both types of vessels are powered by four Mercury Verado outboard engines, which generate a maximum of 300 horsepower each (CBP 2016; HST 2018). As CBP is currently operating at the Ponce Marine Unit and no increase in emissions from the new Apostle vessels would be expected, no impact on air quality would be expected as a result of operations associated with the Proposed Action.

### **3.8 Noise**

Sound is defined as a particular auditory effect produced by a given source. Noise is defined as any undesirable sound that interferes with communication, is strong enough to damage hearing, or is otherwise bothersome. Noise can be intermittent or continuous and include any number of sources and frequencies. Major sources of noise include transportation vehicles and equipment, machinery, and appliances (EPA 1972). Human response to increased sound levels varies according to the source type, features of the sound source, distance between the source and receptor, receptor sensitivity, and time of day. Affected receptors can be specific (i.e., churches, schools, hospitals) or broad areas (i.e., nature preserves or designated districts).

### 3.8.1 Noise Metrics

Although human response to noise varies, measurements can be calculated with instruments that record instantaneous sound levels in decibels. A-weighted decibels (dBA) characterize sound levels that can be sensed by the human ear. “A-weighted” denotes the adjustment of the frequency range to what the average human ear can sense when experiencing an audible event. The threshold of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (EPA 1981). Table 3-5 compares common sounds and shows how they rank in terms of effects on hearing.

*Table 3-5. Sound Levels and Human Response*

Noise Level (dBA)	Common Sounds	Effect
10	Just audible	Negligible
30	Soft whisper (15 feet)	Very quiet
50	Light auto traffic (100 feet)	Quiet
60	Air conditioning unit (20 feet)	Intrusive
70	Noisy restaurant or freeway traffic	Telephone use difficult
80	Alarm clock (2 feet)	Annoying
90	Heavy truck (50 feet) or city traffic	Very annoying; hearing damage (8 hours)
100	Garbage truck	Very annoying
110	Pile drivers	Strained vocal effort
120	Jet takeoff (200 feet) or auto horn (3 feet)	Maximum vocal effort
140	Carrier deck jet operation	Painfully loud

Source: EPA 1981b.

Maintenance and repair work can cause an increase in sound that is well above the ambient level. A variety of sounds are emitted from loaders, trucks, saws, and other work equipment. Table 3-6 lists noise levels associated with common types of equipment (EPA 1971).

*Table 3-6. Predicted Noise Levels for Maintenance and Repair Equipment*

Equipment	Predicted Noise Level at 50 Feet (dBA)
Bulldozer	80
Grader	0–93
Truck	83–94
Roller	73–75
Backhoe	72–93
Jackhammer	81–98
Concrete mixer	74–88
Welding generator	71–82
Paver	86–88

Source: EPA 1971.

### 3.8.2 Noise Regulations

Puerto Rico's EQB regulates noise control through the Regulation for the Control of Noise Pollution, last amended in 2011 (EQB 2011). These regulations define four receptor zones classified via frequent activities (residential, commercial, industrial, etc.) and establish standards and requirements for noise control in each zone (EQB 2011). Zone I encompasses areas where humans may live and noise can interfere with the enjoyment of such property (e.g., residences, hotels, apartments, campsites, orphanages). Zone II comprises areas where interpersonal communication is achieved by speech, with which noise levels can interfere (e.g., restaurants, gas stations, funeral parlors, theaters, stadiums, churches). Zone III contains areas where people stay for long periods of time engaged in activities such that higher noise levels are anticipated (e.g., warehouses, docks, refineries, farms). Zone IV is the quiet zone and a designated area where a need may exist for exceptional quietness (e.g., hospitals, clinics, courts of justice). Table 3-7 provides noise limits for sound that crosses property boundaries of the source site, which will be measured at or within the proper receiving zone.

*Table 3-7. Noise Level Limits (dBA)*

Emitting Source	Receiving Zones							
	Zone I (Residential)		Zone II (Commercial)		Zone III (Industrial)		Zone IV (Quiet Zone)	
	Day	Night	Day	Night	Day	Night	Day	Night
Zone I (Residential)	60	50	65	55	70	60	55	50
Zone II (Commercial)	65	50	70	60	75	65	55	50
Zone III (Industrial)	65	50	70	65	75	75	55	50
Zone IV (Quiet Zone)	65	50	70	65	75	75	55	50

Note: Day represents the time period from 7:00 a.m. to 10:00 p.m.; night represents the time period from 10:01 p.m. to 6:59 a.m.

Source: EQB Regulation for the Control of Noise Pollution (EQB 2011).

### 3.8.3 Affected Environment

The proposed project area is located in the wharf of Playa de Ponce and surrounded by warehouses and administrative buildings, with a waterfront park and parking area directly to the east. In addition to the temporary structure and boat ramp at the Ponce Marine Unit, there are several piers along the southern coast of Puerto Rico within 1 mile of the proposed project area. The proposed project area is located in Zone III, the industrial zone, but borders Zone II (commercial), with the waterfront park to the east and Zone III to the west and north.

Current noise levels at the project site are mostly influenced by vehicular traffic in the area and CBP operations at the Ponce Marine Unit. The closest residential area to the project site is located approximately one-third of a mile to the east. The closest school is Our Lady of Carmen School (in the quiet zone), located approximately one-half mile north of the project site. Hospital Dramas is the closest hospital (quiet zone), located approximately 1.6 miles north of the project site.



### 3.8.4 Environmental Consequences

Noise impact analyses typically evaluate potential changes to the existing noise environment that would result from implementation of a proposed action. Potential changes in the acoustical environment can be beneficial (i.e., if they reduce the number of sensitive receptors exposed to unacceptable noise levels or reduce the ambient sound level), negligible (i.e., if the total number of sensitive receptors exposed to unacceptable noise levels is essentially unchanged), or adverse (i.e., if they result in increased sound exposure to unacceptable noise levels or ultimately increase the ambient sound level). Projected noise effects were evaluated qualitatively for the project.

#### 3.8.4.1 No-Action Alternative

Under this alternative, no construction activities would occur at the project site. Therefore, noise levels would result only from operational activities at the site. Current operations at the Ponce Marine Unit would continue, with no anticipated change in noise levels. Therefore, no additional noise impacts would be expected from the No-Action Alternative.

#### 3.8.4.2 Proposed Action Alternative

Under the Proposed Action, noise levels would temporarily increase during the 7-month construction period and depend on the number and type of equipment used, equipment location, and duration of use. Table 3-8 presents typical noise emission levels for common construction equipment that may be used as part of the Proposed Action Alternative. Noise emission levels could increase to up to 95 dBA during construction activities.

*Table 3-8. Noise Emission Levels for Construction Equipment*

Equipment	L <sub>max</sub> at 50 Feet (dBA)
Backhoe and chain	80
Concrete mixer truck	85
Concrete pump truck	82
Barge-mounted pile-driver (impact)	95
Barge-mounted pile-driver (vibratory)	95
Wharf crane	85
Flatbed truck	84
Dump truck	84
Concrete saw	90

Source: Federal Highway Administration *Construction Noise Handbook*, Chapter 9.0 Construction Equipment Noise Levels and Ranges, August 24, 2017.

The maximum noise emission level for Zone III (industrial), per the EQB, is 75 dBA (diurnal and nocturnal). Construction noise levels associated at the closest sensitive receptors (quiet zone) are anticipated to reach no more than 30 dBA; the regulatory limit is 55 dBA (diurnal). Although noise levels could exceed regulatory limits at the project site, the predicted noise levels represent the worst-case scenario. The noise from construction equipment would be localized, short-term, and intermittent during machinery operation, likely producing lower noise emissions during construction. Further, the existing buildings and structures at the Ponce Marine Unit would restrict the transmission of sound from construction activities to the surrounding area.

Noise emissions during operation of the Ponce Marine Unit would be the same as current conditions, resulting from the use of CBP vehicles and vessels operating at the pier. Therefore, operations would have no effect on noise levels in the area.

### 3.9 Utilities and Infrastructure

This section focuses on utilities and infrastructure within the vicinity of the project area, including public utilities, solid waste management, and transportation systems. Public utilities include natural gas, electric, water, and wastewater infrastructure. Solid waste management involves the generation, collection, and disposal of non-hazardous solid waste, including construction and demolition debris. The transportation resource is defined as the system of roadways and highways that could reasonably be affected by the project.

#### 3.9.1 Affected Environment

Electric service is overseen by the Puerto Rico Energy Commission, or PREC (PREC 2018). Electricity is provided by the Puerto Rico Electric Power Authority, or PREPA (PREPA 2018). PREPA is a government-owned corporation that generates, distributes, and transmits power throughout Puerto Rico and to the project site (PREPA 2018). Solid waste facilities and landfills in Puerto Rico face serious challenges (EPA 2016), particularly in light of the massive debris generated from Hurricane Maria (NPR 2017). Even before the massive cleanup effort required after the hurricane, the majority of Puerto Rico's operating landfills were beyond capacity (EPA 2016). Water and wastewater treatment is provided by PRASA (USGS 2014).

#### 3.9.2 Environmental Consequences

##### 3.9.2.1 No-Action Alternative

The Ponce Marine Unit is a small, industrial site, with limited personnel and limited demands on water, sewage, electricity, and waste removal. Under the No-Action Alternative, no changes would be made at the site. There would be no additional requirements for water, electricity, or solid waste disposal.

##### 3.9.2.2 Proposed Action Alternative

Under the Proposed Action, there would be short-term impacts on power consumption, water consumption, and solid waste disposal increases during the construction phase, both onsite and offsite. The boat ramp construction plan calls for erection of a temporary coffer dam at the mouth of the inlet. This action would increase power consumption from power pumps to drain the area for the removal of the original pier, temporary structure, and boat ramp and to keep it drained during the subsequent construction of the replacement boat ramp. If nighttime work were required, additional electricity would be needed to power lights to illuminate the work area. Additional water would be required to wash equipment and mix grout onsite, as well as to prepare the concrete to cast the boat ramp at an offsite location. Disposal of the debris from the original concrete pier, temporary structure, and boat ramp would be sent to a local permitted landfill.

Construction of the pier would likely lead to increased power consumption onsite, as it would require pile driving of hollow pilings and emplacement of precast concrete panels. These items and the concrete to fill the pilings would be fabricated offsite and require power and water at the fabrication sites. Power to sink the pilings would be provided by barges and autonomous engines and therefore would not be expected to require onsite water or power. There could be a need for minimal water and power to prepare patches and grout to join the concrete panels and plug voids from power line and water line installation.

Excavation of a trench from the property line to the proposed pier for power and water lines would also be constructed. This trench would be covered with concrete upon completion. The process would generate concrete and potentially some soil debris to be disposed of in a landfill. The long-term effects of the pier and boat ramp installation would slightly increase the need for power and water to the site to serve the three planned base stations and the lighting along the proposed pier, and for lighting at the proposed ramp replacement.

Implementation of the Proposed Action would result in long-term, moderate, direct, beneficial impacts on infrastructure due to the installation of a new pier and boat ramp. The proposed pier would be constructed with reinforced concrete piles and both the pier and the boat ramp would have longer expected lifetimes.

### 3.10 Hazardous Materials

Hazardous materials are defined by 49 CFR § 171.8 as “hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions” in 49 CFR Part 173. Transportation of hazardous materials is regulated by the U.S. Department of Transportation in 49 CFR Parts 105–180.

Statutes and regulations govern the management of hazardous materials and hazardous waste activities at Federal operations. The Comprehensive Environmental, Response, Compensation, and Liability Act (CERCLA) requires the cleanup of hazardous waste and holds the responsible party liable for the funding and remedial actions required. The Resource Conservation and Recovery Act (RCRA) establishes a Federal program to manage hazardous waste to protect human health and the environment. The RCRA Subtitle C program requires the immediate cleanup resulting from improper waste management and helps state and local agencies develop hazardous waste management programs (EPA 2017b).

Special hazards include substances that pose a risk to human health and are addressed separately from other hazardous substances. They include asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs), and lead-based paint (LBP). EPA regulates asbestos abatement and worker safety under 40 CFR Part 763. Whether from lead abatement or other activities, depending on the quantity and concentration, the disposal of LBP waste may be regulated by the RCRA or by 40 CFR Part 260. The disposal of PCBs is addressed in 40 CFR Parts 750 and 761.

All generators of hazardous waste must implement BMPs when operating and maintaining the site of generation to minimize the risk of fire, explosion, or unplanned release of hazardous wastes to air, soil, or surface water that could negatively affect human health or the environment. The evaluation of hazardous material affects and pollution prevention include potential hazardous materials that could be used during construction and operation of a project, the potential to encounter hazardous materials at contaminated sites during construction and operation, and the potential to interfere with ongoing remediation of existing contaminated sites at the proposed project site or in the immediate vicinity (FAA 2015).

The evaluation of solid waste impacts include the availability of landfills to support the population’s residential, commercial, and industrial needs and the potential for waste streams caused by the construction or operation of the project to overwhelm these facilities. Some localities

possess landfills designated for disposal of construction and demolition debris. Recycling programs are available for various waste categories.

### 3.10.1 Affected Environment

No potential or existing environmental contamination was identified at the proposed project site. Therefore, no Phase I or Phase II assessments were conducted as part of this EA. There are no fuel storage tanks or fueling operations onsite.

A search of EPA's Envirofacts RCRAInfo website indicated one hazardous waste generator within a 1-mile radius of the project site (EPA 2017c). Homeca Recycling Center Co., Inc., is located approximately 230 feet to the north of the proposed project area, at 1 Calle Salmon. This facility is classified as a conditionally exempt small-quantity generator and is able to accept up to 1,000 kilograms of ignitable, corrosive, and reactive waste, as well as lead, mercury, and other waste codes.

No sites on EPA's National Priorities List are located within a 1-mile radius of the project site (EPA 2017d). However, EPA identifies three brownfield properties within 1 mile (EPA 2016b–d). Two brownfield sites are undergoing assessment, and as such, contaminant reports are unavailable (HAZ050 and HAZ102). Site HAZ100, located at 69 Calle Comercio in Ponce, was assessed in 2014, but cleanup activities have not been reported. No evidence of hazardous wastes or materials (e.g., drums, oil stains) was observed during the August 2016 site survey. Further, ACM, PCBs, and LBP are not expected during construction and operation at the Ponce Marine Unit facility due to the age of construction and the type of facilities under the Proposed Action.

### 3.10.2 Environmental Consequences

Risks associated with hazardous material use would be considered significant if the Proposed Action resulted in exposure to hazardous materials above regulated thresholds, if the Proposed Action did not comply with Federal and state regulations, or if the Proposed Action produced hazardous materials at a quantity beyond CBP's capacity to manage it. An effect on solid waste management would be considered significant if the Proposed Action exceeded the capacity of existing landfills or caused a long-term interruption of waste management, a permit violation, or a utility plan violation.

#### 3.10.2.1 No-Action Alternative

Under this alternative, there would be no increase in the presence or risk of hazardous materials or waste. No new hazardous waste or material would be generated, as construction of the pier and boat ramp would not occur. Operations at the Ponce Marine Unit would continue and may include the use of petroleum, oil, and lubricants (POL). The operation and maintenance of vehicles and marine vessels pose the risk for accidental release of hazardous materials. This risk is minimized by the implementation of standard CBP BMPs. CBP's process for the handling and disposal of hazardous waste would be in effect as part of its normal operations. Therefore, there would be no short- or long-term impacts under the No-Action Alternative.

#### 3.10.2.2 Proposed Action Alternative

No long-term impacts due to the storage, transport, handling, and use of hazardous substances, petroleum products, and hazardous and petroleum wastes are expected from the implementation

of the Proposed Action Alternative. Under the Proposed Action, construction activities have the potential to utilize hazardous materials that may include oil, oil filters, and refrigerant to operate machinery during construction. Short-term, direct, negligible, adverse impacts would be expected from the presence of hazardous materials onsite during construction and therefore increase the potential of a spill. All such hazardous materials would be used and stored in accordance with the project's SPCC plan, as well as with Federal, state, and local regulations. POL would be stored properly and within designated containers, which would include primary and secondary containment measures. Cleanup materials (e.g., oil mops), in accordance with the project's SPCC plan, would be maintained at the site to allow for immediate response in case a spill occurs.

Similarly, solid and hazardous waste generated from construction would be properly contained, controlled, and disposed of in accordance with measures outlined in the SPCC plan. Disposal contractors would use existing roads to transport equipment and waste, and all waste would be disposed of in compliance with Federal, state, and local regulations.

The construction of the pier would involve slight disturbances to soil beneath the site, as soil cuttings and removal would take place during the structural foundation development of the pier. However, any waste streams would be handled properly through CBP BMPs (see Chapter 5). Although the proposed project area is within a 1-mile radius of three brownfield properties, it is not expected that ground disturbance involved in construction would encounter contaminated soils, as the brownfield properties are small, located to the north, and only suspected of asbestos and lead presence throughout the buildings and aboveground structures (EPA 2016c–e).

### 3.11 Human Health and Safety

This section discusses potential impacts on human health and safety of CBP personnel and community members within the vicinity of the project area. Effects on human health and safety include direct factors, such as exposure to chemicals, extreme temperatures, and weather, and indirect factors, such as physical safety and security of the surrounding environment.

#### 3.11.1 Affected Environment

The proposed project area is located in a developed area with no known contamination issues. Factors in the project area that could affect human health include automobile and boating accidents, workplace accidents, criminal activities, and extreme weather.

CBP, as a Government employer, is subject to regulations established by the Federal Occupational Safety and Health Administration (OSHA), which issues standards specifying the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits with respect to workplace stressors. Puerto Rico has an OSHA-approved state program, which adopts all OSHA standards and regulations applicable to state and local government and private-sector employment, with minor revisions to the recordkeeping regulation (OSHA undated). Section 19 of the Occupational Safety and Health Act of 1970 requires that all Federal agencies have a safety and health program that meets the same standards as private employers (OSHA 2016).



### 3.11.2 Environmental Consequences

#### 3.11.2.1 No-Action Alternative

Under this alternative, risks to health and safety associated with existing conditions and operations at the Ponce Marine Unit would continue. CBP would construct a new pier and replacement boat ramp. The original pier was displaced by Hurricane Maria and the boat ramp is severely worn and broken where it extends into the water. Long-term, direct, moderate adverse impacts would be expected to CBP personnel through the continued use of the existing facilities, due to the continuation of the health and safety risks associated with the existing conditions.

#### 3.11.2.2 Proposed Action Alternative

Under the Proposed Action, direct, adverse risks to human health and safety of construction personnel would increase slightly during the construction phase. CBP would minimize risk by adhering to occupational safety and health regulations, the use of protective gear and equipment, and BMPs. Access to the construction site would be restricted to construction workers and applicable CBP personnel. Risks to human health and safety during construction of the Proposed Action would therefore be short-term and negligible.

During the operations phase, potential long-term, adverse impacts on human health and safety would be minimized by ensuring compliance with applicable construction and safety codes. Employees would adhere to fire safety standards set forth in the Puerto Rico building and National Fire Protection Association codes. Operations of marine vessels would continue in accordance with applicable CBP safety regulations.

Construction of the pier and replacement of the boat ramp would also have the potential to decrease adverse risks to overall human health and safety. The original concrete pier and deteriorated boat ramp at the Ponce Marine Unit are unusable in their current state. Under the Proposed Action, both would be replaced to enable CBP personnel to safely operate out of the Ponce Marine Unit facility. The new pier and ramp would be larger and possess several safety features (i.e., guardrails and lighting) to decrease safety risks and increase efficiencies of the facility's daily operations.

Replacement of the pier and boat ramp would facilitate CBP's ability to carry out its mission of interdicting unlawful people and cargo attempting to encroach U.S. borders. This would result in a long-term, beneficial impact on the health and safety of nearby residents and community members by creating a more secure environment.

## 4 Cumulative Impacts

The cumulative impacts analysis has been conducted in accordance with CEQ regulations that implement the NEPA and CEQ handbook, *Considering Cumulative Effects under the National Environmental Policy Act* (CEQ 1997). This EA addresses the potential cumulative impacts of the two alternatives proposed for the Ponce Marine Unit and all related and similar actions that could contribute to cumulative impacts. The CEQ regulations define “cumulative impact” as “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 C.F.R. §1508.7). Cumulative impacts can result from the combination of individually minor effects of actions over time, and NEPA requires the analysis of cumulative impacts on assess the overall effect of a proposed action on its surrounding environment.

This chapter assesses the Ponce Marine Unit project’s potential cumulative impacts of the replacement of a pier and boat ramp. As previously discussed, the Proposed Action would be located within the boundaries of the existing Ponce Marine Unit in Puerto Rico. The APE for this Proposed Action, analyzed for cumulative impacts, is shown in Figure 4-1. Localized around the Ponce Marine Unit, the APE consists of a 1-mile radius around the project area. This project is limited to construction activities and the 1-mile radius encompasses the furthest extent of possible impacts from the project activities.



Source: Google Earth 2018.

*Figure 4-1. Ponce Marine Unit Area of Potential Effect for the Proposed Action*

### 4.1 CBP Activities Included in the Cumulative Impacts Analysis

CBP’s law enforcement operations throughout the Caribbean Sea have been continuous since its inception. Past actions by CBP fall under maintenance and security operations that occurred within the APE before the development of this EA. The original concrete pier was displaced by Hurricane Maria and boat ramp is extremely dilapidated and therefore, both are unusable. After the recent hurricane damage to the Ponce Marine Unit, the perimeter fence was replaced and a temporary

structure was built to replace the original pier. CBP continues to operate out of the Ponce Marine Unit. Future actions would consist of the maintenance and repair of the new tactical infrastructure that is part of this Proposed Action. There are no additional planned CBP actions within the APE for this Proposed Action; therefore, there is no potential for cumulative effects arising from CBP-sponsored actions (CBP 2018a).

Adverse impacts of future and ongoing projects would be prevented or minimized with continued funding and implementation of CBP's environmental conservation measures, including environmental education and training of agents and the use of biological and archaeological monitors. CBP's activities have had many positive cumulative impacts.

#### 4.2 Non-CBP Activities Included in the Cumulative Impacts Analysis

CBP completed a search of actions planned by other agencies that may also affect the region's natural and human environment. None were found to occur within the designated APE (USACE 2018b, USACE 2017). A search of projects within the Federal Energy Regulatory Commission revealed two projects involving liquefied natural gas terminals (FERC 2017, FERC 2018). As these projects are located more than 50 miles from the project area and therefore not within the APE, they are not included in this analysis.

Federal actions within the region most likely to contribute to cumulative effects along with this project are related to sanitary landfill capacity. Even prior to the major hurricane damage sustained in Puerto Rico, solid waste disposal landfills have operated at or beyond their designed capacity. EPA has tried to close existing landfills and help establish adequate disposal capacity (EPA 2016b). The development of this Proposed Action would add solid waste to landfills as part of demolition and construction activities. EPA does not list additional environmental assessments or environmental impact statements for the municipality of Ponce, Puerto Rico (EPA 2018).

#### 4.3 Resources Evaluated for Cumulative Impacts

This EA evaluates cumulative impacts due to the Proposed Action and No-Action alternatives. All impacts are evaluated for their potential effects on the following resource areas:

- Geology and soils
- Water resources
- Biological resources
- Cultural, historical, and archaeological resources
- Air quality
- Noise
- Utilities and infrastructure
- Hazardous materials, and
- Human health and safety.

Cumulative impacts related to land use, socioeconomic resources, environmental justice, protection of children, roadways and traffic, and aesthetics and visual resources were not evaluated further due to their lack of direct effect from the No-Action and Proposed Action alternatives.

#### 4.4 Cumulative Impacts: Geology and Soils

The Proposed Action is small in its areal coverage and would not permanently displace geological or soil resources. Excavation of the trench to carry utilities to the proposed new pier would require the removal of soils, however the majority of that soil would be used to fill the trench following the placement of utility cables. No short- or long-term cumulative effects are anticipated.

#### 4.5 Cumulative Impacts: Water Resources

The Proposed Action would not be expected to cause short-term effects on water resources during construction or long-term effects on water use requirements, water quality surfaces, or water resources, including wetlands and regulatory WoUS. Debris from demolition of infrastructure (i.e., existing boat ramp, original concrete pier and temporary structure, and excavation debris from construction of a utilities trench to the new pier) would have a minor impact on solid waste disposal capacity in the region. EPA is working with Puerto Rican officials to establish new landfills (EPA 2016b). New landfill siting would require National Pollutant Discharge Elimination System (NPDES) permitting. Although there is potential for a minor, adverse cumulative effect, the NPDES program exists to ensure that there are no adverse impacts from permitted activities; therefore, the adverse impact is only a potential impact.

#### 4.6 Cumulative Impacts: Biological Resources

No additional projects were identified within the APE. Therefore, no cumulative effects from the Proposed Action would be expected.

#### 4.7 Cumulative Impacts: Cultural, Historical, and Archaeological Resources

No short- or long-term impacts on cultural, historical, or archaeological resources would be expected from the Proposed Action given the absence of historical structures or cultural or archaeological resources within the APE. Therefore, no cumulative impacts would be expected.

#### 4.8 Cumulative Impacts: Air Quality

A minor increase in local air pollution would be expected due to construction activities. Temporary increases in air pollution would result from vehicle emissions from construction workers commuting to the project and the use of vehicles and construction equipment at the facility. Due to the short duration of the project, any impacts on ambient air quality from emissions during construction are expected to be short term and can be reduced through the use of standard BMPs. Operations at the facility would continue, and no increase in emissions from personal vehicles or vehicles and marine vessels operating at the pier would be expected. Therefore, no cumulative impacts on air quality would be expected.

#### 4.9 Cumulative Impacts: Noise

The Proposed Action would not generate sufficient noise to have a cumulative effect on the overall noise levels of the area surrounding the Ponce Marine Unit. Because of the existing structures at the facility and surrounding buildings, the Proposed Action is not anticipated to generate sufficient noise to disturb nearby quiet zone (Zone IV) areas. Therefore, no cumulative impacts on ambient noise levels would be expected.

#### 4.10 Cumulative Impacts: Utilities and Infrastructure

The demolition and construction activities associated with the Proposed Action could have short-term, minor, adverse impacts on landfill capacity and a cumulative impact given the large amount of hurricane damage debris being sent to regional landfills. The amount of debris resulting from the Proposed Action is negligible in comparison to the quantity of debris generated by hurricane cleanup activity. Therefore, short- and long-term, minor, adverse, cumulative effects would be expected.

#### 4.11 Cumulative Impacts: Hazardous Materials

No temporary or permanent effects on the public, wildlife, or other natural resources would be expected from the storage, transport, handling, and use of hazardous materials and substances during the activities associated with the Proposed Action. All activities would be completed in accordance with the project's SPCC plan and Federal, state, and local laws and regulations pertaining to the storage, transport, handling, and use of hazardous materials and substances. Therefore, no cumulative effects would be expected.

#### 4.12 Cumulative Impacts: Human Health and Safety

Although, short-term, minor impacts on human health and safety would be expected during construction activities, adherence to Federal safety regulations would minimize risk and protect workers. There is potential for beneficial cumulative impacts, as the Proposed Action would provide a safer working environment for CBP agents by replacing the pier and ramp and adding several safety features. In addition, the Proposed Action would have a beneficial cumulative impact on the surrounding area by improving CBP's ability to carry out its mission.

#### 4.13 Incomplete or Unavailable Information

Hurricane Irma hit Puerto Rico on September 6, 2017, leaving one million people without electricity (Johnson et al., 2017). Then, on September 20, 2017, Hurricane Maria struck the island as a Category 4 storm, traveling directly across Puerto Rico, with 60,000 people still lacking electricity from Hurricane Irma (Resnick and Barclay, 2017). Hurricane Maria had a significant impact on Puerto Rico, affecting buildings and island infrastructure, and led to major power outages. At the time that this EA was written, Puerto Rico was still assessing damage from the hurricanes and working to rebuild lost and impaired infrastructure. The scope and timeline of these infrastructure projects are unknown at this time, but they are neither anticipated to affect nor be affected by the Proposed Action. Thus, no cumulative impacts are expected from hurricane recovery efforts.



## 5 Mitigation Measures and Best Management Practices

It is CBP's policy to reduce effects on air quality, wildlife, landscapes, and other natural and cultural resources through a sequence of avoidance, minimization, mitigation, and compensation. Mitigation efforts vary by project and setting and may include activities such as implementation of appropriate BMPs and restoration of habitat. CBP coordinates its environmental design measures with appropriate Federal and state resource agencies. General BMPs have been developed during the preparation of this EA.

This section describes those measures that may be implemented to reduce or eliminate potential adverse effects on the human and natural environment. Many of these measures have been incorporated by CBP as standard operating procedures on past projects. Table 5-1 summarizes BMPs and mitigation measures by resource area for each potentially affected resource category.

*Table 5-1. Resource Area BMPs and Associated Mitigation Resource Area*

Resource Area	Mitigation Measures and Best Management Practices
Geology and soils	<ul style="list-style-type: none"> <li>Stormwater Pollution Prevention Plan (SWPPP)</li> <li>Sediment and Erosion Control Plan and associated BMPs</li> <li>Drainage improvements and revegetation</li> </ul>
Water resources	<ul style="list-style-type: none"> <li>SPCC Plan and associated BMPs</li> <li>Construction Mitigation and Restoration Plan and associated BMPs</li> <li>SWPPP and associated BMPs</li> <li>Sediment and Erosion Control Plan and associated BMPs</li> <li>Proper storage and use of fuels and hazardous materials</li> </ul>
Biological resources	<ul style="list-style-type: none"> <li>Biological monitoring onsite during construction</li> <li>Biological surveys in advance of construction</li> <li>General and species specific BMPs</li> </ul>
Cultural, historical, and archaeological resources	<ul style="list-style-type: none"> <li>Consultation with state representatives</li> </ul>
Air quality	<ul style="list-style-type: none"> <li>Dust control measures and associated BMPs</li> <li>Fire Prevention and Suppression Plan and associated BMPs</li> <li>Maintenance of equipment and vehicles according to specifications</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Adherence with OSHA requirements</li> <li>Proper design and maintenance of equipment and vehicles</li> <li>Seasonal activity restrictions</li> </ul>
Utilities and infrastructure	<ul style="list-style-type: none"> <li>Marking and avoidance</li> <li>Repair or replacement</li> </ul>
Hazardous materials	<ul style="list-style-type: none"> <li>SPCC Plan and associated BMPs</li> <li>Proper storage and use of hazardous materials</li> <li>Proper management and disposal of solid and hazardous waste</li> <li>Vehicle maintenance</li> </ul>
Human health and safety	<ul style="list-style-type: none"> <li>Fire Prevention and Suppression Plan and associated BMPs</li> <li>SPCC Plan and associated BMPs</li> <li>Adherence with OSHA requirements</li> </ul>

## 5.1 General Construction Activities

BMPs would be implemented as standard operating procedures during construction activities. As part of the project, the following plans would be prepared and implemented, consistent with Federal, state, and local requirements and standard industry practices:

- Construction Mitigation and Restoration Plan
- Dust Control Plan
- Fire Prevention and Suppression Plan
- Spill Prevention, Control, and Countermeasures (SPCC) Plan
- Stormwater Pollution Prevention Plan (SWPPP).

Each of these plans identifies BMPs that would be implemented to avoid or minimize effects to resource areas. In addition to preparing and implementing plans directing construction design measures and practices, all construction practices would be limited to approved areas.

## 5.2 Geology and Soils

A SWPPP would be prepared prior to construction activities. Site-specific BMPs would be implemented as described in the SWPPP to reduce erosion and the impact of non-point source pollution during construction activities. These BMPs would greatly reduce the amount of soil lost to runoff during heavy rain events and ensure the integrity of the construction site. A Sediment and Erosion Control Plan would be implemented, along with other soil control BMPs to reduce impacts of soil disturbance and compaction. These BMPs can also beneficially affect air quality by reducing the amount of fugitive dust.

Areas with highly erodible soils would be given special consideration to ensure incorporation of various and effective compaction techniques, aggregate materials, wetting compounds, and rehabilitation to reduce potential soil erosion. Erosion control measures such as waterbars, gabions, straw bales, and revegetation would be implemented during and after construction activities. Silt fencing and floating silt curtains would be installed and maintained to prevent movement of soil and sediment and to minimize turbidity increases in water. Aggregate materials for the pile fillings and precast pile caps would be obtained from developed or previously used sources that are compatible with the project area and from legally permitted sites. Materials from undisturbed areas adjacent to the project area would not be used. All excavated materials would be stored and disposed of in approved areas.

The construction plan calls for the use of a barrier to be pumped and kept dewatered during the construction of the boat ramp. This practice would prevent uncured concrete from coming into contact with surface waters. In addition, a single entry and exit point to the construction site would be established to avoid unnecessary soil compaction. After construction is complete, compacted soils would be scarified or aerated to minimize potential impacts.

## 5.3 Water Resources

To minimize potential effects from hazardous and regulated materials, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of accepted industry guidelines, and all vehicles would have drip pans during storage to contain minor

spills and drips. Although a major spill is unlikely, any spill of 5 gallons or more would be contained immediately within an earthen dike, and an absorbent (e.g., granular, pillow, sock) would be applied to contain the spill. An SPCC Plan would be in place prior to the start of construction, and all personnel would be briefed on its implementation and responsibilities.

A Sediment and Erosion Control Plan and SWPPP would be developed and implemented to minimize pollutants in stormwater runoff. The contractor would avoid contaminating natural aquatic and wetland systems with runoff by limiting all equipment maintenance, staging, laydown, and dispensing of hazardous liquids (e.g., fuel and oil) to designated upland areas. Runoff would be prevented from entering drainages or storm drains by placing fabric filters, sand bag enclosures, or other capture devices around the work area. The capture devices would be emptied or cleaned out at the end of each day, with any waste properly disposed. Contamination of ground and surface waters would be avoided by storing concrete wash water, with any water that has been contaminated (e.g., with construction materials, oils, or equipment residue) in closed containers onsite until removed for disposal. In upland areas, storage tanks must be on-ground containers. Water tankers that convey untreated surface water would not discard unused water where it has the potential to enter aquatic or wetland habitat. In the event of heavy rains, all construction activities would temporarily cease until conditions are suitable to move equipment and material again without an increased risk of runoff.

Impacts on surface water could occur during operation of the Ponce Marine Unit, associated with boat washing activities and accidental POL spills. This risk is present with current operations at the Ponce Marine Unit and is not expected to increase due to the Proposed Action. Site-specific spill prevention and stormwater runoff management BMPs would be implemented during operations to manage runoff to nearby surface waters.

#### 5.4 Biological Resources

CBP consulted with NOAA Fisheries and USFWS regarding the potential impact to protected species. BMPs recommended by USFWS in their March 2017 letter, shown in Appendix A, would be implemented and are incorporated in this section of the EA. Additional BMPs will be included in Final EA once consultation with NOAA Fisheries and USFWS have concluded.

A protected species observer would be present during pile driving activities to screen construction operations to ensure adherence with BMPs and advise the construction contractor as needed. The protected species observer would notify the construction manager of activities that might harm or harass an individual of a federally listed species. Upon such notification, the construction manager may temporarily suspend all activities in question and notify the contracting officer, administrative contracting officer, and contracting officer's representative of the suspense so that the key client contact can be notified and apprised of the situation and when a resolution can be reached. Shut-down procedures would be used if a protected species has the potential to enter the project area. Prior to arrival on the worksite, all personnel would be made aware of these species and familiar with the proper BMPs to implement in case they encounter these species and be informed that the harming, harassment, or killing of listed species involves civil and criminal penalties.

Construction activities would be performed only in areas that have been surveyed for biological resources, and the project work area would be surveyed for the presence of any listed species at least one hour before any in-water construction activity occurs. All vessels associated with

construction activities would operate at a “no wake” or “idle” speed at all times while in water within a federally listed species habitat area, and vessels would follow deepwater routes whenever possible.

The contractor would ensure the proper placement of USFWS-approved manatee signs throughout the duration of the proposed project, in accordance with the guidelines specified in the USFWS consultation.

A coral survey would be conducted prior to the onset of pier construction to determine the locations of coral colonies in the immediate construction footprint. Healthy individuals of coral colonies that would be disturbed by the proposed project would be relocated, if determined to be in the direct footprint of the construction area.

If herbicides or pesticides are used, applications would be made under the supervision of a licensed applicator. A log of the event—including the date, time, chemical and amount used, and specific location—would be maintained. The contractor would follow guidance from EPA on applications in or near riparian areas.

A Fire Prevention and Suppression Plan would be developed and implemented for all construction activities that require welding or otherwise have a risk of starting a wildfire.

The LED bollard lighting would be designed and located to avoid unnecessary impacts on natural areas and wildlife along the pier.

## 5.5 Cultural, Historical, and Archaeological Resources

The Phase IB and Phase I maritime surveys, as well as the cultural resources inventory search, determined that the probability of encountering cultural, historical, or archaeological resources within the APE is extremely low. If previously unidentified cultural resources are encountered during construction activities, the contractor would stop all ground-disturbing activities until OECH and officials from CBP are notified and the nature and significance of the find can be evaluated.

## 5.6 Air Quality

All construction equipment and vehicles must be kept in good operating condition to minimize exhaust emissions. Standard BMPs would be used to control fugitive dust during the construction phases of the project. In addition, a Dust Control Plan outlining dust suppression methods would be developed and implemented prior to construction.

## 5.7 Noise

All motorized equipment would possess working mufflers and be kept properly tuned to reduce engine noise and backfires. All motorized generators would be in baffle boxes (a sound-resistant box placed over or around a generator), have an attached muffler, or use other noise-abatement methods in accordance with industry standards. Activities that produce significant noise emissions would be conducted during regular working hours to minimize disturbance to the surrounding area.

## 5.8 Utilities and Infrastructure

Before beginning construction, contractors would locate and mark utilities in the field. All overhead and underground public and private utility lines (e.g., gas, electric, water, sewer, communication) and customer service lines would be identified and protected during excavation, clearing and grading, and other construction activities. Contractors would work with PREPA and PRASA to coordinate activities. The use of LED lighting along the pier would be more energy efficient than other lamp types and minimize demand on the electricity grid that powers the lights.

Effects to roads and the use of such infrastructure for CBP's operations would be localized to areas under construction and would be temporary and minimal. The contractor would maintain adequate drainage and control potential effects from erosion and sedimentation through implementation of appropriate measures. Damage to roads, concrete-lined ditches, fence, utilities, and other existing structures would be replaced or repaired to original condition or better.

The management and disposal of solid waste and recyclables created during construction activities would be in accordance with Federal and state regulations. Only an approved, authorized contractor would handle and transport waste material from the project site.

## 5.9 Hazardous Materials

When hazardous and regulated materials are handled, workers would collect and store all fuels, waste oils, and solvents in clearly labeled closed tanks and drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein.

All vehicles and other equipment would be maintained to prevent leakage of fluids. Any leaked fluids would be collected and disposed of properly.

Solid waste receptacles would be maintained at staging areas and other locations. All food-related trash such as wrappers, cans, bottles, and scraps would be disposed of in closed containers. Non-hazardous solid waste (trash and waste construction materials) would be collected and deposited in onsite receptacles. Waste and other discarded materials contained in these receptacles would be removed from the site as quickly as possible. Solid waste would be collected and disposed of properly by an approved contractor.

## 5.10 Human Health and Safety

A buffer zone surrounding the construction area would be established to ensure the health and safety of the public. Federal OSHA regulations would be fully complied with, and an onsite emergency plan would be developed in the case of a dangerous natural event or construction accident. Contractors would be trained in emergency response and safety measures.



1

2

This page intentionally left blank.

## 6 Agencies, Organizations, and Persons Consulted

### 6.1 Introduction

CBP is committed to communicating with the public to help ensure that potentially affected communities and other interested parties understand proposed actions and are given opportunities to participate in decisions that may affect them. To that end, CBP made the draft Ponce Marine Unit EA and Draft FONSI available for public review, providing stakeholders with the opportunity to comment.

### 6.2 Draft Environmental Assessment

A Notice of Availability, published in two local newspapers (*La Perla del Sur* and *Caribbean Business*), on October 31, 2018, informed the public of the opportunity to comment on the Draft EA and Draft FONSI. Both documents are available for comment on CBP's website (<http://www.cbp.gov/about/environmental-cultural-stewardship/nepa-documents/docs-review>) and in hardcopy at the following location:

Ponce Municipal Library (Mariana Suarez De Longo Municipal)  
Miguel Pou Boulevard  
Ponce, PR 00733

Comments on the draft Ponce Marine Unit EA and FONSI may be submitted during the 30-day comment period and must be received by November 30, 2018. Comments submitted by mail should be addressed to:

Joseph Zidron  
Real Estate and Environmental Branch Chief  
Border Patrol & Air and Marine Program Management Office  
24000 Avila Road, Suite 5020  
Laguna Niguel, CA 92677

Comments may also be emailed to [joseph.zidron@cbp.dhs.gov](mailto:joseph.zidron@cbp.dhs.gov). The email subject line should read "CBP Ponce Pier and Ramp EA."

Public comments on the Draft EA and Draft FONSI, as well as CBP's responses to those comments, would be included in the Final EA in Appendix B. Availability of the Final EA and FONSI would be published in local newspapers and on CBP's website.

### 6.3 Consultations

Certain statutes, such as the Endangered Species Act (16 U.S.C. § 1531 et seq.), Marine Mammal Protection Act of 1972 (16 U.S.C. Chapter 31), National Historic Preservation Act (NHPA) (16 U.S.C. § 470 et seq.), and the Clean Water Act (33 U.S.C. § 1251 et seq.), require consultation and coordination by CBP with Federal, state, and local agencies. CBP conducted natural resource and cultural surveys of the proposed project area to collect information on plant and animal species, habitat, and cultural resources that might be present.

Natural resource consultations relate to the potential for the Proposed Action to disturb sensitive species or habitats. The project area is approximately 2.65 acres – comprised of 1.05 acres of land

and 1.6 acres of water, where no federally threatened or endangered species have been identified as occurring within this area. CBP coordinated with USFWS, NOAA Fisheries, SHPO, and USACE. Copies of the consultation and coordination letters are provided in Appendix A.

Cultural resource consultations pertain to the potential to encounter important cultural resources and archaeological sites during the Proposed Action. CBP coordinated with the Puerto Rico Oficina Estatal de Conservación Histórica, as required by Section 106 of the NHPA. Copies of the consultation and coordination letters are provided in Appendix A.

#### 6.4 Distribution

CBP provided a letter informing the following stakeholders of record, as listed below, of the availability of the Draft EA for the Replacement of the Pier and Boat Ramp at the Ponce Marine Facility.

- NOAA Fisheries, Southeast Regional Office, Protected Resources Division
- NOAA Fisheries, Habitat Conservation Division
- NOAA Fisheries, Protected Resources Division, MMPA Branch
- U.S. Department of Transportation/Federal Highway Administration
- USACE Jacksonville District, Antilles Regulatory Section
- U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office
- Natural Resources Conservation Service (NRCS)
- Puerto Rico State Historic Preservation Office  
(Oficina Estatal de Conservación Histórica)
- Puerto Rico Aqueduct and Sewer Authority
- Puerto Rico Department of Agriculture  
(Departamento de Agricultura)
- Puerto Rico Department of Economic Development and Commerce
- Puerto Rico Department of Natural and Environmental Resources  
(Departamento de Recursos Naturales y Ambientales)
- Puerto Rico Department of Transportation and Public Works
- Puerto Rico Electric Power Authority
- Puerto Rico Environmental Quality Board (  
Junta de Calidad Ambiental)
- Puerto Rico Planning Board
- Puerto Rico Ports Authority
- Archeology and Ethnohistory program of the Puertorican Institute of Culture  
(Programa de Arqueología y Etnohistoria del Instituto de Cultura Puertorriqueña)
- Historical built heritage program of the Puertorican Institute of Culture  
(Programa de Patrimonio Histórico Edificado del Instituto de Cultura Puertorriqueña)
- Municipality of Ponce

## 7 References

- Climate Adaptation Knowledge Exchange. 2018. Puerto Rico Coastal Zone Management Program. Available at <http://www.cakex.org/directory/organizations/puerto-rico-coastal-zone-management-program>. Last accessed 3/23/2018.
- Department of Homeland Security (DHS). 2014. DHS Implementation Manual 023-01-001-01, rev. 01 “Implementation of the National Environmental Policy Act (NEPA)” Environmental Impact Analysis Process (EIAP). Available at [https://www.dhs.gov/sites/default/files/publications/DHS\\_Instruction%20Manual%20023-01-001-01%20Rev%2001\\_508compliantversion.pdf](https://www.dhs.gov/sites/default/files/publications/DHS_Instruction%20Manual%20023-01-001-01%20Rev%2001_508compliantversion.pdf).
- Environmental Quality Board (EQB). 1995. Environmental Control Board Regulation for the Control of Atmospheric Pollution. Commonwealth of Puerto Rico, Office of the Governor. July 1995.
- Environmental Quality Board (EQB). 2011. Regulation for the Control of Noise Pollution (Amended Version). Available at [http://www.gobierno.pr/NR/rdonlyres/27B321AF-F995-4A43-8AE3-2B8D6893DE79/0/Reglamento\\_Control\\_Ruidos\\_Ingles.pdf](http://www.gobierno.pr/NR/rdonlyres/27B321AF-F995-4A43-8AE3-2B8D6893DE79/0/Reglamento_Control_Ruidos_Ingles.pdf).
- Federal Aviation Administration (FAA). 2015. 1051.1F Desk Reference. Chapter 7: Hazardous Materials, Solid Waste, and Pollution Prevention. Available at [https://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/enviro\\_policy\\_guidance/policy/faa\\_nepa\\_order/desk\\_ref/media/7-hazmat.pdf](https://www.faa.gov/about/office_org/headquarters_offices/apl/enviro_policy_guidance/policy/faa_nepa_order/desk_ref/media/7-hazmat.pdf).
- Federal Energy Regulatory Commission (FERC). 2017. EcoEléctrica, LP, Docket No. CP16-492-000. Available at <https://www.ferc.gov/industries/gas/indus-act/pipelines/approved-projects/2017/CP16-492-000.pdf>.
- Federal Energy Regulatory Commission (FERC). 2018. Aguirre Offshore Gasport Project Overview. Available at <http://en.aguirreoffshoregasport.com/the-aguirre-offshore-gasport-project-overview/location-puerto-rico>. Last accessed 3/28/2018.
- Federal Highway Administration (FHWA). 2017. *Construction Noise Handbook*. Chapter 9.0: Construction Equipment Noise Levels and Ranges. Available at [https://www.fhwa.dot.gov/Environment/noise/construction\\_noise/handbook/handbook09.cfm](https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm). Updated 8/24/2017.
- Gobierno de Puerto Rico (PR). 2017. Plan de Usos de Terrenos. Junta de Planificación, Oficina del Gobernador. Available at <http://jp.pr.gov/Planes/Plan-de-Usos-de-Terrenos>.
- Google Earth (November 3, 2017). Ponce Marine Unit, Ponce, Puerto Rico. 17°58’46.16”N, 66°37’10.5”W. Eye alt 32779 feet. 2018 Google. 2018 Digital Globe. Last accessed 9/16/2018.
- HDR. 2013. Final Cultural Resources Inventory of Air and Marine Facility Ponce, Ponce Municipality, Puerto Rico. Blackwell, Chad, and Matt Edwards. August 2013.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- HDR. 2016a. Ponce Marine Unit, Facility Repairs and Alterations, Ponce, Puerto Rico Determination of Waters of the U.S. and Listed Species Survey. September 28, 2016.
- HDR. 2016b. Biological Resources Survey and Benthic Habitat Characterization. U.S. Customs and Border Protection Marine Facility, Ponce, Puerto Rico. November 2016. Prepared by CSA Ocean Services Inc.
- HDR. 2018. 2018 Biological Resources Survey and Benthic Habitat Characterization. U.S. Customs and Border Protection, Ponce Marine Facility, Ponce, Puerto Rico. September 2018. Prepared by CSA Ocean Services Inc.
- Homeland Security Technology (HST). 2018. SAFE Boat Apostle Marine Interceptor. Available at <https://www.homelandsecurity-technology.com/projects/safe-boat-apostle-marine-interceptor>. Last accessed 3/28/2018.
- Johnson, Alex; Daniel Arkin, Jason Cummings, and Bill Karins. 2017. Hurricane Irma Skirts Puerto Rico, Leaves 1 Million without Power. NBC News. September 7, 2017. Available at <https://www.nbcnews.com/storyline/hurricane-irma/hurricane-irma-skirts-puerto-rico-lashing-it-powerful-winds-flooding-n799086>.
- Lenz, Barry and Valeria Whalon (HDR) Memo to Lauri Regan (CBP). “CBP Ponce Marine Station Site Visit”. August 16, 2018.
- Morelock, Jack, Jorge Capella, Jorge R. Garcia, and Maritza Barreto. 2000. Puerto Rico—Seas at the Millennium. Available at <http://geology.uprm.edu/Morelock/pdfdoc/morlok2.pdf>. Last accessed 12/16/2016.
- National Public Radio (NPR). 2017. After Maria, Puerto Rico Struggles under the Weight of Its Own Garbage. December 14, 2017. Available at <https://www.npr.org/sections/thetwo-way/2017/12/14/570927809/after-maria-puerto-rico-struggles-under-the-weight-of-its-own-garbage>.
- NatureServe. 2013. NatureServe Vista Decision-Support Software for Land Use and Conservation Planning User’s Manual. 22 October 2013. Available at [http://www.natureserve.org/sites/default/files/vista\\_usermanual\\_102213\\_whole.pdf](http://www.natureserve.org/sites/default/files/vista_usermanual_102213_whole.pdf). Last accessed 2/6/2018.
- Occupational Safety and Health Administration (OSHA). 2016. All about OSHA. OSHA 3302-11R. Available at [https://www.osha.gov/Publications/all\\_about\\_OSHA.pdf](https://www.osha.gov/Publications/all_about_OSHA.pdf).
- Occupational Safety and Health Administration (OSHA). Undated. Puerto Rico State Plan. Available at [https://www.osha.gov/dcsp/osp/stateprogs/puerto\\_rico.html](https://www.osha.gov/dcsp/osp/stateprogs/puerto_rico.html). Last accessed 4/3/2018.
- Puerto Rico Electric Power Association (PREPA). 2018. Puerto Rico Electric Power Authority: From Executive Director Office. Available at <https://www.aeepr.com/INVESTORS>. Last accessed 3/26/2018.



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- 1 Puerto Rico Energy Commission (PREC). 2018. About the Puerto Rico Energy Commission.  
2 Available at <http://energia.pr.gov/en/about-the-commission>. Last accessed 3/26/2018.
- 3 Resnick, Brian, and Eliza Barclay. 2017. What Every American Needs to Know about Puerto  
4 Rico's Hurricane Disaster. Vox. October 16, 2017. Available at  
5 [https://www.vox.com/science-and-health/2017/9/26/16365994/hurricane-maria-2017-](https://www.vox.com/science-and-health/2017/9/26/16365994/hurricane-maria-2017-puerto-rico-san-juan-humanitarian-disaster-electricity-fuel-flights-facts)  
6 [puerto-rico-san-juan-humanitarian-disaster-electricity-fuel-flights-facts](https://www.vox.com/science-and-health/2017/9/26/16365994/hurricane-maria-2017-puerto-rico-san-juan-humanitarian-disaster-electricity-fuel-flights-facts).
- 7 Rivera, Magaly. 1998. Puerto Rico's Topography. Available at  
8 <http://welcome.topuertorico.org/reference/topo.shtml>. Last accessed 2/3/2017.
- 9 U.S. Army Corps of Engineers (USACE). 2017. Revised 2017 Acquisition Strategy. Jacksonville  
10 District Engineer, Planning Division.
- 11 U.S. Army Corps of Engineers (USACE). 2018a. Design Analysis for the RP 2004905–Ponce  
12 Marine Unit–Pier & Ramp Replacement at Ponce, Puerto Rico. RTA Submittal. Mobile  
13 District. January 2018.
- 14 U.S. Army Corps of Engineers (USACE). 2018b. USACE Jacksonville District Environmental  
15 Documents Library. Available at [http://www.saj.usace.army.mil/About/Divisions-](http://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents)  
16 [Offices/Planning/Environmental-Branch/Environmental-Documents](http://www.saj.usace.army.mil/About/Divisions-Offices/Planning/Environmental-Branch/Environmental-Documents). Last accessed  
17 3/28/2018.
- 18 U.S. Census Bureau (USCB). 2016a. 2012–2016 American Community Survey 5-Year Estimates.  
19 Ponce Municipio, Puerto Rico. ACS Demographic and Housing Estimates. Available at  
20 <https://factfinder.census.gov>. Last accessed 3/28/2018.
- 21 U.S. Census Bureau (USCB). 2016b. 2012–2016 American Community Survey 5-Year Estimates.  
22 Puerto Rico. Selected Economic Characteristics. Available at <https://factfinder.census.gov>.  
23 Last accessed 3/28/2018.
- 24 U.S. Census Bureau (USCB). 2016c. 2012–2016 American Community Survey 5-Year Estimates.  
25 Ponce Municipio, Puerto Rico. Selected Economic Characteristics. Available at  
26 <https://factfinder.census.gov>. Last accessed 3/28/2018.
- 27 U.S. Census Bureau (USCB). 2016d. 2012–2016 American Community Survey 5-Year Estimates.  
28 United States. Selected Economic Characteristics. Available at  
29 <https://factfinder.census.gov>. Last accessed 3/28/2018.
- 30 U.S. Customs and Border Protection (CBP). 2012. 2012–2016 Border Patrol Strategic Plan.
- 31 U.S. Customs and Border Protection (CBP). 2016. Fact Sheet: Interceptor Class Interim 39-Foot  
32 Midnight Express. Available at [https://www.cbp.gov/sites/default/files/assets/documents](https://www.cbp.gov/sites/default/files/assets/documents/2016-Jul/FS_2016_InterimMidnightExpress_07_06_16_0.pdf)  
33 [/2016-Jul/FS\\_2016\\_InterimMidnightExpress\\_07\\_06\\_16\\_0.pdf](https://www.cbp.gov/sites/default/files/assets/documents/2016-Jul/FS_2016_InterimMidnightExpress_07_06_16_0.pdf).
- 34 U.S. Customs and Border Protection (CBP). 2017a. From the Air and Sea. Available at  
35 <https://www.cbp.gov/border-security/air-sea>.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- 1 U.S. Customs and Border Protection (CBP). 2018a. Documents for Current/Ongoing Projects.  
2 Available at [https://www.cbp.gov/about/environmental-cultural-stewardship/current-](https://www.cbp.gov/about/environmental-cultural-stewardship/current-ongoing-projects)  
3 [ongoing-projects](https://www.cbp.gov/about/environmental-cultural-stewardship/current-ongoing-projects). Last accessed 3/28/2018.
- 4 U.S. Customs and Border Protection (CBP). 2018b. Consultation Letter to Puerto Rico State  
5 Historic Preservation Officer, Oficina Estatal de Conservación Histórica. Post-Hurricane  
6 Maria Emergency Repairs to the USCG Ponce Boathouse Perimeter Fence in Ponce, Puerto  
7 Rico. April 20, 2018.
- 8 U.S. Department of Agriculture (USDA). 1979. Soil Survey of Ponce Area of Southern Puerto  
9 Rico. USDA Soil Conservation Service.
- 10 U.S. Department of Agriculture (USDA). 2018. Soil Map: Ponce Area, Puerto Rico Southern Part.  
11 NRCS Web Soil Survey. Available at [https://websoilsurvey.sc.egov.usda.gov/App](https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx)  
12 [/WebSoilSurvey.aspx](https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx). Last accessed 3/30/2018.
- 13 U.S. Environmental Protection Agency (EPA). 1971. Noise from Construction Equipment and  
14 Operations, Building Equipment, and Home Appliances. December 31, 1971. Available at  
15 <https://nepis.epa.gov/Exe/ZyPDF.cgi/9101NN3L.PDF?Dockey=9101NN3L.PDF>. Last  
16 accessed 3/21/2018.
- 17 U.S. Environmental Protection Agency (EPA). 1972. Noise Control Act of 1972. Available at  
18 [https://www.gsa.gov/cdnstatic/Noise\\_Control\\_Act\\_of\\_1972.pdf](https://www.gsa.gov/cdnstatic/Noise_Control_Act_of_1972.pdf).
- 19 U.S. Environmental Protection Agency (EPA). 1981. Noise and its Measurement. January 1981.  
20 Available at <http://nonoise.org/epa/Roll19/roll19doc49.pdf>. Last accessed 3/21/2018.
- 21 U.S. Environmental Protection Agency (EPA). 1996a. Environmental Fact Sheet: Emission  
22 Standards for New Gasoline Marine Engines. Available at  
23 <https://nepis.epa.gov/Exe/ZyPDF.cgi/00000FD4.PDF?Dockey=00000FD4.PDF>.
- 24 U.S. Environmental Protection Agency (EPA). 1996b. AP-42: Compilation of Air Emissions  
25 Factors. Volume I, Chapter 3.3. Last updated October 1996.
- 26 U.S. Environmental Protection Agency (EPA). 2016a. NAAQS Table. Available at  
27 <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. Last accessed 2/9/2017.
- 28 U.S. Environmental Protection Agency (EPA). 2016b. EPA's Work to Address Puerto Rico  
29 Landfills. US EPA Region 2. September 2016. Available at [https://www.epa.gov/sites](https://www.epa.gov/sites/production/files/2016-09/documents/puerto_rico_landfills_fact_sheet_final_0.pdf)  
30 [/production/files/2016-09/documents/puerto\\_rico\\_landfills\\_fact\\_sheet\\_final\\_0.pdf](https://www.epa.gov/sites/production/files/2016-09/documents/puerto_rico_landfills_fact_sheet_final_0.pdf). Last  
31 accessed 3/26/2018.
- 32 U.S. Environmental Protection Agency (EPA). 2016c. Cleanups in My Community. Brownfields  
33 Property Progress Profile. HAZ100-EDIFICIO VASSALLO. Available at  
34 [https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172376%22)  
35 [=/shared/CIMC/\\_portal/CIMC&Page=Profile+Page&coll=ACRES\\_GRANT\\_EXPORT.](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172376%22)  
36 [PROPERTY\\_ID&val1=%22172376%22](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172376%22). Last accessed 3/23/2018.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- 1 U.S. Environmental Protection Agency (EPA). 2016d. Cleanups in My Community. Brownfields  
2 Property Progress Profile. HAZ102-Calle Comercio #73. Available at  
3 [https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172377%22)  
4 [=/shared/CIMC/\\_portal/CIMC&Page=Profile+Page&coll=ACRES\\_GRANT\\_EXPORT.](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172377%22)  
5 [PROPERTY\\_ID&val1=%22172377%22](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172377%22). Last accessed 3/23/2018.
- 6 U.S. Environmental Protection Agency (EPA). 2016e. Cleanups in My Community. Brownfields  
7 Property Progress Profile. HAZ050-Antiguo Colegio Ponceño de Varones. Available at  
8 [https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172375%22)  
9 [=/shared/CIMC/\\_portal/CIMC&Page=Profile+Page&coll=ACRES\\_GRANT\\_EXPORT.](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172375%22)  
10 [PROPERTY\\_ID&val1=%22172375%22](https://obipublic11.epa.gov/analytics/saw.dll?PortalPages&Action=Navigate&PortalPath=/shared/CIMC/_portal/CIMC&Page=Profile+Page&coll=ACRES_GRANT_EXPORT.PROPERTY_ID&val1=%22172375%22). Last accessed 3/23/2018.
- 11 U.S. Environmental Protection Agency (EPA). 2017a. Outdoor Air Quality Data. Monitor Values  
12 Report. Available at <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>.  
13 Last accessed 2/9/2017.
- 14 U.S. Environmental Protection Agency (EPA). 2017b. Resource Conservation and Recovery Act  
15 (RCRA) Overview. Available at <http://nonoise.org/epa/Roll19/roll19doc49.pdf>.
- 16 U.S. Environmental Protection Agency (EPA). 2017c. Envirofacts. RCRAInfo. Available at  
17 <https://www3.epa.gov/enviro/facts/rcrainfo/search.html>. Last accessed 2/9/2017.
- 18 U.S. Environmental Protection Agency (EPA). 2017d. Superfund Site Information. Available at  
19 <https://cumulis.epa.gov/supercpad/cursites/srchsites.cfm>. Last accessed 2/9/2017.
- 20 U.S. Environmental Protection Agency (EPA). 2018a. NEPAassist: Analysis Ponce Marine Unit.  
21 Available at <https://nepassisttool.epa.gov/nepassist/nepamap.aspx>. Last accessed  
22 3/28/2018.
- 23 U.S. Environmental Protection Agency (EPA). 2018b. Clean Air Act (CAA) and Federal Facilities.  
24 Available at <https://www.epa.gov/enforcement/clean-air-act-caa-and-federal-facilities>.  
25 Last accessed 2/9/2017.
- 26 U.S. Environmental Protection Agency (EPA). 2018c. Puerto Rico Nonattainment/Maintenance  
27 Status for Each County by Year for All Criteria Pollutants. Available at  
28 [https://www3.epa.gov/airquality/greenbook/anayo\\_pr.html](https://www3.epa.gov/airquality/greenbook/anayo_pr.html). Last accessed 3/21/2018.
- 29 U.S. Fish and Wildlife Service (USFWS). 2018. National Wetlands Inventory. Surface Water and  
30 Wetlands Mapper. Available at <https://www.fws.gov/wetlands/data/Mapper.html>. Last  
31 Accessed May 14, 2018.
- 32 U.S. Forest Service (USFS). 1995. Description of the Ecoregions of the United States. USDA  
33 Forest Service. Miscellaneous Publication 1391.
- 34 U.S. Forest Service (USFS). 2009. Miller, G. L., and A. E. Lugo. Guide to the Ecological Systems  
35 of Puerto Rico. USDA Forest Service International Institute of Tropical Forestry. General  
36 Technical Report IITF-GTR-35.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

U.S. Geological Survey (USGS). 2003. The Puerto Rico Trench: Implications for Plate Tectonics and Earthquake and Tsunami Hazards. Available at <http://oceanexplorer.noaa.gov/explorations/03trench/trench/trench.html>. Last Accessed 3/23/2018.

U.S. Geological Survey (USGS). 2005. Surface-Water, Water-Quality, and Ground-Water Assessment of the Municipio de Ponce, Puerto Rico, 2002-2004. USGS Scientific Investigations Report 2005-5243.

U.S. Geological Survey (USGS). 2014. Estimated Water Use in Puerto Rico 2010. USGS Open File Report 2014-1117.

U.S. Geological Survey (USGS). 2016. USGS Groundwater Information: South Coast Aquifer (Puerto Rico). Available at [http://water.usgs.gov/ogw/aquiferbasics/ext\\_scaq.html](http://water.usgs.gov/ogw/aquiferbasics/ext_scaq.html). Last accessed 12/16/2016.

U.S. Geological Survey (USGS). 2018. National Gap Analysis Program (GAP) Land Cover Data Viewer. Available at [https://gis1.usgs.gov/csas/gap/viewer/land\\_cover/Map.aspx](https://gis1.usgs.gov/csas/gap/viewer/land_cover/Map.aspx). Last accessed 3/23/2018.

Water Technology. 2016. Portugués Dam, Ponce, Puerto Rico. Available at <http://www.watertechnology.net/projects/portuguesdamponcepuertorico>. Last accessed 12/19/2016.

## **7.1 Code of Federal Regulations**

36 CFR § 60.4, National Register of Historic Places, Criteria for Evaluation.

36 CFR § 800.5, Advisory Council on Historic Preservation, Protection of Historic Properties, Assessment of Adverse Effects.

40 CFR Part 51, Environmental Protection Agency, Requirements for Preparation, Adoption, and Submittal of Implementation Plans.

40 CFR Part 91, Environmental Protection Agency, Control of Emissions from Marine Spark-Ignition Engines.

40 CFR Part 93, Environmental Protection Agency, Determining Conformity of General Federal Actions to State or Federal Implementation Plans.

40 CFR Part 260, Environmental Protection Agency, Hazardous Waste Management System, General.

40 CFR Parts 750 and 761, Environmental Protection Agency, Toxic Substances Control Act.

40 CFR Part 763, Environmental Protection Agency, Asbestos.

40 CFR Parts 1500–1508, Council on Environmental Quality, Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1 49 CFR Parts 105–180, Department of Transportation, Pipeline and Hazardous Materials Safety  
2 Administration, Hazardous Materials Regulations.

3 **7.2 Executive Orders**

4 Executive Order 13045, Protection of Children from Environmental Health Risks and Safety  
5 Risks, April 23, 1997.

6 **7.3 United States Code**

7 16 U.S.C. § 470 et seq., National Historic Preservation Act.

8 16 U.S.C. § 703 et seq., Migratory Bird Treaty Act.

9 16 U.S.C. § 1451 et seq., Coastal Zone Management Act of 1972.

10 16 U.S.C. § 1531 et seq., Endangered Species Act of 1973.

11 16 U.S.C. § 6401 et seq., Coral Reef Conservation Act of 2000.

12 29 U.S.C. § 651 et seq., Occupational Safety and Health Act of 1970.

13 33 U.S.C. § 1251 et seq., Clean Water Act of 1972.

14 42 U.S.C. § 4321 et seq., National Environmental Policy Act of 1969.

15 42 U.S.C. § 6901 et seq., Resource Conservation and Recovery Act of 1976.

16 42 U.S.C. § 7401 et seq., Clean Air Act of 1970.



This page intentionally left blank.

## 8 List of Preparers

### U.S. Customs and Border Protection

---

#### **Joseph Zidron**

EA Responsibilities: *Real Estate and Environmental Branch Chief, Acting, Border Patrol & Air and Marine Program Management Office*

#### **Lauri Regan**

EA Responsibilities: *EA Project Manager, Border Patrol & Air and Marine Program Management Office*

### Logistics Management Institute (LMI)

---

#### **Kaitlyn Carter**

EA Responsibilities: *Cultural Resources, Air Quality, Hazardous Materials, Noise and Human Health & Safety Lead; Manager, Chapter 5—"Mitigation Measures and Best Management Practices"; Chapter 6—"Agencies, Organizations, and Persons Consulted"; Chapter 7—"References"; Administrative Record Lead*

Education: BA, Environmental Science, and BA, Environmental Thought and Practice, University of Virginia

Experience: 2 years

#### **Natalie Fike**

EA Responsibilities: *Technical Editor*

Education: BA, Communication Studies, Canisius College

Experience: 11 years

#### **Francis Reilly**

EA Responsibilities: *Water Resources, Biological Resources, Utilities and Infrastructure and Geological Resources Lead*

Education: MS, Biology, East Carolina University; BS, Biology, and BS, Chemistry, Wheeling Jesuit University

Experience: 35 years

#### **John Ruffing**

EA Responsibilities: *Manager, Chapter 1—"Purpose and Need for the Action"; Chapter 2—"Purpose and Need for the Action"*

Education: BS, Environmental Resource Management, Pennsylvania State University

Experience: 29 years

#### **Amy Stewart**

EA Responsibilities: *Document Production Lead*

Education: AAS, General Studies, Northern Virginia Community College

Experience: 26 years

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1	<b>Audra Upchurch, PMP, CEP</b>	
2	EA Responsibilities:	<i>Quality Manager; Manager, Chapter 8—"List of Preparers"; Appendix A—</i>
3		<i>Consultation and Coordination Letters</i>
4	Education:	MNR, Natural Resources, and BS, Forestry, Virginia Polytechnic Institute
5		and State University
6	Experience:	16 years
7	<b>Lisa Watts, PMP</b>	
8	EIS Responsibilities:	<i>Manager, Chapter 3—"Affected Environment and Environmental</i>
9		<i>Consequences"; Document Manager</i>
10	Education:	MEM, Environmental Management, Duke University;
11		BA, Environmental Studies and Policy, Hendrix College
12	Experience:	10 years

1 **Appendix A. Consultation and Coordination Letters**

2 The consultation letters and responses are provided below.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1 A.1 U.S. Fish and Wildlife Service (USFWS)  
2 CBP Letter to USFWS

1300 Pennsylvania Avenue NW  
Washington, DC 20229

JAN 26 2017



**U.S. Customs and  
Border Protection**

Dr. José A. Cruz-Burgos  
Caribbean Endangered Species Program Coordinator  
Caribbean Ecological Services Field Office  
P.O. Box 491  
Road 301, KM 5.1  
Boquerón, PR 00622  
Email: jose\_cruz-burgos@fws.gov

**Subject:** Early Endangered Species Act Section 7 Consultation and General Project Information related to the Air and Marine Facilities (AMF), U.S. Customs Border Protection (CBP) Ramey Sector, Puerto Rico, Ponce Replacement Pier and Boat Ramp

Dear Dr. José A. Cruz-Burgos:

The U.S. Department of Homeland Security (DHS), CBP is proposing to construct a replacement pier and boat ramp at the U.S. Coast Guard (USCG) Ponce Boathouse located at 41 Bonaire Street, Ponce, Puerto Rico 00716 (Latitude: N 17° 58.734303' Longitude: W 66° 37.196585') (see **Attachment 1**). A general description of the proposed project is provided in subsequent paragraphs. CBP has retained the services of HDR to complete the environmental permitting process, including the completion biological surveys of the proposed project area. While the project is in the early planning stages, the purpose of this letter is to inform the U.S. Fish and Wildlife Service (USFWS) about the project and initiate informal consultation in accordance with Section 7(a)(2) of the Endangered Species Act.

CBP, with the support of USACE, is planning to design and construct a new pier and boat ramp capable of supporting operations for a minimum of two SAFE™ 410 Apostle Vessels docked simultaneously, and constructed a minimum of 3 feet above the mean high water level. The pier would be constructed of cast-in-place reinforced concrete, and would be a minimum of 15 feet wide over its entire length. The location of the pier will either be east of the USCG Ponce Boathouse property line (at or near to the existing pier and boat ramp) (Pier Option A), or south of the USCG Ponce Boathouse property line, pending final approvals (Pier Option B). The project includes replacing the existing boat ramp to permit the safe launch and recovery of 45-foot-long trailered marine vessels at mean low water.

The project will obtain a permit under Section 404 of the Clean Water Act and as part of that process, CBP plans on presenting a brief description of the proposed project at an upcoming U.S. Army Corps of Engineers (USACE) interagency meeting. At that time we would like to discuss the results of the biological surveys conducted by HDR and CSA Ocean Sciences, Inc., as well as any concerns that USFWS might have regarding the project's potential impacts on protected species.



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

Dr. José A. Cruz-Burgos  
Page 2

Should you have any questions about the proposed project, please contact Audra Upchurch at (202) 748-4435 or by email at [audra.upchurch@cbp.dhs.gov](mailto:audra.upchurch@cbp.dhs.gov).

Thank you for your consideration on this request.

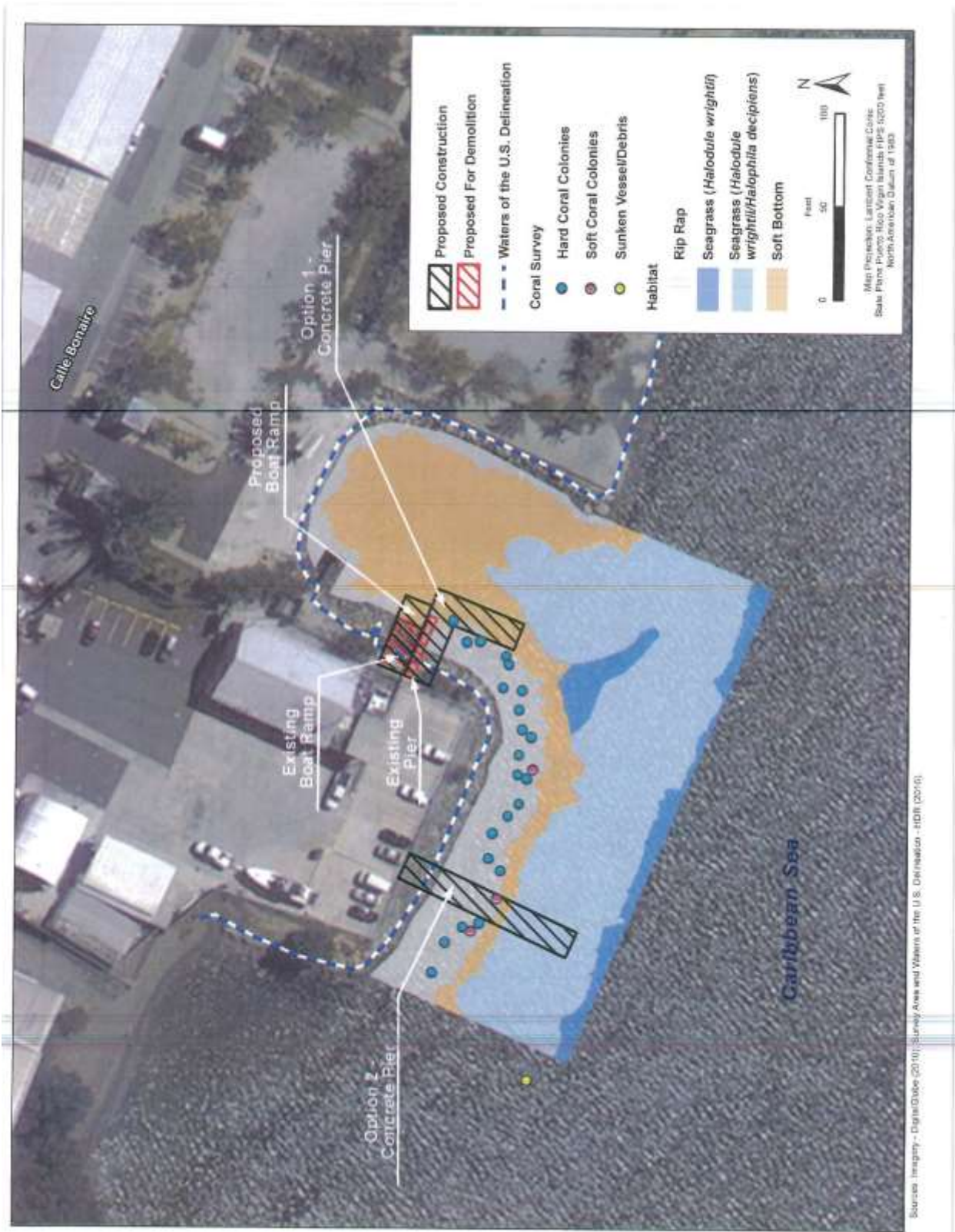
Sincerely,



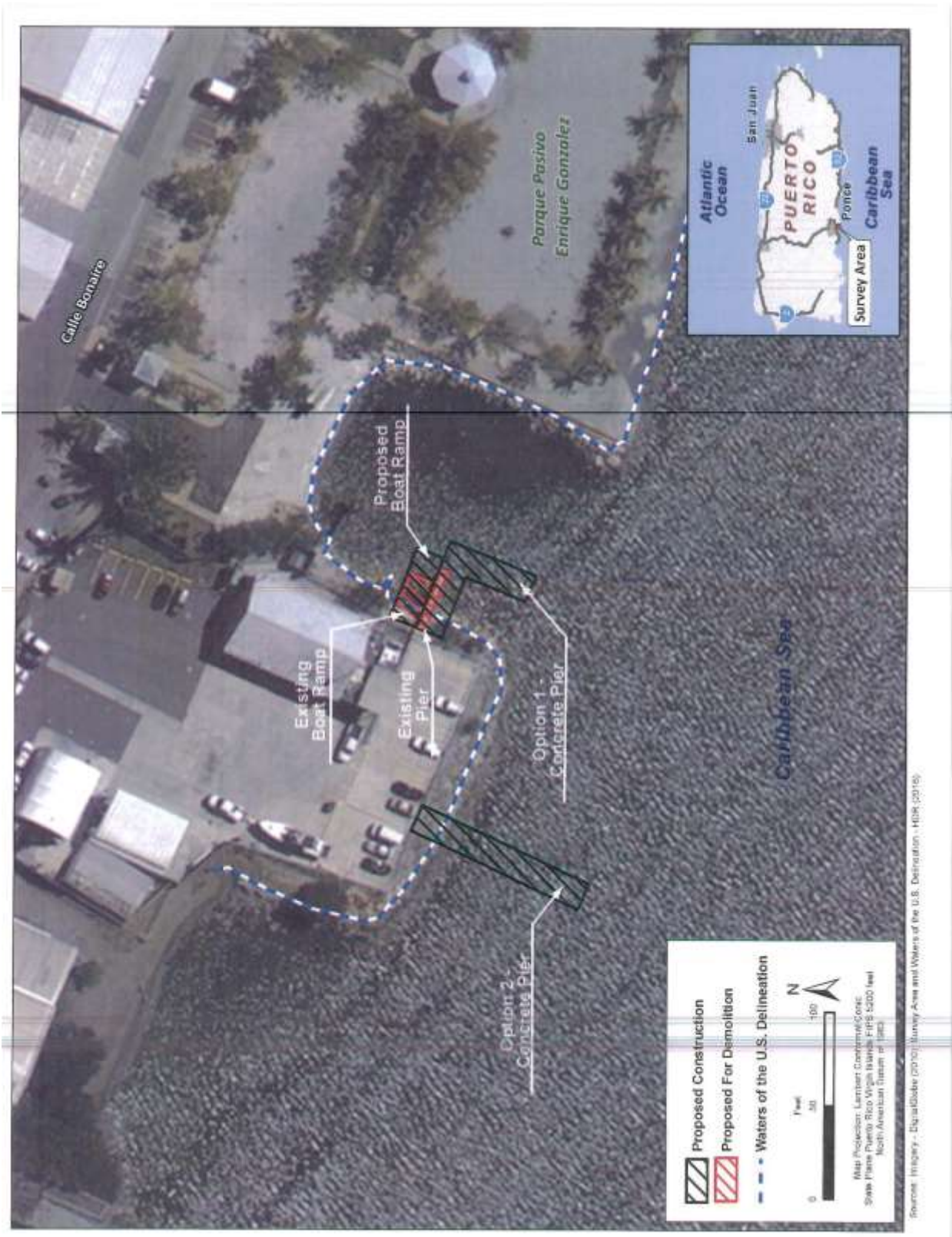
Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
Program Management Office

Enclosure(s)

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*





*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1 USFWS Response to CBP, March 2017



**United States Department of the Interior**

**FISH AND WILDLIFE SERVICE**

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

**MAR 02 2017**



In Reply Refer To:  
FWS/R4/CESFO/72113-101

Mr. Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
U.S. Customs and Border Protection  
1300 Pennsylvania Avenue NW  
Washington, DC 20229

Re: U.S. Customs Border Protection pier  
and boat ramp replacement.

Dear Mr. Enriquez:

We have reviewed your request for information regarding endangered and threatened species and their habitats for the above referenced action. 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.*).

The proposed project consists of the construction of a pier and a boat ramp at the U.S. Coast Guard Ponce Boathouse located at 41 Bonaire Street, Ponce, Puerto Rico. The pier would be constructed of cast-in-place reinforced concrete, and would be a minimum of 15 feet wide over its entire length. Also, the project would include the replacement of an existing boat ramp.

The proposed action lies within the habitat of the endangered Antillean manatee (*Trichechus manatus manatus*). The Service has developed recommendations with the purpose of assisting other agencies, private organizations and community to avoid or minimize adverse impacts on Antillean manatees during project development in an area where the manatee may occur. Please find Service's recommendation attached to this letter. These recommendations should be included in the project permit conditions and implemented during construction and operations.

Based on the above, we believe that the proposed project is not likely to adversely affect federally-listed species under the jurisdiction of the Fish and Wildlife Service. Thank you for the opportunity to comment on this project. We appreciate your interest in protecting


2

Mr. Enriquez

2

endangered species and their habitats. If you have any questions or require additional information, please do not hesitate to contact Angel Colón at 787-851-7297.

Sincerely yours,

  
for Edwin E. Muffiz  
Field Supervisor

agcs

Enclosure: USFWS January 2012 Technical Assistance to Evaluate Effects on Antillean Manatees

cc  
COE, San Juan  
DRNA, 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.



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)

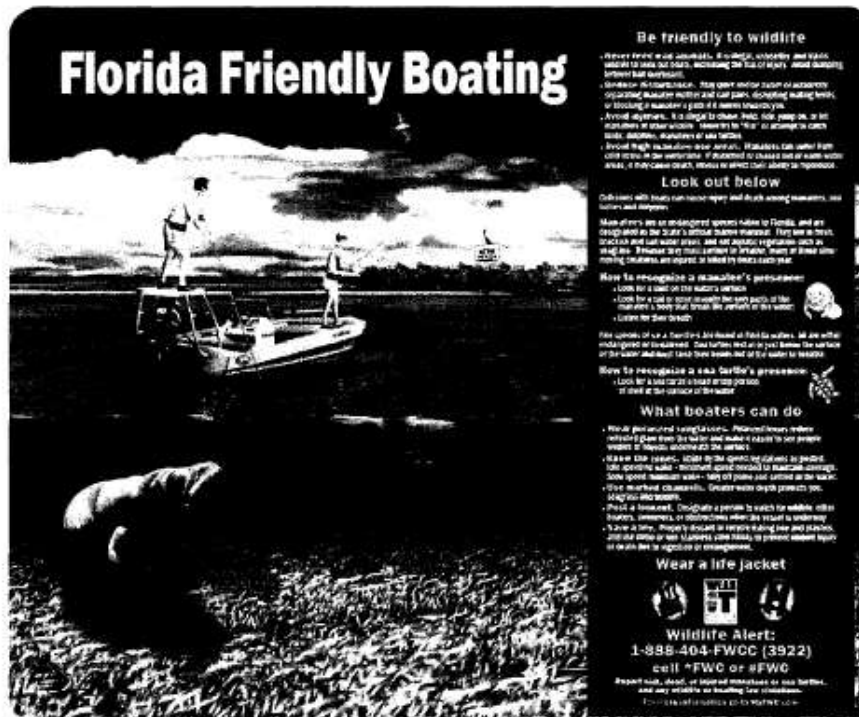


This **permanent** bilingual sign is required as part of the standard manatee construction conditions and is intended to be placed within docking and launching facilities. Minimum size should be at least 30" inches tall by 24" inches wide with rounded corners. This sign shall be installed prior, during 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*

*path of your vessel, reduce the velocity to 5 mph and turn your vessel away from the manatee's path or wait until the manatee has moved from the area by putting your vessel in neutral.)*

3. *Luego de asegurarse de que el manatí esté fuera de la trayectoria de su embarcación, continúe navegando despacio (no más de 5 mph) hasta que su embarcación se encuentre a no menos de 50 pies (15 metros) del manatí. (After you are certain that the manatee is well outside of the path of your vessel, resume navigation slowly (not more than 5 mph) until your vessel is not less than 50 feet (15 meters) away from the manatee.)*
4. *Obedezca las zonas con límites de velocidad y reduzca la velocidad en aguas llanas menores a 10 pies de profundidad en particular cerca de la costa, en las desembocaduras de ríos, en praderas de hierbas marinas y manglares. (Obey regulatory speed zones and reduce velocity in shallow waters less than 10 feet, particularly close to the coast, in river mouths, in sea grass beds and mangroves.)*
5. *Si observa un manatí mientras usted está en el agua, obsérvelo pasivamente, no lo persiga, acose o lo toque. (If you observe a manatee while in the water, passively observe it, do not follow it, nor harass or touch.)*
6. *No tire basura al agua. El manatí puede ingerirla o enredarse en ella, lo cual podría causarle heridas o la muerte. (Do not throw trash in the water. Manatees may ingest or entangle on trash, which may injure or kill it.)*
7. *Nunca alimente o le ofrezca agua a un manatí. Es ilegal y los malacostumbra a acercarse a lugares donde pueden ser lastimados. (Never feed or give water to a manatee. It is illegal and will wrongly habituate them to approach areas where they can be injured.)*

*Informe accidentes con un manatí inmediatamente. Si encuentra un bebé manatí solo, en peligro, herido o muerto, llame al Cuerpo de Vigilantes del Departamento de Recursos Naturales y Ambientales al 787-724-5700 o al Programa de Rescate de Mamíferos Marinos al 787-833-2025, 787-538-4684 ó 787-645-5593. (Inform any accident with a manatee immediately. If you find a baby manatee alone, in danger, injured or dead, call the Department of Natural and Environmental Resources Law Enforcement at 787-724-5700 or the Marine Mammal Rescue Program at 787-833-2025, 787-538-4684 or 787-645-5593.)*

*Herir o matar un manatí puede conllevar multas de más de \$50,000 y/o no menos de dos años de cárcel. ¡EVÍTESE ESE RIESGO!  
(Harming or killing a manatee could carry fines of more than \$50,000 and/or not less than two years in prison. AVOID THIS RISK!)*

**GRACIAS POR AYUDAR A SALVAR LOS MANATÍES  
THANKS FOR HELPING SAVE THE MANATEES**

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- 1 A.2 NOAA Fisheries
- 2 CBP Letter to NOAA Fisheries

<p>JAN 26 2017</p> <p>Dr. Lisamarie Carrubba NOAA Fisheries Caribbean Field Office, PRD P.O. Box 1310 Boquerón, PR 00622 Email: lisamarie.carruba@noaa.gov</p>	<div style="text-align: right;"><p>1300 Pennsylvania Avenue NW Washington, DC 20229</p><p><b>U.S. Customs and Border Protection</b></p></div> <hr/> <p><b>Subject:</b> Early Endangered Species Act (ESA) Section 7 Consultation and Project Information related to the Air and Marine Facilities (AMF), U.S. Customs Border Protection (CBP) Ramey Sector, Puerto Rico, Ponce Pier and Ramp</p> <p>Dear Dr. Carrubba:</p> <p>The U.S. Department of Homeland Security (DHS), CBP is proposing to construct a replacement pier and boat ramp at the U.S. Coast Guard (USCG) Ponce Boathouse located at 41 Bonaire Street, Ponce, Puerto Rico 00716 (Latitude: N 17° 58.734303' Longitude: W 66° 37.196585') (see <b>Attachment 1</b>). A general description of the proposed project is provided in subsequent paragraphs. CBP has retained the services of HDR to complete the environmental permitting, including the completion of biological surveys of the proposed project area. While the project is in early planning stages, the purpose of this letter is to inform the National Marine Fisheries Service (NMFS) about the project and initiate informal in accordance with Section 7(a)(2) of the Endangered Species Act.</p> <p>CBP, with the support of the U.S. Army Corps of Engineers (USACE) is planning to design and construct a new pier and boat ramp capable of supporting operations for a minimum of two SAFE™ 410 Apostle Vessels docked simultaneously and constructed a minimum of 3 feet above the mean high water level. The pier would be constructed of cast-in-place reinforced concrete and would be a minimum of 15 feet wide over its entire length. The location of the pier will either be east of the USCG Ponce Boathouse property line (at or near to the existing pier and boat ramp) (Pier Option A), or south of the USCG Ponce Boathouse property line, pending final approvals (Pier Option B). In order to permit the safe launch and recovery of 45-foot trailered marine vessels, during mean low water level, the project would include replacement of the existing boat ramp.</p> <p>The project will obtain a permit under Section 404 of the Clean Water Act and as part of that process, we plan on presenting a brief description of the project in an upcoming U.S. Army Corps of Engineers (USACE) interagency meeting. At that time we would like to discuss the results of the biological surveys conducted by HDR and CSA Ocean Sciences, Inc. and any concerns that NMFS might have regarding the project's potential impacts on protected species.</p>
--	---

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

Dr. Lisamarie Carrubba

Page 2

Should you have any questions about the proposed project, please contact Audra Upchurch at (202) 748-4435 or by email at [audra.upchurch@cbp.dhs.gov](mailto:audra.upchurch@cbp.dhs.gov).

Thank you for your consideration on this request.

Sincerely,

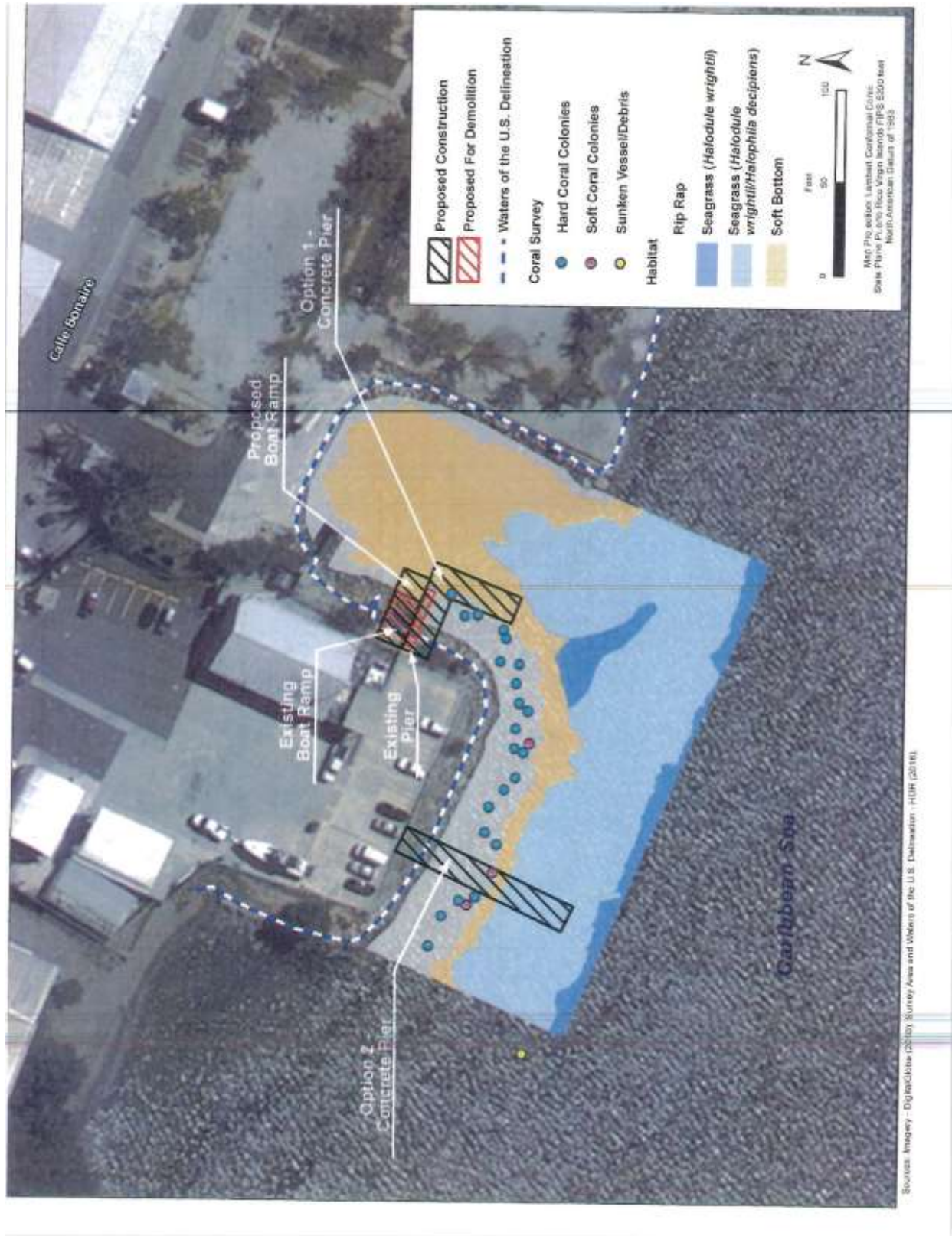


Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
Program Management Office

Enclosure(s)

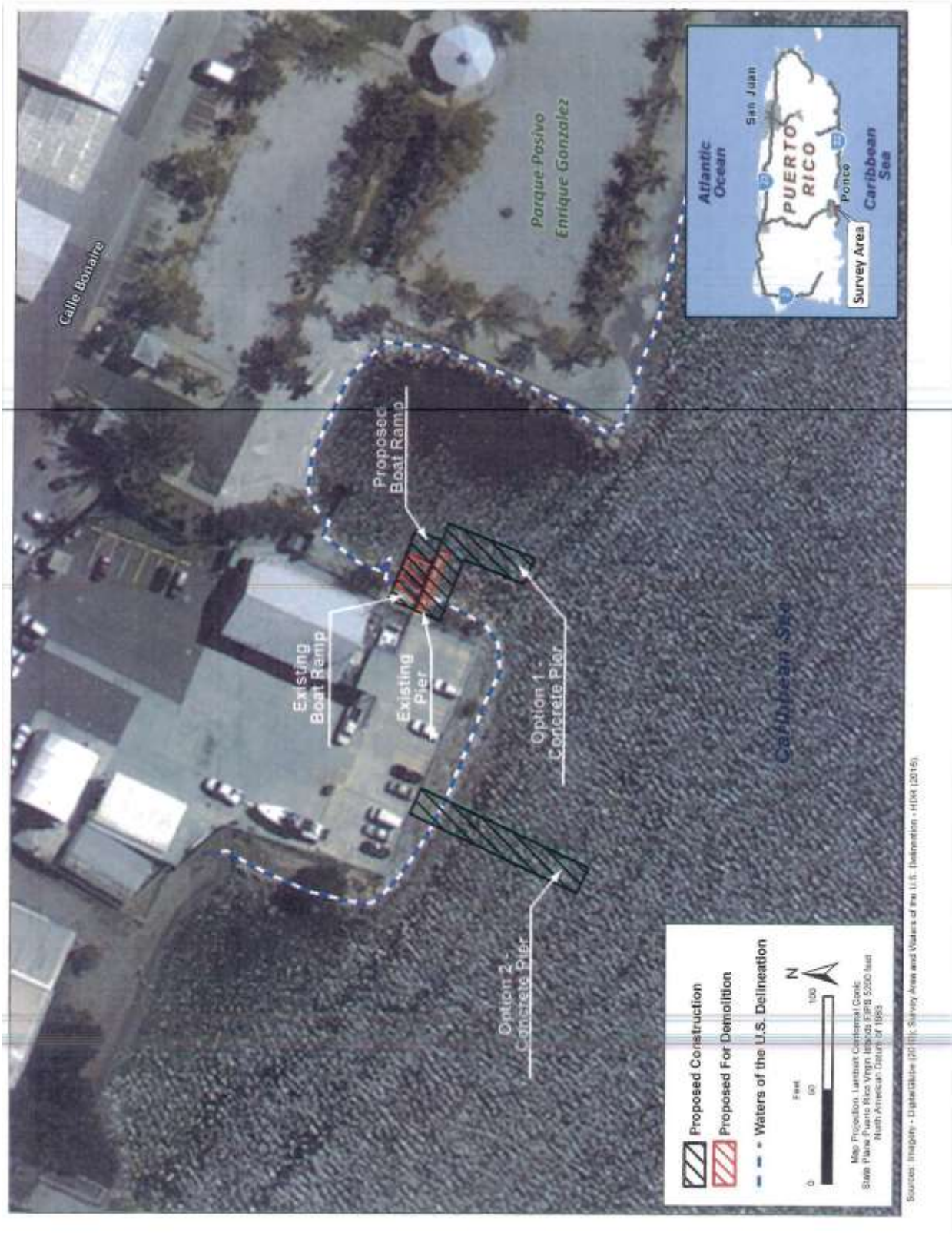


*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*





*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

- 1 A.3. National Marine Fisheries Service
- 2 CBP Letter to NOAA Fisheries

1300 Pennsylvania Avenue NW  
Washington, DC 20229



U.S. Customs and  
Border Protection

JAN 26 2017

Mr. Jose A. Rivera, Fishery Biologist  
National Marine Fisheries Service  
Habitat Conservation Division  
c/o Jacksonville District Corps of Engineers, Antilles Office  
Fundación Angel Ramos, Annex Building  
383 Franklin Delano Roosevelt Avenue, Suite 202  
San Juan, PR 00918  
Email: Jose.A.Rivera@noaa.gov

**Subject:** Early Essential Fish Habitat Consultation and General Project Information related to the Air and Marine Facilities (AMF), U.S. Customs Border Protection (CBP) Ramey Sector, Puerto Rico, Ponce Replacement Pier and Boat Ramp

Dear Mr. Rivera:

The U.S. Department of Homeland Security (DHS), CBP is proposing to construct a replacement pier and boat ramp at the U.S. Coast Guard (USCG) Ponce Boathouse located at 41 Bonaire Street, Ponce, Puerto Rico 00716 (Latitude: N 17° 58.734303' Longitude: W 66° 37.196585') (see **Attachment 1**). A general description of the proposed project is provided in subsequent paragraphs. CBP has retained the services of HDR to complete the environmental permitting, including completion of biological surveys of the proposed project area. While the project is in early planning stages, the purpose of this letter is to inform the National Marine Fisheries Service (NMFS) about the project, and to initiate Essential Fish Habitat consultation, in accordance with Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act.

CBP, with the support of the U.S. Army Corps of Engineers (USACE), is planning to design and construct a new pier and boat ramp capable of supporting operations for a minimum of two SAFE™ 410 Apostle Vessels docked simultaneously, and constructed a minimum of 3 feet above the mean high water level. The pier would be constructed of cast-in-place reinforced concrete, and would be a minimum of 15 feet wide over its entire length. The location of the pier will either be east of the USCG Ponce Boathouse property line (at or near to the existing pier and boat ramp) (Pier Option A), or south of the USCG Ponce Boathouse property line, pending final approvals (Pier Option B). The project includes replacing the existing boat ramp, in order to permit the safe launch and recovery of 45-foot trailered marine vessels at mean low water.

The project will obtain a permit under Section 404 of the Clean Water Act and as part of that process, CBP plans on presenting a brief description of the project at an upcoming U.S. Army Corps of Engineers (USACE) interagency meeting. At that time we would like to discuss the results of biological surveys conducted by HDR and CSA Ocean Sciences, Inc., as well as any concerns that NMFS might have regarding the project's potential impacts on essential fish habitat in the proposed project area.

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

Mr. Jose A. Rivera

Page 2

Should you have any questions about the proposed project, please contact Audra Upchurch at (202) 748-4435 or by email at [audra.upchurch@cbp.dhs.gov](mailto:audra.upchurch@cbp.dhs.gov).

Thank you for your consideration on this request.

Sincerely,

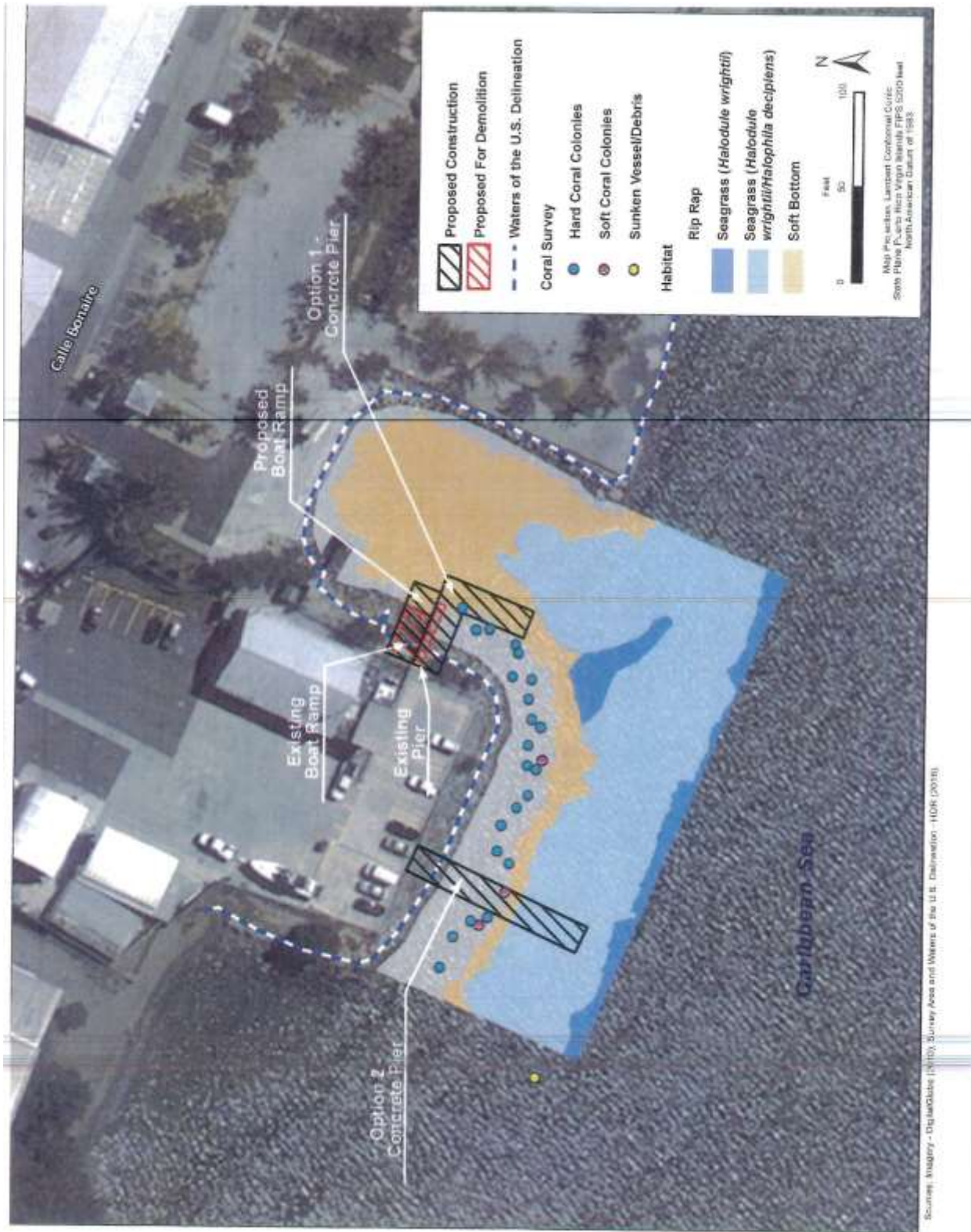


Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
Program Management Office

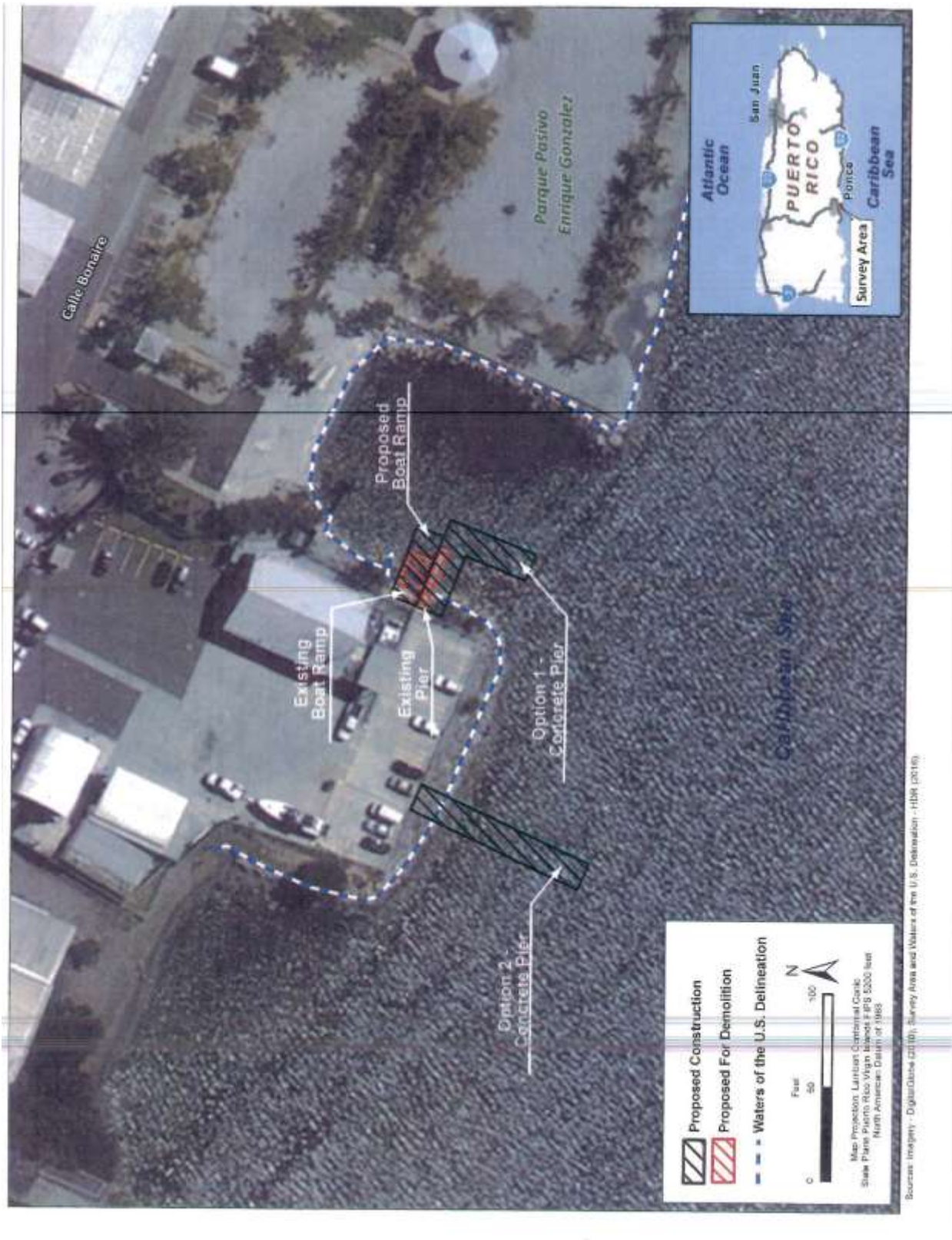
Enclosure(s)



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*





**A.4. Puerto Rico Oficina Estatal de Conservación Histórica**

**CBP Letter to Puerto Rico Oficina Estatal de Conservación Histórica**

1300 Pennsylvania Avenue NW  
Washington, DC 20229



**U.S. Customs and  
Border Protection**

APR 28 2017

Mr. Carlos A. Rubio Cancela, Architect  
State Historic Preservation Officer  
Oficina Estatal de Conservación Histórica  
Cuartel de Ballajá, Oficina 336-A, Tercer Piso  
San Juan, PR 00902

**REFERENCE:** U.S. Customs and Border Protection (CBP), Air and Marine Facilities (AMF)  
Ramey Sector, Puerto Rico, Ponce Pier and Boat Ramp Replacement

Dear Mr. Rubio Cancela:

The U.S. Department of Homeland Security (DHS), U.S Customs and Border Protection (CBP) proposes to construct a replacement pier and boat ramp at the U.S. Coast Guard (USCG) Ponce Boathouse located at 41 Bonaire Street, Ponce, PR 00716 (Parcel ID: 412-061-611-04; see Attachment A for project location). CBP is the lead federal agency for this undertaking. Pursuant to Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations (36 CFR Part 800), this letter and enclosures constitute a request for concurrence with CBP's determination of effects on historic properties from this undertaking.

**Description of the Undertaking**

Due to age and deterioration, the condition of the existing facilities can no longer adequately support CBP's mission requirements. Additionally, the existing pier cannot accommodate CBP vessel sizes and; therefore, is no longer usable and has been abandoned in place. CBP, with the support of the U.S. Army Corps of Engineers (USACE), proposes to design and construct a new pier and boat ramp capable of supporting operations for a minimum of two SAFE™ 410 Apostle Vessels docked simultaneously and constructed a minimum of three (3) feet above the mean high water level. Additionally, the proposed project consists of replacing the existing boat ramp, in order to permit the safe launch and recovery of 45-foot trailered marine vessels at mean low water.

The proposed pier would be constructed of cast-in-place reinforced concrete and would be a minimum of 15 feet wide over its entire length. The location of the pier will either be east of the USCG Ponce Boathouse property line (at or near the existing pier and boat ramp; Option 1) or south of the USCG Ponce Boathouse property line (Pier Option 2). See Attachment B for location and placement of the pier and boat ramp options.



Mr. Carlos A. Rubio Cancela

Page 2

#### **Determination and Documentation of the Area of Potential Effects**

The Area of Potential Effects (APE) delineated for this project accounts for all potential direct and indirect effects from the undertaking on historic properties. In general, effects from the project are not expected to extend landward outside of the USCG parcel boundaries. Construction would occur on the waterside/southern end of the parcel. The existing buildings and structures on the USCG parcel would restrict views and transmission of sound from construction activities to the adjacent Bonaire Street. The APE boundaries (Attachment B) extend into the water where construction will occur and include 1.37 acres on land and 1.01 acres on water.

#### **Identification and Evaluation of Historic Properties**

In 2013, CBP conducted a comprehensive cultural resources survey of the USCG Ponce Boathouse property to fulfill its responsibilities under Section 110 of the NHPA. The report was reviewed by OECH and the determinations of eligibility concurred with by OECH (OECH Correspondence 26 August 2013; Attachment C). The survey included a literature and record search of files at OECH within 1 mile of the facility and a Phase IB archeological survey conducted in 1992, in accordance with the *Procedimiento para la radicación y evaluación de proyectos de construcción y desarrollo* (Procedure for the placement and evaluation of construction and development projects) published by the *Consejo Para la Protección del Patrimonio Arqueológico Terrestre de Puerto Rico* (Council for the Protection of the Terrestrial Archeological Patrimony of Puerto Rico). The architectural survey was conducted in 2002, in accordance with the *Reglamento para la designación, registro y conservación de sitios y zonas históricas en Puerto Rico* (Regulations for the designation, registration, and conservation of historic sites and districts in Puerto Rico) published by the *Estado Libre Asociado de Puerto Rico, Oficina de la Gobernadora, Junta de Planificación* (Free Associated State of Puerto Rico, Office of the Governor, Planning Council).

The literature and record search conducted in 2013 found no previously recorded terrestrial archeological sites within 1 mile of the facility. Two unnumbered maritime archeological sites were identified outside of the APE (343 meters and 1.66 kilometers southeast of the facility). Additionally, the 1841 U.S. Customs House, located across Bonaire Street from the USCG Ponce Boathouse was listed in the NRHP in 1988. However, the Customs House is 85 and 95 meters, respectively, from the proposed pier and boat ramp Options 1 and 2, which is outside of the APE delineated for this project.

The 2013 archeological investigation found no archeological sites at the USCG Ponce Boathouse. A pedestrian survey of 100% of the parcel was conducted and two shovel test pits dug. The survey revealed that the facility had been heavily impacted by construction and the potential for archeological deposits was extremely low. The architectural survey evaluated four buildings and six structures for NRHP eligibility. One structure on the parcel was not evaluated

Mr. Carlos A. Rubio Cancela

Page 3

in 2013, the Playa Ponce Rear Light, which constructed between 1952 and 1958 and is owned by USCG. The ten buildings and structures at the facility were determined not eligible for listing in the NRHP with OECH concurrence.

**Determination of Effects on Historic Properties**

No archeological sites are present on the USCG parcel or within the APE. Therefore, no archeological sites would be affected by the undertaking.

The Playa Ponce Rear Light is the only unevaluated building or structure on the USCG parcel. As no formal determination of eligibility has been made for it, it is assumed to be NRHP-eligible for the purposes of this consultation. Based on the project design and scope, anticipated effects on the Playa Ponce Rear Light are minimal and do not negatively impact the property's historic integrity. The construction of the pier and boat ramp would minimally change the setting of the light. The pier and boat ramp would be replacing existing non-historic structures and the new construction would continue existing and historic governmental maritime uses at the site. Therefore, CBP has determined this project has no adverse effects on historic properties.

We request concurrence on our determination of no historic properties affected as contained in the enclosed report. If CBP has not received a response from your office within 30 days of your receipt of this determination letter, CBP will consider its responsibilities under Section 106 to have been fulfilled.

If you have any questions or concerns, please feel free to contact Lauri Regan at (202) 313-1872, lauri.r.regan@cbp.dhs.gov; US Customs and Border Protection, 24000 Avila Road, Suite 5020, Laguna Niguel, CA 92677, Attn: *Paul Enriquez*. We also request you provide an electronic copy of your response to Ms. Regan at lauri.r.regan@cbp.dhs.gov.

Sincerely,

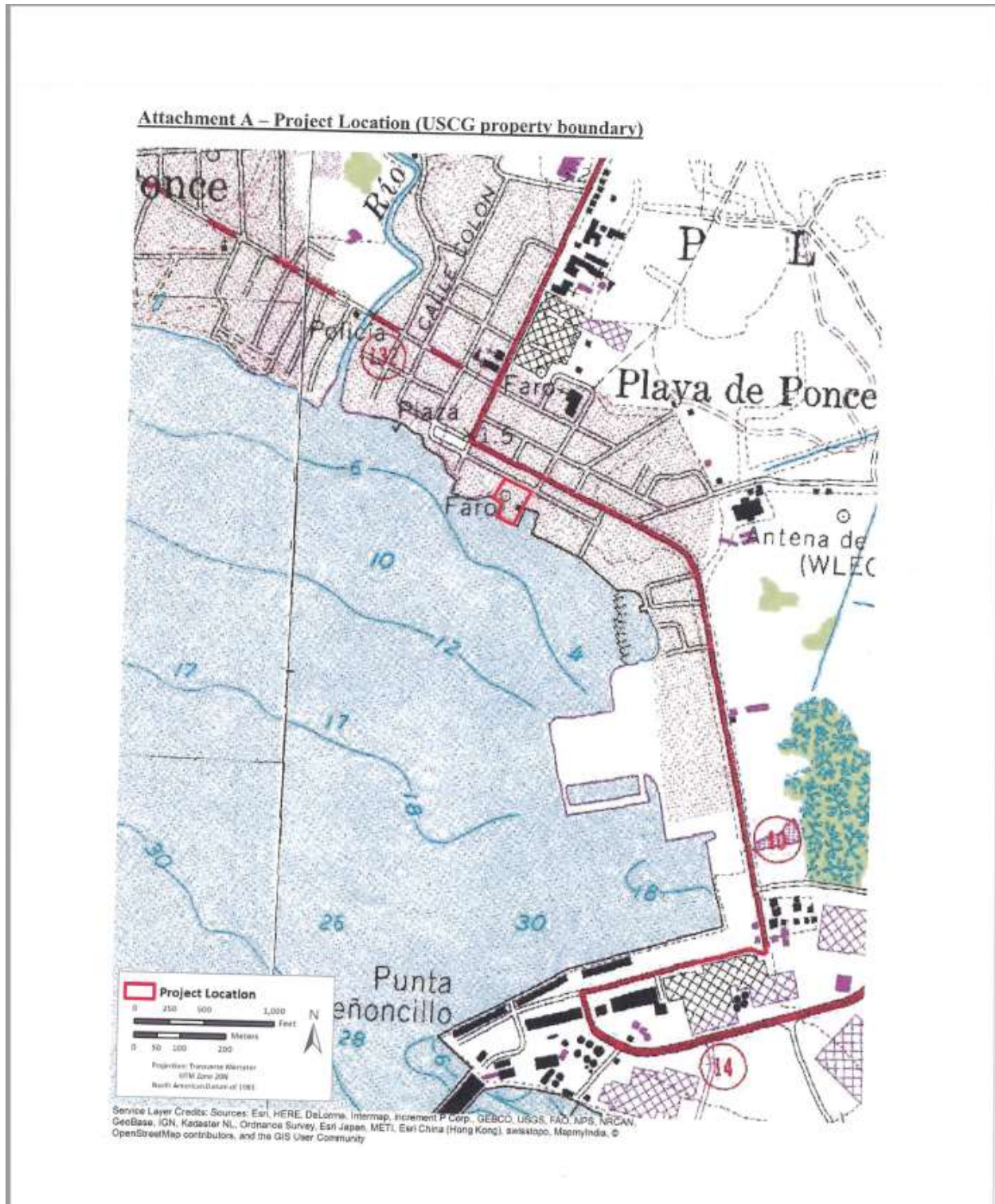


Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
Program Management Office

Enclosures: Attachment A – Project Location (USGS Topographic Quadrangle)  
Attachment B – Area of Potential Effects/Construction Design  
Attachment C – OECH Correspondence to CBP, dated 26 August 2013  
Attachment D – Section 106 Delivery Control Form



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

**Attachment B – Area of Potential Effects Map**



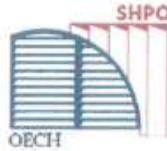
Sources: Imagery - DigitalGlobe (2016); Survey Area and Waters of the U.S. Delination - HCR (2016).

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

**Attachment C – OECH Correspondence to CBP, dated 26 August 2013**

OFICINA ESTATAL DE  
CONSERVACIÓN HISTÓRICA  
OFICINA DEL GOBIERNO

STATE HISTORIC  
PRESERVATION OFFICE  
OFFICE OF THE GOVERNOR



October 25, 2013

Jennifer DeHart Hass, Director  
Environmental and Energy Division  
U.S. Customs and Border Protection  
1300 Pennsylvania Avenue NW  
Washington DC, 20229

**SHPO #08-26-13-01 IDENTIFICATION AND EVALUATION OF AIR AND MARINE FACILITY CARIBBEAN IN AGUADILLA, RAMEY BORDER PATROL STATION IN AGUADILLA AND AIR AND AIR AND MARINE FACILITY IN PONCE, ISLANDWIDE, PUERTO RICO**

Dear Ms. DeHart:

We acknowledge the receipt of the cultural resources inventories prepared for the above referenced facilities in accordance with Section 110 of the National Historic Preservation Act (NHPA). We are providing you the following comments for each one:

Air and Marine Facility, Caribbean, (Aguadilla) We concur with the survey's evaluation and NRHP recommendations for all properties within the boundaries of the AMF Caribbean facility with the exception of the hangar (Building PR4043) as it seems with enough integrity and significance to be individually eligible for inclusion in the National Register of Historic Places (NRHP).

Ramey Border Patrol Station, (Aguadilla) We concur with the survey's evaluation and NRHP recommendations for all properties within the boundaries of the BPS facility.

Air and Marine Facility, (Ponce) We concur with the survey's evaluation and NRHP recommendations for all properties within the boundaries of the AMF facility with the exception of the US Coast Guard Marine Safety Division boathouse (Building PR 4924) and the Playa de Ponce rear range light (PMU-5). Close consideration need to be taken with these two resources in their direct association with the USCG context.

We appreciate the opportunity to comment on this matter. If you have any questions or comments or require any further assistance, do not hesitate to architect Santiago Gala Aguilera or historian Juan Llanes Santos of our Office.

Sincerely,

Diana López Sotomayor, Archaeologist  
State Historic Preservation Officer

DLS/NP/BRS/JLS:SG

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

P.O. Box 9023035  
San Juan, PR 00902-3935

Teléfono/Phone | 787.741-3737  
Fax | 787.741-3773





*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*



ESTADO LIBRE ASOCIADO DE  
PUERTO RICO  
Oficina Estatal de Conservación Histórica  
State Historic Preservation Office

**Formulario para el control de entrega.  
Proyectos de sección 106**

(Delivery control form 106 Section)



SHPO  
OFICINA ESTATAL DE  
CONSERVACION HISTORICA  
OFFICE OF THE SUPERVISOR  
STATE HISTORIC  
PRESERVATION OFFICE  
OFFICE OF THE GOVERNOR

Sección A. Información a ser llenada por el proponente* (Section A. Information to be filled by proponent)		
Nombre del Proyecto/ Project's name		Número de referencia federal/ Reference federal number
CBP Ponce Pier and Boat Ramp Replacement		SEAC-RP2004905
Municipio/ Municipality	Barrio/ Ward	Nombre del Proponente/ Proponent's name
Ponce	Playa	U.S. Customs and Border Protection
Agencia Federal/ Federal Agency	Total de fondos federales solicitados/ Total of federal funds to be requested	Total de acres/ Total amount of acres
CBP	\$1,886,500.00	Terrestrial: 1.37 ac Maritime: 1.01 ac
Nombre de la persona que entrega/ Name of person who delivers		Firma/Signature
Paul Enriquez		
Sección B. Información a ser llenada por la OECH al momento de la entrega del proyecto (Section B. Information to be filled by SHPO upon delivery)		
Fecha de entrega en la OECH/ SHPO delivery date		Nombre y firma de la persona que recibe/ Name and signature of person who received

- \* Para poder cumplir su labor ministerial la OECH requiere que la Sección A de este formulario sea completada en su totalidad. Por tal razón, no se aceptarán proyectos que incumplan este requerimiento.  
(To carry out our duties, the SHPO requires that Section A of this form be totally filled-out. For this reason, we will not accept an incomplete form.)

*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1 Response to CBP, April 2017



**GOBIERNO DE PUERTO RICO**  
**Oficina Estatal de Conservación Histórica**

May 10, 2017

**Paul Enriquez**

Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
U.S. Customs and Border Protection  
1300 Pennsylvania Avenue NW  
Washington, DC 20229

**SHPO 05-04-17-01 U.S. CUSTOMS AND BORDER PROTECTION (CBP), AIR AND MARINE FACILITIES (AMF) RAMEY SECTOR, PONCE PIER AND BOAT RAMP REPLACEMENT, PONCE, PUERTO RICO**

Dear Mr. Enriquez,

Our Office has received and reviewed the above referenced project in accordance with 54 U.S.C. 306108 (commonly known as Section 106 of the National Historic Preservation Act) 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.

The waters where the scheduled improvements are to be carried out experienced heavy maritime commercial activity during the nineteenth and early twentieth centuries. Therefore, it is likely that archaeological material remains associated with this activity lie within the area of potential effects (APE) of this undertaking. The 2013 Cultural Resources Inventory of the Ponce facility did not include the surrounding waters. As such, an underwater archaeological survey of the APE should be carried out to determine the presence of these remains. You should submit a report documenting the results of this survey to our Office for review and comment.

if you have any questions regarding this matter, please contact Miguel Bonini at (787) 721-3737 or [mbonini@prshpo.pr.gov](mailto:mbonini@prshpo.pr.gov).

Sincerely,

**Carlos A. Rubio-Cancela**  
State Historic Preservation Officer

CARC/ERS/MB

2



**GOBIERNO DE PUERTO RICO**

**Oficina Estatal de Conservación Histórica**

Monday, February 12, 2018

**Paul Enriquez**

Real Estate and Environmental Branch Chief  
Border Patrol and Air and Marine  
Program Management Office  
US Customs and Border Protection  
1300 Pennsylvania Avenue NW  
Washington DC, 20229

**SHPO 01-12-18-01 POST-HURRICANE MARIA EMERGENCY REPAIRS TO  
THE USCG PONCE BOATHOUSE PERIMETER FENCE, PONCE, PUERTO  
RICO**

Dear Mr. Enriquez:

Our Office has received and reviewed the above referenced project, in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties from the Advisory Council on Historic Preservation*. The State Historic Preservation Officer (SHPO) is to advise and assist federal agencies 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.

If you have any questions or comments regarding this matter, do not hesitate to contact Santiago Gala Aguilera, of our Office at [sgala@prshpo.pr.gov](mailto:sgala@prshpo.pr.gov) or extension 2010.

Sincerely,



**Carlos A. Rubio Calles**  
State Historic Preservation Officer

CARC/GMO/SG



OFICINA PRETATOR  
CONSERVACION HISTORICA  
OFICINA DE SUPERVISION  
STATE HISTORIC  
PRESERVATION OFFICE  
OF CLERK OF COURTS

Cuartel de Balleja, San Juan, PR • PO Box 9023935, San Juan, PR 00902-3935 • [www.oech.pr.gov](http://www.oech.pr.gov) • 787-721-3737

1 CBP Response Transmitting Underwater Survey, 2018

1300 Pennsylvania Avenue NW  
Washington, DC 20229



**U.S. Customs and  
Border Protection**

**MAR 15 2018**

Carlos A. Rubio Cancela  
State Historic Preservation Officer  
Oficina Estatal de Conservación Histórica  
Cuartel de Ballajá, Oficina 336-A, Tercer Piso  
San Juan, Puerto Rico 00902

Re: SHPO 05-04-17-01  
U.S. Customs and Border Protection, Air and Marine Facilities Ramey Sector, Ponce Pier  
and Boat Ramp Replacement, Ponce, Puerto Rico  
REPORT REVIEW: *Underwater Archaeology Survey for the Proposed Ponce Marine Unit  
Boat Ramp and Pier, Ponce Municipality, Puerto Rico*

Dear Mr. Cancela,

At your request during initial consultation for the referenced project (letter dated May 10, 2017), the U.S. Department of Homeland Security, U.S. Customs and Border Protection (CBP) contracted SEARCH to conduct a Phase I maritime archaeological investigation of the project's Area of Potential Effects (APE). The survey was completed on July 26, 2017 to assist CBP with its obligation under Section 106 of the National Historic Preservation Act and implementing regulations (36 CFR Part 800). While the survey was completed in July of last year, CBP has delayed this submittal to allow the SHPO to reestablish their operations and handle emergency response undertakings.

Instrumentation for the Phase I survey included a differentially corrected global positioning system receiver, a marine magnetometer, and a side-scan sonar. SEARCH designed the survey to cover the 0.6 acres of the marine APE with parallel survey lines spaced 20 feet apart. The survey was designed and directed by professional maritime archaeologists who meet the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation*, and employed data acquisition technologies and methodologies that surpassed best current practices for maritime archaeological survey. SEARCH applied data processing techniques to identify and recognize potential submerged cultural resources and used a thorough maritime context to assist with the archaeological interpretation of the data.



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

Mr. Cancela

Page 2

No remote-sensing targets were identified within the APE that would be indicative of potential submerged cultural resources. Therefore, SEARCH recommends a clearance for cultural resources for this project. Enclosed is the draft technical report of findings for your review. We look forward to receiving and addressing your comments. If you have any questions or require additional information, please feel free to contact Lauri Regan at (202) 313-1872, lauri.r.regan@cbp.dhs.gov, U.S. Customs and Border Protection, 24000 Avila Road, Suite 5020, Laguna Niguel, CA 92677, Attn: *Paul Enriquez*. We also request you provide an electronic copy of your response to Ms. Regan at lauri.r.regan@cbp.dhs.gov.



Paul Enriquez  
Real Estate and Environmental Branch Chief  
Border Patrol and Air & Marine  
Program Management Office

Encl. (1): Draft Technical Report of Findings: *Underwater Archaeology Survey for the Proposed Ponce Marine Unit Boat Ramp and Pier, Ponce Municipality, Puerto Rico*



*DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico*

1 Response to CBP, April 2018



**GOBIERNO DE PUERTO RICO**  
**Oficina Estatal de Conservación Histórica**

April 3, 2018

**Paul Enriquez**

Real Estate and Environmental Branch Chief  
Border Patrol and Air Marine  
Program Management Office  
U.S. Customs and Border Protection  
1300 Pennsylvania Avenue NW  
Washington, DC 20229

SHPO 05-04-17-01 U.S. CUSTOMS AND BORDER PROTECTION PONCE  
PIER AND BOAT RAMP REPLACEMENT, PONCE, PUERTO RICO

Dear Mr. Enriquez,

We have reviewed the underwater archaeological survey report prepared for the above referenced project. The survey did not detect any historically significant resources. Therefore, we do not recommend any additional identification efforts. Nevertheless, the undertaking lies within Playa de Ponce, a district eligible for inclusion in the National Register of Historic Places under Criteria A and C. Notwithstanding, we do not believe that implementation of the undertaking will adversely affect this historic district and, therefore, believe that a finding of no adverse affect would be appropriate for the project.

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 questions regarding this matter, please contact our Office at (787) 721-3737 or email, [ediaz@prshpo.pr.gov](mailto:ediaz@prshpo.pr.gov)

*Sincerely,*

**Carlos A. Rubio-Cancela**  
State Historic Preservation Officer

CARC/GMO/BRS/MB



Centro de Ballajá, San Juan, PR • P.O. Box 9023935, San Juan, PR 00902-3935 • [www.prshpo.pr.gov](http://www.prshpo.pr.gov) • 787-721-3737

2