

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.

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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.

1 Executive Summary

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

14 Background

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

33 Purpose and Need

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

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

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

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

8 **Proposed Action and Alternatives**

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

15 **Alternatives Considered but Eliminated from Further Consideration**

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

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

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

34 **Impact Comparison Matrix**

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

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Table ES-1: Comparison of Analyzed Impacts

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

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 ₂	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 ²	meters squared
31	MBTA	Migratory Bird Treaty Act
32	Mgal/d	million gallons per day
33	µg/m ³	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 ₂	nitrogen dioxide
40	NOAA	National Oceanic and Atmospheric Administration
41	NO _x	nitrogen oxide
42	NPDES	National Pollutant Discharge Elimination System
43	NRHP	National Register of Historic Places
44	O ₃	ozone
45	OECH	Oficina Estatal de Conservación Histórica
46	OSHA	Occupational Safety and Health Administration

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1	Pb	lead
2	PCB	polychlorinated biphenyl
3	PM _{2.5}	particulate matter, 2.5 microns
4	PM ₁₀	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 ₂	sulfur dioxide
15	SO _x	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

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1 Introduction

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

13 1.1 Background

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

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

36 1.2 Purpose and Need

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

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

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

14 1.3 Location and Description of the Ponce Marine Unit

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

23 The project area is enclosed by a security fence, with a vehicle gate entrance located on Calle
24 Bonaire. The project area is approximately 2.65 acres – comprised of 1.05 acres of land and 1.6
25 acres of water. Most of the land area is covered in asphalt paving or structures, except for a 2.8
26 square meter (m²) strip of grassy sand located behind a fence along a beach west of the facility and
27 an 85 m² strip of landscaped lawn east of the facility’s main parking lot (HDR 2013). As shown in
28 Figure 1-2, the facility consists of four buildings and seven structures: a main office building, a
29 security booth, two modular offices, three shipping cargo containers used for storage, a flat-roof
30 vehicle shelter in front of the containers, a vehicle wash canopy, a metal-clad storage shed, and
31 the Playa Ponce Rear Range Light (a 25-foot cast iron and steel tower capped by a navigation
32 light).

33 Adjacent to the east of the Ponce Marine Unit is a small cove where the original concrete pier and
34 boat ramp are located. The original pile design concrete pier extended approximately 15 feet east
35 into the cove, but was displaced by Hurricane Maria, which hit the island of Puerto Rico on
36 September 20, 2017. The concrete pier is currently turned over on the riprap shore, but remains
37 partly in the water (Lenz & Whalon 2018) (Figure 1-3). A temporary structure was constructed
38 following Hurricane Maria in order to fulfill the immediate operational need of deploying CBP
39 assets from the Ponce Marine Unit. The temporary structure is a wooden pier approximately 3 feet
40 by 18 feet and supported by three polyvinyl chloride (PVC) pipes. North of the original concrete
41 pier is a boat ramp totaling 15 feet in length. The ramp is in severely deteriorated condition;
42

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

3 *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

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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.

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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

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1 *Email:*

2 Comments may also be emailed to joseph.zidron@cbp.dhs.gov. The email subject line
3 should read, “CBP Ponce Pier and Boat Ramp EA.”

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

- 15 • National Oceanic and Atmospheric Administration National Marine Fisheries Service
- 16 (NOAA Fisheries or NMFS), Southeast Regional Office, Protected Resources Division
- 17 • NOAA Fisheries, Habitat Conservation Division
- 18 • NOAA Fisheries, Protected Resources Division, MMPA Branch
- 19 • U.S. Department of Transportation/Federal Highway Administration
- 20 • USACE Jacksonville District, Antilles Regulatory Section
- 21 • U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office
- 22 • Natural Resources Conservation Service (NRCS)
- 23 • Puerto Rico State Historic Preservation Office
- 24 (Oficina Estatal de Conservación Histórica)
- 25 • Puerto Rico Aqueduct and Sewer Authority
- 26 • Puerto Rico Department of Agriculture
- 27 (Departamento de Agricultura)
- 28 • Puerto Rico Department of Economic Development and Commerce
- 29 • Puerto Rico Department of Natural and Environmental Resources
- 30 (Departamento de Recursos Naturales y Ambientales)
- 31 • Puerto Rico Department of Transportation and Public Works
- 32 • Puerto Rico Electric Power Authority
- 33 • Puerto Rico Environmental Quality Board
- 34 (Junta de Calidad Ambiental)
- 35 • Puerto Rico Planning Board
- 36 • Puerto Rico Ports Authority
- 37 • Archeology and Ethnohistory program of the Puertorican Institute of Culture
- 38 (Programa de Arqueología y Etnohistoria del Instituto de Cultura Puertorriqueña)
- 39 • Historical built heritage program of the Puertorican Institute of Culture
- 40 (Programa de Patrimonio Histórico Edificado del Instituto de Cultura Puertorriqueña)
- 41 • Municipality of Ponce

1 **1.5 Organization of This EA**

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

- 3 • Chapter 1, Introduction, provides background information on the purpose and need for the
4 Proposed Action, summarizes the public involvement in developing this EA, and provides
5 an overview of its organization.
- 6 • Chapter 2, Proposed Action and Alternatives, describes the Proposed Action and
7 alternatives and summarizes impacts of the alternatives.
- 8 • Chapter 3, Affected Environment and Environmental Consequences, describes the
9 potentially affected resources within the project site and the environmental consequences
10 of the proposed alternatives.
- 11 • Chapter 4, Cumulative Impacts, describes the cumulative impacts of the proposed
12 alternatives.
- 13 • Chapter 5, Mitigation Measures and Best Management Practices, describes the measures
14 to mitigate consequences of the Proposed Action and best management practices to be
15 undertaken.
- 16 • Chapter 6, Agencies, Organizations, and Persons Consulted.
- 17 • Chapter 7, References.
- 18 • Chapter 8, List of Preparers.
- 19 • Appendix A, Consultation and Coordination Letters.
- 20

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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.

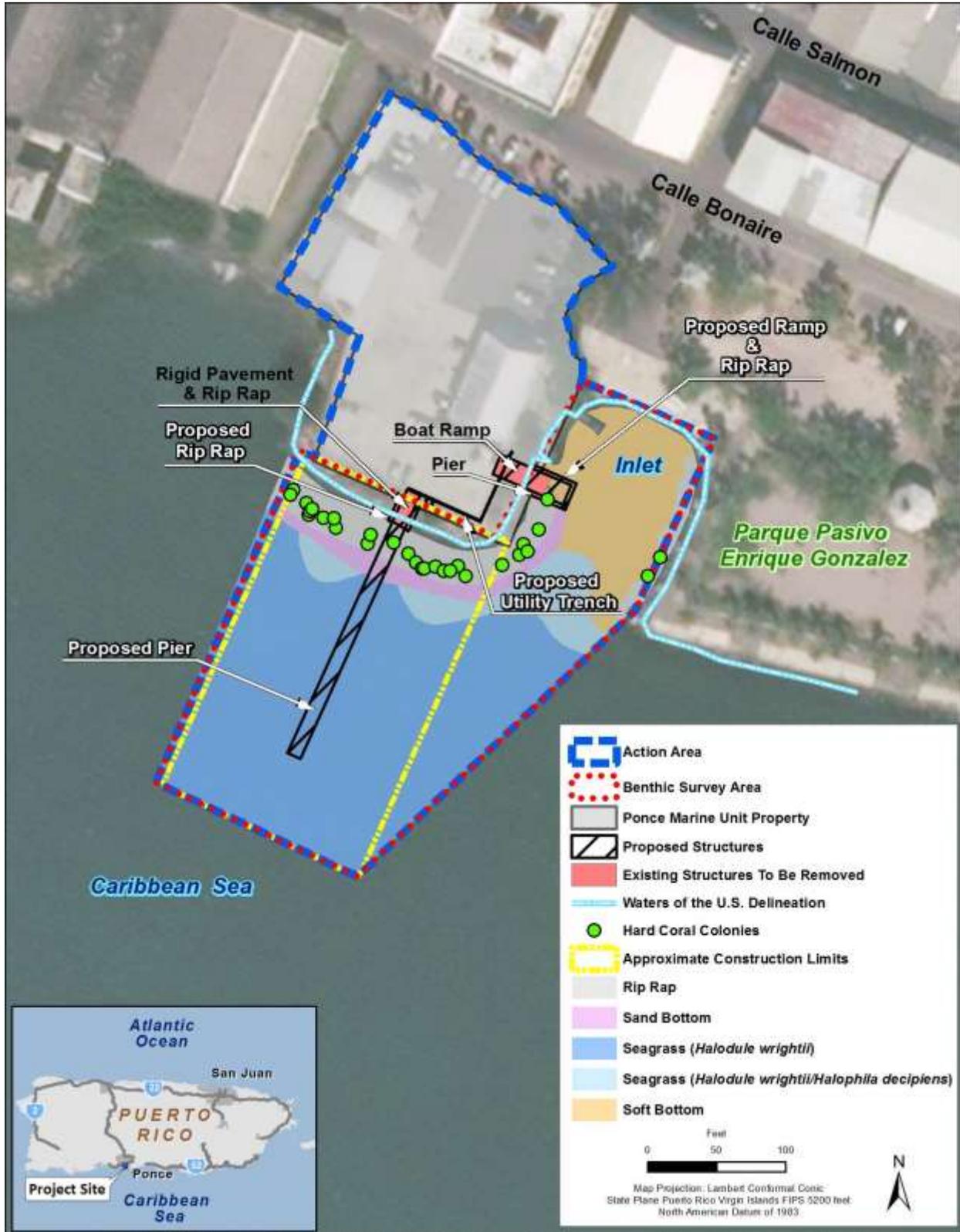
2.2 Proposed Action Alternative—Replacement of Existing Boat Ramp and Pier

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.

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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.

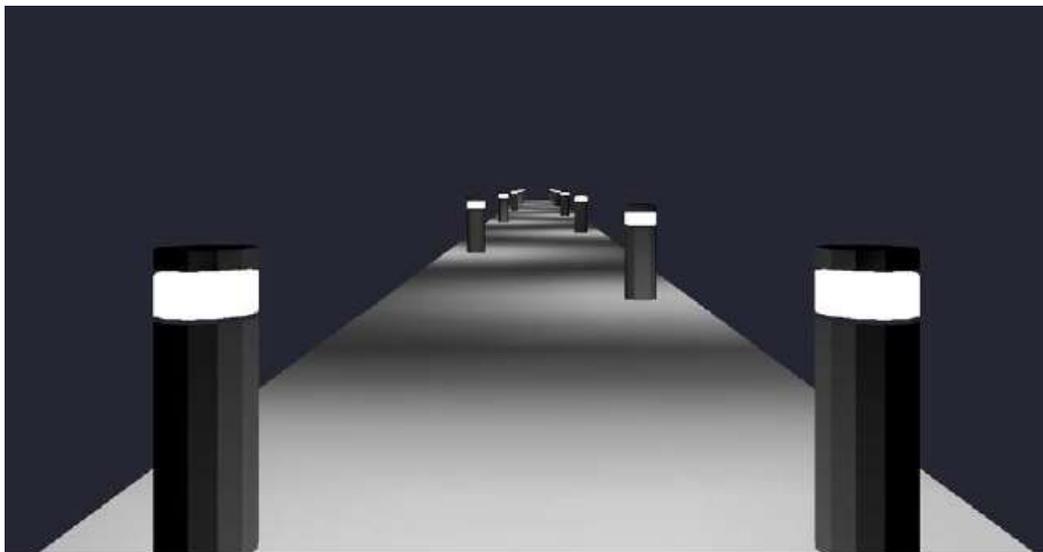
Figure 2-1. Ponce Marine Unit Proposed Action Alternative

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3

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

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

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



23 Source: USACE 2018a.

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

26 2.3 Alternatives Considered but Eliminated from Further Consideration

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

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

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

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

14 **2.4 Impact Comparison Matrix**

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

19 *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,

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

6 3.2 Resources Not Carried Forward for Analysis

7 3.2.1 Land Use

8 No effects on land use plans or policies are anticipated from the Proposed Action or No-Action
9 Alternative. Puerto Rico’s Land Use Plan classifies the proposed project area as urban land (PR
10 2017). Although a waterfront park exists to the east of the proposed project site, the Proposed
11 Action is compatible with historical and current land use in the area and would not result in changes
12 to land use. Therefore, a detailed discussion of land use was eliminated from further consideration
13 in this EA.

14 3.2.2 Socioeconomics

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

22 3.2.3 Environmental Justice

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

35 3.2.4 Protection of Children

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

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

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

12 3.2.5 Roadways and Traffic

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

23 3.2.6 Aesthetics and Visual Resources

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

31 3.3 Geology and Soils

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

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

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

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

10 3.3.1 Affected Environment

11 3.3.1.1 Geology

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

20 3.3.1.2 Topography and Physiography

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

25 3.3.1.3 Soils

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

33 3.3.2 Environmental Consequences

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

1 *3.3.2.1 No-Action Alternative*

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

5 *3.3.2.2 Proposed Action Alternative*

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

18 **3.4 Water Resources**

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

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

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

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

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

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

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

28 3.4.1 Affected Environment

29 3.4.1.1 Water Use

30 Most public drinking water used in the area of Ponce is withdrawn from the south coast aquifer or
31 from surface water and provided by the Puerto Rico Aqueduct and Sewer Authority (PRASA)
32 (USGS 2014). The water requirements were more than 4.48 million gallons per day (Mgal/d) in
33 2010, of which 1.14 Mgal/d were withdrawn from surface water and 3.34 Mgal/d from
34 groundwater. Estimated water usage for non-PRASA-supplied water is only 0.2 Mgal/d, with
35 0.07 Mgal/d from surface water and 0.13 Mgal/d from groundwater (USGS 2014). Less than
36 1 percent of Puerto Rico depends on private wells or springs for household water needs. Water for
37 irrigation is predominantly withdrawn from surface water features and characterized as the Juana
38 Diaz Irrigation District.

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

1 *3.4.1.2 Water Quality*

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

6 *3.4.1.3 Groundwater and Surface Water*

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

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

18 *3.4.1.4 Regulated Waters*

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

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

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

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

Source: HDR 2016a.

Figure 3-1. Delineation of WoUS

1
2
3

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March 22, 2018

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

Note: Yellow Star indicates Ponce Marine Unit facility.

Source: USFWS 2018.

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

1
2
3
4

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

1 *3.4.1.5 Coastal Zone Management Area*

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

10 *3.4.2 Environmental Consequences*

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

19 *3.4.2.1 No-Action Alternative*

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

26 *3.4.2.2 Proposed Action Alternative*

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

36 Issues related to WoUS would arise during the construction phase of the Proposed Action.
37 Construction of the replacement boat ramp would occur at the water's edge and in water within
38 the jurisdictional control of USACE. A coffer dam would be installed to enable water to be pumped
39 from the boat ramp construction area. A short-term effect during construction is this dewatering.
40 CBP would coordinate with USACE and has BMPs in place for this activity. In addition, the
41 proposed pier would be constructed within WoUS designated as shallow or deepwater marine or
42 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).

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

4 *3.5.1.1 Vegetation*

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

12 *3.5.1.1.1 Terrestrial Vegetation*

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

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

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



32
33 Source: HDR 2018.

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

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



6
7 Source: HDR 2016a.

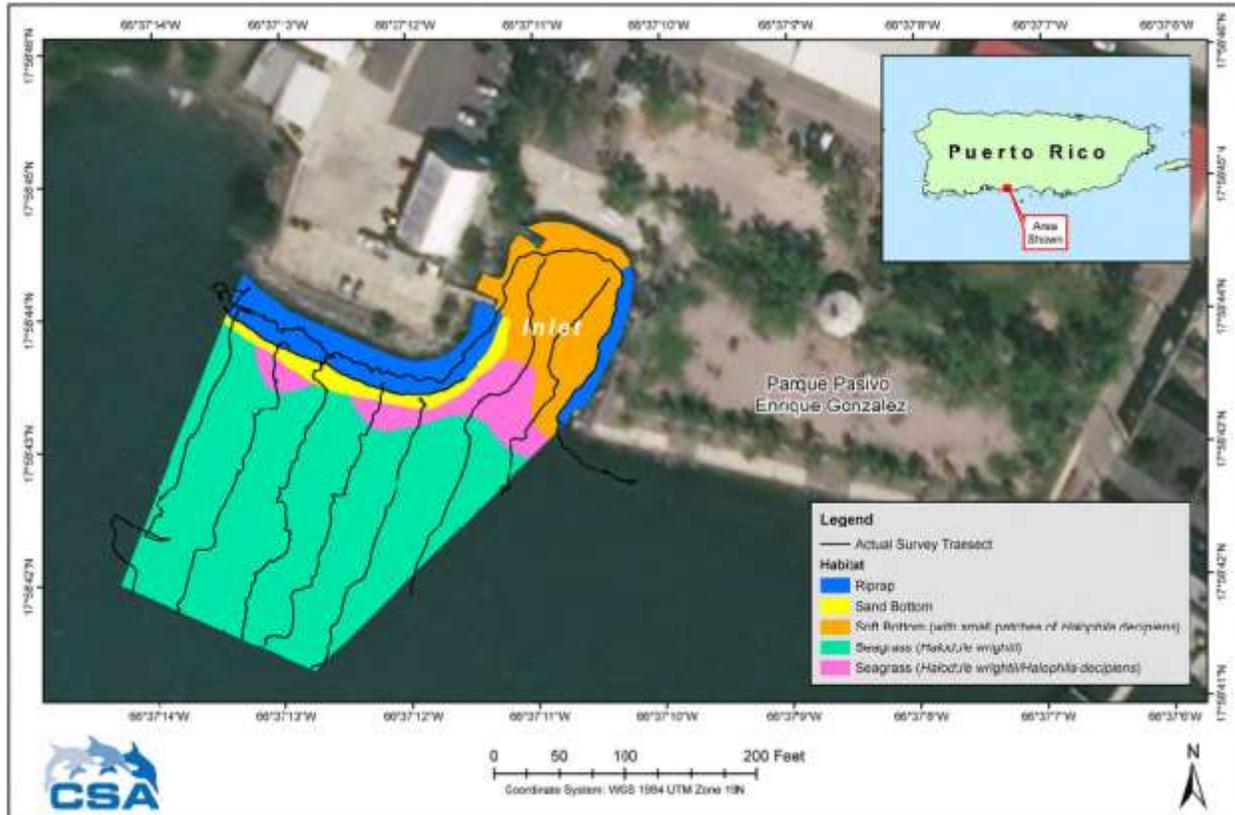
8 *Figure 3-4. Park Adjacent to the Basin*

9 **3.5.1.1.2 Aquatic Vegetation**

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

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

24 The third habitat type, riprap, is found along the southern boundary of the Ponce Marine Unit
25 facility's fence line, southwest of the basin and along the eastern edge of the basin. The riprap is
26 composed of various-sized boulders and concrete pieces. The riprap embankment slopes down to
27 the water line, with submerged sections extending up to more than 30 feet from water level (HDR
28 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.

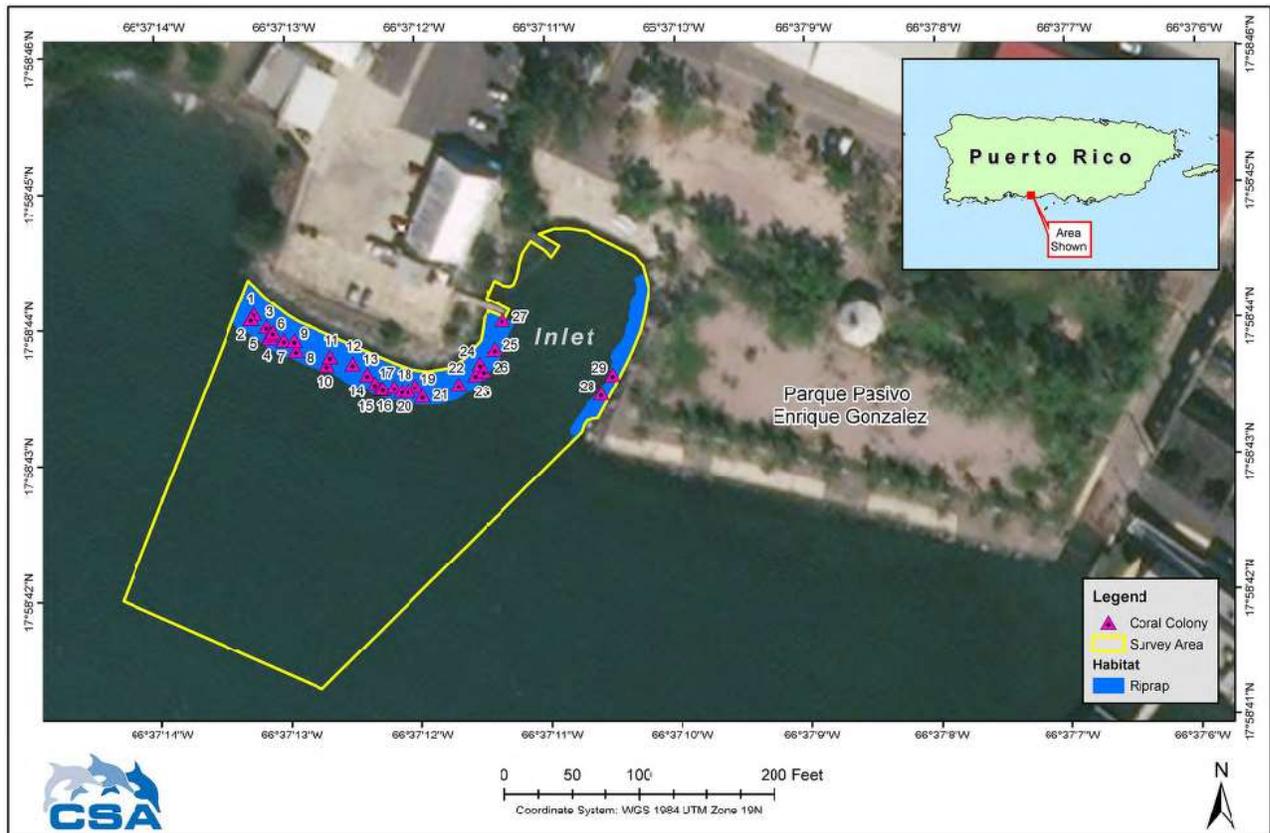
3.5.1.2.1 Aquatic Wildlife

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 lacunata*), 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).

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

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



18 Source: HDR 2018.
19

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

1 3.5.1.2.2 Terrestrial Wildlife

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

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

14 3.5.1.3 Migratory Bird Treaty Act

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

22 During the 2016 survey, a variety of birds were observed flying over or near the project area,
23 including the little blue heron (*Egretta caerulea*), green heron (*Butorides virescens*), brown pelican
24 (*Pelecanus occidentalis*), sandwich tern (*Thalasseus sandvicensis*), magnificent frigatebird
25 (*Fregata magnificens*), bank swallow (*Riparia riparia*), and black swift (*Cypseloides niger*). In
26 addition, Monk parakeets (*Myiopsitta monachus*) had a communal nest in the tallest coconut palm
27 (*Cocos nucifera*) just outside the property front gate at the northeast corner of the site (HDR
28 2016a).

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

33 No active bird nests or nesting behavior of MBTA-protected species was observed during the 2016
34 survey. No breeding activity was observed for any of the avian species present. CBP would
35 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 Crake	<i>Hapalocrex flaviventer</i>
Caribbean Coot	<i>Fulica caribaea</i>
Limpkin	<i>Aramus guarauna</i>
Snowy Plover ^(c)	<i>Charadrius nivosus</i>
Wilson's Plover	<i>Charadrius wilsonia</i>
American Oystercatcher	<i>Haematopus palliatus</i>
Red Knot (rufa ssp.) ^{(a), (nb)}	<i>Calidris canutus</i>
Semipalmated Sandpiper (Eastern) ^(nb)	<i>Calidris pusilla</i>
White-Crowned Pigeon	<i>Patagioenas leucocephala</i>
Bridled Quail-Dove	<i>Geotrygon mystacea</i>
Antillean Mango ^(d)	<i>Anthracothorax dominicus</i>
Loggerhead Kingbird	<i>Tyrannus caudifasciatus</i>
Puerto Rican Vireo	<i>Vireo latimeri</i>
Elfin Woods Warbler ^(a)	<i>Setophaga angelae</i>
Greater Antillean Oriole	<i>Icterus portoricensis</i>

1 Notes: (a) ESA candidate, (c) non-listed subspecies or population of threatened or endangered species, (d) MBTA
 2 protection uncertain or lacking, (nb) non-breeding in this bird conservation region.
 3 Source: USFWS 2008.

4 **3.5.1.4 Threatened and Endangered Species**

5 CBP is currently conducting informal ESA Section 7 consultation with NOAA Fisheries and
 6 USFWS to consider impacts on threatened and endangered species that have the potential to occur
 7 in the project area. CBP consulted with the NOAA Fisheries Habitat Conservation Division,
 8 NOAA Fisheries Caribbean Field Office, and USFWS Caribbean Ecological Services Field Office
 9 on January 26, 2017, in compliance with the ESA (see Appendix A). USFWS responded on March
 10 2, 2017, stating that the project lies within the habitat of the endangered Antillean manatee
 11 (*Trichechus manatus manatus*), a sub-species of the West Indian manatee (*Trichechus manatus*).
 12 USFWS provided several recommendations to be implemented during the project and included in
 13 the project's permit conditions, but concluded the Proposed Action is not likely to adversely affect
 14 any federally listed species within their jurisdiction.

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

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

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

8 The hawksbill sea turtle (*Eretmochelys imbricata*) and West Indian manatee (*Trichechus manatus*)
 9 could use the nearshore areas adjacent to the site, including seagrass meadows and submerged
 10 riprap shoreline for foraging. However, sea turtles are not expected to nest on rocky shorelines
 11 (*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?
Reptiles			
Puerto Rican Boa	<i>Epicrates inornatus</i>	Endangered	No
Hawksbill Sea Turtle	<i>Eretmochelys imbricata</i>	Endangered	No
Mammals			
West Indian Manatee	<i>Trichechus manatus</i>	Endangered	No
Birds			
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
Ferns and Allies			
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
Flowering Plants			
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

1 3.5.2 Environmental Consequences

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

8 3.5.2.1 No-Action Alternative

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

12 3.5.2.2 Proposed Action Alternative

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

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

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

32 3.6 Cultural, Historical, and Archaeological Resources

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

1 To be listed as eligible for the NRHP, a cultural resource must possess one of these four criteria
2 (36 CFR § 60.4):

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

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

17 3.6.1 Affected Environment

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

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

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

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

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

3 CBP consulted with OECH on April 28, 2017, in compliance with Section 106 of the NHPA and
4 36 CFR Part 800 (see Appendix A). OECH responded on May 10, 2017, requesting that an
5 underwater archeological survey of the archaeological resources APE be conducted to determine
6 the presence of archaeological material remains. The Phase I maritime survey, conducted by an
7 outside contractor, SEARCH, was completed in July 2017 (SEARCH 2017). SEARCH conducted
8 background research and a remote-sensing survey, which included the collection of magnetic data
9 and acoustic imagery of the 0.6 acres of water within the APE. The investigation did not identify
10 potential submerged cultural resources; therefore, cultural resource clearance for this project is
11 recommended (SEARCH 2017).

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

16 3.6.2 Environmental Consequences

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

24 3.6.2.1 No-Action Alternative

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

28 3.6.2.2 Proposed Action Alternative

29 No adverse impacts on archaeological or historical resources would be expected under the
30 Proposed Action. Cultural, historical, and archaeological resources within the APE were assessed
31 through a Phase IB survey and Phase I maritime survey. The Phase 1B survey concluded that no
32 surface or subsurface archaeological sites exist in the proposed project area. The soil tests
33 concluded that because it is likely the area was modified prior to construction and paving, the
34 potential for buried resources is minimal. The project-specific study concluded that the potential
35 for intact cultural resources within the proposed project area is low, and no historic buildings or
36 structures are located within the proposed project area. The Phase I maritime survey found no
37 presence of potential submerged cultural resources. Therefore, the Proposed Action is not likely
38 to adversely affect the surrounding historic district, including any cultural, historical, or
39 archaeological resources. In the event that any historical resources are discovered during
40 construction, all work would cease, the local police department would be immediately notified,
41 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 (NO₂), ozone (O₃), sulfur dioxide (SO₂), 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/Secondary	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/m ³)	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 _{2.5}	Primary	1 year	12.0 µg/m ³	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m ³	Annual mean, averaged over 3 years
		Primary and secondary	24 hours	35 µg/m ³	98th percentile, averaged over 3 years
	PM ₁₀	Primary and secondary	24 hours	150 µg/m ³	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.

1 Regarding emissions from marine vessels, the EPA published the gasoline marine final rule in
2 1996 that established emission standards for spark-ignition gasoline marine engines (EPA 1996a).
3 This rule applies to outboard and gasoline engines used in personal watercraft and jet boat
4 applications; it focuses on emissions of hydrocarbons, a greenhouse gas and carcinogen. The final
5 rule requires marine vessel manufacturers to use cleaner technology in all vessels manufactured
6 after 1998 to meet EPA standards (40 CFR Part 91).

7 3.7.1 Affected Environment

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

13 Puerto Rico's Environmental Quality Board (EQB) monitors air quality through several stations
14 throughout the island. There is one monitoring station in the municipality of Ponce, Site ID 72-
15 113-0004, which measures CO concentrations. It is located approximately 3 miles to the northwest
16 of the project site. The annual CO 8-hour max at this station for 2011 through 2016 ranged from
17 0.8 ppm to 4.4 ppm (EPA 2017a).

18 3.7.2 Environmental Consequences

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

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

29 3.7.2.1 No-Action Alternative

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

34 3.7.2.2 Proposed Action Alternative

35 Under the Proposed Action, there would be short-term, temporary, minor adverse impacts on local
36 air quality due to emissions from the equipment used during project construction. Air emissions
37 were calculated using the method described in EPA's AP-42 document and only for NAAQS—
38 nitrogen oxide (NO_x), CO, sulfur oxide (SO_x), PM₁₀—and greenhouse gases (specifically carbon
39 dioxide [CO₂]) with known emission factors (EPA 1996b). Table 3-4 estimates the emissions
40 under the Proposed Action for pollutants with emissions factors listed in AP-42 (EPA 1996b).

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

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

Pollutant		Emissions (tons/year)
NAAQS	NO _x	19.52
	CO	4.21
	SO _x	1.29
	PM ₁₀	1.38
	sum	26.40
Greenhouse gases	CO ₂	723.96

4 Puerto Rico’s EQB follows EPA’s definition of a major stationary source, a facility or source with
5 the potential to emit 100 tons per year or more of any air pollutant, except greenhouse gases (EQB
6 1995; 42 U.S.C. § 7401 et seq.). Emissions would be substantial if they exceed this threshold.
7 Table 3-4 demonstrates that the potential air emissions associated with the Proposed Action would
8 not exceed pollutant thresholds as established by EPA. Greenhouse gases and air pollutants would
9 be emitted during construction activities as a result of burning fossil fuels used by construction
10 equipment (e.g., impact hammer, boat emissions, and crane). Construction activities for the
11 Proposed Action would likely require electrical tools, which contribute significantly to emissions.
12 The use of tugboats to tow barges during the removal of the original pier and temporary structure
13 and construction of the new pier are also included in the air emissions calculations.

14 Construction activities are expected to be minimal and temporary (lasting 7 months), and no
15 additional long-term emissions would be expected. CBP would follow construction BMPs outlined
16 in Section 5.6 to minimize impacts from construction equipment emissions and dust particles. In
17 addition, minor emissions from the operation of the Ponce Marine Unit and associated vehicles
18 and marine vessels would continue as currently operated. CBP intends to replace two Midnight
19 Express vessels with two SAFE 410 Apostle vessels. Although slightly larger in size, the SAFE
20 410 Apostle vessels have the same engine size as the Midnight Express vessels; both types of
21 vessels are powered by four Mercury Verado outboard engines, which generate a maximum of
22 300 horsepower each (CBP 2016; HST 2018). As CBP is currently operating at the Ponce Marine
23 Unit and no increase in emissions from the new Apostle vessels would be expected, no impact on
24 air quality would be expected as a result of operations associated with the Proposed Action.

25 3.8 Noise

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

1 **3.8.1 Noise Metrics**

2 Although human response to noise varies, measurements can be calculated with instruments that
 3 record instantaneous sound levels in decibels. A-weighted decibels (dBA) characterize sound
 4 levels that can be sensed by the human ear. “A-weighted” denotes the adjustment of the frequency
 5 range to what the average human ear can sense when experiencing an audible event. The threshold
 6 of audibility is generally within the range of 10 to 25 dBA for normal hearing. The threshold of
 7 pain occurs at the upper boundary of audibility, which is normally in the region of 135 dBA (EPA
 8 1981). Table 3-5 compares common sounds and shows how they rank in terms of effects on
 9 hearing.

10 *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

11 Source: EPA 1981b.

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

15 *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

16 Source: EPA 1971.

1 **3.8.2 Noise Regulations**

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

15 *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

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

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

19 **3.8.3 Affected Environment**

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

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

1 **3.8.4 Environmental Consequences**

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

9 **3.8.4.1 No-Action Alternative**

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

14 **3.8.4.2 Proposed Action Alternative**

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

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

Equipment	L _{max} 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

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

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

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

1 **3.9 Utilities and Infrastructure**

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

8 **3.9.1 Affected Environment**

9 Electric service is overseen by the Puerto Rico Energy Commission, or PREC (PREC 2018).
10 Electricity is provided by the Puerto Rico Electric Power Authority, or PREPA (PREPA 2018).
11 PREPA is a government-owned corporation that generates, distributes, and transmits power
12 throughout Puerto Rico and to the project site (PREPA 2018). Solid waste facilities and landfills
13 in Puerto Rico face serious challenges (EPA 2016), particularly in light of the massive debris
14 generated from Hurricane Maria (NPR 2017). Even before the massive cleanup effort required
15 after the hurricane, the majority of Puerto Rico’s operating landfills were beyond capacity (EPA
16 2016). Water and wastewater treatment is provided by PRASA (USGS 2014).

17 **3.9.2 Environmental Consequences**

18 **3.9.2.1 No-Action Alternative**

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

23 **3.9.2.2 Proposed Action Alternative**

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

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

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

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

11 3.10 Hazardous Materials

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

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

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

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

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

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

3 3.10.1 Affected Environment

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

7 A search of EPA's Envirofacts RCRAInfo website indicated one hazardous waste generator within
8 a 1-mile radius of the project site (EPA 2017c). Homeca Recycling Center Co., Inc., is located
9 approximately 230 feet to the north of the proposed project area, at 1 Calle Salmon. This facility
10 is classified as a conditionally exempt small-quantity generator and is able to accept up to
11 1,000 kilograms of ignitable, corrosive, and reactive waste, as well as lead, mercury, and other
12 waste codes.

13 No sites on EPA's National Priorities List are located within a 1-mile radius of the project site
14 (EPA 2017d). However, EPA identifies three brownfield properties within 1 mile (EPA 2016b-d).
15 Two brownfield sites are undergoing assessment, and as such, contaminant reports are unavailable
16 (HAZ050 and HAZ102). Site HAZ100, located at 69 Calle Comercio in Ponce, was assessed in
17 2014, but cleanup activities have not been reported. No evidence of hazardous wastes or materials
18 (e.g., drums, oil stains) was observed during the August 2016 site survey. Further, ACM, PCBs,
19 and LBP are not expected during construction and operation at the Ponce Marine Unit facility due
20 to the age of construction and the type of facilities under the Proposed Action.

21 3.10.2 Environmental Consequences

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

29 3.10.2.1 No-Action Alternative

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

38 3.10.2.2 Proposed Action Alternative

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

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

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

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

21 3.11 Human Health and Safety

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

26 3.11.1 Affected Environment

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

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

1 3.11.2 Environmental Consequences

2 *3.11.2.1 No-Action Alternative*

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

9 *3.11.2.2 Proposed Action Alternative*

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

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

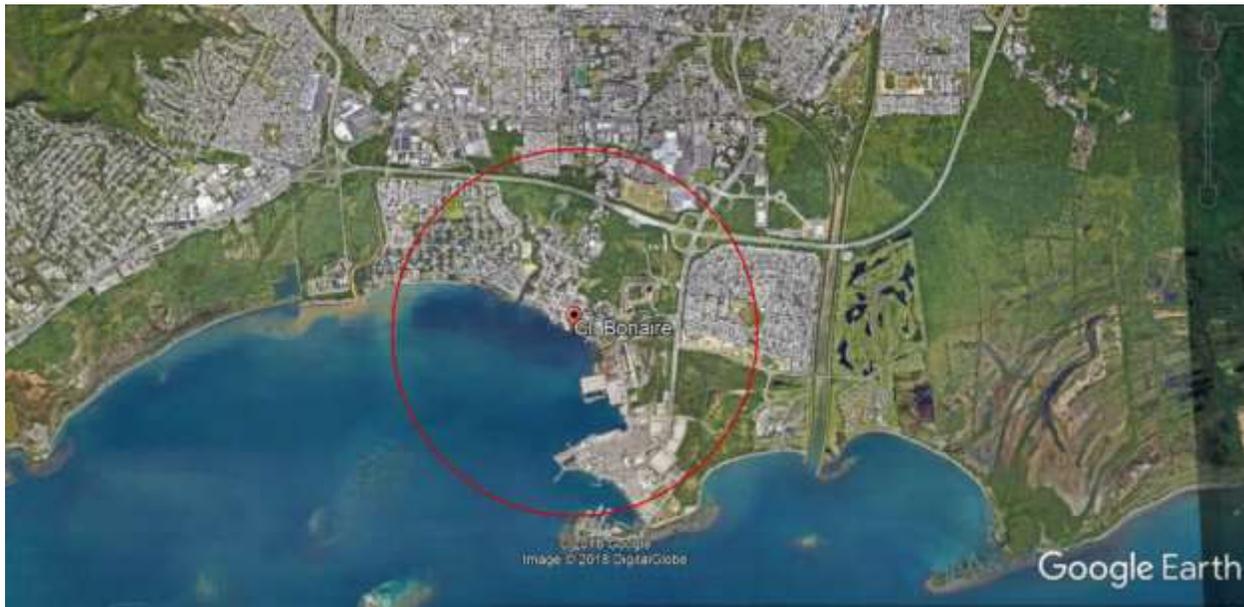
21 Construction of the pier and replacement of the boat ramp would also have the potential to decrease
22 adverse risks to overall human health and safety. The original concrete pier and deteriorated boat
23 ramp at the Ponce Marine Unit are unusable in their current state. Under the Proposed Action,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

27 Replacement of the pier and boat ramp would facilitate CBP's ability to carry out its mission of
28 interdicting unlawful people and cargo attempting to encroach U.S. borders. This would result in
29 a long-term, beneficial impact on the health and safety of nearby residents and community
30 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

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

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

10 4.2 Non-CBP Activities Included in the Cumulative Impacts Analysis

11 CBP completed a search of actions planned by other agencies that may also affect the region's
12 natural and human environment. None were found to occur within the designated APE (USACE
13 2018b, USACE 2017). A search of projects within the Federal Energy Regulatory Commission
14 revealed two projects involving liquefied natural gas terminals (FERC 2017, FERC 2018). As
15 these projects are located more than 50 miles from the project area and therefore not within the
16 APE, they are not included in this analysis.

17 Federal actions within the region most likely to contribute to cumulative effects along with this
18 project are related to sanitary landfill capacity. Even prior to the major hurricane damage sustained
19 in Puerto Rico, solid waste disposal landfills have operated at or beyond their designed capacity.
20 EPA has tried to close existing landfills and help establish adequate disposal capacity (EPA
21 2016b). The development of this Proposed Action would add solid waste to landfills as part of
22 demolition and construction activities. EPA does not list additional environmental assessments or
23 environmental impact statements for the municipality of Ponce, Puerto Rico (EPA 2018).

24 4.3 Resources Evaluated for Cumulative Impacts

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

- 27 • Geology and soils
- 28 • Water resources
- 29 • Biological resources
- 30 • Cultural, historical, and archaeological resources
- 31 • Air quality
- 32 • Noise
- 33 • Utilities and infrastructure
- 34 • Hazardous materials, and
- 35 • Human health and safety.

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

1 **4.4 Cumulative Impacts: Geology and Soils**

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

6 **4.5 Cumulative Impacts: Water Resources**

7 The Proposed Action would not be expected to cause short-term effects on water resources during
8 construction or long-term effects on water use requirements, water quality surfaces, or water
9 resources, including wetlands and regulatory WoUS. Debris from demolition of infrastructure (i.e.,
10 existing boat ramp, original concrete pier and temporary structure, and excavation debris from
11 construction of a utilities trench to the new pier) would have a minor impact on solid waste disposal
12 capacity in the region. EPA is working with Puerto Rican officials to establish new landfills (EPA
13 2016b). New landfill siting would require National Pollutant Discharge Elimination System
14 (NPDES) permitting. Although there is potential for a minor, adverse cumulative effect, the
15 NPDES program exists to ensure that there are no adverse impacts from permitted activities;
16 therefore, the adverse impact is only a potential impact.

17 **4.6 Cumulative Impacts: Biological Resources**

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

20 **4.7 Cumulative Impacts: Cultural, Historical, and Archaeological Resources**

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

24 **4.8 Cumulative Impacts: Air Quality**

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

33 **4.9 Cumulative Impacts: Noise**

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

1 **4.10 Cumulative Impacts: Utilities and Infrastructure**

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

8 **4.11 Cumulative Impacts: Hazardous Materials**

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

15 **4.12 Cumulative Impacts: Human Health and Safety**

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

22 **4.13 Incomplete or Unavailable Information**

23 Hurricane Irma hit Puerto Rico on September 6, 2017, leaving one million people without
24 electricity (Johnson et al., 2017). Then, on September 20, 2017, Hurricane Maria struck the island
25 as a Category 4 storm, traveling directly across Puerto Rico, with 60,000 people still lacking
26 electricity from Hurricane Irma (Resnick and Barclay, 2017). Hurricane Maria had a significant
27 impact on Puerto Rico, affecting buildings and island infrastructure, and led to major power
28 outages. At the time that this EA was written, Puerto Rico was still assessing damage from the
29 hurricanes and working to rebuild lost and impaired infrastructure. The scope and timeline of these
30 infrastructure projects are unknown at this time, but they are neither anticipated to affect nor be
31 affected by the Proposed Action. Thus, no cumulative impacts are expected from hurricane
32 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"> • Stormwater Pollution Prevention Plan (SWPPP) • Sediment and Erosion Control Plan and associated BMPs • Drainage improvements and revegetation
Water resources	<ul style="list-style-type: none"> • SPCC Plan and associated BMPs • Construction Mitigation and Restoration Plan and associated BMPs • SWPPP and associated BMPs • Sediment and Erosion Control Plan and associated BMPs • Proper storage and use of fuels and hazardous materials
Biological resources	<ul style="list-style-type: none"> • Biological monitoring onsite during construction • Biological surveys in advance of construction • General and species specific BMPs
Cultural, historical, and archaeological resources	<ul style="list-style-type: none"> • Consultation with state representatives
Air quality	<ul style="list-style-type: none"> • Dust control measures and associated BMPs • Fire Prevention and Suppression Plan and associated BMPs • Maintenance of equipment and vehicles according to specifications
Noise	<ul style="list-style-type: none"> • Adherence with OSHA requirements • Proper design and maintenance of equipment and vehicles • Seasonal activity restrictions
Utilities and infrastructure	<ul style="list-style-type: none"> • Marking and avoidance • Repair or replacement
Hazardous materials	<ul style="list-style-type: none"> • SPCC Plan and associated BMPs • Proper storage and use of hazardous materials • Proper management and disposal of solid and hazardous waste • Vehicle maintenance
Human health and safety	<ul style="list-style-type: none"> • Fire Prevention and Suppression Plan and associated BMPs • SPCC Plan and associated BMPs • Adherence with OSHA requirements

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

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

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

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

24 5.4 Biological Resources

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

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

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

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

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

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

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

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

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

19 5.5 Cultural, Historical, and Archaeological Resources

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

26 5.6 Air Quality

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

31 5.7 Noise

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

1 5.8 Utilities and Infrastructure

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

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

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

16 5.9 Hazardous Materials

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

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

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

29 5.10 Human Health and Safety

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

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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. 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

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

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

8 **6.4 Distribution**

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

- 12 • NOAA Fisheries, Southeast Regional Office, Protected Resources Division
- 13 • NOAA Fisheries, Habitat Conservation Division
- 14 • NOAA Fisheries, Protected Resources Division, MMPA Branch
- 15 • U.S. Department of Transportation/Federal Highway Administration
- 16 • USACE Jacksonville District, Antilles Regulatory Section
- 17 • U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office
- 18 • Natural Resources Conservation Service (NRCS)
- 19 • Puerto Rico State Historic Preservation Office
- 20 (Oficina Estatal de Conservación Histórica)
- 21 • Puerto Rico Aqueduct and Sewer Authority
- 22 • Puerto Rico Department of Agriculture
- 23 (Departamento de Agricultura)
- 24 • Puerto Rico Department of Economic Development and Commerce
- 25 • Puerto Rico Department of Natural and Environmental Resources
- 26 (Departamento de Recursos Naturales y Ambientales)
- 27 • Puerto Rico Department of Transportation and Public Works
- 28 • Puerto Rico Electric Power Authority
- 29 • Puerto Rico Environmental Quality Board (
- 30 Junta de Calidad Ambiental)
- 31 • Puerto Rico Planning Board
- 32 • Puerto Rico Ports Authority
- 33 • Archeology and Ethnohistory program of the Puertorican Institute of Culture
- 34 (Programa de Arqueología y Etnohistoria del Instituto de Cultura Puertorriqueña)
- 35 • Historical built heritage program of the Puertorican Institute of Culture
- 36 (Programa de Patrimonio Histórico Edificado del Instituto de Cultura Puertorriqueña)
- 37 • Municipality of Ponce

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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.

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1 8 List of Preparers

2 U.S. Customs and Border Protection

3 **Joseph Zidron**

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

6 **Lauri Regan**

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

9 Logistics Management Institute (LMI)

10 **Kaitlyn Carter**

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

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

17 Experience: 2 years

18 **Natalie Fike**

19 EA Responsibilities: *Technical Editor*

20 Education: BA, Communication Studies, Canisius College

21 Experience: 11 years

22 **Francis Reilly**

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

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

27 Experience: 35 years

28 **John Ruffing**

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

31 Education: BS, Environmental Resource Management, Pennsylvania State
32 University

33 Experience: 29 years

34 **Amy Stewart**

35 EA Responsibilities: *Document Production Lead*

36 Education: AAS, General Studies, Northern Virginia Community College

37 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 **Audra Upchurch, PMP, CEP**

2 EA Responsibilities: *Quality Manager; Manager, Chapter 8—"List of Preparers"; Appendix A—*
3 *Consultation and Coordination Letters*
4 Education: MNR, Natural Resources, and BS, Forestry, Virginia Polytechnic Institute
5 and State University
6 Experience: 16 years

7 **Lisa Watts, PMP**

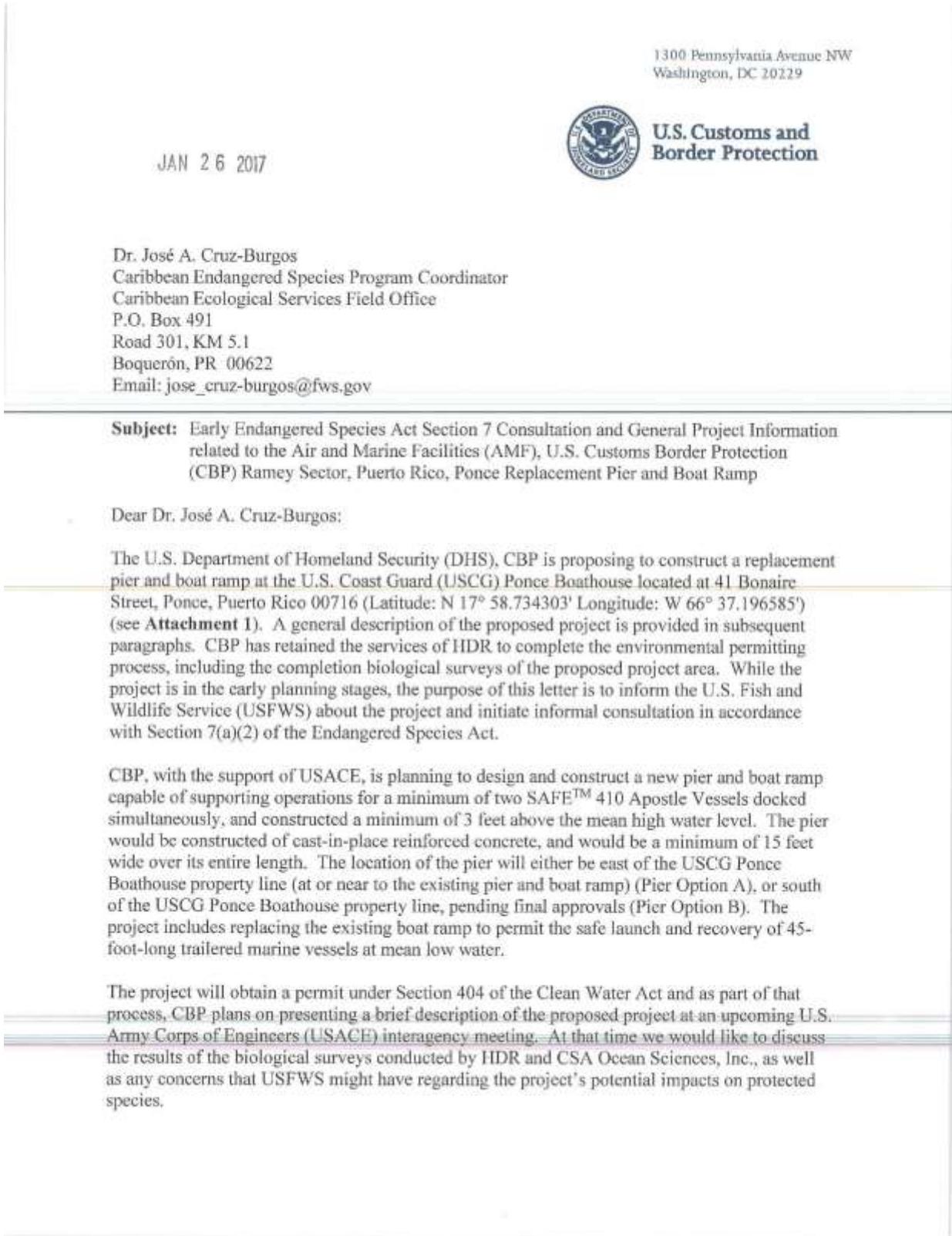
8 EIS Responsibilities: *Manager, Chapter 3—"Affected Environment and Environmental*
9 *Consequences"; Document Manager*
10 Education: MEM, Environmental Management, Duke University;
11 BA, Environmental Studies and Policy, Hendrix College
12 Experience: 10 years

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



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.

Thank you for your consideration on this request.

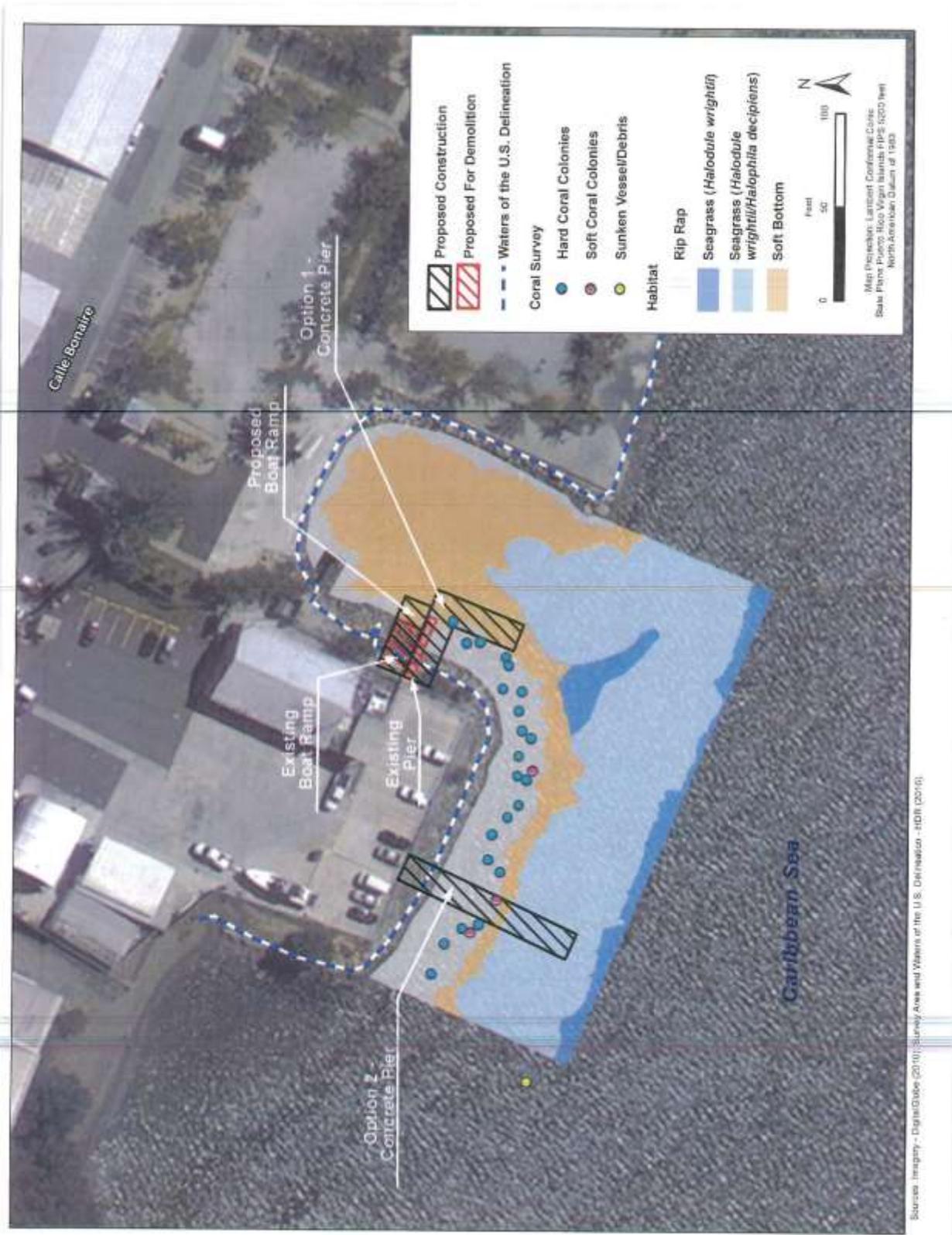
Sincerely,



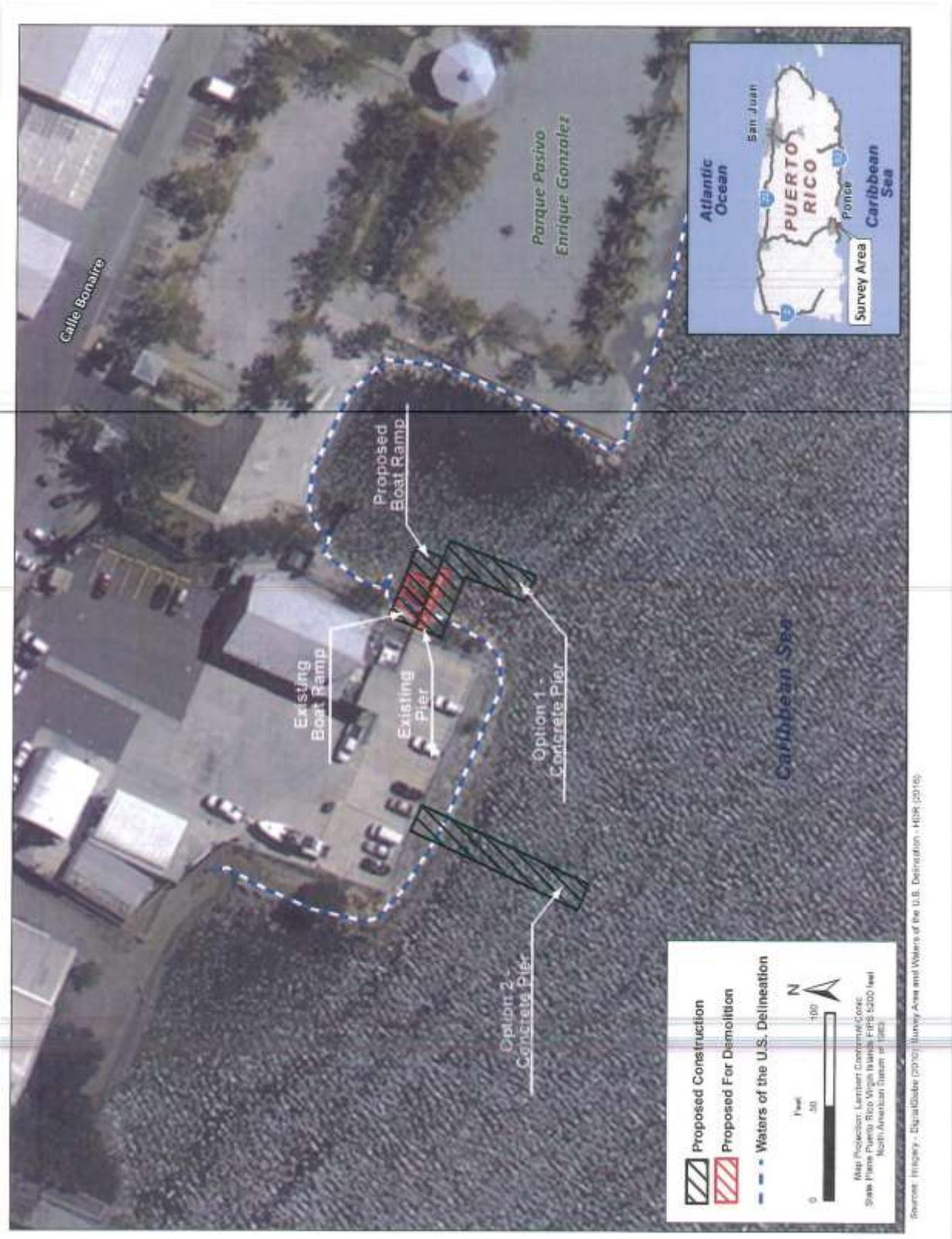
Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air & Marine
Program Management Office

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



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. Muñiz
Field Supervisor

ages

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.

PRECAUCIÓN: HÁBITAT DE MANATÍ
CAUTION: MANATEE HABITAT

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

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

DETENERSE

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

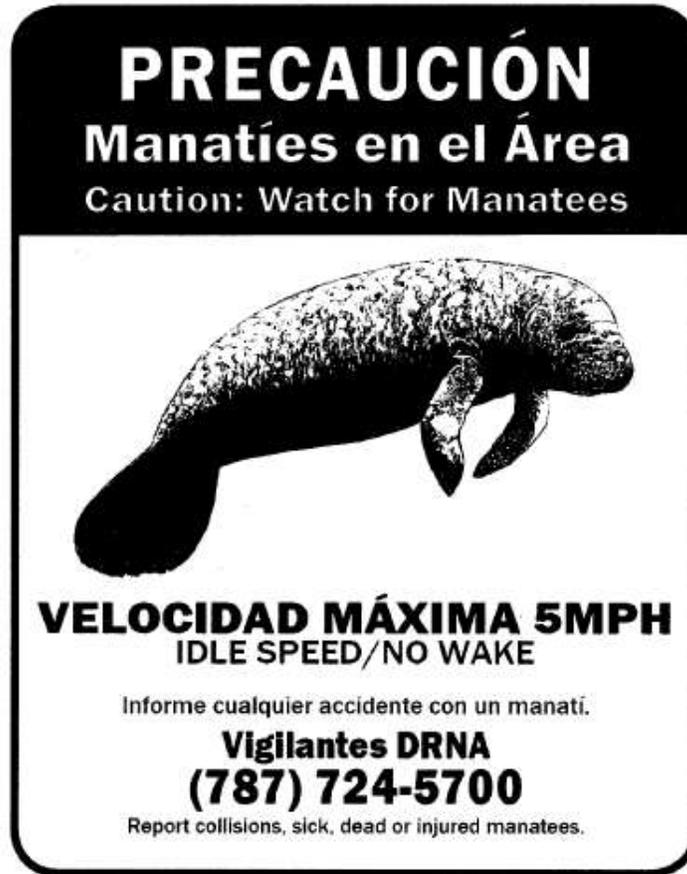
Informe cualquier accidente con un manatí.
Report any collision with or injury to a manatee.



Vigilantes DRNA
(787)724-5700

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

To obtain a ready to print copy of this sign, please contact the USFWS Caribbean Ecological Services Field Office at 787-851-7297 ext. 220 or by email at jan_zegarra@fws.gov



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

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 wáter.*)
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.)*

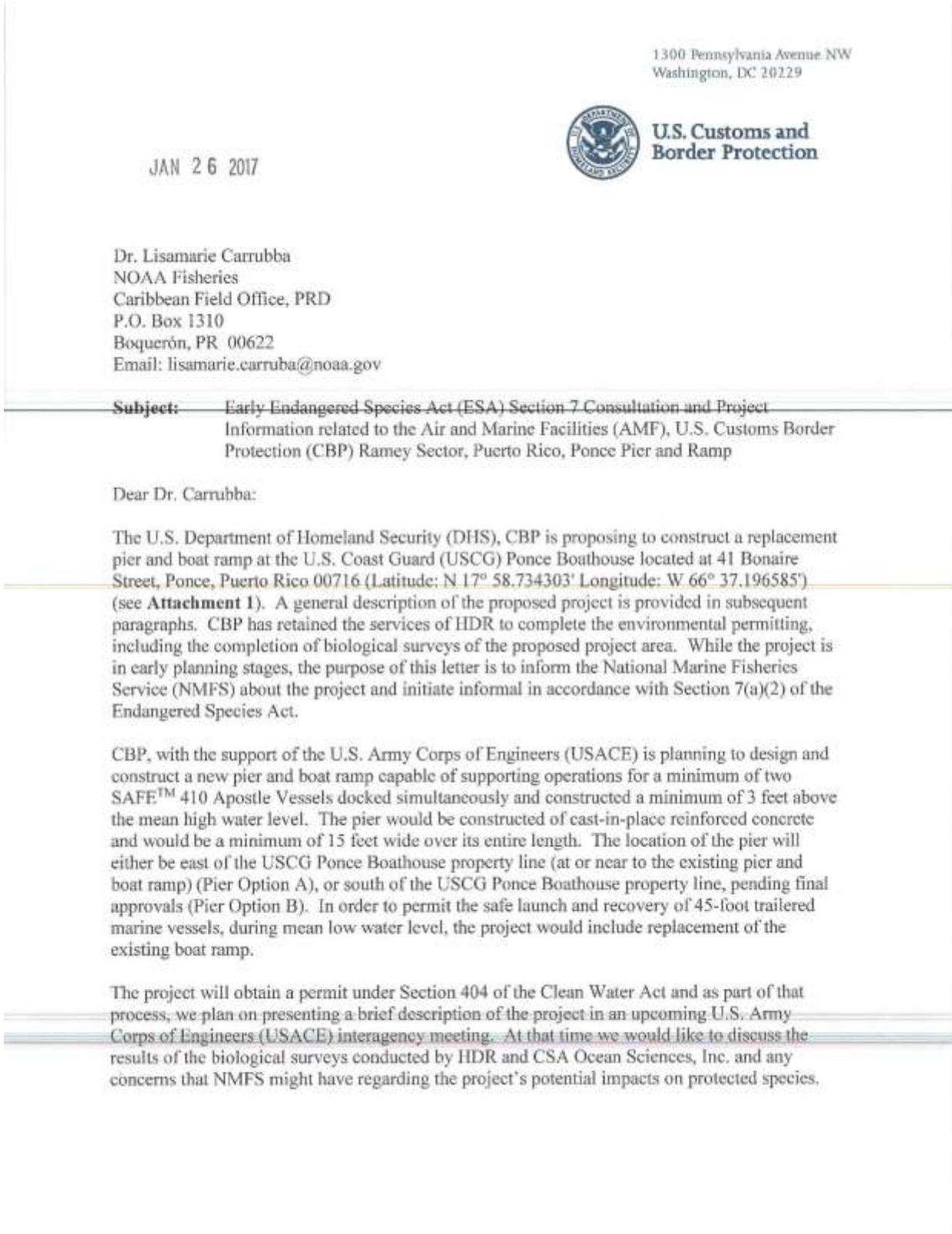
Informe accidentes con un manatí inmediatamente. Si encuentra un bebé manatí solo, en peligro, herido o muerto, llame al Cuerpo de Vigilantes del Departamento de Recursos Naturales y Ambientales al 787-724-5700 o al Programa de Rescate de Mamíferos Marinos al 787-833-2025, 787-538-4684 ó 787-645-5593. (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 of 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



1300 Pennsylvania Avenue NW
Washington, DC 20229



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

JAN 26 2017

Dr. Lisamarie Carrubba
NOAA Fisheries
Caribbean Field Office, PRD
P.O. Box 1310
Boquerón, PR 00622
Email: lisamarie.carruba@noaa.gov

Subject: 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

Dear Dr. Carrubba:

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 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.

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.

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.

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.

Thank you for your consideration on this request.

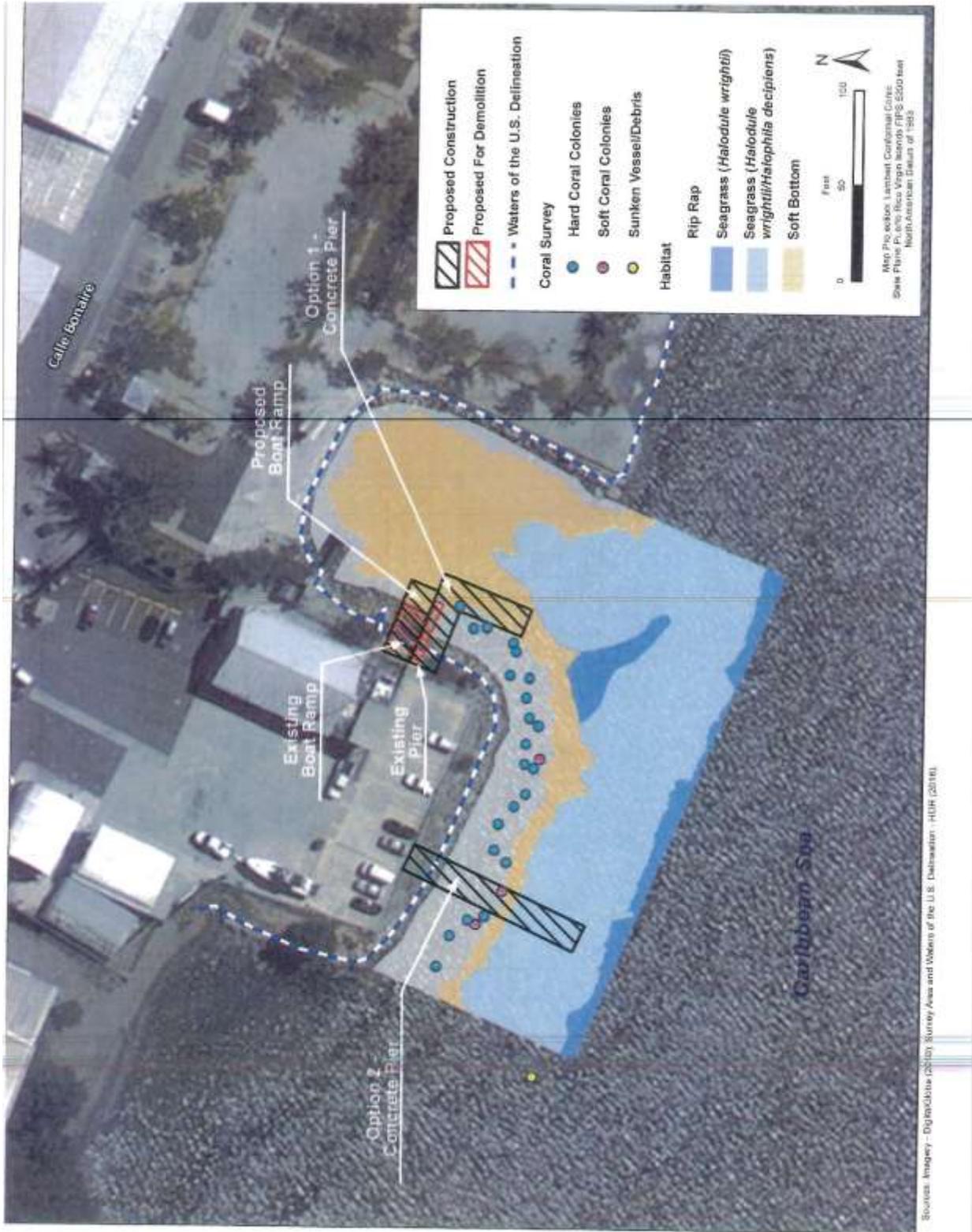
Sincerely,



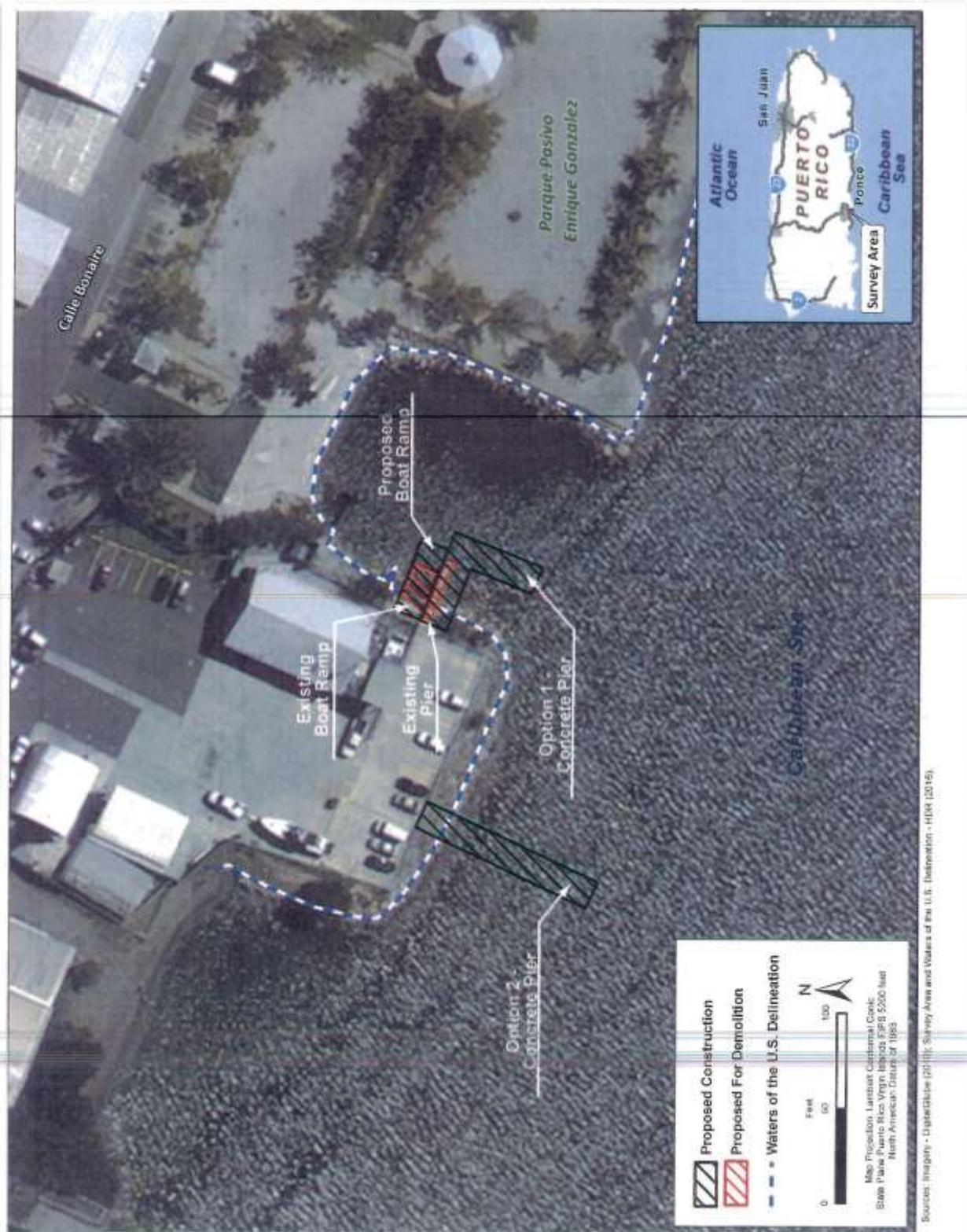
Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air & Marine
Program Management Office

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 20219



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.

Thank you for your consideration on this request.

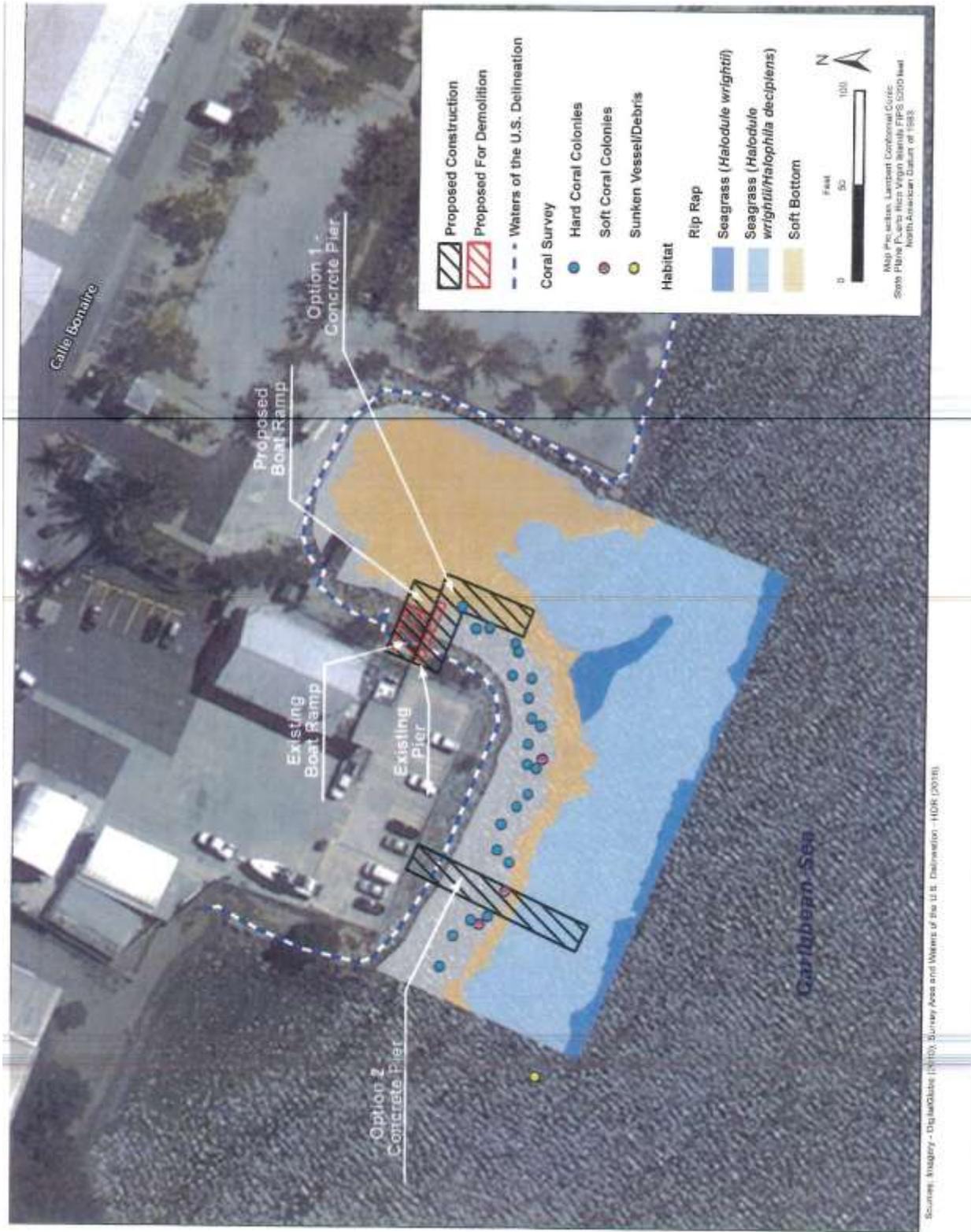
Sincerely,



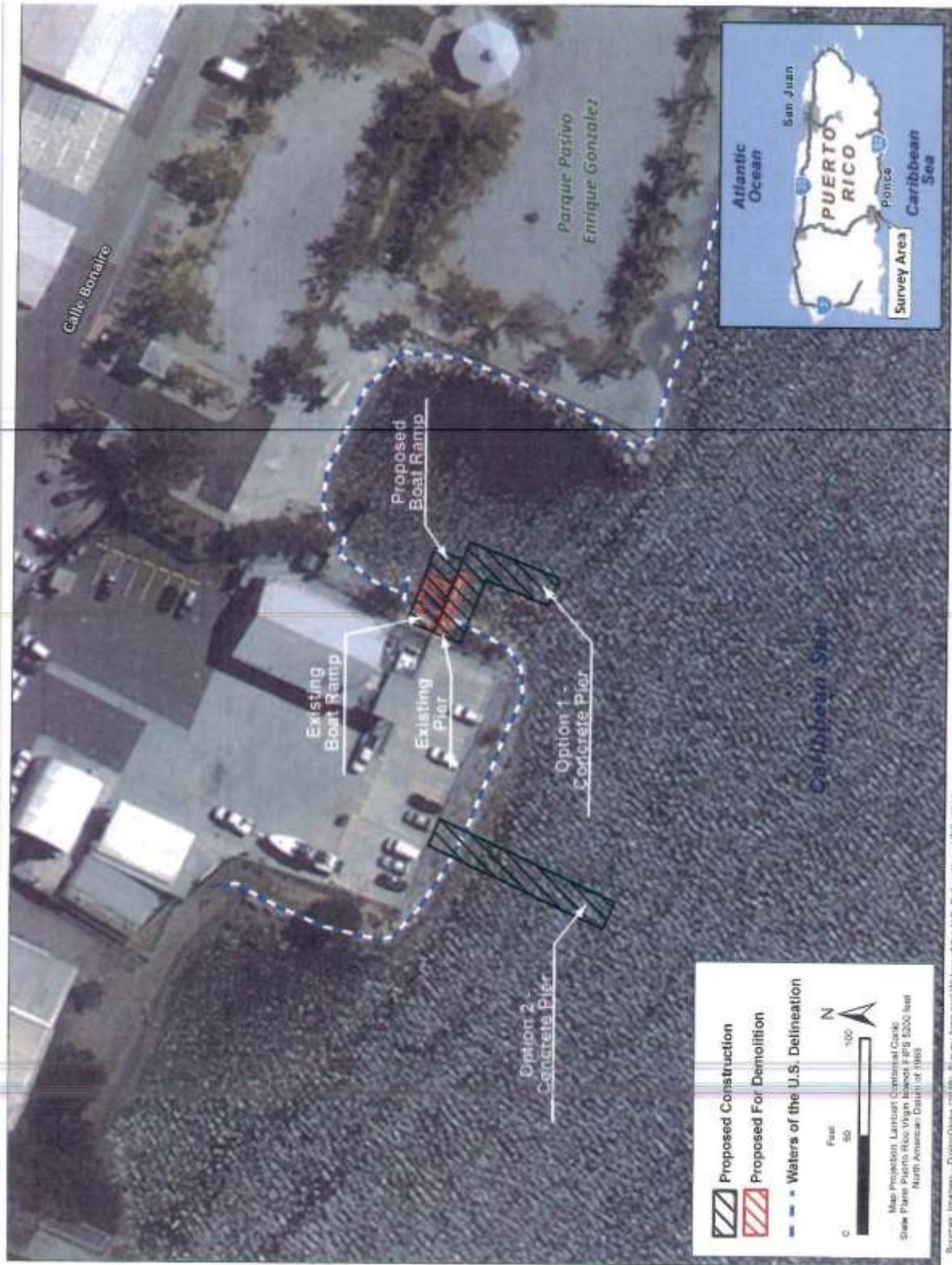
Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air & Marine
Program Management Office

Enclosure(s)

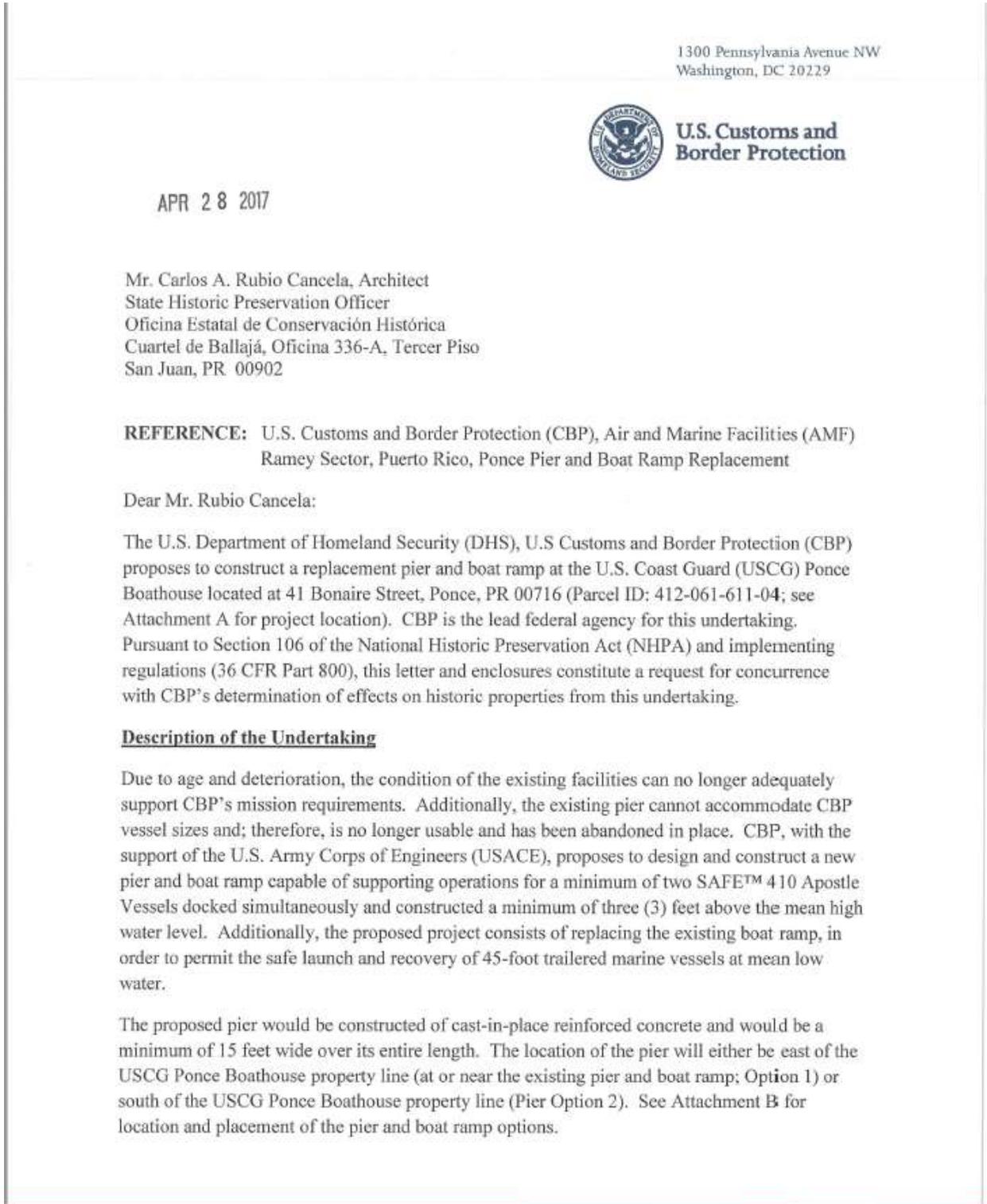
DRAFT Environmental Assessment for the Replacement of the Pier and Boat Ramp at the U.S. Border Patrol & Air and Marine Facility, Ponce, Puerto Rico



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



- 1 A.4. Puerto Rico Oficina Estatal de Conservación Historica
- 2 CBP Letter to Puerto Rico Oficina Estatal de Conservación Historica



3

Mr. Carlos A. Rubio Cancela

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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

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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,

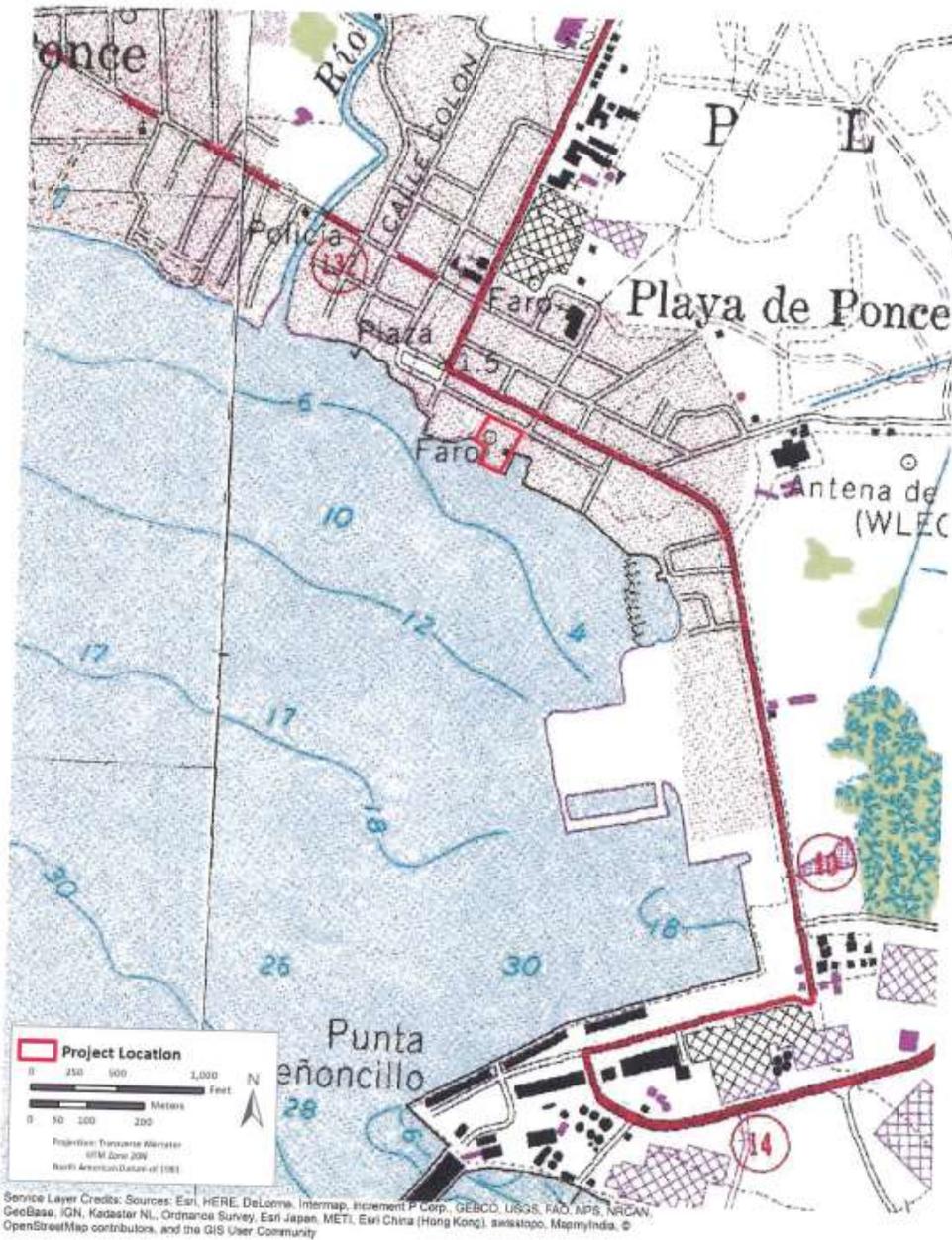


Paul Enriquez
Real Estate and Environmental Branch Chief
Border Patrol and Air & Marine
Program Management Office

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

Attachment A – Project Location (USCG property boundary)



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



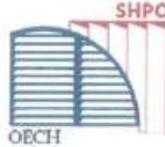
Sources: Imagery - DigitalGlobe (2016); Survey Area and Waters of the U.S. Colonization - HCR (2016).

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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 ESTADAL 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

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

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



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



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



(Delivery control form 106 Section)

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.)

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.

Sincerely,

Carlos A. Rubio-Cinco
State Historic Preservation Officer

CARC/BRS/MB



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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 or extension 2010.

Sincerely,



Carlos A. Rubio Calvo
State Historic Preservation Officer

CARC/GMO/SG



OFICINA PRESTATOR
CONSERVACION HISTORICA
ESTADO HISTORICO
PRESERVATION OFFICE

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

Sincerely,

Carlos A. Rubio-Cancela
State Historic Preservation Officer

CARC/GMO/BRS/MB



Carrión de Ballajá, San Juan, PR • P.O. Box 9021925, San Juan, PR 00902-1925 • www.bach.pr.gov • 787-721-3737

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