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IN REPLY REFER TO:

DEP-HAR.25.0684

November 18, 2024

TO: MARY ALICE EVANS, DIRECTOR
OFFICE OF PLANNING AND SUSTAINABLE DEVELOPMENT
ENVIRONMENTAL REVIEW PROGRAM

FROM: DREANALEE K. KALILI Dreanalee Kalili
DEPUTY DIRECTOR OF TRANSPORTATON FOR HARBORS

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT – REAL PROPERTY ACQUISITION AND PIER CONSTRUCTION
UNITED STATES COAST GUARD
HONOLULU, O'AHU, HAWAI'I
TAX MAP KEYS: (1) 5-041:321 (PORTION)

The State of Hawaii Department of Transportation - Harbors Division is the owner of the subject property. We hereby authorize the United States Coast Guard and WSP USA to prepare and submit the subject Draft Environmental Assessment (DEA).

This DEA has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 U.S. Code [USC] §4321 et seq.); Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of Homeland Security (DHS) Management Directive 023-01, Rev 01; DHS Instruction Manual 023-01-001-01, Rev 01; and Coast Guard Commandant Instruction (COMDTINST) 5090.1, Environmental Planning Policy. Additionally, given the U.S. Coast Guard's (USCG) proposed acquisition of property currently owned by the Hawaii Department of Transportation – Harbors Division (see Section 1.2, Background and Section 2.1, Proposed Action), this DEA has also been prepared pursuant to the requirements of the Hawaii Environmental Policy Act (HEPA) statute and its implementing rules, codified in Hawaii Revised Statutes (HRS) Chapter 343 as well as Hawaii Administrative Rules (HAR) Chapter 11-200 and 11-201. Please publish this DEA in the upcoming issue of *The Environmental Notice*.

Please contact our consultants, Mr. Nick Meisinger from WSP USA at (805) 252-0060 if you have any questions.

From: webmaster@hawaii.gov
To: DBEDT OPSD Environmental Review Program
Subject: New online submission for The Environmental Notice
Date: Monday, November 18, 2024 1:55:32 PM

Action Name

Draft Environmental Assessment for Real Property Acquisition and Pier Construction

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds
- (3) Propose any use within a shoreline area

Judicial district

Honolulu, Oʻahu

Tax Map Key(s) (TMK(s))

(1) 5-041:321

Action type

Applicant

Other required permits and approvals

CWA

Discretionary consent required

USCG proposed acquisition of HDOT-owned Property

Agency jurisdiction

State of Hawaiʻi

Approving agency

HDOT - Division of Harbors

Agency contact name

DreanaLee Kalili

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Is there a consultant for this action?

Yes

Consultant

WSP USA, Inc.

Consultant contact name

Nick Meisinger

Consultant contact email

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104 West Anapamu Street
Suite 204A
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Map It

Action summary

The USCG is proposing acquisition of an undeveloped 0.71-acre portion of a larger 1.28-acre waterside parcel located at Pier 53, abutting USCG Base Honolulu to its east. In addition to the real property acquisition, the USCG proposes construction of a new pier to support current and future berthing needs. The proposed construction includes a fixed, pile-supported pier extending up to 340 feet westward from

USCG Base Honolulu Berth G to the Matson property boundary. The proposed action also includes the installation of fenders, mooring hardware, and utilities. Support pile materials have not been determined at this design stage, but could include steel, concrete (precast or auger-cast), or pressure-treated lumber. Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the fixed pier. The floating dock would include hardware and utility connections.

Reasons supporting determination

As described for each resource area in Section 4, Environmental Consequences and as summarized in Section 6, Summary of Findings of the Draft EA, the implementation of the Proposed Action would result in less than significant impacts.

Attached documents (signed agency letter & EA/EIS)

- DEP-HAR.25.0684-Memo-to-DIR-OPSD-Real-Property-Acquisition.pdf
- USCG-Base-Honolulu-Real-Property-and-Pier_Draft-EA_102924.pdf

Action location map

- Real-Property-Acquisition-and-Pier-Construction.zip

Authorized individual

Nick Meisinger, WSP USA, Inc.

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

Draft Environmental Assessment for Real Property Acquisition and Pier Construction U.S. Coast Guard Base Honolulu

Contract No. GS-00F-314CA
Task Order No. 47PB0124F0006

Prepared for:

UNITED STATES COAST GUARD
USCG Base Honolulu
400 Sand Island Parkway
Honolulu, Hawaii 96819

Prepared by:

WSP USA, Inc.
104 West Anapamu Street, Suite 204A
Santa Barbara, CA 93101

November 2024

The U.S. Coast Guard (USCG) has prepared a Draft Environmental Assessment (DEA) for Real Property Acquisition and Pier Construction to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. This Draft EA has been prepared pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA); Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of NEPA* (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of Homeland Security Management Directive 023-01; and Coast Guard Commandant Instruction (COMDTINST) 5090.1, *U.S. Coast Guard Environmental Planning Policy and Environmental Planning Implementing Procedures* (April 2019). Additionally, given the USCG's proposed acquisition of property currently owned by the Hawaii Department of Transportation (HDOT) Harbors Division (HDOT-Harbors), this EA has also been prepared pursuant to the requirements of the Hawaii Environmental Policy Act (HEPA) statute and its implementing rules, codified in Hawaii Revised Statutes (HRS) Chapter 343 as well as Hawaii Administrative Rules (HAR) Chapter 11-200 and 11-201.

This DEA serves as a concise public document to briefly provide sufficient evidence and analysis for determining the need to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI). This DEA concisely describes the proposed action, the need for the proposal, the alternatives, and the environmental impacts of the proposal and alternatives. This DEA also contains a comparative analysis of the action and alternatives, a statement of the environmental significance of the preferred alternative, and a list of the agencies and persons consulted during DEA preparation.

CASEY.MATTHEW.CAMPBELL.1391725710
Digitally signed by CASEY.MATTHEW.CAMPBELL.1391725710
Date: 2024.10.28 14:05:04 -10'00'

	Environmental Engineer	NEPA Level II
Matthew Casey Environmental Reviewer	Title/Position	NEPA Warrant Program

In reaching my decision/recommendation on the USCGs Proposed Action, I considered the information contained in this DEA and considered and acknowledge the written comments submitted to me from the Environmental Reviewer.

Digitally signed by BOGDEN.JORDAN.CAPON.1368959339
Date: 2024.10.28 14:21:10 -10'00'

	Commanding Officer, USCG Civil Engineering Unit Honolulu
Lieutenant Commander Jordan C. Bogden Proponent	Title/Position

CONTENTS

CONTENTS (CONTINUED)

CONTENTS (CONTINUED)

CONTENTS (CONTINUED)

CONTENTS (CONTINUED)

APPENDICES

LIST OF FIGURES

LIST OF TABLES

CONTENTS (CONTINUED)

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µPa	micropascal
μPa^2s	micropascal squared-second
BA	Biological Assessment
BMP	best management practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cm	centimeter
CO	carbon monoxide
COMDTINST	Coast Guard Commandant Instruction
CWA	Clean Water Act
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
D14	Fourteenth Coast Guard District
dB	decibel
DHS	Department of Homeland Security
DLNR	Department of Land and Natural Resources
DLNR-DAR	Department of Land and Natural Resources, Division of Aquatic Resources
DO	dissolved oxygen
DTH	down-the-hole
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FEP	Fishery Ecosystem Plan
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
FR	Federal Register
FRC	Fast Response Cutter
HAPC	Habitat Area of Particular Concern
HAR	Hawaii Administrative Rules
HDOT	Hawaii Department of Transportation
HEPA	Hawaii Environmental Policy Act
HIDOH	Hawaii Department of Health
HIDOH-CAB	Hawaii Department of Health, Clean Air Branch
HRS	Hawaii Revised Statutes

ACRONYMS AND ABBREVIATIONS (CONTINUED)

kHz	kilohertz
LOS	Level of Service
MMPA	Marine Mammal Protection Act
mph	miles per hour
MRCI	Marine Research Consultants, Inc.
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MUS	Management Unit Species
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NH_4	ammonium
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NO_3	nitrate
NOAA	National Oceanic and Atmospheric Administration
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSC	National Security Cutter
O_3	ozone
ORMP	Ocean Resources Management Plan
P.L.	Public Law
Pb	lead
PIFSC	Pacific Islands Fisheries Science Center
PIRO	Pacific Islands Regional Office
PM	particulate matter
PM_{10}	particulate matter 10 microns or less
$PM_{2.5}$	particulate matter 2.5 microns or less
ppm	parts per million
PSO	Protected Species Observer
RMS	root mean square
SELcum	cumulative sound exposure level
sf	square foot
SFA	Sustainable Fisheries Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SMA	Special Management Areas

ACRONYMS AND ABBREVIATIONS (CONTINUED)

SO_2	sulfur dioxide
SO_x	sulfur oxides
SPL	sound pressure level
SWPPP	Stormwater Pollution Prevention Plan
TMK	Tax Map Key
TN	Total Nitrogen
TP	Total Phosphorus
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WLB	Seagoing Buoy Tender
WPB	Island-Class Patrol Boat
WPFMC	Western Pacific Fisheries Management Council

SECTION 1
PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) (42 U.S. Code [USC] §4321 et seq.); Council on Environmental Quality (CEQ) Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of Homeland (DHS) Security Management Directive 023-01, Rev 01; DHS Instruction Manual 023-01-001-01, Rev 01; and Coast Guard Commandant Instruction (COMDTINST) 5090.1, *Environmental Planning Policy*. Additionally, given the U.S. Coast Guard's (USCG's) proposed acquisition of property currently owned by the Hawaii Department of Transportation (HDOT) Harbors Division (HDOT-Harbors) (see Section 1.2, *Background* and Section 2.1, *Proposed Action*), this EA has also been prepared pursuant to the requirements of the Hawaii Environmental Policy Act (HEPA) statute and its implementing rules, codified in Hawaii Revised Statutes (HRS) Chapter 343 as well as Hawaii Administrative Rules (HAR) Chapter 11-200 and 11-201.

1.2 BACKGROUND

The USCG is proposing the acquisition of and shoreside improvements to a 0.71-acre property located in Honolulu Harbor at 400 Sand Island Parkway on the east side of Pier 53 adjacent to the current, northwest boundary of USCG Base Honolulu (see Figure 1). The subject parcel comprises a portion of the 1.28-acre Tax Map Key (TMK) Parcel 15041321 that has been owned by HDOT-Harbors since conveyance on March 13, 1986, before which the parcel was owned by the U.S. Federal Government. This parcel would be subdivided into a 0.71-acre parcel to be acquired by the USCG (acquisition parcel) while the remaining 0.57 acres would be retained by HDOT-Harbors (see Figure 1). The proposed shoreside improvements include construction of a fixed, pile-supported pier along the entire length of the proposed acquisition parcel to better accommodate mooring of vessels at Base Honolulu. Additionally, the USCG is considering the option of installing a new floating dock that would extend the length of the pile-supported pier (see Figure 2).

1 inch =2,000 feet
0 1,000 2,000 Feet

Project Site
USCG Base Honolulu

FIGURE 1

General Vicinity
Real Property Acquisition and Pier Construction
USCG Base Honolulu, HI

Contractor Laydown Area
Pier 53 - Pile Supported Pier
Pier 53 - Floating Dock
Parcel Acquisition (0.71 acre)
USCG Base Honolulu

1 inch =50 feet
0 25 50
Feet

FIGURE 2

Project Area
Real Property Acquisition and
Pier Construction
USCG Base Honolulu, HI

As described in Section 1.3.3, *Base Honolulu*, Base Honolulu is a multi-mission facility currently equipped with the following vessel inventory:

- Two 225-foot Seagoing Buoy Tender (WLBs);
- Three 154-foot Fast Response Cutters (FRCs); and
- Two 418-foot National Security Cutters (NSCs), which were recently homeported in 2019.

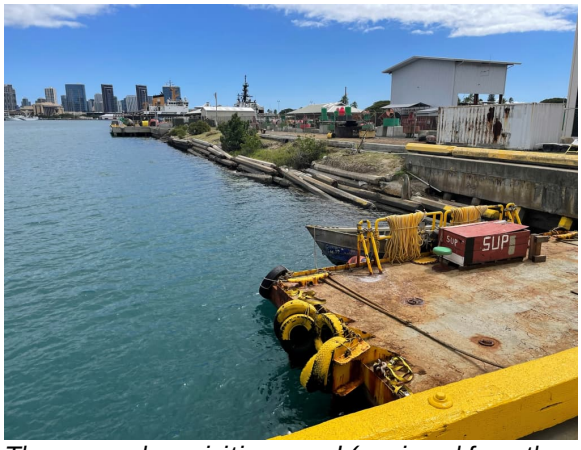
Two NSCs were homeported at Base Honolulu in 2019 following implementation of required shoreside and in-water improvements evaluated in the 2015 EA and 2016 Supplemental EA.

In 2015, the USCG completed an EA and Biological Assessment (BA) for the proposed homeporting of two new NSCs and associated infrastructure improvements at Base Honolulu (USCG 2015). The EA and BA analyzed the potential impacts of proposed shore-side facility development and mooring configurations for the new NSCs. This included an analysis of other ongoing vessel assignment actions including decommissioning of Island-Class Patrol Boats (WPBs), stationing of FRCs, and the return of one or two previously assigned WLBs from their off-site mid-cycle assessment. The 2015 EA identified three alternatives that addressed shore-side facility and berthing requirements. The Preferred Alternative (Alternative A), which was ultimately selected by the USCG, focused on NSC mooring at Berths A/B and D on the east side of Base Honolulu. The Preferred Alternative also considered three FRCs mooring at Berths B and C, one WLB mooring at Berth E, and two WPBs mooring at Berth G and its attached floating dock, respectively.

Following publication of the EA and signing of the associated Finding of No Significant Impact (FONSI) in July 2015, it was determined during preliminary detailed engineering design that pier and decking upgrades would be required to support the NSC homeporting. Improvement of the fendering along Berths A/B and C/D and replacement of piles and decking at Berth D associated with these upgrades was determined to require both in-water pile driving and over-water activities. In 2016, the USCG prepared a Supplemental EA to more specifically address these activities associated with the NSC homeporting.

Two 225-foot WLBs are homeported at Base Honolulu. One of these vessels has been undergoing an off-site mid-cycle assessment and will be returning shortly, creating a need for a new berth.

In 2022, with the anticipated return of the second WLB from its off-site mid-cycle assessment, the USCG identified a need to extend to Berth G and construct a new floating dock to better accommodate mooring of the existing FRCs, or other vessels, at Base Honolulu. These in-water modifications closely aligned with an alternative that was previously analyzed in the 2015 EA; however, this alternative was neither selected for execution in the 2015 EA nor identified as preferred during previous agency consultations. Due to the age of the baseline environmental information supporting the 2015 EA, the USCG recently completed a new EA and associated BA in July 2024. These documents incorporated elements of the 2015 EA and the 2016 Supplemental EA, but focused on the improvements at Berth G.



The proposed acquisition parcel (as viewed from the remainder of the Matson property with Berth G in the background) has been identified for development by the USCG to support current and future berthing needs for vessels homeported at, or visiting, Base Honolulu.

Even with previous and ongoing actions to accommodate the two recently homeported NSCs and the return of the second WLB from its off-site mid-cycle assessment, the USCG lacks adequate pier space at Base Honolulu. For example, the 270-foot Medium Endurance Cutter is currently homeport at Pearl Harbor, Hawaii due to the lack of pier space at USCG Base Honolulu. Maintenance and on/offloading periods require shifting mooring positions, increasing overall downtime of vessels and personnel. The USCG has determined that the undeveloped parcel immediately adjacent to

Berth G represents an opportunity to add contiguous operational space to Base Honolulu's waterfront. Acquisition and development of the subject parcel under the Proposed Action would provide the USCG with the ability to:

- Provide sufficient space, shore service, and utilities infrastructure for all USCG vessels homeported at Base Honolulu to moor immediately alongside the waterfront instead of in stacked or shotgun (i.e., ship-to-ship) mooring configurations that result in vessels encroaching further into the harbor and more closely to the Kapalama Channel;
- Provide additional space for maneuvering and maintenance activities at Base Honolulu; and
- Provide mooring space for visiting vessels transiting the Pacific.

This EA provides additional environmental analysis related to implementation of the Proposed Action and its alternatives, including the No-Action Alternative. This information and analysis will serve as the basis for a USCG decision regarding the Proposed Action.

If the Proposed Action would result in a significant impact to the environment, preparation of an Environmental Impact Statement (EIS) would be required. If no significant impacts would occur, a FONSI would be appropriate.

1.3 HOMEPORTING OVERVIEW

1.3.1 USCG Mission

The USCG is the U.S.'s oldest maritime agency. The USCG area of responsibility includes over 95,000 miles of U.S. coastlines, waterways, and harbors; more than 3.36 million square miles of Exclusive Economic Zone and U.S. territorial seas; and international waters or other maritime regions of importance to the U.S. The USCG is a multi-missioned military and maritime service within the DHS.

The USCG's 11 fundamental missions are ports, waterways, and coastal security; drug interdiction; aids to navigation; search and rescue; living marine resources; marine safety; defense readiness; migration interdiction; marine environmental protection; ice operations; and other law enforcement. Examples of these fundamental missions include the following:

- Protect all U.S. ports, inland waterways, harbors, navigable waters, the Great Lakes, territorial seas, contiguous waters, customs waters, coastal seas, littoral areas, the U.S. Exclusive Economic Zone, oceanic regions of the U.S. national interest, sea lanes to the U.S., U.S. maritime approaches, and high seas surrounding the nation;
- Protect the U.S. Marine Transportation System, which is comprised of intermodal connections, vessels, vehicles, and system users, as well as all federal maritime navigation systems;
- Maintain maritime border security against illegal drugs, illegal aliens, firearms, and weapons of mass destruction;
- Ensure that U.S. military assets can be rapidly supplied and deployed by keeping USCG units at a high state of readiness, and by keeping marine transportation open for the transit of assets and personnel from other branches of the armed forces;
- Coordinate efforts and intelligence with federal, state, and local agencies;
- Respond to calls of distress, whether from commercial or recreational boats or downed aircraft;
- Support programs to ensure that boats are safe for public use and contain appropriate safety equipment;
- Protect against illegal fishing and destruction of living marine resources; and
- Prevent and respond to oil and hazardous material spills – both accidental and intentional.

1.3.2 USCG District 14

In 1939, the Fourteenth Coast Guard District (D14) was established in Honolulu with 230 personnel. Today, more than 1,150 active duty, 150 reserve, 80 civilian, and 400 auxiliary men and women support D14. The area of responsibility for D14 includes more than 14 million square miles of land and sea, with units on Oahu, Maui, Kauai, Island of Hawaii, and in American Samoa, Saipan, Guam, Singapore, and Japan. The District Commander oversees 25 operational units ashore and afloat throughout the Pacific. These operational units regularly perform missions related to maritime safety, protection of natural resources, maritime security, homeland security, and national defense (USCG 2022).

D14 personnel conduct a variety of daily operations in support of the USCG's statutory missions, including search and rescue, coast and Pacific Ocean patrol to enforce safety and fisheries regulations, safety and compliance inspections and exams on commercial vessels and waterfront facilities, and national strategic defense and critical infrastructure protection. D14 personnel enforce federal laws on the high seas and navigable waters of the U.S., including the territorial seas, by conducting illegal alien and drug interdiction and protecting living marine resources by managing a maritime environmental protection program aimed at preventing, detecting, and controlling pollution in Hawaii's waters and throughout the Pacific. Personnel also maintain navigation aids such as buoys and harbor entrance day boards and administer a boating safety program (in concert with the Coast Guard Auxiliary).

1.3.3 Base Honolulu

Base Honolulu is a multi-mission facility currently equipped with the following vessel inventory:

- Two 225-foot WLBs;
- Three 154-foot FRCs; and
- Two 418-foot NSCs.

Although the USCG carries out a variety of missions from Base Honolulu, its primary mission is distress response. Fulfillment of this mission includes training personnel, maintaining awareness of emergent distress through lookout activities and communications watches, and responding to distress situations. Secondary missions include safety inspections, security and law enforcement patrols (including fisheries enforcement activities) and providing initial pollution response.

Base Honolulu currently occupies approximately 40.76 acres on Sand Island in Honolulu (USCG 1992). Sand Island is located along the southern border of the Honolulu Harbor, south of downtown Honolulu, and is linked to downtown Honolulu by the Sand Island Parkway which bridges the Kalihi Channel and Kapalama Basin. Mooring facilities are maintained along the entire northeast property limit of the Base Honolulu; the harbor opens to Honolulu Channel to

the east. The wharf design along the northern perimeter of Base Honolulu currently includes seven berths, referred to as Berths A through G, with the proposed acquisition parcel located immediately to the west of Berth G (refer to Figure 1 and Figure 2).

1.4 PURPOSE OF THE PROPOSED ACTION

The *purpose* of the Proposed Action is to acquire and develop the subject acquisition parcel to provide additional mooring capacity.

The USCG is also considering the construction of a floating dock that would extend the length of the new pier that would occupy the acquired property. The *purpose* for this floating dock is to enable Base Honolulu to meet mission needs facilitated by vessel mooring on its waterfront.

1.5 NEED FOR THE PROPOSED ACTION

The overarching *need* for the Proposed Action is to address the lack of adequate pier space for USCG vessels currently homeported at Base Honolulu as well as cutters transiting the area in support of USCG strategic missions in the Pacific. As previously described, existing pier space currently requires USCG vessels to be moored in staked or shotgun (i.e., ship-to-ship) configurations. Additionally, maintenance and on/offloading periods require shifting of vessels' mooring positions, increasing overall downtime of vessels and personnel.

The USCG is also considering the construction of a floating dock that would extend the length of the new pier that would occupy the acquired property. The *need* for this floating dock is to provide greater flexibility in vessel mooring facilities equipped with necessary hardware and utility connections. For example, the floating dock would support smaller vessels such as FRCs, which have specific logistical and maintenance needs.

1.6 AGENCY AND PUBLIC INVOLVEMENT PROCESS

On February 23, 2024, scoping letters were distributed by the USCG to solicit input on the proposed project from interested agencies and stakeholders. The

notices informed recipients of a 30-day period during which comments could be submitted on key issues that relevant stakeholders felt should be addressed during the environmental review process. Further, a Notice of Intent to prepare an EA was published in the *Honolulu Star-Advertiser* on February 23, 2023 to solicit additional input from the public and other interested stakeholders.

As part of the project planning process, USCG is working closely with the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), and Hawaii Department of Land and Natural Resources (DLNR) Division of Aquatic Resources to identify opportunities and constraints related to project design. USCG's goal is to avoid or minimize adverse environmental impacts to the extent feasible while maintaining the project's viability and its ability to meet the purpose and need.

1.7 SUMMARY OF ENVIRONMENTAL STUDY REQUIREMENTS

As previously described, this EA has been prepared in accordance with the requirements of NEPA (42 USC §4321 et seq.); CEQ Regulations for Implementing NEPA (40 CFR Parts 1500-1508); DHS Management Directive 023-01, Rev 01; DHS Instruction Manual 023-01-001-01, Rev 01; and COMDTINST 5090.1, *Environmental Planning Policy*. Additionally, given the USCG's proposed acquisition of property owned by HDOT-Harbors, this EA also meets the requirements of the HEPA statute and its implementing rules, codified in HRS Chapter 343 as well as Hawaii Administrative Rules Chapter 11-200 and 11-201.

1.7.1 National Environmental Policy Act

NEPA requires that federal agencies consider potential environmental consequences of proposed actions that have a federal nexus. The law's intent is to protect, restore, and enhance the environment through well-informed federal decisions. The CEQ was established under NEPA for the purpose of implementing and overseeing federal policies as they relate to this process. The CEQ is responsible for developing procedures for federal agency implementation of NEPA. These procedures were initially promulgated in 1971 as guidelines and were then issued as regulations in 1978. In May 2022, the CEQ issued a final rule

to amend certain provisions of its NEPA implementing regulations. These amendments related to addressing the purpose and need of a proposed action, agency NEPA procedures for implementing CEQ's NEPA regulations, and the definitions of "effects." These regulations specify that an EA be prepared to:

- Briefly provide sufficient analysis and evidence for determining whether to prepare an EIS or a FONSI;
- Aid in an agency's compliance with NEPA when no EIS is necessary; and
- Facilitate preparation of an EIS if one is necessary.

Further, to comply with other relevant environmental requirements (e.g., Endangered Species Act [ESA], National Historic Preservation Act [NHPA], Coastal Zone Management Act [CZMA], etc.) in addition to NEPA, the decision-making process for the Proposed Action involves a thorough examination of all environmental issues pertinent to the Proposed Action.

1.7.2 Endangered Species Act

The ESA (16 USC §§1531–1544, as amended) established measures for the protection of plant and animal species that are federally listed as threatened and endangered, and for the conservation of habitats that are critical to the continued existence of those species. Federal agencies must evaluate the effects of their proposed actions through a set of defined procedures, which can include the preparation of a BA and can require formal consultation with USFWS and/or NMFS under Section 7 of the ESA.

In response to the scoping letter provided on February 23, 2024, NMFS provided scoping comments on March 11, 2024 and identified the USCG's responsibility to consult with NMFS pursuant to the ESA. The USCG prepared a BA to describe the potential effects of the Proposed Action on federally listed species and federally designated critical habitat. In a letter dated October 8, 2024, NMFS concurred that "all effects of the proposed action are either discountable or insignificant" (see Appendix C).

1.7.3 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (MSA), as amended (16 USC §1801 et seq.) established: 1) a fishery conservation zone between the territorial seas of the U.S. and 200 nautical miles offshore; 2) an exclusive U.S. fishery management authority over fish within the fishery conservation zone (excluding highly migratory species); 3) regulations for foreign fishing within the fishery conservation zone through international fishery agreements, permits, and import prohibitions; and, 4) national standards for fishery conservation and management and eight regional fishery management councils to apply those national standards in fishery management plans.

Congress enacted the 1996 amendments to the Act, known as the Sustainable Fisheries Act (SFA) (Public Law [P.L.] 104-297), to address the substantial decline in fish stocks caused by direct and indirect habitat loss. The SFA requires that agencies consult with the NMFS concerning actions that may adversely impact Essential Fish Habitat (EFH). Per the EFH provision, USCG must consult with NMFS if there "may be adverse effect to EFH" from implementation of a proposed action.

In response to the scoping letter provided on February 23, 2024, NMFS provided scoping comments on March 11, 2024 and identified the USCG's responsibility to consult with NMFS pursuant to the MSA. The USCG prepared an EFH Assessment to describe the potential effects of the Proposed Action on EFH. In a letter dated September 11, 2024 NMFS determined that the implementation of the Proposed Action may adversely affect EFH and provided conservation recommendation to avoid and minimize these effects. In a letter dated September 22, 2024, the USCG accepted and adopted these conservation recommendations in full, thereby concluding consultation pursuant to the MSA as confirmed by NMFS in an e-mail dated October 2, 2024 (see Appendix C).

1.7.4 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act of 1934 (FWCA) (16 USC 661 et seq.) directs the USFWS to investigate and report on proposed federal actions that affect any stream or other body of water and to provide recommendations to

minimize impacts on fish and wildlife resources. The FWCA requires federal agencies that construct, license or permit water resource development projects to first consult with the USFWS, NMFS, and state fish and wildlife agencies regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.

In response to the scoping letter provided on February 23, 2024, USFWS provided scoping comments on March 19, 2024 and identified the USCG's responsibility to consult with the USFWS pursuant to the FWCA (see Appendix C). The USCG provided the benthic survey, BA, and other ESA and MSA consultation materials to USFWS and hosted an informal meeting on October 16, 2024 to discuss consultation requirements pursuant to FWCA.

1.7.5 Clean Air Act and Conformity Requirements

The Clean Air Act (CAA) (42 USC §§7401-7671, as amended) provided the authority for the U.S. Environmental Protection Agency (USEPA) to establish nationwide air quality standards to protect public health and welfare. These federal standards, known as the National Ambient Air Quality Standards (NAAQS), were developed for six criteria pollutants: ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). The CAA also requires that each state prepare a State Implementation Plan (SIP) for maintaining and improving air quality to eliminate NAAQS violations. Under the CAA Amendments of 1990, federal agencies are required to determine whether their undertakings are in conformance with the applicable SIP and demonstrate that their actions will not cause or contribute to a new violation of the NAAQS; increase the frequency or severity of any existing violation; or delay timely attainment of any standard, emission reduction, or milestone contained in the SIP. The USEPA has set forth regulations in 40 CFR Part 51, Subpart W which require the proponent of a proposed action to perform an analysis to determine if implementation of the action would conform to the SIP. As described in Section 2.1, *Proposed Action*, construction activities associated with the Proposed Action would not exceed *de*

minimis thresholds for any criteria air pollutants (40 CFR §93.153).[1] Therefore, pursuant to the CAA, a Conformity Determination is not required.

1.7.6 Wetland and Water Resources Regulatory Requirements

The Clean Water Act (CWA) (33 USC §1251 et seq.) regulates pollutant discharges that could affect aquatic life forms or human health and safety. Section 404 of the CWA and Executive Order (EO) 11990, *Protection of Wetlands*, regulate development activities in or near Waters of the U.S. including wetlands. Section 404 also regulates development in streams and wetlands and requires proponents to obtain a permit from the U.S. Army Corps of Engineers (USACE) for dredging and filling in wetlands. The Proposed Action would not include any dredging activities. In-water work would be limited to the construction of the pile supported pier extensions. EO 11988, *Floodplain Management*, requires federal agencies to take action to reduce the risk of flood damage; minimize the impacts of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains. Federal agencies are directed to consider the proximity of their actions to floodplains.

1.7.7 Coastal Zone Consistency Determination

The federal CZMA mandated state-federal partnerships to ensure the protection of coastal resources. In compliance with this law and to address and resolve coastal problems, the State of Hawaii developed Hawaii's Coastal Zone Management (CZM) Program (HRS 205A-2). The CZM Program is designed to protect valuable and vulnerable coastal resources by reducing coastal hazards and improving the review process for activities proposed within the coastal zone. The CZM Program focuses on ten objectives and policies related to the following: recreational resources; historic resources; scenic and open space resources; coastal ecosystems; economic uses; coastal hazards; managing development; public participation; beach protection; and marine resources. The CZM Program also requires permits for development within Special Management Areas (SMAs), which include lands within 300 feet from the shoreline.

[1] The phrase *de minimis* means "of minimum impact." The USEPA has defined *de minimis* thresholds for criteria air pollutants, which indicate that there would be no significant contamination within an airshed.

The Proposed Action site is located within an SMA. The federal regulations implementing the CZM Program require the applicable state agency to inform the applicable federal agency of its agreement or disagreement with the federal agency's consistency determination. Therefore, the USCG is required to submit a consistency determination to the Hawaii Office of Planning and Sustainable Development based on the analysis of the Proposed Action and alternatives to the Proposed Action provided in this EA and the State of Hawaii must issue either agreement or disagreement with that determination.

1.7.8 Cultural Resources Regulatory Requirements

The NHPA (16 USC §470) established the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation, which outlined procedures for the management of cultural resources on federal property. Cultural resources can include archaeological remains, architectural structures, and traditional cultural properties such as ancestral settlements, historic trails, and places where significant historic events occurred. The NHPA requires federal agencies to consider the potential impacts of their proposed developments on cultural resources that are listed, nominated to, or eligible for listing on the NRHP; designated as a National Historic Landmark; or valued by modern Native Americans for maintaining their traditional culture. Section 106 of the NHPA requires federal agencies to consult with the appropriate State Historic Preservation Office (SHPO) if their undertaking might affect such resources. Protection of Historic and Cultural Properties (36 CFR Part 800) provides an explicit set of procedures for federal agencies to meet their obligations under the NHPA, which includes requirements for inventory of resources and consultation with the SHPO.

EO 13007, *Indian Sacred Sites*, directs federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites on any land or interests in land owned by the U.S., including leasehold interests held by the U.S., except Indian trust lands. Indian sacred sites consist of any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe (an Indian or Alaska Native tribe, band, nation, Pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to P.L. 103-454, 108 Stat. 4791, an "Indian" refers to a member of

such an Indian tribe or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion) provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.

The American Indian Religious Freedom Act (42 USC §1996) established federal policy to protect and preserve the rights of Native Americans to believe, express, and exercise their traditional religions, including providing access to sacred sites. The Native American Graves Protection and Repatriation Act (25 USC §§3001-3013) requires consultation with Native American tribes prior to excavation or removal of human remains and certain objects of cultural importance.

1.7.9 Sustainability and Greening

On January 20, 2021, President Biden issued EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, which declared the Administration's policy to listen to the science; improve public health and protect our environment; ensure access to clean air and water; reduce greenhouse gas emissions; bolster resilience to the impacts of climate change; and prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals. EO 13990 directs federal agencies to immediately review and take action to address the promulgation of federal regulations and other actions during the last 4 years that conflict with these important national objectives and to immediately commence work to confront the climate crisis.

1.7.10 Hawaii Revised Statutes Chapter 343

Compliance with HRS Chapter 343, the HEPA, is required for any one of nine defined actions that propose: 1) the use of state or county lands or funds; 2) use of land classified as conservation district; 3) use within a shoreline area (as defined in HRS Chapter 205A); 4) use within any historic site as designated in the NRHP or Hawaii Register; 5) use of the Waikiki area of Oahu; 6) amendments to existing county general plans resulting in specific designation impacts; 7) any reclassification of land classified as a conservation district; 8) any construction of

new or modification of existing helicopter facilities; or 9) construction of a water treatment unit, waste-to-energy facility, landfill, oil refinery, or power-generating facility. Because the Proposed Action would include the acquisition of a portion of a parcel currently owned by the HDOT-Harbors, it triggers review under HEPA as the first of the defined nine actions requiring consideration under HEPA.

1.7.11 Hawaii Revised Statutes Chapter 205

Under the State Land Use Law (Act 187), HRS Chapter 205, all lands and waters of the state are classified into one of four districts: Agriculture, Rural, Conservation, or Urban. Conservation Districts, under the jurisdiction of DLNR, are further divided into five subzones: Protective, Limited, Resource, General, and Special. The use of Conservation District lands is regulated by HRS Chapter 183C and HAR Chapter 13-5. Base Honolulu (federal property owned in fee simple by the USCG) and adjacent submerged lands are under federal jurisdiction. The proposed acquisition parcel, currently owned by HDOT-Harbors, is classified as Urban lands and waters.

1.7.12 Hawaii Revised Statutes Chapter 484

The Hawaii Uniform Land Sales Practices Act (HRS Chapter 484 §§1-22) governs the subdivision of parcels throughout the State. However, pursuant to 484-5, *Exemptions*, *"…this chapter shall not apply to offers or dispositions of an interest in land:…(7) by any government or government agency."* Therefore, the proposed real property subdivision and acquisition between the HDOT-Harbors and the USCG is exempt from Chapter 484 requirements.

1.7.13 City and County of Honolulu General Plan

The General Plan for the City and County of Honolulu (General Plan), last revised in 2021, is a comprehensive document with wide-ranging social, economic, environmental, and design objectives, as well as broad policies to facilitate the attainment of those objectives. The General Plan is divided into 11 subject areas including: population; economic activity; the natural environment; housing; transportation and utilities; energy; physical development and urban design; public safety; health and education; culture and recreation; and

government operations and fiscal management (City and County of Honolulu 2021).

1.8 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

The Proposed Action includes a real estate action (i.e., administrative action) that would enable the expansion of Base Honolulu's waterfront mooring capacity for existing USCG vessels homeported at Base Honolulu. Because the administrative real estate action would directly lead to shoreside development on the acquired property, future construction of the shoreside development is considered pursuant to the requirements of NEPA and potentially HEPA, as applicable.

This EA considers the Proposed Action and evaluates potential environmental impacts to those environmental resources that would likely be affected by implementation of the Proposed Action. For this EA, the following environmental resources are evaluated in detail pursuant to NEPA and the HEPA significance criteria presented in HAR Section 11-200-12(b)(1-13):

- Air Quality and Climate Change (HAR Section 11-200-12[b][1, 7, and 10]);
- Biological Resources (HAR Section 11-200-12[b][9]);
- Cultural Resources (HAR Section 11-200-12[b][1]);
- Geological Hazards (HAR Section 11-200-12[b][11]);
- Hazardous Materials and Wastes (HAR Section 11-200-12[b][2 and 7]);
- Safety (HAR Section 11-200-12[b][5]);
- Visual Resources (HAR Section 11-200-12[b][12]);
- Water Resources (HAR Section 11-200-12[b][2, 7, and 10]); and,
- Cumulative Impacts (HAR Section 11-200-12[b][8]).

Environmental resource areas that are anticipated to experience either no environmental impacts or negligible environmental impacts under implementation of the Proposed Action are not examined in detail. Implementation of the Proposed Action evaluated in this EA is not anticipated to result in any long-term adverse impacts to airborne noise, transportation,

socioeconomics and environmental justice, or public services and utilities. A brief description of each of these environmental resources is provided below:

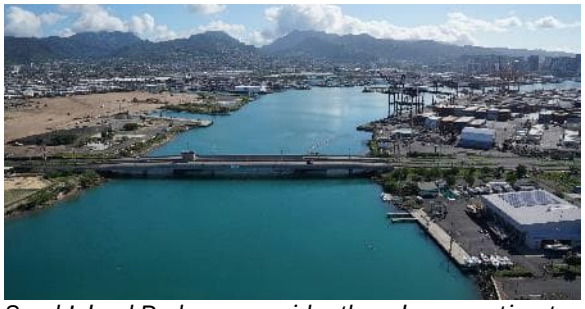
Honolulu Harbor is an industrial and commercial waterfront serving cruise ships and ferries as well as general cargo, barges, and tugboats.

- Airborne Noise. Implementation of the Proposed Action would result in temporary airborne noise associated with the proposed construction activities on the proposed acquisition parcel adjacent to the current boundaries of Base Honolulu. Construction activities would generally occur during the weekdays within daytime hours and would involve the use of standard construction equipment including, but not limited to, heavy haul trucks, crane barges, tugboats, and pile drivers. Airborne noise generated by construction activities would generally be consistent with the existing ambient noise environment at this industrial and commercial waterfront location, including the remainder of Pier 53 that currently serves as an active container terminal. Noise associated with tugboats and other vessels involved in construction activities would also be consistent with the ambient noise environment given the existing marine vessel traffic within Honolulu Harbor. Down-the-hole drilling, vibratory pile driving, and impact pile driving would be the predominant noise source during construction and would determine the maximum airborne noise levels in the vicinity of the property acquisition parcel and Base Honolulu. However, noise-generating in-water construction activities would be limited to the construction phase and would not persist in the long term. Therefore, the increase in noise levels would be intermittent and temporary and would not exceed significance criteria under HAR 11-200-12(b)(10).

  Following the completion of construction activities, there would be no change in personnel or operational activities at Base Honolulu. The airborne noise levels associated with routine vessel operation and maintenance, training activities, personnel lodging, and recreation would be consistent with the

existing ambient noise environment, which is dominated by vessel operations and industrial and commercial waterfront operations.

- Transportation. Construction activities associated with the Proposed Action would involve the use of marine vessels and heavy haul trucks to deliver construction materials to the proposed acquisition parcel adjacent to the current boundaries of Base Honolulu. Additionally, construction worker commutes would contribute to existing traffic along the roadway network within the vicinity of Base Honolulu. However, this increase in marine vessels and roadway traffic would be temporary.



Sand Island Parkway provides the sole connection to mainland Oahu.

The proposed acquisition parcel is located adjacent to a federally maintained navigation channel, which is heavily trafficked by marine vessels including cargo ships, barges, ferries, cruise ships, and leisure boats. Marine vessel operations during construction would not contribute substantially to, or otherwise affect, typical marine vessel movements in Honolulu Harbor and would likely be limited to a single tugboat and a single crane barge. While marine traffic can often be congested within the channel, these additional temporary marine vessel operations would not substantially contribute to the overall marine vessel traffic. The USCG would issue a Notice to Mariners, as necessary, regarding maritime safety in the navigation channel. Additionally, the USCG would coordinate with the USACE, as necessary, regarding permitting requirements under the CWA and the Rivers and Harbors Act.

Sand Island is linked to the City of Honolulu by Sand Island Parkway, also referred to as Highway 64. Sand Island Parkway is located adjacent to and provides direct access to Base Honolulu as well as to local businesses, including five port terminals. The Sand Island Parkway experiences little to no congestion, operating at a Level of Service (LOS) A in the vicinity of Sand Island (Oahu Metropolitan Planning Organization 2011). LOS A is a

classification of optimum traffic volume conditions. Construction-related traffic associated with the Proposed Action – including heavy haul truck trips and construction worker commutes – would be limited to less than 10 trips per day and would not contribute substantially to overall traffic volumes in the region. Given the construction schedule, these heavy haul truck trips and construction work commutes would be limited to the daytime during off-peak periods, further limiting the potential for traffic related impacts.

Following the completion of construction activities, the change in operational activities at Base Honolulu would be minimal and there would be no change in the number of personnel. Therefore, there would be no change in marine vessel traffic or vehicle traffic.

- Socioeconomics and Environmental Justice. Construction activities associated with the Proposed Action would be temporary in nature and would generate short-term spending and employment opportunities. This work would result in beneficial impacts on the local economy; however, these impacts would be negligible in the context of the regional economy.

  EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that *"each Federal Agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health."* As described in Section 4, *Environmental Consequences*, construction activities associated with the Proposed Action would not substantially affect either human health or the environment. Therefore, no permanent populations – minority, low-income, Tribal, or otherwise – would be disproportionately affected and there would be no significant impacts pursuant to HAR Section 11-200-12(b)(4 and 6).

- Public Services and Utilities. Implementation of the Proposed Action would not change the number of personnel at Base Honolulu. Therefore, there would be no long-term increase in demand for police, fire, recreation, or schools and there would be no significant impacts pursuant to HAR Section 11-200-12(b)(6).

The Proposed Action would add utility services including electricity, water, sanitary sewer, and communications to the new pier to accommodate mooring of existing vessels. Utility construction activities would be subject to standard design review requirements in order to avoid inadvertent interruption of existing subsurface utilities at Base Honolulu. In addition, the proposed facilities are not expected to result in a substantial increase in utility demands over existing conditions and there would be no significant impacts pursuant to HAR Section 11-200-12(b)(13).

SECTION 2
PROPOSED ACTION AND ALTERNATIVES

The USCG is proposing the acquisition of and subsequent shoreside improvements to a 0.71-acre property, currently owned by HDOT-Harbors, to more fully accommodate existing vessel mooring needs at Base Honolulu. As described in Section 1.2, *Background*, the USCG lacks adequate pier space at Base Honolulu. For example, periods of maintenance and on/offloading require shifting mooring positions, therefore increasing overall downtime of vessels and personnel. The USCG has determined that the undeveloped parcel immediately adjacent to Berth G represents an opportunity to add contiguous operational space to Base Honolulu's waterfront.

2.1 PROPOSED ACTION

The USCG Proposed Action includes three primary components: 1) the proposed acquisition of a 0.71-acre property, currently owned by the HDOT-Harbors; 2) stabilization of the shoreline with a bulkhead and subsequent development of a new pile-supported pier in the submerged portion of the acquired property; and 3) optional construction of a floating dock extending the length of the proposed pile-supported pier. Each component is described more fully below. While the floating dock is considered an option at this time, it is included in the Proposed Action to ensure that the most impactful alternative is analyzed.

2.1.1 Real Property Acquisition

Under the Proposed Action, the USCG would acquire a 0.71-acre portion of an existing 1.28-acre parcel owned by the HDOT-Harbors. The existing parcel is identified by the City and County of Honolulu Real Property Assessment Division as TMK Parcel 15041321. The existing parcel abuts Base Honolulu to its east and south, Matson cargo facility to its west, and Honolulu Harbor to its north (refer to Figure 1 and Figure 2). The western portion of the parcel is currently developed with Matson cargo facilities including a pier with heavy-lift cargo cranes; however, the 0.71-acre portion of the parcel proposed for acquisition by the USCG is currently undeveloped.

The property acquisition would require the subdivision of the existing 1.28-acre TMK Parcel 15041321 into two new parcels: the 0.71-acre USCG acquisition parcel and 0.57-acre remainder parcel.

2.1.2 Pile-Supported Pier and Bulkhead Construction

The proposed construction includes a fixed, pile-supported pier extending approximately 325 feet westward from Base Honolulu's Berth G to the Matson property boundary. The Proposed Action would allow for mooring of existing vessels, reducing potential downtime of vessels and personnel associated with mooring vessels in stacked configurations.

The existing undeveloped acquisition parcel (looking west towards the Matson facility) includes the natural shoreline with unknown debris including unused concrete piles.

Before construction of the pile-supported pier can begin, the acquisition parcel would be cleared of debris including discarded concrete piles. Following completion of site preparation activities, the USCG would stabilize the shoreline with a bulkhead, similar to and in line with neighboring Berth G. While the bulkhead and stabilization effort has not been designed yet, it is assumed that some dredge and fill may be required to level and stabilize approximately 340 feet of shoreline with sheet piles.

The pile-supported pier would be up to 340 feet long and up to 60 feet wide with a total footprint of 20,400 square feet (sf). For the purposes of the analysis provided in this EA, the pier deck is assumed to be concrete and would be supported by concrete piles. The support system for the pier deck is assumed to include 25 bents, horizontal concrete supports to distribute loading under the deck approximately every 14 feet of pier length. Each bent would be supported by six piles: four vertical and two batter (angled) piles. Every other bent is assumed to have two extra piles, one at each end of the bent, for a total of 180 piles. While the materials for support piles have not yet been determined, it is

assumed that piles would be 16-inch-diameter concrete piles similar to the USCG's neighboring Berth G. Pile installation is assumed to be accomplished by:

- Down-the-hole drilling to create a 6-foot-deep socket into which the concrete pile would be inserted; and
- Impact pile driving the concrete pile to depth within the drilled socket.

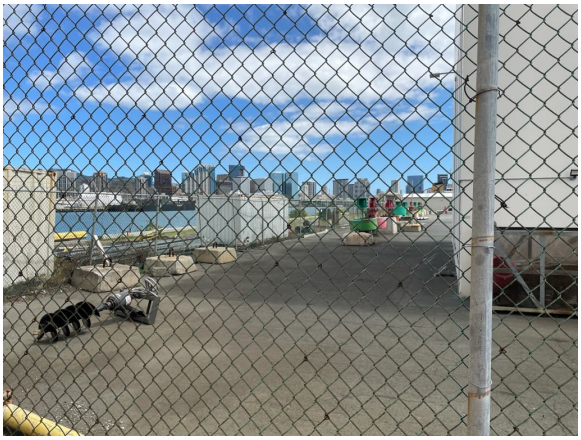
The Proposed Action also includes the installation of mooring hardware, services, and utilities.

The USCG has not yet prepared construction bid documents for the proposed shoreside improvements and therefore a final construction plan has not yet been developed. It is expected that the contractor would use a combination of in-water and on-shore methods, based on the alternative ultimately identified for implementation.

Sideview of existing Berth G with concrete decking supported by vertical and batter piles. The proposed pile-supported pier is likely to be similar in construction.

It is anticipated that access to the project site by construction crews would occur primarily landside from Base Honolulu. Construction vehicles and equipment would access the site from Sand Island Parkway, a four-lane road providing access to Base Honolulu via a secure, gated entrance, and then to the proposed acquisition parcel adjacent to Berth G. Upon acquisition of the subject parcel, the chain-link fence separating the parcel from Base Honolulu would be removed permitting access shoreside construction vehicles via Base Honolulu instead of across the adjacent Matson property.

A temporary equipment and material staging area would be required and is anticipated to be located on a portion of the parking lots or lawn areas near Berth G, within close proximity to the project site. Selection of the portion of the equipment and material staging area would consider existing parking supply and demand to ensure that adequate parking would remain available for the duration of project implementation.



Construction parking and materials laydown would occur on existing surface parking lots or lawns located in close proximity to the project site. The existing chain link fence separating the proposed acquisition parcel and Base Honolulu would be removed to facilitate access.

2.1.3 Floating Dock Construction (Optional)

Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the new fixed pier via a small gangway. The floating dock would include hardware and utility connections for a shore tie mound. Under this alternative it is possible that the total length of the concrete pier described under the Proposed Action would be reduced. For example, this alternative could involve the extension of concrete pier at Berth G by just 25 feet and the construction of a 175-foot by 15-foot floating dock. However, this EA conservatively analyzes the maximum extent for the concrete pier footprint and the floating dock footprint under this alternative (refer to Figure 2).

The optional floating dock would be held in place by concrete guide piles along the dock centerline. Installation of the guide piles is expected to be accomplished using the same method used for installation of the support piles for the new concrete pier, including down-the-hole drilling and then impact driving of concrete guide piles.

As described for the Proposed Action, this alternative would also involve the stabilization of the shoreline with a bulkhead. It is assumed that some dredge

and fill may be required to level and stabilize approximately 340 feet of shoreline with sheet piles.

2.2 Alternative 1: Real Property and Pile-Supported Pier Construction Only

Alternative 1 would include only the proposed real property acquisition and the new pile-supported pier described for the Proposed Action. The shoreside improvements component of Alternative 1 would be the same as the Proposed Action but the optional floating dock would not be constructed under this alternative.

2.3 No Action Alternative

CEQ regulations implementing NEPA require that a No-Action Alternative be analyzed to provide a baseline for comparison with the Proposed Action. The No-Action Alternative identifies and describes the potential environmental impacts of the future state of the status quo (i.e., if the Proposed Action were to not be implemented). Under the No-Action Alternative, the USCG would not take action to acquire the subject parcel and construct a new bulkhead, pile-supported pier and optional floating dock to provide additional mooring infrastructure to accommodate current and future vessels at Base Honolulu. There would be no change to USCG mooring at Base Honolulu and USCG vessels would not operate in closer proximity to the Matson cargo operations facility than they currently do.

SECTION 3
AFFECTED ENVIRONMENT

This section describes pertinent existing environmental conditions for resources potentially affected by the Proposed Action and identified alternatives. In compliance with NEPA; CEQ Regulations for Implementing NEPA; DHS Security Management Directive 023-01, Rev 01; DHS Instruction Manual 023-01-001-01, Rev 01; and COMDTINST 5090.1, *Environmental Planning Policy*, the description of the affected environment focuses on only those aspects potentially subject to impacts.

In the case of the Proposed Action at USCG Base Honolulu, the affected environment description is limited primarily to Base Honolulu and, regionally, to the adjacent areas in the Honolulu Harbor. Resource descriptions focus on the resources with potential to be affected by implementation of the Proposed Action or any of the identified alternatives, including:

- Air Quality and Climate Change;
- Biological Resources;
- Cultural Resources;
- Geological Resources;
- Hazardous Materials and Wastes;
- Safety;
- Visual Resources; and
- Water Resources.

3.1 AIR QUALITY AND CLIMATE CHANGE

3.1.1 Definition of Resource

Air quality in a given location is determined by the concentration of various pollutants in the atmosphere. NAAQS are established by the USEPA for criteria pollutants, including the following: O_3, CO, NO_2, SO_2, PM_{10} and $PM_{2.5}$, and Pb. NAAQS represent maximum levels of background pollution that are considered safe, with an adequate margin of safety, to protect public health and welfare.

3.1.1.1 Criteria Pollutants

Air quality is affected by stationary sources (e.g., urban and industrial development) and mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors, including the quantity and type of pollutants emitted locally and regionally, and the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions, and topography. In the vicinity of the project site, the following criteria pollutants are of potential concern:

Ozone (O_3). In April 2004, the USEPA issued the final rule for 8-hour O_3, revising the 1-hour O_3 NAAQS standard. The 8-hour standard is more stringent than the 1-hour standard, and non-attainment areas for 8-hour O_3 are now designated. As of June 15, 2005, the 1-hour standard was revoked for all areas except those without effect dates for 8-hour O_3 designations (USEPA 2024a). On March 12, 2008, the USEPA revised the 8-hour O_3 NAAQS to a level of 0.075 parts per million (ppm) from the previous level of 0.08 ppm. The change, which was designed to improve the protection of public health, went into effect on May 27, 2008 (USEPA 2024a).

Particulate Matter (PM_{10} and $PM_{2.5}$). Particulate matter (PM) is a mixture of tiny particles that vary greatly in shape, size, and chemical composition, and can be comprised of metals, soot, soil, and dust. PM_{10} includes larger, coarse particles, whereas $PM_{2.5}$ includes smaller, fine particles. Sources of course particles include crushing or grinding operations, and dust from paved or unpaved roads. Sources of fine particles include all types of combustion activities (e.g., motorized vehicles and vessels, power plants, wood burning) and certain industrial processes. Exposure to PM_{10} and $PM_{2.5}$ levels exceeding current standards can result in increased lung- and heart-related respiratory illness. The USEPA has concluded that finer particles are more likely to contribute to health problems than those greater than 10 microns in diameter.

Other criteria pollutants, including CO, nitrogen oxides (NO_x), sulfur oxides (SO_x), airborne Pb, and hazardous air pollutants do not occur at levels warranting detailed evaluation (Hawaii Department of Health [HIDOH] 2024a).

3.1.1.2 Clean Air Act Amendments

The CAA Amendments of 1990 place most of the responsibility to achieve compliance with NAAQS on individual states. To this end, USEPA requires each state to prepare a SIP. A SIP is a compilation of goals, strategies, schedules, and enforcement actions that will lead the state into compliance with all NAAQS. Areas not in compliance with a standard can be declared *nonattainment* areas by USEPA or the appropriate state or local agency. In order to reach *attainment*, NAAQS may not be exceeded more than once per year.

Compliance with the NAAQS is based on data from ambient air monitoring stations located throughout the state, including monitoring stations in the vicinity of Base Honolulu. The Hawaii Department of Health, Clean Air Branch (HIDOH-CAB), enforces air quality regulations in Hawaii.

The USEPA General Conformity Rule (40 CFR Part 93, Subpart B for federal agencies and 40 CFR Part 51, for state requirements) requires all federal agencies to ensure that any agency action or activity conforms to an approved SIP. This applies only to federal actions in *nonattainment* or *maintenance* areas. The General Conformity Rule requires analysis of total direct and indirect emissions of criteria pollutants, including precursors, when determining conformity of the Proposed Action. The rule applies if the action's emissions are greater than 10 percent of an area's total emissions of a given pollutant and are considered "regionally significant" or emissions exceed *de minimis* thresholds. If *de minimis* thresholds are exceeded, a conformity decision shall be made.

3.1.1.3 NEPA Guidance on Consideration of Greenhouse Gas Emissions and Climate Change

Consistent with EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, CEQ has issued interim *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*.

When conducting climate change analyses in NEPA reviews, agencies should consider: 1) the potential effects of an action on climate change, including by

assessing both greenhouse gas emissions and reductions from the proposed action; and 2) the effects of climate change on a proposed action and its environmental impacts. Analyzing reasonably foreseeable climate effects in NEPA reviews helps ensure that decisions are based on the best available science and account for the urgency of the climate crisis. Climate change analysis also enables agencies to evaluate reasonable alternatives and mitigation measures that could avoid or reduce potential climate change-related effects and help address mounting climate resilience and adaptation challenges.

CEQ originally published the guidance on January 8, 2023 to seek public comment on the guidance. CEQ intends to either revise the guidance in response to public comments or finalize the interim guidance.

3.1.1.4 Hawaii Climate Adaptation Initiative Act

On June 9, 2014, Hawaii established an interagency climate adaptation committee charged with developing a sea-level rise vulnerability and adaptation report addressing statewide impacts through 2050 (House Bill 1714; now Act 83). Act 83 also authorizes the Office of Planning to coordinate the development of climate adaptation plans and policy recommendations, and to use the committee's report as a framework for addressing other climate threats and climate change adaptation priorities. In 2017, the Office of Conservation and Coastal Lands and the Office of Planning developed the statewide *Hawaii Sea Level Rise Vulnerability and Adaptation Report* that provides guidance for development projects (Hawaii Climate Change Mitigation and Adaptation Commission 2017).

3.1.2 Existing Conditions

3.1.2.1 Climate

The project site is located on Sand Island within Honolulu Harbor, approximately 0.15 mile southeast of the City of Honolulu. Honolulu is characterized by mild temperatures, with annual averages ranging from 65.8 degrees Fahrenheit (°F) to 84°F, and heavy annual rainfall averaging approximately 20.87 inches (Western Regional Climate Center 2014).

Honolulu is located more than 2,000 miles from the nearest continental landmass. It experiences moderate temperatures based on climatic factors related to its proximity to the Pacific Ocean. The temperature of cold, arctic winter air masses may increase by as much as 100 degrees during their passage over the Pacific by the time they reach the State of Hawaii. The temperature moderation generated by the ocean also creates as a seasonal lag for the islands, where the peak of summer and winter are as much as two months behind corresponding seasonal peaks experienced on continental North America (National Weather Service 2024). Light and variable southwest winds bring hot, humid weather in the summer and occasional storms with high waves, wind, and rain in the winter (National Weather Service 2024).

More locally, temperature and rain on the Island of Oahu is also influenced by terrain, as steep mountains cause fronts to rise and increase precipitation on the north-facing slopes, while the south (leeward) side of the island experiences less precipitation. Thus, the northerly side of the island tends to be wetter with more frequent rainfall, while the leeward side is regularly dry and sunny, experiencing rain primarily during seasonal winter storms.

3.1.2.2 Local Air Quality

Air pollution originates from industrial activity, motor vehicles, power equipment, and energy production. Because the State of Hawaii is not impacted by pollution from neighboring states and benefits from virtually constant ocean breezes, the islands have some of the best air quality in the nation. There are 16 monitoring stations located across the State of Hawaii, four of which are located in Honolulu County and are maintained by the HIDOH (HIDOH 2024). The Sand Island monitoring station, which is located nearest to Base Honolulu, measures O_3, $PM_{2.5}$, and wind speed. Data gathered from monitoring stations indicate that the Island of Oahu and the State of Hawaii are in *attainment* for all federal and state criteria air pollutants (USEPA 2024b).

3.1.2.3 Air Emissions at the Project Site

The project site abuts Base Honolulu to its east and south and Matson cargo facility to its west, and Honolulu Harbor to its north; however, the 0.71-acre

project site proposed for acquisition by the USCG is currently undeveloped. While air pollutant emissions within the vicinity of the project site are associated with the operation of vessels, periodic maintenance dredging operations, building operations (e.g., utility usage), the project site itself does not generate any air emissions.

3.1.2.4 Climate Change Issues for Honolulu Harbor

Impacts from global climate change vary from ocean and atmospheric warming to increased threats to public health and safety. In Hawaii, an interdisciplinary working group was established by the State Office of Planning, CZM Program, with assistance from the University of Hawaii's Center for Island Climate Adaptation and Policy. The State of Hawaii's Ocean Resources Management Plan (ORMP) Working Group subsequently prepared *A Framework for Climate Change Adaptation in Hawaii* (2009) to encourage and facilitate federal, state, and local agencies, policy makers, business, and community partners to plan for the impacts of climate change (University of Hawaii 2009). Potential impacts and planning considerations were identified in the document, including the following impacts identified for *Port and Harbor Management*:

- Submersion of infrastructure due to sea level rise and flooding;
- Increased public safety risk due to hazardous flooding conditions;
- Weakened drainage systems that remove storm water runoff from harbor facilities;
- Increased potential for the spread of diseases and other public safety issues due to flooding conditions; and
- Loss of operational time due to flooding conditions.

In 2011, the Oahu Metropolitan Planning Organization held a workshop addressing the climate change risk for major Oahu transportation assets, including Honolulu Harbor, Honolulu International Airport, Kalaeloa area, and bridges at Waikiki. The *Transportation Asset Climate Change Risk Assessment* summary issued at the conclusion of the workshop (Oahu Metropolitan Planning Organization 2011) assessed the risk for these transportation assets based on five climate change variables (i.e., sea level rise, storm surge, rainfall, wind velocity, and air temperature) for three time periods (baseline definitions from 1970-2000,

2050, and 2100). Honolulu Harbor was assessed as having a high-risk level for both 2050 and 2100 based on its high vulnerability to storm surges and because of its high socioeconomic importance.

Since that time, the Hawaii Climate Change Mitigation and Adaptation Commission prepared the *Hawaii Sea Level Rise Vulnerability and Adaptation Report* (2017), which recommended the state, including the Island of Oahu, prepare for 3.2 feet of sea-level rise arriving as early as 2060. HDOT-Harbors is engaged in efforts to develop adaptation strategies to address the long-term impacts of climate change. This includes collaborating with other agencies (HDOT is a member of both the ORMP Policy Group and Working Group) and considering climate change adaptation in its harbor master plans and designs. The *Honolulu Harbor 2050 Master Plan*, published in November 2022, sets goals to "…meet the significant challenges to harbor infrastructure and operations posed by climate change and sea level rise…" and "…a commitment to creative, cooperative, and timely adaptation strategies and investments in harbor infrastructure…" Key recommendations related to adaptation and resiliency include raising pier facilities to adapt to sea level rise and meet future operational requirements, and reconstructing and strengthening pier facilities to withstand more frequent and intense storm events. Additional recommendations related to adaptation and resiliency include conducting a feasibility study, in coordination with the USACE, for the reopening of a second harbor entrance at Kalihi Channel and widening the Main Entrance and Kapalama Transit Channels (HDOT-Harbors 2022).

3.2 BIOLOGICAL RESOURCES

3.2.1 Definition of Resource

Biological resources include native or naturalized plants and wildlife and the habitats in which they occur. Sensitive biological resources are defined as those plant and wildlife species that are federally listed as threatened or endangered, or proposed as such, under the ESA (refer to Section 1.7.2, *Endangered Species Act*) or otherwise afforded protection by the NMFS under the MSA (refer to Section 1.7.3, *Magnuson-Stevens Fishery Conservation and Management Act*) or the Marine Mammal Protection Act (MMPA). The ESA protects listed species against take,

which includes killing, harming, harassing, or any action that may damage their habitat. Federal Candidate species receive no statutory protection under the ESA; however, cooperative conservation of these species is encouraged because they are, by definition, species that may warrant future protection under the ESA.

3.2.2 Existing Conditions

The project site is located in Honolulu Harbor, which is highly developed and used primarily for commercial purposes. The harbor handles over 12 million tons of cargo annually and serves the critical central hub of the state's commercial harbor system as all overseas imports arrive at Honolulu Harbor before being distributed to neighboring islands. The harbor is 40 feet deep and contains five components: the Main Channel, Main Harbor Basin, Kapalama Channel, Kapalama Basin, and Kalihi Channel (HDOT-Harbors 2012). Additionally, it contains 30 major berth facilities with more than 5 linear miles of mooring space. In addition to berthing wharves, the site consists of developed upland areas including more than 200 acres of container yards, loading docks, parking lots, buildings, parks, and other landscaped areas. The project site comprises a strip of undeveloped land adjacent to Base Honolulu and between a developed cargo container yard and the shoreline.

3.2.2.1 Terrestrial Biological Resource

<u>Vegetation</u>

Vegetation in the Sand Island area is influenced by generally low rainfall, saline soil, the man-made origin of the area, and the high degree of development and human activity. Consequently, only a small variety of plant life, which is characterized as drought resistant, highly salt-tolerant, and hearty in dry areas, occurs on Sand Island. No federally listed or state-listed plant species are found on any area of Sand Island (USCG 2023).

Terrestrial Habitats

Due to the developed nature of Honolulu Harbor, Base Honolulu, and the adjacent Matson cargo facility, there are no functionally intact terrestrial upland habitats within the project area. Further, as a result of ongoing shipping activities, noise disturbances deter most shoreline species from occupying areas within or surrounding the harbor. More suitable upland habitats are located to the south of Honolulu Harbor within and in the vicinity of the Sand Island State Recreation Area. However, this area also experiences large volumes of residents and weekend campers and is located near the San Island Off-Highway Vehicle day use riding area (DLNR 2023).

The project area is located along an undeveloped waterfront. There is no native shoreline vegetation within the project area but ruderal vegetation is present in the immediate shorefront and a non-native grasses are present as a mown area in the upland portion.

Terrestrial Wildlife

Transient birds and small mammals may be observed within the project site. Typical small mammals that would be expected to occur in the vicinity of the project area include rats (*Rattus* spp.), house mice (*Mus musculus*), feral cats (*Felis catus*), and feral dogs (*Canis lupus familiaris*). Bird species likely to occur in the general vicinity include shorebirds and multiple species of gulls and doves as well as house sparrow (*Passer domesticus*) and house finch (*Haemorhous mexicanus*). No federally listed or state-listed terrestrial special status wildlife species are known to occur within the project site or the surrounding vicinity (USFWS 2023). Further, no federally designated critical habitat for terrestrial wildlife species occurs within the project site or the surrounding vicinity (USFWS 2023).

Aquatic Biological Resources

Honolulu Harbor has been previously surveyed for aquatic biological resources by USACE ahead of maintenance activities in the harbor (USACE 2015). Additionally, several surveys have been conducted around Base Honolulu over

the years, including dive surveys conducted by Marine Research Consultants, Inc. (MRCI) in November 2014 (MRCI 2015), surveys conducted by Foster and Sukhraj in January and February 2015 (Foster and Sukhraj 2015), and surveys of Berths F and G conducted by MRCI in March and November 2023 (MRCI 2023). Additionally, Pier 53 was surveyed by MRCI in April 2024 (MRCI 2024).

Physical Habitat Structure

The physical structure of the shoreline and nearshore submerged surfaces extending to the Honolulu Harbor floor were generally similar throughout the survey area. The shoreline fronting Pier 53 is divided into four distinct zones:

- Vertical Wall: The vertical wall is the man-made concrete wall comprising the shoreline structure of Pier 53. At low tidal stands, the upper portion of the wall is exposed to the atmosphere.
- Shelf: At the base of the vertical wall, the hard platform consists of a narrow and shallow (less than 3 feet deep) reef shelf.
- Shelf Break and Slope: The outer edge of the shelf is defined by a sharp break to a slope of approximately 45 degrees.
- Harbor Floor: At the base of the slope at a depth of approximately 20 to 25 feet, the harbor floor flattens out and is primarily soft bottom with sediments. Debris on the soft sediment surface of the harbor floor provide hard substrate for coral settlement and growth.

Corals in Honolulu Harbor

Benthic surveys performed in April 2024 identified 12 species of hard coral at Pier 53. The most common hard corals include Harbor *Porites*, *Montipora capitata*, *Porites lobata*, and *Porites compressa*. As described in Section 2.1, *Proposed Action*, implementation of the Proposed Action would result in over-water coverage of between 15,000 and 25,500 sf; however, the area of coral coverage is substantially less. The benthic survey identified areas where corals could potentially occur in an area of 340 feet (104 meters) along the shoreline out to a distance of 23 feet (7 meters), for a total area of 7,836 sf (728 square meters). The following coral communities were observed in the four distinct zones described above:

- Vertical Wall: Most of the vertical concrete wall comprising the shoreline structure of Pier 53 was encrusted with hard corals (primarily Harbor *Porites*) and fouling organisms such as tunicates, bryozoans, and sponges.

- Shelf: Over the length of Pier 53, the shelf varied substantially in terms of biotic cover. Some areas of the shelf were devoid of macrobiotic cover, including coral, while other sections were nearly completely colonized by coral, which consisted primarily of Harbor *Porites*. Growth forms of Harbor *Porites* consisted of knobby encrustations and encrusting veneer.

- Shelf Break and Slope: Coral on the shelf break and slope consist primarily of Harbor *Porites* as well as a variety of other species including, large encrustations of *Montipora patula* and *M. capitata*, branching hemispherical colonies of *Pocilopora meandrina*, and colonies of *Porites lobata* and *P. compressa*.

- Harbor Floor: Debris on the soft sediment surface of the harbor floor provided hard substrate of coral settlement and growth.

The coral communities off Pier 53 varied in size, coverage, and composition with depth and location between Base Honolulu (east) and the Matson cargo facility (west). Of the nine coral species observed during the 2024 survey, the most common was *Montipora capitata* which made up 192 of the 365 colonies. The most common coral community size class observed was 20 to 40 centimeters (cms) with 127 colonies (MRCI 2024). However, with regard to coverage, Harbor *Porites* created the most coral coverage within the survey area with coverage increasing from Base Honolulu at the eastern end of the survey area to the Matson cargo facility to the west.

Aquatic Vegetation and Algal Communities

Based on surveys performed by the USACE for maintenance dredging in the Honolulu Harbor, seagrass beds and algae are minimal within the harbor (USACE 2015). Nearshore habitat diversity in the immediate vicinity of the project area is limited to unconsolidated sediment/mud in the deeper areas, piles, and over-water structure provided by piers and docks, and hard substrate

on which corals have varying presence (MRCI 2015; Foster and Sukhraj 2015). Surveys performed on Base Honolulu in 2015 identified turf algae and sponges on Berths F and G; however, these forage species are connected with corals (Foster and Sukhraj 2015). During the benthic surveys conducted in April 2024, macroalgae was relatively scarce, composing only 3 percent of bottom coverage within the survey area. No seagrass was observed in the survey area (MRCI 2024).

Fish

During the April 2024 survey, fish were common throughout the survey area with density increasing from Base Honolulu (east) to the Matson cargo facility (west) within the survey area. A total of 27 species within 13 families were observed with the most abundant being acanthurids (surgeonfish), chaetodonts (butterflyfish), mullids (goatfish), and pomocentrids (damselfish). Fish were observed schooled among debris and broken sections of concrete that created cave-like structures and provided shelter. Most fish observed were adults with some schools of juvenile parrotfish were observed traversing the area. No fish representing significant commercial resources were observed (MRCI 2024).

Essential Fish Habitat

The MSA requires federal agencies to consult with the NMFS to address activities that may adversely affect EFH, which is defined as *"…those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity."* Such "waters" include *"…aquatic areas and their associated physical, chemical, and biological properties that are used by fish…"* and may include aquatic areas historically used by fish. "Substrate" includes *"…sediment, hard bottom, structures underlying the waters, and associated biological communities…"*

The Hawaii Department of Land and Natural Resources, Division of Aquatic Resources (DLNR-DAR) is the primary agency for coordinating reef management efforts in the Main Hawaiian Islands (DLNR 2023). The EFH in the Pacific Region is defined by the Western Pacific Regional Fishery Management Council (WPRFMC). NMFS (PIRO) also manages and regulates these fisheries. Since the 1980s, PIRO has managed EFH for several fish and coral species under

separate Fishery Management Plans (FMPs). These included the Bottomfish and Seamount Groundfish FMP (WPRFMC 1986a), the Crustaceans FMP (WPRFMC 1983), the Precious Corals FMP (WPRFMC 1979), the Coral Reef Ecosystems FMP (WPRFMC 2001), and the Pacific Pelagic FMP (WPRFMC 1986b).

In 2010, the WPRFMC developed Fishery Ecosystem Plans (FEPs) as an ecosystem-based approach to fisheries management and is restructuring its management framework from species-based FMPs to place-based FEPs. The FEP incorporates all of the management provisions of the Bottomfish and Seamount Groundfish FMP, the Crustaceans FMP, the Precious Corals FMP, and the Coral Reef Ecosystems FMP that are applicable to a given area. Although pelagic fishery resources play an important role in the biological as well as the socioeconomic environment of the Hawaiian Islands, they are managed separately through the Pacific Pelagic FEP. Habitat Areas of Particular Concern (HAPCs) were also identified through individual FMPs and are included in the FEPs. However, there are no HAPCs located within the project area.

EFH for Bottomfish and Seamount Groundfish Management Unit Species (MUS). There are 14 bottomfish MUS included in the Hawaii FEP. These include: silverjaw snapper (*Aphareus rutilans*), gray jobfish (*Aprion virescens*), giant trevally (*Caranx ignobilis*), black jack (*C. lugubris*), sea bass (*Etelis quernus*), red snapper (*E. carbunculus*), longtail snapper (*E. coruscans*), blue stripe snapper (*Lutjanus kasmira*), yellowtail snapper (*Pristipomoides auricilla*), pink snapper (*P. filamentosus* and *P. seiboldii*), snapper (*P. zonatus*), thicklip trevally (*Pseudocaranx dentex*), and amberjack (*Seriola dumerili*). Seamount groundfish MUS include ratfish (*Hyperoglyphe japonica*), alfonsin (*Beryx splendens*), and armorhead (*Pseudopentaceros wheeleri*) (WPRFMC 2009a). Except for several of the major commercial species, very little is known about the life histories, habitat utilization patterns, food habits, or spawning behavior of most adult bottomfish and seamount groundfish species. Further, very little is known about the distribution and habitat requirements of juvenile bottomfish. Generally, the distribution of adult bottomfish in the Western Pacific Region is closely linked to suitable physical habitat. Unlike the U.S. mainland, with its continental shelf ecosystems, Pacific islands are primarily volcanic peaks with steep drop-offs and limited shelf ecosystems. Adult bottomfish are usually found in habitats characterized by a hard substrate of high structural complexity. The total extent

and geographic distribution of the preferred habitat of bottomfish is not well known. To reduce the complexity and number of EFH identifications required for individual species and life stages, EFH has been designated for bottomfish assemblages. The species complex designations include deep-slope bottomfish (shallow water and deepwater) and seamount groundfish complexes. The designation of these complexes is based on the ecological relationships among species and their preferred habitat. Given the uncertainty concerning the life histories and habitat requirements, EFH was designated for adult and juvenile bottomfish as the water column and all bottom habitat extending from the shoreline to a depth of approximately 1,969 feet (600 meters) and encompassing the steep drop-offs and high-relief habitats that are important for bottomfish throughout the Western Pacific Region (WPRFMC 2009a).

The diets of juvenile and adult bottomfish are not well known; however, juvenile individuals have been reported as eating small crustaceans, other juvenile fish, mollusks, gelatinous plankton, and echinoids. Adult diets vary and can include fish, crabs, shrimp, and other benthic crustaceans.

Although this EFH does occur within the project site, no bottomfish or seamount groundfish species were observed during surveys at Base Honolulu in 2023.

Crustacean MUS. To reduce the complexity and the number of EFH identifications required for individual species and life stages, EFH has designated assemblages for crustacean species (WPRFMC 2009a). The species complex designations are spiny lobsters (*Panulirus marginatus* and *P. penicillatus*), slipper lobsters (Family Scyllaridae), Kona crab (*Ranina ranina*), and deepwater shrimp (*Heterocarpus* spp.) (WPRFMC 2009a). Spiny lobster EFH for larvae is designated as the water column from shore to 149 feet (150 meters) deep, and bottom habitat for juvenile and adults from the shore to 100 meters deep.

Deepwater shrimp EFH is designated as within the water column from 1,804 to 2,297 feet (550 to 700 meters) for eggs and larvae, and on outer reef slopes from 984 to 2,297 feet (300 to 700 meters) for juveniles and adults. Due to the shallow waters in Honolulu Harbor, deepwater shrimp EFH does not occur within the project site.

Although spiny and slipper lobster and Kona crab EFH does occur within the project site, none of these species were observed during surveys in 2024.

Coral Reef Ecosystem MUS. Coral reef ecosystem MUS include over 80 species mentioned in the FEP including species within the following families: surgeonfish (Acanthuridae), triggerfish (Balistidae), jacks (Carangidae), sharks (Carcharhinidae), squirrelfish (Holocentridae), wrasses (Labridae), goatfish (Mullidae), Moray eels (Muraenidae), octopi (Octopodidae), parrotfish (Scaridae), barracuda (Sphyraenidae), and many others (WPRFMC 2009a). In designating EFH for Coral Reef Ecosystems, MUS are linked to specific habitat "composites" (e.g., sand, live coral, seagrass beds, mangrove, and open ocean) for each life history stage. Except for several of the major coral reef-associated species, very little is known about the life histories, habitat utilization patterns, food habits, or spawning behavior of most coral reef-associated species. For this reason, EFH was designated using a two-tiered approach including these categories: Currently Harvested Coral Reef Taxa and Potentially Harvested Coral Reef Taxa. To reduce the complexity and the number of EFH identifications required for individual species and life stages, the EFH has been designated assemblages for species (WPRFMC 2009a).

During the benthic surveys performed in April 2024, 27 species of coral reef fish were observed, the most abundant of which were acanthurids (surgeonfish), chaetodonts (butterflyfish), and mullids (goatfish).

Pacific Pelagic MUS. Oceanic and pelagic fish are the most important fish (economically, culturally, and socially) in the Pacific. These fish live in the near-surface waters of the ocean, often far from shore. These include species such as dolphinfish, wahoo, tuna, billfish (swordfish, sailfish, marlin, spearfish), pelagic sharks, moonfish, and squid (WRPFMC 2009b).

Species of oceanic pelagic fish live in tropical and temperate waters throughout the world's oceans, including the Pacific. They are capable of long migrations that reflect complex relationships to oceanic environmental conditions. These relationships are different for larval, juvenile, and adult stages of life. The larvae and juveniles of most species are more abundant in tropical waters, whereas the adults are more widely distributed.

Preferred water temperature often varies with fish size. Adult pelagic fish usually have a wide temperature tolerance, and during spawning they generally move to warmer waters that are preferred by larval and juvenile stages.

Many pelagic fish make vertical migrations through the water column. They tend to inhabit surface waters at night and deeper waters during the day, but several species make extensive vertical migrations between surface and deeper waters throughout the day.

Although there are many unknowns regarding life stages and locations of Pacific pelagic species, many are thought to occur in the open ocean for all life stages, but some may have life stages within nearshore habitats, including those in Honolulu Harbor. No Pacific pelagic species were observed during surveys at the project site in April 2024.

Marine Mammals and Sea Turtles

A number of marine mammals and sea turtles are known to occur off the coast of the Hawaiian Islands (see Table 3-1). However, none of these species were documented or observed in the project area by in the 2015 surveys conducted by MRCI and Foster and Sukhraj or the April 2024 surveys conducted by MRCI.

Table 3-1. Marine Mammals and Sea Turtles Known to Occur off of the Hawaiian Islands

Common Name	Scientific Name
Mammals	
Blainville's beaked whale	*Mesoplodon denisrostris*
Blue whale	*Balaenoptera musculus*
Common bottlenose dolphin	*Tursiops truncates*
Bryde's whale	*Balaenoptera edeni*
Cuvier's beaked whale	*Ziphius cavirostris*
Dwarf sperm whale	*Kogia sima*
False killer whale	*Pseudorca crassidens*
Fin whale	*Balaenoptera physalus*
Fraser's dolphin	*Lagenodelphis hosei*

Common Name	Scientific Name
Hawaiian monk seal	*Monachus schauinslandi*
Humpback whale	*Megaptera novaeangliae*
Killer whale	*Orcinus orca*
Longman's beaked whale	*Indopacetus pacificus*
Minke whale	*Balaenoptera acutorostrata*
Melon-headed whale	*Peponocephala electra*
Pantropical spotted dolphin	*Stenella attenuata*
Pygmy killer whale	*Feresa attenuate*
Pygmy sperm whale	*Kogia breviceps*
Risso's dolphin	*Grampus griseus*
Rough-toothed dolphin	*Steno bredanensis*
Sei whale	*Balaenoptera borealis*
Short-beaked common dolphin	*Delphinus delphis*
Short-finned pilot whale	*Globicephala macrorhynchus*
Sperm whale	*Physeter macrocephalus*
Spinner dolphin	*Stenella longirostris*
Striped dolphin	*Stenella coeruleoalba*
Reptiles	
Green sea turtle	*Chelonia mydas*
Hawksbill sea turtle	*Eretmochelys imbricate*
Leatherback sea turtle	*Dermochelys coriacea*
Loggerhead sea turtle	*Caretta caretta*
Olive ridley sea turtle	*Lepidochelys olivacea*

Source: NMFS 2024.

Federally Listed Threatened and Endangered Species

As previously described, the project site has no functionally intact terrestrial upland habitat types. USFWS has identified that the Hawaiian hoary bat may occur in the vicinity; however, habitat to support the Hawaiian hoary bat does not exist in the project site. No federally listed terrestrial plant or wildlife species are known to occur or have federally designated critical habitat within the vicinity of the project site. (USFWS 2023).

Three federally listed aquatic species have the potential to occur within the project site, including the green sea turtle, Hawksbill sea turtle, and Hawaiian monk seal.

In addition, federally designated critical habitat for the green sea turtle is proposed within the project site.

Green Sea Turtle

The green sea turtle is listed as a federally threatened species within the vicinity of Honolulu Harbor. Green turtles inhabiting the Hawaiian Islands are among the best known in the Pacific in terms of their nearshore benthic foraging pastures and associated underwater habitats. Important resident areas have been identified along the coastlines of Oahu, Molokai, Maui, Lanai, Hawaii, as well as at Lisianski Island and Pearl and Hermes Reef (Balazs et al. 1987; Balazs 1979, 1980, 1982).

On July 19, 2023, the USFWS and NMFS concurrently proposed additional critical habitat that includes area in the Hawaiian Islands, including Oahu (88 Federal Register [FR] 46376 and 88 FR 46572). NMFS also proposed marine critical habitat on July 19, 2023, which includes physical or biological features that are essential to the conservation of the species. Within the project site, only the benthic foraging / resting essential feature is present (USCG 2023).

Based on surveys performed by the USACE for maintenance dredging in the Honolulu Harbor, foraging habitat (i.e., seagrass beds and algae) is minimal within the harbor and green sea turtles are more likely to occur in the entrance channel and nearshore waters where seagrass beds are present (USACE 2015). Surveys performed by the USFWS in 2013 observed a male green sea turtle foraging in the entrance channel (USACE 2015). Benthic surveys performed by MCRI (2024) did not identify any seagrass and limited macroalgae within the project site. However, since green sea turtles may also feed on sponges and invertebrates, marginal foraging habitat does occur within the project site (USCG 2023).

Hawksbill Sea Turtle

The Hawksbill sea turtle is listed as a federally endangered species in the vicinity of the project site. Hawksbills nest only on main island beaches, primarily along the east coast of the island of Hawaii. Two of these sites (Halape and Apua Point) are in Hawaii Volcanoes National Park (Katahira et al. 1994). Other beaches on the island of Hawaii with recorded Hawksbill nesting include Kamehame,

Punaluu, Horseshoe, Ninole, Kawa, and Pohue. Kamehame Point on Hawaii and a black sand beach at the river mouth of Halawa Valley at the east end of Molokai are the most consistently used beaches.

Critical habitat has not been proposed or designated for the hawksbill sea turtle within the Pacific Ocean.

The project area does not contain suitable nesting habitat for the hawksbill sea turtle. Foraging habitat does occur within the project area; however, this is marginal habitat due to the busy harbor setting. Although there have been sightings of this species in the area, these are injured or sick individuals. It is unlikely that a healthy hawksbill sea turtle would be present within the project site (USCG 2023).

Hawaiian Monk Seal

The Hawaiian monk seal (*Monachus schauinslandi*) is a federally endangered earless seal that is endemic to the waters off the Hawaiian Islands. Monk seals commonly haul out of the water onto sandy beaches and less frequently on rocky beaches to rest. The Hawaiian monk seal is rarely seen in Honolulu Harbor. The Pacific Islands Fisheries Science Center (PIFSC) conducted systematic seal counts in 2000-2001 and in 2008 via aerial surveys for all the main Hawaiian Islands. The 2000 survey was conducted from an airplane and the 2001 and 2008 surveys were both conducted by helicopter. No Hawaiian monk seals were sighted within Honolulu Harbor during these three surveys (PIFSC 2009, 2012). Reports by the general public, which are non-systematic and not representative of overall seal use of main Hawaiian Islands shorelines, have been collected in the main Hawaiian Islands since the 1980s. A total of four Hawaiian monk seal sightings have been reported for Honolulu Harbor in 2002, 2004, 2005, and 2009. One sighting was reported as a dead seal floating in the harbor, but the carcass was never recovered (PIFSC 2009).

The remote northwestern Hawaiian Islands are considered federally designed critical habitat for monk seals. On September 21, 2015, federally designated critical habitat for the species was again to include terrestrial and marine areas in 10 areas in the Northwestern Hawaiian Islands and six areas on the Main Hawaiian Islands. However, this designation excluded coastal environments with hardened shorelines or developed areas that lack the features that would

support Hawaiian monk seal use. During a meeting with NMFS on March 1, 2023, NMFS stated that Honolulu Harbor is excluded from federally designated critical habitat for the Hawaiian monk seal (USCG 2023).

The project site does not contain suitable haulout habitat for the Hawaiian monk seal. Some foraging habitat does occur within the project site; however, this is marginal habitat due to the busy harbor and industrialized setting. Although there have been sightings of this species in the area, they are uncommon as monk seals are known to avoid areas with higher human activity. It is unlikely that a Hawaiian monk seal would be present within the project site (USCG 2023).

3.3 CULTURAL RESOURCES

3.3.1 Definition of Resource

Cultural resources represent and document activities, accomplishments, and traditions of previous civilizations and link current and former inhabitants of an area. Depending on their conditions and historic use, these resources may provide insight to living conditions in previous civilizations and may retain cultural and religious significance to modern groups.

Archaeological resources comprise areas where prehistoric or historic activity measurably altered the environment or deposits of physical remains (e.g., arrowheads, bottles) discovered therein. Architectural resources include standing buildings, districts, bridges, dams, and other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for inclusion in the NRHP, an inventory of culturally significant resources identified in the U.S.; however, more recent structures, such as Cold War-era resources, may warrant protection if they have the potential to gain significance in the future. Traditional cultural resources can include archaeological resources, structures, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that that Native Hawaiians or other groups consider essential for the persistence of traditional culture. These resources are protected by the state under HRS Chapter 6E, Historic Preservation.

The term "historic properties" refers to cultural resources that meet specific criteria for eligibility for listing on the NRHP; historic properties need not be formally listed on the NRHP. Section 106 of the NHPA does not require the preservation of historic properties but ensures that the decisions of federal agencies concerning the treatment of these places result from meaningful considerations of cultural and historic values and of the options available to protect the properties. The Proposed Action is an undertaking as defined by 36 CFR §800.3 and is subject to requirements outlined in Section 106 of the NHPA.

3.3.2 Existing Conditions

3.3.2.1 Regional History

Current models of Hawaiian history indicate that permanent settlement on the Island of Oahu occurred on the windward side of the island beginning sometime between 800 and 1000 A.D. During those years, residents often visited the leeward sides of the island to exploit various resources such as fishing areas, bird colonies, and shellfish bays. Small campsites associated with those visits are thought to exist throughout the leeward area (DLNR 2012). It was not until 1804, when King Kamehameha I conquered Oahu that the royal court of the Hawaiian empire finally came to Oahu, first in Waikiki, and then by 1810 relocating to Honolulu and uniting the Hawaiian Island (National Park Service [NPS] 2024a). While Captain Cook had overlooked this location in 1778, Captain William entered the harbor in 1794, calling it Fair Haven (Hawaiian Historical Society 1934).

Honolulu became the most important shipping port in Hawaii, and it flourished as an exporter of sandalwood, sugar, and pineapple; as a whaling supply port; and as a light manufacturing hub. Both tourism and defense instillations followed the early rise, and those activities remain to this day. Westernization of the Islands was conducted by seaman, colonizers, and merchants from America and Europe, with the arrival of the 1820 New England missionaries leaving the largest imprint as evidenced by modern religion, education, economics, and politics. Despite periods of Russian, French, and British occupation of the harbor,

Honolulu was reclaimed and proclaimed the Capitol of Kamehameha III's kingdom by 1850; the City remains the state capital to this day.

From U.S. annexation in 1898 to statehood in 1959, Honolulu experienced a turbulent transition. Dredging of Honolulu Harbor resulted in the infill of sediment on naturally formed reefs and tidelands, including the barrier island originally known as Quarantine Island in the nineteenth century, a location where ships were required to moor if there was concern that they carried contagious diseases. This newly filled island provided greater protection to the inland side of the harbor for ships and was renamed Sand Island. In the early 1900s, approximately 40 percent of the population in Hawaii was Japanese; as tensions over relations with Japan rose, preparations were made for potential internment if a situation arose. Then, on December 9, 1941, two days after the attack on Pearl Harbor, Sand Island was opened as the primary camp that all Hawaii internees passed through; with no bridge to Honolulu at the time, Sand Island was an isolated location. The internees were initially housed in tents for 6 weeks while proper barracks were constructed, then housed in barracks temporarily as they were processed for other camp locations. The camp was finally closed on March 1, 1943, and internees were transferred (Japanese Cultural Center of Hawaii 2010).

According to the most recent *Hawaii State Historic Preservation Plan* Oahu currently has 332 historic sites on record and 161 records listed on the NRHP (DLNR 2012). An additional 7,108 archaeological sites have been recorded, according to the State Inventory of Historic Places (DLNR 2012). The NRHP further identifies 173 specific historic places and districts within the City of Honolulu (NPS 2024b). None of these historic sites are located on Sand Island, and despite the historic use of Sand Island, no remnants of the Sand Island Internment Camp or Prisoner of War Camp are documented or preserved within a recognized historic park; however, some structures developed for use during World War II are visible within the State Recreation Area.

3.4 GEOLOGICAL RESOURCES

3.4.1 Definition of Resource

Geological resources consist of surface and subsurface materials and their properties. Principal geologic factors influencing the ability to support structural development are seismic properties (i.e., potential for subsurface shifting, faulting, or crustal disturbance), soil stability, and topography.

Topography is the change in elevation over the surface of a land area. An area's topography is influenced by many factors, including human activity, underlying geologic material, seismic activity, climatic conditions, and erosion. A discussion of topography typically encompasses a description of surface elevations, slope, and distinct physiographic features (e.g., mountains) and their influence on human activities.

The term *soil*, in general, refers to unconsolidated materials overlying bedrock or other parent material. Soil structure, elasticity, strength, shrink-swell potential, and erodibility all determine the ability for the ground to support man-made structures. Soils are typically described in terms of their complex type, slope, physical characteristics, and relative compatibility or constraining properties with regard to particular construction activities and types of land use.

Geologic hazards are natural features that present a danger to the human environment either due to their ability to alter the landscape or expose life or property to damage or destruction.

3.4.2 Existing Conditions

Geology

The Hawaiian Islands were created – and are still being created, in the case of the Island of Hawaii – by the movement of the Pacific Plate over a geologic hotspot. The motion of the plate over the hotspot creates low-relief, low explosivity volcanic mountains that make up the principal islands of the Hawaiian Archipelago.

Sand Island is composed of a core of Quaternary-aged beach deposits that have been expanded with artificial fill while the surrounding channels have been dredged and deepened to maintain shipping into and out of Honolulu Harbor (Sherrod et al 2021).

Topography

Sand Island is a low-lying island that is relatively flat due to the extensive development of the island including Base Honolulu, commercial shipping facilities, and other urban commercial/industrial uses (HDOT-Harbors 2022). The seaward side of the island includes more natural terrain such as beach dunes in the Sand Island State Recreation Area.

Soils

Soils on Sand Island include a core of 43.4 acres of Jaucas sand soil surrounded by 468.6 acres of fill land (Natural Resources Conservation Service [NRCS] 2024). The mapped soil units correspond to the mapped geologic units described above with a core of Quaternary-aged beach deposits surrounded by artificial fills. According to the NRCS, FL type soils consist of materials dredged from the ocean or hauled from nearby areas, or garbage, or from other general material. When wet, this soil type has a moderately low runoff potential as water drains moderately freely through the soil (NRCS 2024). In the center of Sand Island, JaC soils are characterized as having a low runoff potential when wet, as water is transmitted excessively well through the soil; this soil consists of sand-sized fragments of coral and seashells (NRCS 2024). Neither the Jaucas sand soil nor the fill land soils are designated as Prime or Unique Farmland soils or of Statewide Importance (NRCS 2024).

Geologic Hazards

As stated above, Sand Island is a topographically low-lying area whose proximity to sea level exposes it to potential geologic hazards, namely sea level rise, coastal flooding, and tsunami. Together, the U.S. Geological Survey (USGS), University of Hawaii School of Ocean and Earth Science and Technology, and the University of Hawaii's Coastal Geology Group produced the *Atlas of Natural*

Hazards in the Hawaiian Coastal Zone, which assigns qualified rankings to seven natural coastal hazards based on historical trends and natural factors influencing site vulnerability and hazard intensity in the Hawaiian coastal zone (USGS et al. 2002a, 2002b). These hazards consist of the following: coastal slope, geology, tsunamis, high waves, storms, erosion, sea level, seismicity, and volcanism. From this report, the Honolulu coastal zone Overall Hazard Assessment is classified with moderate to high safety risks, primarily due to *"…the low coastal slope which is especially susceptible to damage resulting from tsunami, stream flooding, hurricane storm surge, and seasonal high-wave flooding."* Tsunami and storms are ranked high while high seasonal waves are moderately high. Geologic hazards are further described in Section 3.6, *Safety*.

3.5 HAZARDOUS MATERIALS AND WASTES

3.5.1 Definition of Resource

Hazardous materials are defined as substances with strong physical properties of ignitability, corrosivity, reactivity, or toxicity which may cause an increase in mortality, a serious irreversible illness, incapacitating reversible illness, or pose a substantial threat to human health or the environment. Hazardous wastes are defined as any solid, liquid, contained gaseous, or semisolid waste, or any combination of wastes which pose a substantial present or potential hazard to human health or the environment.

Issues associated with hazardous materials and wastes typically center around underground storage tanks; aboveground storage tanks; and the storage, transport, and use of pesticides; bulk fuel; and petroleum, oil, and lubricants. When such resources are improperly used, they can threaten the health and well-being of wildlife species, botanical habitats, soil systems, water resources, and people.

3.5.2 Existing Conditions

3.5.2.1 Hazardous Materials and Wastes in the Vicinity of the Project Site

The hazardous waste areas identified by the USEPA that are located nearest to Base Honolulu include 11 sites on Sand Island. Due to city permitting, many light industrial facilities are located here; refer to Table 3-2 for a complete list and distance from the project site.

Table 3-2. Local Hazardous Waste Sites: Sand Island

Source/Site	Resource Conservation and Recovery Act Handler ID #	Address	Distance from the project site (feet)
USCG Base Honolulu	HI8690390036	400 Sand Island Parkway	Adjacent
Transoceanic Cable Ship Co	HIR000000711	1001 Sand Island Pkwy	95
Island Wide Air Conditioning Service, LLC	HIR000139220	1029 Ulupono St	280
R S I Roofing and Waterproofing Supply	HIR000124743	1081 Makepono St	310
Mitsunaga Construction Inc.	HIP000097006	1035 Mikole St	400
Sand Island Business Associate	HIP000037200	1071 Mikole St	430
Honolulu Disposal (Aloha Petroleum)	HIP000141291	1169 Mikole St	625
Sand Island Business Association	HIR000139709	1006 Mikole	700
Martin Warehousing and Distribution	HIP000107086	1122 Mikole St	780
National Chemsearch Division of NCH Corp	HID000151241	318 Central Way Sand Island	780
Dags Csd Liliuokalani Bldg	HIR000104257	1026 Puuiwa Pl	1,060
Tajiri Lumber Co	HID984466748	1002 Puuwai Street	1,200

Source: USEPA 2024c

3.5.2.2 Hazardous Materials and Wastes at the Project Site

The project site abuts Base Honolulu to its east and south, Matson cargo facility to its west, and Honolulu Harbor to its north; however, the 0.71-acre project site proposed for acquisition by the USCG is currently undeveloped. No hazardous materials are stored on the project site.

3.6 SAFETY

3.6.1 Definition of Resource

While it is removed from the active volcanism and seismicity of the Island of Hawaii, natural hazards associated with high waves, storms, and flooding threaten Oahu's coastal inhabitants and infrastructure. The primary difference between the nature of coastal hazards on Oahu and the rest of the Hawaiian Islands is the magnitude of the hazard risk due to extensive shoreline development that causes overlap between the human environment and locations where hazards could become disasters.

The overall hazard assessment for the Honolulu coastal zone is moderate to high, primarily due to the low coastal slope, which is susceptible to damage resulting from tsunami, stream flooding, hurricane storm surge, and seasonal high-wave flooding (USGS et al. 2002b). The Island of Oahu, particularly in its southern region including Sand Island, is highly vulnerable to tsunami hazards. Consequently, a tsunami hazard zone has been designated around the perimeter of the island, generally extending landward at least 100 feet away from inland waterways and marinas and up to 0.75 mile from the Pacific Ocean. All of Sand Island, including the project site, is designated as a Tsunami Evacuation Zone by the Hawaii Emergency Management Agency (Hawaii Emergency Management Agency 2024).

While Oahu is far less active than the Island of Hawaii, the volcanic/seismic hazards on Oahu are also ranked moderately high in the southern half of the island, due to its location in the Molokai Seismic Zone and a history of occasional significant seismic activity (USGS et al. 2002a).

3.6.2 Existing Conditions

Wave Action: High waves are a common occurrence along Hawaiian shores. These waves are sourced from distant storms in the northern and southern hemisphere and from passing tropical cyclones. High waves can trigger hazards including debris over wash, flooding, erosion, high wave energy and turbulence in the nearshore zone, and strong currents. High waves that are most likely to affect the south shore of Oahu, including Sand Island, are sourced from hurricanes during the season between June 1 and December 1. Waves from hurricanes present a more complex hazard as they can coincide with other environmental conditions, such as a high tide, storm surge, and wind and wave setup to produce a combined threat, creating waves up to 15 to 20 feet along the east and south shores of Oahu including Sand Island. Other smaller waves that reach Sand Island on the southern coast of Oahu include those from the Kona storms and southern swells. Summer storm swells, sourced as far away as New Zealand in the Southern Hemisphere, generate waves with long periods at 4 to 6 feet in height, and tend to impact the south-facing shoreline (USGS et al. 2002b).

Tsunamis: Tsunamis pose a unique but infrequent risk to Oahu. Caused by violent movement in the sea floor (e.g., undersea earthquakes, landslides, and volcanic eruptions), tsunamis are characterized by speeds up to 590 miles per hour (mph), long wave lengths up to 120 miles, long periods between crests (generally 10 to 60 minutes), and low wave height in the open ocean. When they meet land, tsunamis can flood hundreds of feet or more inland. In recorded history of Hawaii, there have been 26 tsunamis with flood elevations greater than 3.3 feet (1 meter). Of these, 10 had a significant damaging effect on Oahu, roughly translating to a recurrence interval of one damaging tsunami reaching Oahu every 19 years (USGS et al. 2002b). The last major tsunami impacted Oahu in 1976 but the island could be expected to experience another damaging tsunami event at any time given the unpredictable nature of tsunami triggers such as earthquakes and undersea landslides.

The impact of a tsunami at Honolulu could result in the flooding of most of Sand Island, including nearly the entirety of the project site (City and County of Honolulu 2022a). To address risks to life during a tsunami effect, the City and County of Honolulu have mapped the Sand Island tsunami evacuation zone with

the slightly elevated interior of the island only requiring evacuation during extreme tsunamis (City and County of Honolulu 2015).

Strong Winds: Facing southwest, coastal Honolulu, including Sand Island, is extremely vulnerable to strong winds from tropical storms (USGS et al. 2002b). Between 1974 and 1993 there have been 14 unique instances of strong storms or wind events with winds as high as 25 to 65 mph along the coast west of Diamond Head (USGS et al. 2002b).

Coastal Erosion: The Honolulu Coast runs from the Honolulu International Airport to the west and east to Diamond Head. Honolulu Harbor is partially protected from storms and ocean swells by Sand Island. The southern shore along Sand Island east to Ala Moana Park is somewhat protected by wide offshore fringe reefs; however, erosion has historically been a problem, especially around Waikiki Beach and east, at the base of Diamond Head, and prompting the installation of seawalls and groins (USGS et al. 2002b). Base Honolulu, constructed on fill and calcareous formations, is not located on the Pacific-facing side of Sand Island; therefore, it is more protected against coastal erosion.

Earthquake: The southern portion of Oahu, including all of Honolulu, is located within the Molokai Seismic Zone, warranting its current classification as being at moderately high risk for ground shaking (USGS et al. 2002b). Existing theories supporting the potential existence of fault heading west from Diamond Head would further increase the risk on Oahu (USGS Hawaiian Volcano Observatory 2024).

Earthquake-Induced Liquefaction and Landslide: Sand Island is characterized by its calcareous foundation with soft fill soils as well as JaC. The calcareous foundation is a unique substance. Composed of skeletal remains of marine organisms, it exhibits unusual partial properties: high susceptibility to particle crushing; local variations in particle sizes, shapes, and surface roughness; cementation; and pronounced internal porosity, all of which result in susceptibility to natural hazards (Datta et al. 1982). This combination creates an increased potential for earthquake-induced ground motion and liquefaction.

3.7 VISUAL RESOURCES

3.7.1 Definition of Resource

Visual resources are defined as the natural and manufactured features that comprise the aesthetic qualities of an area. These features form observers' overall impressions of an area or its landscape character. Landforms, water surfaces, vegetation, and manufactured features are considered characteristic of an area if they are inherent to the structure and function of a landscape.

The significance of a change in visual character is influenced by social considerations including public value placed on the resource, public awareness of the area, and general community concern for visual resources in the area. These social considerations are addressed as 'visual sensitivity', defined as the degree of public interest in a visual resource and concern over potential adverse changes in the quality of that resource.

3.7.2 Existing Conditions

Sand Island is a relatively thin barrier island between the Main Harbor Basin and the Kapalama Basin, southwest of Honolulu; it is relatively flat and generally does not rise much above sea level (HDOT-Harbors 2022). Sand Island comprises a contrast of viewsheds, including the higher urban densities of downtown Honolulu, its waterfront, and the Aloha Tower to the northeast, including a scenic backdrop formed by the Koolau Mountain Range; open spaces of Sand Island Beach State Recreation Area and the Pacific Ocean to the south, east, and west; and heavy industrial and shipping operations to the north and west. The mauka, or mountainside vistas, include the Nuuanu Valley and Leeward Coast, spanning from Barbers Point to Diamond Head. The southern-facing beach on the Pacific side of the island is located within the Sand Island Beach State Recreation Area, providing highly scenic features, including a sandy beach that is generally 50 to 100 feet wide, and 180 feet wide at its widest point. The central and northeastern portion of the island is characterized by more industrial development and includes the Honolulu water treatment plant, various recycling and distribution centers, a large number of industrial and light industrial facilitates, and a rehabilitation center. The northwestern shore of Sand Island is

less intensely developed, providing space for five piers, with docking and loading gantry cranes and container storage space for a large container facility. The rest of the northern shore of Sand Island, extending eastward until reaching the State of Hawaii Anuenue Fisheries Research Facility and Sand Island Beach State Recreation Area, consists primarily of Base Honolulu.

3.8 WATER RESOURCES

3.8.1 Definition of Resource

Water resources analyzed for this EA include surface and groundwater resources. The quality and availability of surface and groundwater and potential for flooding are addressed in this section. Surface water resources comprise lakes, rivers, and streams and are important for a variety of reasons including economic, ecological, recreational, and human health. Groundwater comprises the subsurface hydrologic resources of the physical environment and is an essential resource in many areas; groundwater is commonly used for potable water consumption, agricultural irrigation, and industrial applications. Groundwater properties are often described in terms of depth to aquifer, aquifer or well capacity, water quality, and surrounding composition.

Water resources are also important because of their role in determining historical migratory and settlement patterns of virtually all mammals; influence on nesting and migratory activities of many bird species; contribution to the evolution of landforms through their roles in the erosion process; and their participation in critical global systems including hydrologic cycle, temperature modification, and oxygen replenishment.

Other issues relevant to water resources include watershed areas affected by existing and potential runoff and hazards associated with floodplains. Floodplains are belts of low, level ground present on one or both sides of a stream channel and are subject to either periodic or infrequent inundation by floodwater. Inundation dangers associated with floodplains have prompted federal, state, and local legislation that limits development in floodplains largely to recreation and preservation activities. For example, EO 11988, *Floodplain Management,* requires actions to minimize flood risk and impacts. Under this EO,

development alternatives must be considered and development must be in accordance with specific federal, state, and local floodplain regulations.

Wetlands are defined by the USACE and USEPA as *"…those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas"* (33 CFR §328.3[b]). *Hydric soils* are those that are saturated, flooded, or ponded for sufficient periods during the growing season and that develop anaerobic conditions in their upper horizons (i.e., layers). *Wetland hydrology* is determined by the frequency and duration of inundation and soil saturation; permanent or periodic water inundation or soil saturation is considered an important force in wetland establishment and proliferation. Jurisdictional wetlands are those subject to regulatory authority under Section 404 of the CWA and EO 11990, *Protection of Wetlands.* There is no formal wetland program in the HIDOH; however, the HIDOH does use their authority under CWA Section 401 (Water Quality Certification) to certify, waive, or deny water quality certification for CWA Section 404 permits issued by the USACE for dredge / fill activities in waters of the U.S.

3.8.2 Existing Conditions

Surface Water

Hydrologic processes in Hawaii are highly dependent on climatic and geological features, and stream flow is influenced by rainfall and wind patterns (State of Hawaii 2011). Annual average rainfall on Oahu ranges from less than 20 inches on the leeward coast to almost 300 inches near the central crest of the Koolau Range. Such a marked difference over a distance of less than 15 miles has a significant effect on the island's water resources (City and County of Honolulu 1990). The majority of perennial streams on Oahu are located in the windward Koolau Range which produces a larger amount of mountain-generated precipitation compared to the leeward side. These streams on the leeward side of the Koolau Range are generally sustained by leakage from high-level dike compartments as well as from springs and seeps (City and County of Honolulu 1990). Honolulu Harbor is the final destination for surface waters running off of

the hills and ridgelines north of Honolulu. The Harbor is also the nearest adjacent surface water to the project site where runoff would proceed directly into the Harbor.

There are three identified freshwater ponds along the southern portion of Sand Island. These man-made ponds are characterized as non-tidal, palustrine systems, covered by trees, shrubs, emergents, mosses, and lichens on less than 30 percent of the surface, with at least 25 percent cover by particles smaller than stones. These ponds are located in proximity to the Honolulu Wastewater Treatment plant boundaries and are part of that facility's operations.

Section 303(d) of the CWA requires states to identify waters that do not meet water quality standards and for which a Total Maximum Daily Load evaluation must be performed. The most recent State of Hawaii *Water Quality Monitoring and Assessment Report* prepared by the HIDOH, Clean Water Branch includes various locations in Honolulu Harbor on the 2022 303(d) list (HIDOH, Clean Water Branch 2022). Taken together, the waters around Honolulu Harbor are listed for Total Phosphorus (TP), Total Nitrogen (TN) and Nitrate + Nitrite Nitrogen (NO_3 + NO_2). Honolulu Harbor was also listed for ammonium (NH_4) and turbidity. In addition, total suspended solids, trash, metals, and pathogens were also detected. Overall, waters located adjacent to the north of Base Honolulu are listed as requiring Total Maximum Daily Load evaluation but as a low priority for the assessment cycle ending October 31, 2021 (HIDOH, Clean Water Branch 2022).

Groundwater

The main island of Oahu has a vast amount of groundwater, divided into seven major areas, which supplies most of the island's domestic water (Oki et al. 1999). Volcanic rocks make up most of Oahu and compose the most important aquifers where water is retained in the cracks between old basaltic lava flows. Quaternary-age consolidated sedimentary deposits form productive aquifers in the lowlands and nearshore areas but are generally prone to intrusion by brackish water or saltwater and are not suitable for human consumption.

Sand Island itself sits nearly at sea level and is composed of unconsolidated Quaternary-aged beach sand deposits that have been expanded with artificial fill to enlarge the island. The State of Hawaii does not maintain any groundwater monitoring wells on Sand Island (HIDOH Safe Drinking Water Branch 2024).

Wetlands

The southern and western perimeter of Sand Island within Sand Island State Recreation Area, more than 1,800 feet from the project site, includes beach shoreline composed of approximately 7 acres of marine wetland. This beach environment is characterized as a high-energy water regime coastline with salinity exceeding 30 parts per thousand, and as an intertidal unconsolidated shore, such that substrates are unconsolidated with less than 75 percent of areal cover by stones, boulders, or bedrock, and less than 30 percent areal cover by vegetation. There are no mapped wetlands located within the project site (USFWS 2024).

Floodplains

The portion of Base Honolulu and the acquisition parcel that is immediately adjacent to Honolulu Harbor is mapped by the Federal Emergency Management Agency (FEMA) as Flood Zone AE EL5, areas with a one percent annual chance (i.e., 100-year flood event) to flood above a base flood elevation of five feet (FEMA 2024). More broadly, the entire southern and western sides of Sand Island are susceptible to 100-year flood events along the coast.

SECTION 4
ENVIRONMENTAL CONSEQUENCES

Environmental impacts that would result from implementation of the Proposed Action and its alternatives at USCG Base Honolulu are evaluated in this section. Analyses are presented by resource area, as presented in Section 3, *Affected Environment*. Analysis of potential impacts to resources typically includes: 1) identification and description of resources that could potentially be affected; 2) examination of the Proposed Action and the potential effects the action may have on the resource; 3) assessment of the significance of potential impacts; and, 4) development of mitigation, special procedures, or adaptive management measures in the event that potentially significant impacts are identified.

For this analysis, potential impacts are defined as:

- Negligible – if the action would result in no noticeable effects, beneficial or adverse, over existing conditions.
- Minor – if the action would result in a limited adverse effect over existing conditions.
- No effects – if the action would not have any influence or impact over existing conditions.
- Substantial – if the action would result in a noticeable or measurable adverse impact to existing environmental conditions.

In this analysis, significance is determined by considering the degree of the effects under the alternatives implemented. Per the CEQ NEPA regulations at 40 CFR §1501.3[b], the USCG has considered the degree of effects to each resource area:

- Both short- and long-term effects;
- Both beneficial and adverse effects;
- Effects on public health and safety; and
- Effects that would violate federal, state, tribal, or local law protecting the environment.

As described in Section 1.7.10, *Hawaii Revised Statutes Chapter* 343, the proposed acquisition of a portion of a parcel currently owned by the HDOT-Harbors triggers review under HEPA. Therefore, pursuant to HAR Section 11-200-12(a) and (b), this HEPA-compliant EA considers the sum of potentially significant effects on the quality of the environment, including whether the Proposed Action:

1. Involves an irrevocable commitment to loss or destruction or any natural or cultural resource;

2. Curtails the range of beneficial uses of the environment;

3. Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in HRS Chapter 344, and any revisions thereof and amendments thereto, court decisions, or executive orders;

4. Substantially affects the economic welfare, social welfare, and cultural practices of the community or State;

5. Substantially affects public health;

6. Involves substantial secondary impacts, such as population changes or effects on public facilities;

7. Involves a substantial degradation of environmental quality;

8. Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

9. Substantially affects a rare threatened species, or its habitat;

10. Detrimentally affects air or water quality or ambient noise levels;

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geological hazardous land, estuary, fresh water, or coastal waters;

12. Substantially affects scenic vistas and viewplanes identified in county or state plans or studies; or

13. Requires substantial energy consumption

4.1 AIR QUALITY AND CLIMATE CHANGE

4.1.1 Approach to Analysis

The 1990 Amendments to the CAA require that federal agency activities conform to the SIP with respect to achieving and maintaining attainment of NAAQS and addressing air quality impacts. The USEPA General Conformity Rule requires that a conformity analysis be performed which demonstrates that a Proposed Action does not: 1) cause or contribute to any new violation of any NAAQS in the area; 2) interfere with provisions in the SIP for maintenance or attainment of any NAAQS; 3) increase the frequency or severity of any existing violation of any NAAQS; or 4) delay timely attainment of any NAAQS, any interim emission reduction goals, or other milestones included in the SIP. Provisions in the General Conformity Rule allow for exemptions from performing a conformity determination only if total emissions of individual nonattainment area pollutants resulting from the action fall below *de minimis* thresholds. Information provided by ambient air monitoring stations located in Honolulu and on Sand Island indicate that the project site is located is an area that is in full *attainment* for all NAAQS thresholds (USEPA 2024b; refer Section 3.1, *Air Quality and Climate Change*), thereby eliminating the need to perform a conformity determination for pollutants.

4.1.2 Impacts

4.1.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

<u>Short-Term Construction-Related Emissions</u>

Short-term criteria air pollutant emissions would be generated during construction of the bulkhead, pile-supported pier, and floating dock while

construction of the bulkhead and other shoreside improvements may also result in fugitive dust emissions. The heavy construction equipment fleet mix, the hours of construction, and operating conditions would vary during the implementation phases of the Proposed Action. While not currently known, the types of shoreside and in-water construction equipment, number of construction personnel, and timing of construction activities would be determined upon completion of engineering design and USCG selection of a contractor.

Operation of construction equipment with internal combustion engines, off-site vehicles (e.g., construction employee vehicles, delivery trucks), and marine vessels would result in emission of criteria air pollutants (i.e., CO, reactive organic gases, NO_x, SO_2, and PM). In addition to on-site construction emissions, regional emissions would occur associated with haul truck trips (and potentially marine vessel trips) for the delivery of supplies and removal of solid waste (e.g., construction and demolition debris). Nevertheless, due to the short-term nature of proposed construction activities (i.e., maximum of 6 months), combustion emissions would be considered a short-term and minor impact pursuant to NEPA and HAR Section 11-200-12(b)(1, 7, and 10).

General Conformity

Given that the State of Hawaii as whole, with the exception of intermittent volcanic eruptions on the Big Island of Hawaii, is in *attainment* for NAAQS, short-term temporary emissions from construction- and operational-related activities related to the Proposed Action would not require a conformity determination. Implementation of the Proposed Action would result in short-term, minor impacts to air quality as defined in Title 40 CFR Part 41.

Climate Change

Honolulu Harbor's vulnerability to climate change factors such as sea level rise and storm surge is a long-term issue that has been the subject of increased discussion by federal, state, and local government agencies as well as University of Hawaii scientists (refer to Section 3.1, *Air Quality and Climate Change*). While the contribution of any single project to climate change is too small to quantify, the combined greenhouse gas emissions from all human activities have a severe

long-term adverse impact on the global climate. The operation of heavy construction equipment would result in a temporary increase in greenhouse gas. However, this temporary increase in greenhouse gas emissions would be negligible in the context of stationary source and mobile source emissions on Oahu and/or the State of Hawaii.

As described in Section 3.1, *Air Quality and Climate Change*, the Oahu Metropolitan Planning Organization *Transportation Asset Climate Change Risk Assessment* noted that portions of the greater Honolulu Harbor area may be vulnerable to storm surge flooding and ponding. The Hawaii Climate Change Mitigation and Adaptation Commission *Hawaii Sea Level Rise Vulnerability and Adaptation Report* prepare for 3.2 feet of sea-level rise arriving as early as 2060. HDOT-Harbors is engaged in efforts to develop adaptation strategies to address the long-term impacts of climate change. The implementation of the Proposed Action would: 1) include the acquisition of the subject parcel which would not alter the physical environment itself; and 2) construct a shore-stabilizing bulkhead, pile-supported pier, and floating dock. These actions would not increase the vulnerability of Base Honolulu or Honolulu Harbor to sea level rise. Additionally, implementation of the Proposed Action would not impede the ongoing implementation of adaptation strategies by HDOT-Harbors. Therefore, impacts would be negligible as a result of the Proposed Action pursuant to NEPA and HAR Section 11-200-12(b)(1, 7, and 10).

4.1.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action except for the proposed floating dock which would not be constructed. Short-term construction-related air pollutant and greenhouse gas emissions would be slightly reduced compared to the Proposed Action due to the reduced construction intensity and duration. As such, construction-related impacts to air quality and climate change would be minor. Additionally, the implementation of Alternative 1 would not result in a long-term increase in operational emissions. Finally, this alternative would not increase the vulnerability of the project site, or the greater Honolulu Harbor area, to sea level rise.

4.1.2.3 No Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier or floating dock. No construction-related or operational emissions would be generated under the No-Action Alternative and no changes to existing criteria air pollutant and greenhouse gas emissions would occur. Therefore, there would be no impact to air quality and climate change.

4.1.3 Special Procedures

No special procedures would be required. Impacts from the Proposed Action are anticipated to be minor with implementation of standard best management practices (BMPs), such as implementation of control measures for reducing fugitive dust emissions, and conformance with all applicable federal, state, and local requirements.

4.2 BIOLOGICAL RESOURCES

4.2.1 Approach to Analysis

Determination of the significance of potential impacts to biological resources is based on the following: 1) the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource; 2) the proportion of the resource that would be affected relative to its occurrence in the region; 3) the sensitivity of the resource to proposed activities; and 4) the duration of adverse ecological effects. Consistent with HAR Section 11-200-12(b)(9), this HEPA-compliant EA considers whether the Proposed Action substantially affects a rare threatened species or its habitat. Impacts to biological resources would be considered significant if federally listed species or federally designated critical habitats would be adversely affected or if such species or habitats would be affected over relatively large areas or if disturbances would cause reductions in population size or distribution.

The region of influence for biological resources is defined as the project site and the surrounding waters, including the Kapalama Channel and Main Harbor

Basin. The threshold for significance is based on whether an action would have a detrimental effect on terrestrial or aquatic habitats, local wildlife, or threatened and endangered species throughout the region of influence, including any actions that would trigger formal consultation with regulatory agencies.

4.2.2 Impacts

4.2.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

As described in Section 3.2, *Biological Resources*, Honolulu Harbor is highly developed and serves as the principal seaport for Honolulu and the State of Hawaii. No substantial native shoreline vegetation or functionally intact terrestrial habitat occurs at the project site, and no federally listed or state-listed terrestrial special status plant or wildlife species are known to occur within the project area (USCG 2023). Further, no federally designated critical habitat for terrestrial plant or wildlife species occurs within the project site (USFWS 2023).

Short-term construction impacts associated with the Proposed Action would occur in the immediate vicinity of Pier 53. Proposed construction activities would be short-term and associated air emissions and airborne noise would be similar to that already experienced in the industrial Honolulu Harbor. Consequently, impacts to terrestrial biological resources as a result of facilities construction activities under the Proposed Action would be short-term and negligible pursuant to NEPA and HAR Section 11-200-12(b)(9).

Seabirds protected under the Migratory Bird Treaty Act, such as the wedge-tailed shearwater (*Puffinus pacificus chlororhynchus*) and the federally listed Hawaiian hoary bat, could transit the area (USFWS 2023). Seabirds and bats fly at night and are attracted to artificially lighted areas; this attraction can result in disorientation and subsequent fallout due to exhaustion or collision with objects that project above the vegetation layer. Once grounded, they are vulnerable to predators and are often struck by vehicles along roadways. Increases in the use of nighttime lighting, particularly during peak fallout periods (September 15-December 15) could result in seabird injury or mortality. Impacts to seabirds can be minimized through shielding outdoor lights associated with the project to the

maximum extent possible, eliminating nighttime construction, and disseminating information related to seabird fallout. Implementation of the Proposed Action would not entail any nighttime construction, introduction of poles, towers, or street lighting, or changes to existing lights, power lines, or cables. Therefore, the potential for impacts to seabirds or the federally listed Hawaiian hoary bat would be short-term and negligible pursuant to NEPA and HAR Section 11-200-12(b)(9).

Aquatic Biological Resources

The implementation of the Proposed Action would include the installation of up to 180 piles and 340 feet of steel sheet piles. The design for the shoreline and bulkhead is currently not known but the maximum impacts are assumed and would not change the assessment for ESA and MSA species and habitats. Each component of the Proposed Action would be located on the existing slope and shoreline without removal/excavation of any areas, although some fill may be placed behind the new bulkhead once it is installed to support stabilization and paving of the shoreside portion of the acquisition parcel. The Proposed Action would not involve any dredging of material and would not change the general character of sediment, substrate, or bathymetry within the project area beyond moving the vertical wall component of the shoreline further into the channel.

As part of impact offset measures (see below), the Proposed Action may include removal of submerged debris within Base Honolulu which would have a positive effect on benthic habitat by increasing availability of habitat and removal of items that could decrease water quality (e.g., tires, PVC pipes, etc.).

Coral Communities

The proposed project would install a new pile-supported pier with an optional floating dock, resulting in over-water coverage of between 15,000 and 25,500 sf (refer to Section 2.1, *Proposed Action*). To support the new pile-supported pier extensions and floating dock, up to 180 24-inch piles and 340 feet of sheet piling would be installed. Depending on the final project design, the placement of piles could be located on corals and/or soft sediment. The benthic survey performed in April 2024 determined that corals are located on the shelf and slope but not on

the soft sediment harbor floor. An estimate of the coral that would be covered with the maximum design would be 3,832 sf. The USCG would attempt to minimize impacts on corals while still meeting the purpose and need for the Proposed Action.

The increased over-water coverage would reduce light penetration to the benthic communities. Reduced light would negatively impact coral communities since their algal symbionts require sunlight to photosynthesize. It is expected that over time, there would be a permanent loss of corals in this area of reduced light. The area is expected to have lower reef function but still be marginal habitat and refuge areas. If practicable while meeting the structural requirements of the pier, the USCG would install grated decking material to minimize the shade footprint. For this assessment, the USCG is estimating the maximum development that could occur (i.e., solid, or non-grated decking) for this design-build project.

The installed pilings would be concrete or steel. These material types have a longer lifetime than traditional timber piles but are also structurally stronger so fewer piles would be required to support the pier. With fewer piles, there would be less disturbance to the benthic habitat. In addition, timber piles are often treated with toxic compounds that reduce water quality in marine systems. The USCG would not use treated timber products to avoid decreased water quality.

To minimize impacts on corals due to habitat conversion (shading) and loss (piles), the USCG would translocate corals to pre-determined locations. Any unavoidable loss would be offset by one or more options that would directly or indirectly benefit corals and/or water quality. Once the project design has been finalized, if the maximum design is not selected, the USCG would provide updated estimates of corals that could successfully be translocated and those that would incur unavoidable loss since some corals cannot be translocated without damage. The former would be included in a Coral Translocation Plan that would include sites coordinated with NMFS. To offset any unavoidable loss, the USCG would implement one or more offset measures or projects that would benefit coral species and water quality in the vicinity. The final areas for habitat conversion and loss, and destinations of translocated corals and offsets would be determined when the final project design has been selected and NMFS has approved the translocation and offset measures. This adaptive management

strategy would allow the USCG to progress with consultation and collaboration with NMFS and other stakeholders while developing the most efficient design of the pier while minimizing the area of impacts.

Under the Proposed Action, and with the implementation of the Coral Translocation Plan, impacts to corals would be short-term and restricted to the construction phase, during which the potential impacts from construction would occur and the Coral Translocation Plan would be implemented. Therefore, with the implementation of the Coral Translocation Plan and other measures, impacts to coral communities under the Proposed Action are expected to be short-term and minor pursuant to NEPA and HAR Section 11-200-12(b)(9).

Underwater Noise

Waters within Honolulu Harbor are currently subject to underwater ambient or background noise from both natural sources (e.g., wind, waves, snapping shrimp) and anthropogenic sources (e.g., commercial and recreational vessels, shoreline and dock construction activities) (USACE 2015; Richardson et al. 1995). During construction, pile removal and installation, and operation of construction equipment would temporarily raise underwater noise levels.

All pile installation methods are expected to produce underwater sounds of frequencies typically lower than 2.5 kilohertz (kHz), with the highest intensity of pressure spectral density at or below 1 kHz (Denes et al. 2016; Dahl et al. 2015; Theiss and Reyff 2006). Impact pile driving 24-inch steel or concrete piles is expected to exert a root mean square (RMS) sound pressure level (SPL) of 195 decibels referenced to 1 micropascal (dB re 1 µPa) normalized to a distance of 10 meters (NMFS 2022b). With the use of noise attenuation, this RMS SPL is reduced to 190 dB re 1 µPa. Since this activity is expected to take the 286 strikes per pile and up to 4 piles per day, the unattenuated cumulative sound exposure level (SEL_{cum}) for impact pile driving has been calculated as 215 dB re 1 µPa squared second (μPa^2s) for both steel and concrete piles, and 210 µPa2s with noise attenuation (see Table 4-1).

Table 4-1. Noise Generating Project Activities and Associated Underwater Noise Levels

Vibratory Activity	RMS SPL (dB re 1 µPa)	SELcum (dB re 1 µPa²s)	Seconds per Day	Vibratory Activity	RMS SPL (dB re 1 µPa)
DTH Pile Drilling: 24-inch-diameter concrete piles (Drilling and Debris Removal)	162[a]	203[a]	12,000 (50 min / pile, 4 piles / day)	DTH Pile Drilling: 24-inch diameter concrete piles (Drilling and Debris Removal)	162[a]
Impact Activity	**RMS SPL (dB re 1 µPa)**	**Peak SPL (dB re 1 µPa)**	**SELss (dB re 1 µPa²s)**	**SELcum (dB re 1 µPa²s)**	**Strikes per Day**
Impact Proof 24-inch diameter concrete or steel piles	190[a]	206	179[a]	210[a]	1,144 (286 strikes / pile; 4 piles / day)
Impact Drive: 24-inch sheet piles for bulkhead	184[b]	200	174[b]	214[b]	10,560 (15 min / segment; 44 strikes / min; 16 segments / day)
DTH Pile Driving: 24-inch concrete piles; Percussive Hammer Strikes	162[a]	179	154[a]	205[a]	120,000 (30,000 strikes / pile; 4 piles / day)

Acronyms: DTH = down-the-hole; RMS = root mean square; SPL = sound pressure level; dB = decibel; SELss = single strike sound exposure level; SELcum = cumulative sound exposure level; re 1 µPa = referenced to 1 micropascal; re 1 µPa²s = referenced to 1 micropascal squared second.
Sources: [a] NMFS 2022a; [b] California Department of Transportation (Caltrans) 2020

Increased noise levels would last only for the duration of project construction (i.e., maximum of 6 months). Additionally, BMPs including the use of cushion pads and / or bubble curtains during pile driving and mufflers on equipment would be implemented to reduce noise generated during construction. Once the project is completed, there would be no long-term effect on ambient noise levels pursuant to NEPA and HAR Section 11-200-12(b)(9).

Details related to the effects of noise on forage fish and invertebrates, sea turtles, and the Hawaiian monk seal are discussed further below.

Water Quality

Ambient turbidity levels in Honolulu Harbor are high and constitute water quality impairment. Turbid conditions are a result of sediment-laden stream

discharge and frequent passage of large vessels that resuspend bottom sediment (USACE 2015).

The installation of piles using a down-the-hole (DTH) drill and impact hammer would result in localized re-suspension of sediment from the surrounding benthic habitat. These activities would adversely affect water quality by temporarily increasing turbidity and decreasing dissolved oxygen (DO). These sediments may also contain containments since they have been suspended within Honolulu Harbor which contains a variety of contaminants that have accumulated over decades of industrial use. Therefore, construction activities associated with the Proposed Action have the potential to directly impact water quality in the project area and the surrounding vicinity.

The level of total suspended sediments sufficient to cause adverse effects on the species of concern would be very limited in extent and duration. In addition, the implementation of BMPs, including the use of turbidity curtains and the implementation of a turbidity monitoring plan, would further reduce the potential for increased turbidity. Therefore, any temporary increases in turbidity are expected to be short-term and negligible pursuant to NEPA and HAR Section 11-200-12(b)(9) as well as HAR Section 11-200-12(b)(2, 7, and 10). There would be no long-term degradation of the existing water quality conditions within the project area.

Forage Fish and Invertebrates

As described in Section 3.2, *Biological Resources*, the benthic surveys performed in April 2024 identified 27 fish species in the survey area including boxfish, butterflyfish, cardinalfish, damselfish, eels, goatfish Moorish idols, parrotfish pufferfish, snappers, squirrelfish, surgeonfish, triggerfish wrasses. Sea urchins were the most abundant non-coral invertebrates observed at Pier 53.

If fish and invertebrates occur within the project area during pile installation activities, they could experience temporary shifts in hearing threshold (i.e., a temporary reduction in hearing ability) and behavioral effects. The physical and behavioral effects on fish and invertebrates from pile driving noise would be temporary, occurring only during underwater noise-related construction

activities. In addition, most affected individuals would be expected to move away from pile driving activities to an area with similar habitat, immediately after which underwater noise levels would return to ambient levels and displaced individuals should return. Some fish and invertebrates may be disoriented or even incur an increased risk of mortality through predation. Since the population of forage fish and invertebrates are abundant in the harbor, channels, and nearshore areas, these species would be expected to return when noise activities and construction are completed. Therefore, any short-term increases in underwater noise levels are not expected to result in long-term impacts on forage fish and invertebrates within the project area and would be considered negligible pursuant to NEPA and HAR Section 11-200-12(b)(9).

Essential Fish Habitat

As previously described, the implementation of the Proposed Action may temporarily decrease water quality through turbidity during the installation of piles. Turbidity could include the resuspension of contaminated sediments that have accumulated over decades in the Honolulu Harbor. Pile driving activities could increase turbidity within 300 feet; resuspended sediments would be expected to settle in a few hours (NMFS 2023b). However, since the project area is frequently exposed to increased turbidity from propellor wash and increased runoff during storm events, the corals in the project area are subjected to turbidity regularly. Therefore, impacts related to temporary increases in turbidity would be short-term and minor pursuant to NEPA and HAR Section 11-200-12(b)(9).

Noise has the potential to affect EFH due to disturbance or injury of prey for MUS. However, these impacts would be short-term and minor pursuant to NEPA and HAR Section 11-200-12(b)(9). As described in the *Forage Fish and Invertebrates* discussion, any temporary increases in underwater noise levels are not expected to result in long-term impacts on forage fish and invertebrates within the project area.

The introduction of invasive species could lead to the establishment of nonnative and/or invasive species. Invasive plants and algae can outcompete with native species that are already present. Invasive animal populations can outcompete

native populations for food and other resources. This effect could transform the amount, type, and/or distribution of important prey or forage species for MUS. Prior to mobilizing, the construction contractor would ensure all construction equipment, ballast, and vessel hulls do not pose a risk of introducing new invasive species and would not increase abundance of those invasive species present in Honolulu Harbor. With the implementation of this BMP, the risk to marine species assemblages from the introduction of nonnative, invasive species from would be negligible. Therefore, the introduction on invasive species is expected to have negligible impacts pursuant to NEPA and HAR Section 11-200-12(b)(9).

Federally Listed Threatened and Endangered Species

As previously described, increased underwater noise levels are expected to occur during implementation of the Proposed Action, primarily due to equipment use associated with pile removal and installation activities. Additional noise from in-water construction activities may affect foraging behavior of sea turtles and the Hawaiian monk seal, causing them to avoid foraging areas during active construction. Some construction-related activities have potential to injure federally listed species if within close proximity.

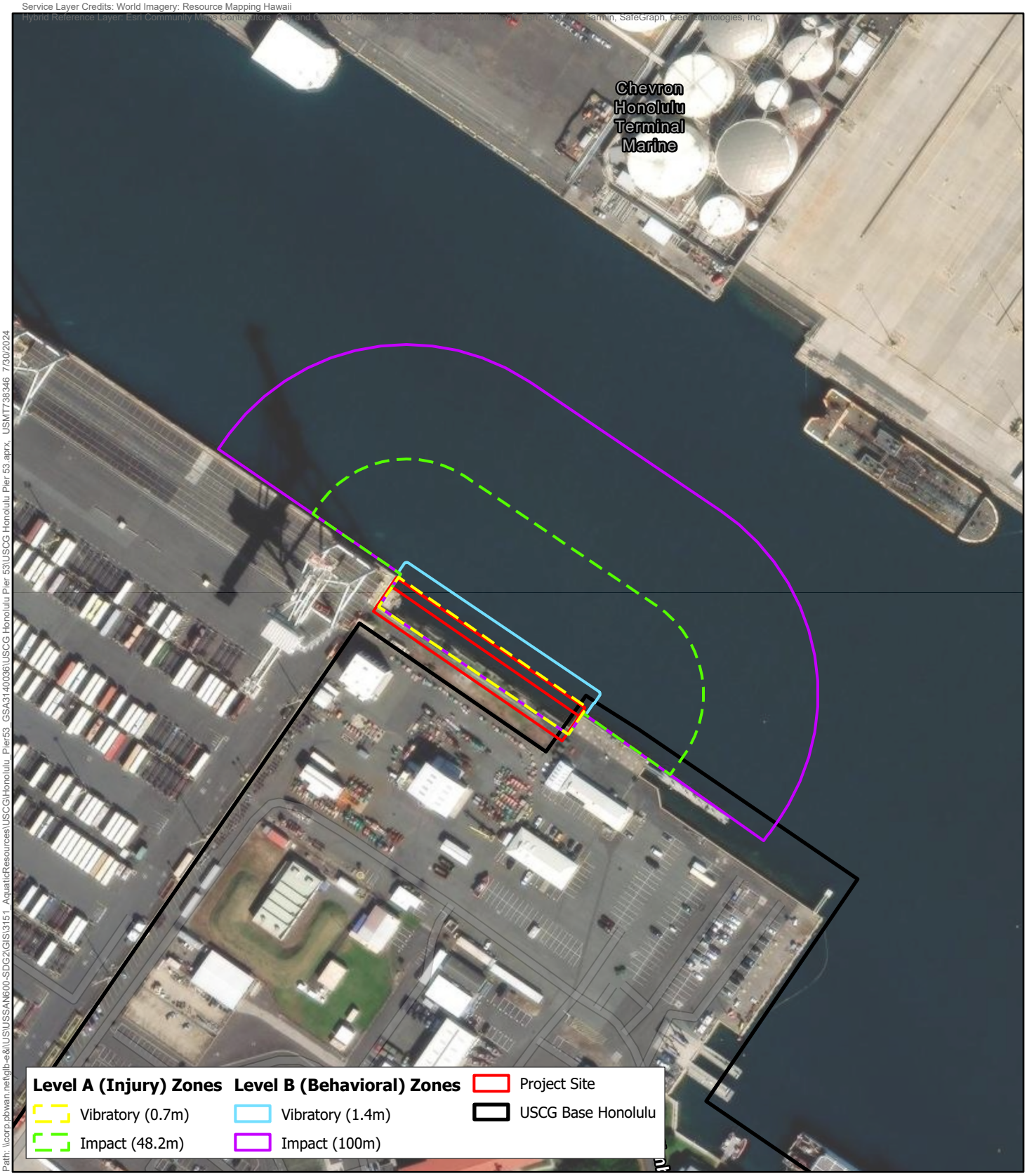
Under the MMPA, NMFS has defined levels of harassment for marine mammals. In the MMPA, Level A Harassment is defined as *"…any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild."* Level B Harassment is defined as *"…any act of pursuit, torment, or annoyance which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to migration, breathing, nursing, breeding, feeding, or sheltering."*

Impact pile driving of concrete or steel piles is considered the loudest potential in-water activity associated with the Proposed Action. Therefore, the area of potential in-water impact for the Honolulu Harbor was determined to extend to the point at which the underwater noise would fall below the behavioral (Level B) noise disturbance threshold set by NMFS for the Hawaiian monk seal and sea turtle species based on this activity. Figure 3 and Figure 4 include these injury and behavioral distances for the Hawaiian monk seal and sea turtles. A Protected

Species Observer (PSO) would be on-site during any underwater noise activities to monitor the Level A (injury) and Level B (behavioral) zones of green and hawksbill sea turtles and Hawaiian monk seals. If a federally listed species entered their respective Level A or Level B zones, the PSO would have authority to shut down project operations until the individual has exited the Level B zone. Additional BMPs related to noise are included in Section 4.2.3, *Special Procedures*.

Vessel strikes are a major threat to sea turtles and are one of the most common causes of sea turtle strandings in the U.S. Many of these strikes occur in high vessel traffic areas, inlets, and harbors (NMFS 2021). Although monk seals also experience mortality and injury through vessel strikes, they are much less likely to occur. In recent years, only one Hawaiian monk seal in 2015 was reported as likely killed by a vessel strike (NMFS 2022b). Construction activities associated with the Proposed Action would require up to three vessels (i.e., one barge, one tug, and one skiff). The support vessels are expected to remain at the construction site for most of the construction period but may make daily movements to carry out construction activities. These movements are considered insignificant and relatively minor within busy marine harbor areas, such as those associated with the Base Honolulu. Given the BMPs (see Section 4.2.3, *Special Procedures*), the relatively low number of construction vessels required at the project area, the slow speed at which the required vessels would operate, and the short duration of many of the activities, impacts associated with vessel strikes would be short-term and minor pursuant to NEPA and HAR Section 11-200-12(b)(9).

As previously described, short-term, localized decreases in water quality could occur due to increased turbidity during pile removal and installation. Turbidity can impact sea turtles and the Hawaiian monk seals as water clarity could be affected and thereby decreasing foraging ability. However, since Honolulu Harbor is already marginal foraging habitat, effects from decreased visibility would be minor. With the implementation of BMPs including the installation of turbidity curtains and implementation of a turbidity monitoring plan (see Section 4.2.3, *Special Procedures*), impacts from turbidity are expected to be short-term and minor pursuant to NEPA and HAR Section 11-200-12(b)(9).



1 inch =200 feet
0 100 200 Feet

FIGURE 3

Level A (Injury) and Level B (Behavioral) Zones
For Sea Turtles
Real Property Acquisition and Pier Construction
USCG Base Honolulu, HI

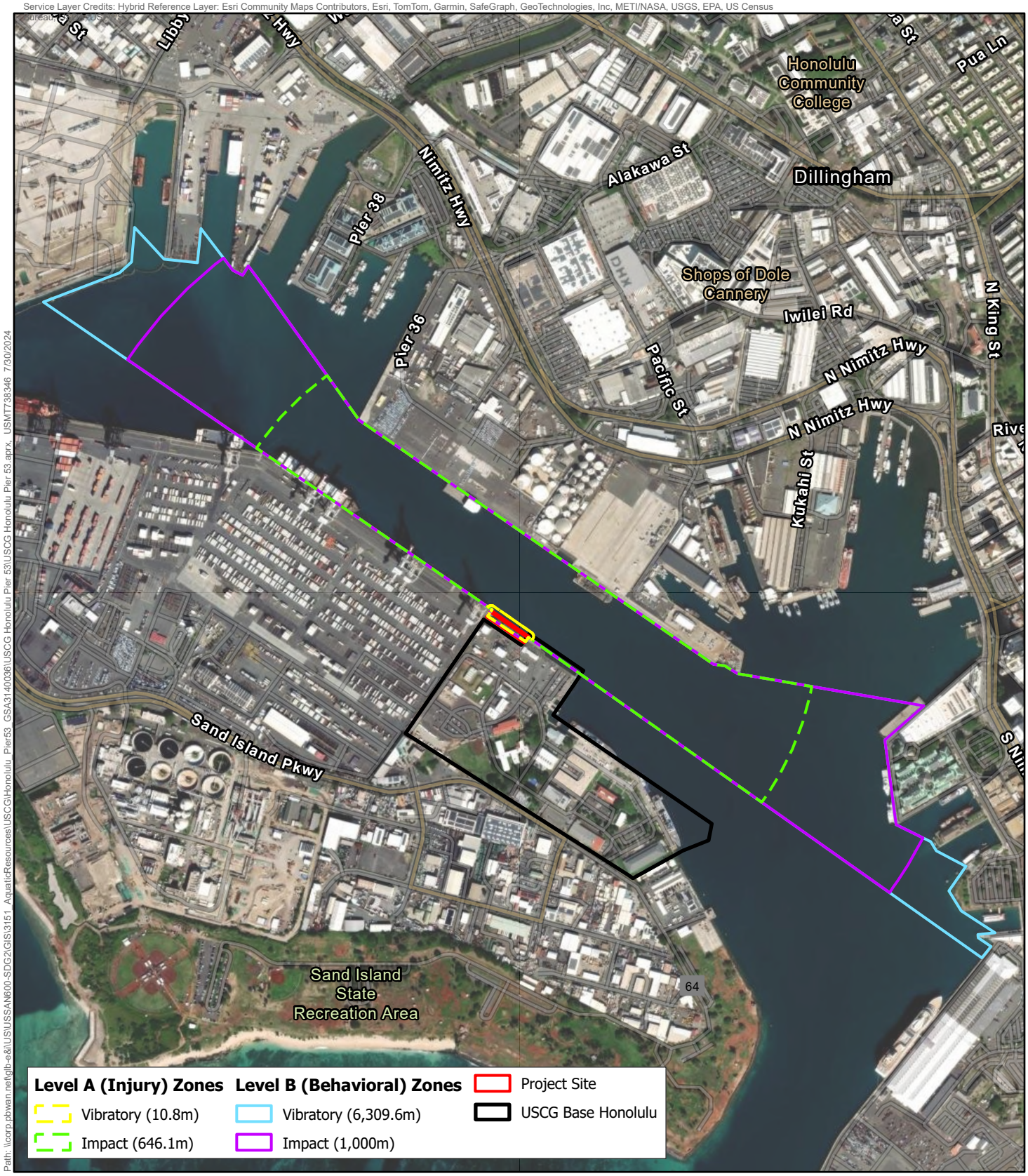


FIGURE 4

Level A (Injury) and Level B (Behavioral) Zones
For the Hawaiian Monk Seal
Real Property Acquisition and Pier Construction
USCG Base Honolulu, HI

As stated above, Honolulu Harbor does not contain any designated habitats for federally listed species. Further, in the context of the total foraging habitat available to sea turtles and marine mammals around Oahu, the relatively small area of effect (e.g., area of sound effects above) would not restrict availability of total foraging and habitat available to those species.

Table 4-2. Potential Effects Determination for Federally Listed Species Occurring the Project Area

Species	Effects	Effects Determination	Basis
Green sea turtle (Central North Pacific DPS)	Noise	NLAA	Noise effects may be above critical injury threshold or anticipated background levels; however, a PSO would be onsite to shut down work when individuals are within threshold distances.
	Vessel strikes	NLAA	Construction vessels are mostly stationary, shut down protocols, speed limits, and other mitigation measures to be employed.
	Decreased water quality	NLAA	Water quality effects considered minimal, short-term, and / or within background conditions. BMPs include Stormwater Pollution Prevention and Control Plan, spill kits, daily equipment checks.
	Habitat exclusion / modification	NLAA	Habitat exclusion / conversion considered insignificant due to small construction footprint compared to available foraging habitat in nearshore Oahu.
	Invasive species	NE	Prior to mobilizing, construction equipment, ballast, and vessel hulls would be checked so they do not pose a risk of introducing invasive species.
Hawksbill sea turtle	Noise	NLAA	Noise effects may be above critical injury threshold or anticipated background levels; however, a PSO would be onsite to shut down work when individuals are within threshold distances.
	Vessel strikes	NE	Low probability of species in the Action Area. Construction vessels are mostly stationary, shut down protocols, speed limits, and other mitigation measures to be employed.
	Decreased water quality	NLAA	Water quality effects considered minimal, short-term, and / or within background conditions. BMPs include Stormwater Pollution Prevention and Control Plan, spill kits, daily equipment checks.
	Habitat exclusion / modification	NLAA	Habitat exclusion / conversion considered insignificant due to small construction footprint compared to available foraging habitat in nearshore Oahu.

Species	Effects	Effects Determination	Basis
	Invasive species	NE	Prior to mobilizing, construction equipment, ballast, and vessel hulls would be checked so they do not pose a risk of introducing invasive species.
Hawaiian monk seal	Noise	NLAA	Noise effects may be above critical injury threshold or anticipated background levels; however, a PSO would be onsite to shut down work when individuals are within threshold distances.
	Vessel strikes	NE	Low probability of species in the Action Area, few individuals known to be struck by vessels. Construction vessels are mostly stationary, shut down protocols, speed limits, and other mitigation measures to be employed.
	Decreased water quality	NLAA	Water quality effects considered minimal, short-term, and / or within background conditions. BMPs include Stormwater Pollution Prevention and Control Plan, spill kits, daily equipment checks.
	Habitat exclusion / modification	NLAA	Habitat exclusion / conversion considered insignificant due to small construction footprint compared to available foraging habitat in nearshore Oahu.
	Invasive species	NE	Prior to mobilizing, construction equipment, ballast, and vessel hulls would be checked so they do not pose a risk of introducing invasive species.

As described in Table 4-2, and in more detail in the BA proposed for the Proposed Action (see Appendix C), the Proposed Action is, at most, not likely to adversely affect federally listed species. Therefore, the Proposed Action would have short-term, minor impacts to federally listed species in the case where a sea turtle or marine mammal is present in Honolulu Harbor during the construction phases, specifically during noise-generating pile driving activities. Further, because there is no designated critical habitat in proximity of the project site, potential impacts to these habitats would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(9).

4.2.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action except for the proposed floating dock which would not be constructed. The shoreside impacts would be the same while the in-water impacts would be reduced under Alternative 1 relative to the Proposed Action due to the reduced amount of short-term in-water work (i.e., pile installation)

and long-term changes to habitat (i.e., reduced increases in over-water coverage). Therefore, potential impacts under Alternative 1 would be similar to the Proposed Action but slightly reduced given the small total area of effect and shorter construction period.

4.2.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. There would be no shoreside or in-water construction activities. Therefore, no short-term construction-related or long-term operational impacts to terrestrial or aquatic biological resources would occur under this alternative.

4.2.3 Special Procedures

The final project design would include the implementation of proposed BMPs agreed to by NMFS (see Appendix C) to minimize potential impacts on forage fish and invertebrates, EFH, federally listed species, and federally designated critical habitat. The complete list of Special Procedures and BMPs is included in Section 7.

4.2.4 Proposed Minimization and Offset Measures

In addition to the proposed BMPs agreed to by NMFS, the USCG is working with NMFS and Hawaii's DLNR-DAR to identify appropriate coral translocation areas to minimize loss, and potential projects or activities that would offset any unavoidable loss of corals. These offset measures are intended to benefit coral habitat and/or water quality in the vicinity of the project area.

4.2.4.1 Minimization Measures

Coral Translocation

Hawaii's DLNR-DAR is the primary agency for coordinating reef management efforts in the Main Hawaiian Islands (DLNR-DAR 2023). If the final Pier 53 design is determined to create over-water coverage on individual corals, the USCG would work with NMFS and DLNR-DAR to develop a Coral

Translocation Plan. This plan would include specifics on numbers of individual corals that would need to be translocated, recipient location, translocation method, installation methods, and a monitoring plan that would ensure the translocations are successful. Generally larger (>10 cm), non-encrusting corals would be translocated. All smaller corals (0-10 cm) and all encrusting corals would not be as successful to translocate.

Since Harbor *Porites* are present at the project site, only sites within Honolulu Harbor would be appropriate recipient sites for these corals to minimize any further spread of this non-native species. Corals that would be translocated would be of sufficient size and species that are known to successfully translocate. No Harbor *Porites* within the project footprint would be translocated but would be included in the proposed offset plan.

Potential areas for translocation include Pier 5/6 on the north side of the Main Harbor and Berth A at Base Honolulu. Other potential sites may be suitable and would be included in planning. Corals would be translocated in approximately the same depth of water of their origin, or slightly deeper. Recipient sites would be surveyed prior to selection to determine suitability and approved by NMFS and DLNR-DAR. The timing of coral translocation would not coincide with any sensitive spawning windows.

Offset Measures

The USCG is considering several options to offset any unavoidable losses for corals that are not possible to translocate due to size or type (i.e., encrusting corals). These options include the following, which are described in more detail in the BA and its supporting documents (see Appendix C):

- Submerged Debris Cleanup on Base; and
- Anuenue Fisheries Research Center Water Intake Pump.

The USCG would try to minimize the area of corals that would be covered by reducing the project footprint in the finalized design. Using survey results, the USCG would estimate the amount of unavoidable loss that would incur and

would work with NMFS and DLNR-DAR to determine the appropriate offsets that would be required.

4.3 CULTURAL RESOURCES

4.3.1 Approach to Analysis

Significance evaluation is the process by which cultural resources are assessed relative to significance criteria for scientific or historic research, for the general public, and for traditional cultural groups. Only cultural resources determined to be significant (e.g., eligible for the NRHP) are protected under the NHPA.

Consistent with HAR Section 11-200-12(b)(1), this HEPA-compliant EA considers whether the Proposed Action involves an irrevocable destruction of any cultural resource. Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts can be assessed by determining the exact locations of cultural resources that could be affected by implementation of an action. Direct impacts may occur by: 1) physically altering, damaging, or destroying all or part of a resource; 2) altering the characteristics of the surrounding environment that contribute to resource significance; 3) introducing visual, audible, or atmospheric elements that are out of character with the property or alter its setting; or 4) neglecting the resource to the extent that it is deteriorated or destroyed. Indirect impacts primarily result from the effects of project-induced population increases and the resultant need to develop new housing areas, utilities services, and other support functions necessary to accommodate population growth. The subsequent growth from these activities and facilities can disturb or destroy cultural resources.

4.3.2 Impacts

4.3.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

Because the property acquisition component of the Proposed Action would not directly result in any ground-disturbing activities, it would not result in direct short- or long-term impacts to cultural resources. However, as the property

acquisition component would allow for construction activities on the acquisition parcel, it could indirectly result in short- and long-term impacts to cultural resources as described below.

Construction-related impacts to cultural resources at the project site would consist of ground-disturbing activities during the excavation and stabilization necessary to construct the bulkhead and pile-supported pier as well as shoreside improvements. As described in Section 3.3, *Cultural Resources*, no known buried archaeological resources are located within the project site. Nevertheless, while unlikely, the potential exists for historic artifacts or buried human remains to be uncovered during ground-disturbing activities. If such resources were uncovered, the USCG would comply with all applicable federal, state, and local regulations regarding incidental finds. Activities would be suspended until a qualified archaeologist and/or Native Hawaiian representative could determine the significance of such resource(s) (see Section 4.3.3, *Special Procedures*). Based on information currently available, the potential for construction-related impacts to cultural resources under the Proposed Action would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(1).

The project site is undeveloped and none of the buildings on the adjacent Base Honolulu to the east or Matson cargo facility to the west are recognized as historically significant structures. Therefore, implementation of the Proposed Action and the presence of the proposed in-water infrastructure would have no impact on any such structures, either directly (e.g., through demolition) or indirectly (e.g., through visual impacts affecting the historic context of the resource). Therefore, long-term impacts to cultural resources resulting from implementation of the Proposed Action would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(1).

4.3.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action except for the proposed floating dock which would not be constructed. Because the shoreside project components, where any potential buried cultural resources could potentially be impacted, are the same as the

Proposed Action, the potential impacts to cultural resources under Alternative 1 would also be negligible.

4.3.2.3 No-Action Alternative

Under the No-Action Alternative, the Coast Guard would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. No ground-disturbing construction activities would occur and there would be no potential for construction-related impacts or operational impacts to archaeological, traditional, or historical resources.

4.3.3 Special Procedures

The potential exists, however slight, for previously undiscovered historic artifacts and/or human remains to be uncovered during ground-disturbing activities. If such resources were uncovered, the USCG would comply with all applicable federal, state, and local regulations regarding incidental finds. Activities would be suspended until a qualified archaeologist and/or Native Hawaiian representative could determine the significance of such resource(s).

4.4 GEOLOGICAL RESOURCES

4.4.1 Approach to Analysis

Protection of unique geological features, minimization of soil erosion, and the siting and design of facilities in relation to potential geologic hazards are considered when evaluating impacts of an action on geological resources. Generally, such impacts can be avoided or minimized with proper construction techniques, erosion control measures, and structural engineering designs are incorporated into project development.

Analysis of potential impacts to geological resources typically include: 1) identification and description of resources that could potentially be affected; 2) identification and description of geologic hazards that could potentially affect the project site; 3) examination of the action and the potential effects it may have on the resource; 4) assessment of the significance of potential impacts; and 5)

provision of mitigation measures in the event that potentially significant impacts are identified. Consistent with HAR Section 11-200-12(b)(11), this HEPA-compliant EA considers whether the Proposed Action would affect or would be likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

4.4.2 Impacts

4.4.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

The property acquisition component of the Proposed Action would have no direct physical effects on or from the environment.

Geology, Topography, and Soils

Potential geologic impacts at the project site would be limited to minor ground-disturbing construction activities associated with the proposed construction of the bulkhead, pile-supported pier, and floating dock.

The vast majority of construction activities would occur in-water. All shoreside construction activities (e.g., minor utilities improvements) would occur on previously disturbed and developed land and would not affect unique geological features. No areas of shallow or exposed bedrock are present within the areas of waterfront and shoreside improvements under the Proposed Action. The project site and surrounding area is relatively level and does not present topographic constraints. Impacts related to geology, topography, and soils would be short-term and negligible pursuant to NEPA and HAR Section 11-200-12(b)(11).

Geologic Hazards

The proposed construction of the proposed bulkhead, pile-supported pier, and floating dock would comply with modern seismic safety standards under the International Building Code. Therefore, implementation of the Proposed Action would result in minor beneficial impacts related to overall reductions in potential

vulnerability to geologic hazards pursuant to NEPA and HAR Section 11-200-12(b)(11).

Impacts with regard to other natural hazards issues are also discussed in Section 4.6, *Safety*.

4.4.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action with the exception that the floating dock would not be constructed.

Short-term construction and long-term operational impacts to geological resources associated with this alternative would be similar to those identified for the Proposed Action since the proposed shoreside and in-water construction elements would be nearly identical.

4.4.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. No ground disturbance would occur under the No-Action Alternative and there would be no impacts related to geologic resources or hazards.

4.4.3 Special Procedures

No special procedures would be required. Impacts to geological resources as a result of the Proposed Action and its alternatives would be short-term and minor.

4.5 HAZARDOUS MATERIALS AND WASTES

4.5.1 Approach to Analysis

Numerous federal, state, and local laws regulate the storage, handling, disposal, and transportation of hazardous materials and wastes; the primary purpose of these laws is to protect public health and the environment. The significance of potential impacts associated with hazardous substances is based on their toxicity, ignitability, and corrosivity. Impacts associated with hazardous materials and wastes would be significant if the storage, use, transportation, or disposal of hazardous substances substantially increases the human health risk or environmental exposure. Consistent with NEPA and HAR Section 11-200-12(b)(2 and 7), this HEPA-compliant EA considers whether the Proposed Action would curtail the range of beneficial uses of the environment or involve a substantial degradation of environmental quality.

4.5.2 Impacts

4.5.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

As described in Section 3.5, *Hazardous Materials and Wastes*, the project site is not currently used for the storage or use of hazardous materials and wastes. The property acquisition component of the Proposed Action would not require new, or otherwise alter the existing, use and storage of hazardous materials and wastes at Base Honolulu. Potential impacts associated with the Proposed Action would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(2 and 7).

<u>Storage of Hazardous Materials and Wastes</u>

During implementation of the construction component of the Proposed Action, there would be a temporary increase in the storage of hazardous materials and wastes associated with construction-related hazardous materials (i.e., petroleum, oils, lubricants, etc.). However, this increase would be temporary and negligible. Additionally, the USCG's Waste Management Compliance Guide for Base Honolulu would apply to the construction activities taken under the Proposed

Action. The USCG's management of hazardous materials and wastes under the Compliance Guide would ensure that impacts from the use and storage of hazardous materials and wastes on the human and natural environment would be negligible pursuant to NEPA and HAR Section11-200-12(b)(2 and 7).

Inadvertent Spills

Although contaminant spills or leaks from project vessels could occur and affect water quality, the likelihood of such spills is relatively low. Construction vessel crews subcontracted by the USCG would use established ports and channels with depths sufficient for the safe navigation of boat traffic to minimize the likelihood of vessel grounding. In addition, they would be required to abide by all project-specific BMPs established to prevent collisions or accidental spills and leaks (refer to Section 4.2.3, *Special Procedures*). This includes the implementation of a Stormwater Pollution Prevention Plan (SWPPP) to control/eliminate stormwater runoff from entering the harbor, and a spill kit readily onsite during all activities.

If spills do occur, the volume and relative area that would be affected by the resulting concentrations of contaminants in the surrounding environment would be small. Further, construction activities require the increase in the number of vessels by a maximum of three (i.e., one barge, one tugboat, and one skiff) within the vicinity of the project area for no longer than 6 months. Therefore, the potential for vessel-related pollution during construction of the Proposed Action is likely to be minor compared to that caused by the heavy background vessel traffic activity (e.g., commercial and recreational vessels, cruise ships, and fishing boats) within the busy harbor.

4.5.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action with the exception that the floating dock included in the Proposed Action would not be constructed.

Short-term construction impacts associated with the use and storage of hazardous materials and wastes associated with this alternative would be similar to those identified for the Proposed Action, but at reduced levels and over a shorter period time associated with the reduced scale of this alternative. Similar to the Proposed Action, the USCG's management of hazardous materials and wastes under the Compliance Guide would ensure that impacts from the use and storage of hazardous materials and wastes at Base Honolulu on the human and natural environment would be negligible.

4.5.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. No construction-related activities would occur under the No-Action Alternative and there would be no impacts related to hazardous materials and wastes.

4.5.3 Special Procedures

The USCG would continue to implement the Waste Management Compliance Guide in place at Base Honolulu. Additionally, the USCG would also be required to abide by all project-specific BMPs established to prevent collisions or accidental spills and leaks (refer to Section 4.2.3, *Special Procedures*).

4.6 SAFETY

4.6.1 Approach to Analysis

If implementation of an action would substantially increase risks associated with health and safety relevant to the public or the environment, it would represent a significant impact. For example, if an action involved a potential for increase in seismicity or natural hazards associated with high waves or storms, public safety could be compromised. Consistent with HAR Section 11-200-12(b)(5), this HEPA-compliant EA considers whether the Proposed Action would substantially affect public health.

4.6.2 Impacts

4.6.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

As described in Section 3.6, *Safety*, the coastal zone in the City of Honolulu, including the natural and built environment, is subject to moderate to high hazard potential associated with high waves, storms, and flooding. Implementation of the Proposed Action would result in shoreside improvements. These improvements would be substantially similar to the existing Base Honolulu waterfront to the east and would not compound the existing hazard potential or susceptibility of the local area to greater impacts from known natural hazards. Rather, the proposed bulkhead, pile-supported pier, and floating dock would all be designed and constructed in compliance with modern seismic safety standards under the International Building Code. These new shoreside and in-water structures and improvements, namely the bulkhead, would make the project site more resilient to geologic and natural hazards. Therefore, the implementation of the Proposed Action would result in minor, long-term, beneficial impacts related to overall reductions in hazard vulnerability at Base Honolulu pursuant to NEPA and HAR Section 11-200-12(b)(5).

4.6.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action with the exception that the floating dock included in the Proposed Action would not be constructed. Short-term construction and long-term operational impacts to safety associated with this alternative would be similar to those identified for the Proposed Action since the proposed shoreside and in-water construction elements would be nearly identical. Therefore, the implementation of this alternative would result in minor, long-term, beneficial impacts related to overall reductions in hazard vulnerability.

4.6.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. As such, there would be no change to the vulnerability or resilience of the acquisition parcel to existing natural hazards in Honolulu Harbor. Therefore, there would be no changes, and no impacts, on local safety under the No-Action Alternative.

4.6.3 Special Procedures

No special procedures would be required. Impacts to safety as a result of the Proposed Action and its alternatives would be minor and, in some instances, beneficial.

4.7 VISUAL RESOURCES

4.7.1 Approach to Analysis

Determination of the significance of impacts to visual resources is based on the level of visual sensitivity in the area. Visual sensitivity is defined as the degree of public interest in a visual resource and concern over adverse changes in the quality of that resource. Visual impacts resulting from implementation of the Proposed Action would be considered significant if there would be a substantial contrast with the existing character of the area, views or viewpoints would be substantially degraded, and/or if sensitive viewers were substantially affected. Consistent with HAR Section 11-200-12(b)(12), this HEPA-compliant EA also considers whether the Proposed Action would substantially affect scenic vistas and viewplanes identified in county or state plans or studies.

4.7.2 Impacts

4.7.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

Implementation of the Proposed Action would result in short-term visual impacts associated with the operation of heavy construction equipment in the

vicinity of the project site necessary to implement the construction portion of the Action. However, the project site is located within an industrial harbor setting and it not readily visible from public viewing points, with the nearest recreational area located approximately 0.2 mile to the southeast and generally screened by Base Honolulu. Further, construction impacts on visual resources would be temporary, lasting for a maximum of up to 6 months. Therefore, short-term visual impact associated with implementation of the Proposed Action would be minor pursuant to NEPA and HAR Section 11-200-12(b)(12).

Upon the completion of construction, the project site would appear as developed industrial waterfront largely indistinguishable from, and visually consistent with the developed waterfront of the adjacent Base Honolulu. Long-term impacts to visual resources would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(12).

4.7.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action with the exception that the floating dock included in the Proposed Action would not be constructed. Short-term construction impacts to visual resources associated with this alternative would be similar to those identified for the Proposed Action, though the use of heavy construction equipment within the project area may occur for a slightly shorter period of time without the floating dock.

4.7.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. Additionally, no vessels would be moored at the acquisition parcel. No short-term construction impact or long-term visual impacts would occur under the No-Action Alternative and therefore, there would be no impacts related to visual resources.

4.7.3 Special Procedures

No special procedures related to visual resources would be required. Construction-related impacts to visual resources as a result of the Proposed Action and its alternative would be short-term and minor. Long-term impacts associated with the Proposed Action would be negligible.

4.8 WATER RESOURCES

4.8.1 Approach to Analysis

Significance of potential impacts to water resources is based on water availability, quality, and use; existence of floodplains and wetlands; and associated regulations. An impact to water resources would be significant if it would: 1) reduce water availability or interfere with the water supply of existing users; 2) create or contribute to overdraft of groundwater basins or exceed safe annual yield of water supply sources; 3) adversely affect water quality or endanger public health by creating or worsening adverse health hazard conditions; 4) threaten or damage unique hydrologic characteristics; or 5) violate laws or regulations that have been established to protect or manage water resources of an area. Impacts of flood hazards would be significant if any alternative is proposed in areas with high probabilities of flooding. Consistent with HAR Section 11-200-12(b)(2, 7, and 10), this HEPA-compliant EA also considers whether the Proposed Action would curtail the range of beneficial uses of the environment; involve a substantial degradation of environmental quality; or substantially affect a rare threatened species, or its habitat;

4.8.2 Impacts

4.8.2.1 Proposed Action: Real Property Acquisition and Construction of Pile-Supported Pier, Bulkhead, and Floating Dock

<u>Surface Water</u>

Ground-disturbing activities associated with the Proposed Action would involve construction adjacent to and within Honolulu Harbor. Specifically, construction

of the bulkhead would include pile driving sheet piles and placing fill behind the sheet piles to extend the existing Base Honolulu shoreline onto the project site. Construction of the pile-supported pier and floating dock would include driving support and guide piles and then placement of pier decking. Construction activities have the potential to impact local water quality through equipment leaks, misplacement of fill waterside of the bulkhead, and surface water runoff. Implementation of standard BMPs would reduce the potential for surface water impacts associated with these activities, including transport of any toxic or foreign material (e.g., misplacement of fill) into the marine habitat of Honolulu Harbor. For example, as described in Section 4.8.3, *Special Procedures*, the construction contractor would be required to prepare a SWPPP as a condition under the National Pollutant Discharge Elimination System (NPDES), Section 404 permitting under the CWA, and the State of Hawaii Clean Water Branch permitting processes.

Some temporary, localized increases in turbidity (as measured by suspended sediment concentration) may occur during support and guide pile installation for the pier and floating dock respectively as well as during sheet pile driving and fill placement associated with the new bulkhead. Levels of total suspended sediments sufficient to cause adverse effects to the species of concern would be very limited in extend and duration (refer to Section 4.2, *Biological Resources*). In addition, proposed BMPs, including the use of turbidity curtains and implementation of a turbidity monitoring plan (refer to Section 4.2.3, *Special Procedures*) would further reduce the potential for increased turbidity. With implementation of standard BMPs, impacts to surface waters resulting from construction activities would be minor and short-term pursuant to NEPA and HAR Section 11-200-12(b)(2, 7, and 10).

Long-term operations at Base Honolulu would not be substantially altered as a result of the Proposed Action. The shoreside portion of the acquisition parcel would be hardscaped and stabilized with asphalt or concrete to create usable shoreside space for Base Honolulu including extension of utility improvements. No new water supply wells would be constructed and no changes to groundwater withdrawal are expected. The extended infrastructure would include connection to existing drainage catchments on Base Honolulu to channel surface flows into Honolulu Harbor. With standard spill control BMPs including

a Spill Control Plan would ensure that long-term impacts associated with drainage to surface waters would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(2, 7, and 10).

Groundwater

The Proposed Action would increase hardscape coverage on the acquisition parcel where the existing natural ground cover would be stabilized and covered with asphalt or concrete to extend the developed shoreside environment of Base Honolulu. However, the total area to be covered would not alter the local groundwater because the project site and the surrounding area is at or near sea level and local groundwater is likely intruded by seawater and is not potable immediately along the shore. Additionally, no new groundwater supply wells would be constructed and no changes to groundwater withdrawal at Base Honolulu are expected. Therefore, implementation of the Proposed Action would have a negligible impact on groundwater resources pursuant to NEPA and HAR Section 11-200-12(b)(2, 7, and 10).

Wetlands

As documented in the USFWS National Wetland Inventory, there are no wetlands located within the project site (USFWS 2024). However, to the east, offshore areas within the harbor channel are designated estuarine and marine deepwater wetland (USFWS 2024). Implementation of the Proposed Action would require in-water construction within the channel including pile driving and the construction of decking within this estuarine and marine deepwater wetland. As such, implementation of the Proposed Action CWA Section 404 and Rivers and Harbors Act Section 10 permits. Compliance with all CWA Section 404 and Rivers and Harbors Act Section 10 permit requirements would ensure that impacts wetlands would be negligible pursuant to NEPA and HAR Section 11-200-12(b)(2, 7, and 10).

Floodplains

The proposed construction activities would be implemented within delineated boundaries of the 100-year floodplain located within the coastal flood zone

containing additional hazards associated with storm waves (FEMA 2024). However, as with the existing mooring configurations and Base Honolulu, the proposed fixed pier extension would be designed to be capable of enduring such conditions. Implementation of the Proposed Action would not introduce any new obstructions that would impede or divert overland floodwater flow or alter the existing hydrologic regime at Base Honolulu such that downstream flood hazards would be increased or newly created. Therefore, the Proposed Action would result in negligible impacts to floodplain management pursuant to NEPA and HAR Section 11-200-12(b)(2, 7, and 10).

4.8.2.2 Alternative 1: Real Property Acquisition and Construction of Pile-Supported Pier and Bulkhead

This alternative would involve the same project elements described for the Proposed Action with the exception that the floating dock included in the Proposed Action would not be constructed. Short-term construction impacts to water resources associated with this alternative would be similar to those identified for the Proposed Action, though the use of heavy construction equipment within the project area may occur for a slightly shorter period of time.

4.8.2.3 No-Action Alternative

Under the No-Action Alternative, the USCG would neither acquire the subject parcel nor would it develop the parcel with a bulkhead, pile-supported pier, or floating dock. There would be no shoreside or in-water construction activities. Therefore, no short-term construction-related or long-term operational impacts to water resources would occur under this alternative.

4.8.3 Special Procedures

Prior to construction, the USCG would be responsible for the development of a SWPPP and subject to requirements for a NPDES permit from the State of Hawaii Clean Water Branch. Conditions of the SWPPP would likely include measures such as:

- To the maximum extent practicable, project-related debris shall not be allowed to enter the water; any project-related debris that inadvertently enters the water shall be removed.

- Construction equipment shall be kept in good repair without leaks of hydraulic or lubricating fluids. If such leaks or drips occur, they shall be cleaned up immediately. Drip pans shall be utilized when vehicles are parked. Equipment maintenance and/or repair would be confined to one location. Runoff from this area shall be controlled to prevent contamination of soils and water. Fueling of land-based vehicles and equipment shall take place at least 50 feet (15 meters) away from the water (and away from drains), preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities.

- To the maximum extent possible, equipment and material shall be lowered to the bottom in a controlled manner. This can include the use of cranes, winches, or other equipment that affect positive control over the placement and rate of descent.

- Spill kits shall be kept on site at all times.

- The contractor shall be required to implement a SWPPP to control/eliminate stormwater runoff from entering the harbor.

- A containment system shall be placed under the deck during removal and installation.

- Concrete for decking shall be pumped into watertight forms.

- A contingency plan to control toxic materials shall be developed and followed to prevent toxic materials from entering or remaining in the marine environment during the project.

- Floating turbidity barriers shall be provided around limits of work during all phases of in-water work. Debris booms shall be positioned to enclose the entire work area and have a freeboard of 8 to 12 inches above the

water surface and a draft of 16 to 36 inches below the water surface. The silt curtain shall be positioned to enclose the work area to minimize turbidity; extend below water to within 2 feet of mudline at the mean lower low water; and be suitably anchored to prevent movement.

Additionally, the USCG would be required to abide by all other project-specific BMPs established to prevent collisions or accidental spills and leaks (refer to Section 4.8.3, *Special Procedures*).

4.9 HAWAII ENVIRONMENTAL POLICY ACT SIGNIFICANCE CRITERIA ANALYSIS

Justification for the USCG's determination that the Proposed Action would not have a significant effect on the environment, in accordance with HEPA HAR Section 11-200-1 and the applicable "significance criteria" identified in HEPA HAR Section 11-200-12(b)(1-13), is provided below.

Based on the analysis in the EA, the USCG anticipates that the Proposed Action would not result in significant effects on the environment for the following reasons:

1. Irrevocably commit a natural, cultural, or historic resource.

Implementation of the Proposed Action would involve the acquisition of a 0.71-acre property located in Honolulu Harbor at 400 Sand Island Parkway on the east side of Pier 53 adjacent to the current, northwest boundary of USCG Base Honolulu (refer to Figure 1). The project site is previously disturbed, but is not developed with buildings or other facilities. The proposed shoreside improvements would include construction of a fixed, pile-supported pier along the entire length of the proposed acquisition parcel to better accommodate mooring of vessels at Base Honolulu. Additionally, the USCG is considering the option of installing a new floating dock that would extend the length of the pile-supported pier (refer to Figure 2).

As described in Section 3.2, *Biological Resources*, Honolulu Harbor is highly developed and serves as the principal seaport for Honolulu and the State of Hawaii. No substantial native shoreline vegetation or functionally intact

terrestrial habitat occurs at the project site, and no federally listed or state-listed terrestrial special status plant or wildlife species are known to occur within the project area. Further, no federally designated critical habitat for terrestrial plant or wildlife species occurs within the project site. Impacts to terrestrial biological resources as a result of facilities construction activities under the Proposed Action would be short-term and negligible.

The proposed project would install a new pile-supported pier with an optional floating dock, resulting in over-water coverage of between 15,000 and 25,500 sf. To support the new pile-supported pier extensions and floating dock, up to 180 24-inch piles and 340 feet of sheet piling would be installed. Depending on the final project design, the placement of piles could be located on corals and/or soft sediment. To minimize impacts on corals due to habitat conversion (shading) and loss (piles), the USCG would translocate corals to pre-determined locations in accordance with a Coral Translocation Plan developed in coordination with NMFS. To offset any unavoidable loss, the USCG would implement one or more offset measures or projects that would benefit coral species and water quality in the vicinity of the proposed project. Therefore, long-term impacts associated with the Proposed Action would be minor.

The implementation of the Proposed Action would temporarily increase underwater noise and decrease water quality during the installation of piles. The implementation of the Proposed Action could lead to the establishment of nonnative and/or invasive species. However, for the reasons described in Section 4.2, *Biological Resources*, these impacts would be short-term and minor.

As described in Section 3.3, *Cultural Resources*, no known buried archaeological resources are located within the project site. Nevertheless, while unlikely, the potential does still exist for historic artifacts or buried human remains to be uncovered during ground-disturbing activities. If such resources were uncovered, the USCG would comply with all applicable federal, state, and local regulations regarding incidental finds. Activities would be suspended until a qualified archaeologist and/or Native Hawaiian representative could determine the significance of such resource(s).

The project site is undeveloped and none of the buildings on the adjacent Base Honolulu to the east or Matson cargo facility to the west are recognized as historically significant structures. Therefore, implementation of the Proposed Action and the presence of the proposed in-water infrastructure would have no impact on any such structures, either directly (e.g., through demolition) or indirectly (e.g., through visual impacts affecting the historic context of the resource).

2. Curtail the range of beneficial uses of the environment.

The Proposed Action would not curtail the range of beneficial uses of the environment. As noted above, impacts on the natural environment would be minimal, and potential adverse impacts would be avoided, minimized, or mitigated by implementing appropriate measures (see Section 7, *Special Procedures*). Implementation of the Proposed Action, including the development of a bulkhead, pile-supported pier, or floating dock, would create a developed waterfront that is consistent with Base Honolulu to the east and the Matson cargo facility to the west.

3. Conflict with the state's environmental policies or long-term environmental goals established by law.

The Proposed Action would not conflict with the state's environmental policies or long-term environmental goals established by law. Potential environmental regulatory compliance and permitting requirements associated with the Proposed Action are summarized in Section 1.7, *Summary of Environmental Study Requirements* and Section 4, *Environmental Consequences*.

4. Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community or State.

As described in Section 1.8, *Scope of the Environmental Assessment*, construction activities associated with the Proposed Action would be temporary in nature and would generate short-term spending and employment opportunities. This work would result in beneficial impacts on the local economy; however, these impacts would be negligible in the context of the regional economy.

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that *"each Federal Agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects..."* As described in Section 4, *Environmental Consequences*, construction activities associated with the Proposed Action would not substantially affect either human health or the environment. Therefore, no permanent populations – minority, low-income, Tribal, or otherwise – would be disproportionately affected.

Finally, as described further in Section 4.2, *Cultural Resources*, impacts to cultural resources – including archaeological and historic built resources – would be negligible. Given the developed nature of Honolulu Harbor and the existing operations therein, the implementation of the Proposed Action would have no impact on cultural practices.

5. Have a substantial adverse effect on public health.

As described in Section 4.4, *Geological Resources* and Section 3.6, *Safety*, implementation of the Proposed Action would result in shoreside improvements that would not compound the existing hazard potential or susceptibility of the local area to greater impacts from known natural hazards. Rather, the proposed bulkhead, pile-supported pier, and floating dock would all be designed and constructed in compliance with modern seismic safety standards under the International Building Code. These new shoreside and in-water structures and improvements, namely the bulkhead, would make the project site more resilient to geologic and natural hazards. Therefore, the implementation of the Proposed Action would result in minor, long-term, beneficial impacts.

6. Involve adverse secondary impacts, such as population changes or effects on public facilities.

As described in Section 1.8, *Scope of the Environmental Assessment*, implementation of the Proposed Action would not change the number of personnel at Base Honolulu. Therefore, there would be no long-term increase in demand for police, fire, recreation, or schools or other potential effects on public facilities.

7. Involve a substantial degradation of environmental quality.

As described in detail for each of the resource areas discussed in Section 4, *Environmental Consequences*, the Proposed Action would not result in substantial degradation of environmental quality. The Proposed Action would occur in previously disturbed areas and would have minimal impacts on the environment. Potential short-term, temporary in-water impacts would be avoided, minimized, or mitigated by implementing appropriate measures (see Section 7, *Special Procedures*).

8. Be individually limited but cumulatively have substantial adverse effect upon the environment or involve a commitment for larger actions.

As described further in Section 5, *Cumulative Impacts*, the implementation of the Proposed Action would not result in substantial cumulative adverse effects on the environment and would not involve a commitment for larger actions. Potential short-term temporary in-water impacts would be avoided, minimized, or mitigated by implementing appropriate measures (see Section 7, *Special Procedures*).

9. Have a substantial effect on rare, threatened, or endangered species, or its habitat.

Increased underwater noise levels are expected to occur during implementation of the Proposed Action, primarily due to equipment use associated with pile removal and installation activities. Additional noise from in-water construction activities may affect foraging behavior of sea turtles and the Hawaiian monk seal, causing them to avoid foraging areas during active construction. Some construction-related activities have potential to injure federally listed species if within close proximity. As described in Section 4.2, *Biological Resources*, a PSO would be on-site during any underwater noise activities to monitor the Level A (injury) and Level B (behavioral) zones of green and hawksbill sea turtles and Hawaiian monk seals. If a federally listed species entered their respective Level A or Level B zones, the PSO would have authority to shut down project operations until the individual has exited the Level B zone.

Vessel strikes are a major threat to sea turtles and are one of the most common causes of sea turtle strandings in the U.S. Construction activities associated with the Proposed Action would require up to three vessels (i.e., one barge, one tug, and one skiff). The support vessels are expected to remain at the construction site for most of the construction period but may make daily movements to carry out construction activities. These movements are considered insignificant and relatively minor within busy marine harbor areas, such as those associated with the Base Honolulu. Given the implementation of standard BMPs (see Section 7, *Special Procedures*), the relatively low number of construction vessels required at project area, the slow speed at which the required vessels would operate, and the short duration of many of the activities impacts associated with vessel strikes would be short-term and minor.

As summarized in Table 4-1, the implementation of the Proposed Action may affect but is not likely to adversely affect federally listed species.

10. Have a substantial adverse effect on air or water quality or ambient noise levels.

As described in Section 4.1, *Air Quality*, short-term criteria air pollutant emissions would be generated during the proposed construction of the bulkhead, pile-supported pier, and floating dock. The construction of the bulkhead and other shoreside improvements may also result in fugitive dust emissions. Operation of construction equipment with internal combustion engines, off-site vehicles (e.g., construction employee vehicles, delivery trucks), and marine vessels would result in emission of criteria air pollutants. In addition to on-site construction emissions, regional emissions would occur associated with haul truck trips (and potentially marine vessel trips) for the delivery of supplies and removal of solid waste (e.g., construction and demolition debris). Nevertheless, due to the short-term nature of proposed construction activities (i.e., maximum of 6 months), combustion emissions would be considered short-term and minor.

As described in Section 4.8, *Water Quality*, Construction activities have the potential to impact local water quality through equipment leaks, misplacement of fill waterside of the bulkhead, and surface water runoff. Implementation of standard BMPs would reduce the potential for surface water impacts associated

with these activities, including transport of any toxic or foreign material (e.g., misplacement of fill) into the marine habitat of Honolulu Harbor. For example, the construction contractor would be required to prepare a SWPPP as a condition under the NPDES, Section 404 permitting under the CWA, and the State of Hawaii Clean Water Branch permitting processes. Some temporary, localized increases in turbidity (as measured by suspended sediment concentration) may occur during support and guide pile installation for the pier and floating dock respectively as well as during sheet pile driving and fill placement associated with the new bulkhead. Levels of total suspended sediments sufficient to cause adverse effects to the species of concern would be very limited in extent and duration (refer to Section 4.2, *Biological Resources*). In addition, proposed BMPs, including the use of turbidity curtains and implementation of a turbidity monitoring plan, would further reduce the potential for increased turbidity. With implementation of standard BMPs described in Section 7, *Special Procedures*, impacts to surface waters resulting from construction activities would be short-term and minor.

As described in Section 1.8, *Scope of the Environmental Assessment,* implementation of the Proposed Action would result in temporary airborne noise associated with construction activities on the proposed acquisition parcel. Construction activities would generally occur during the weekdays within daytime hours and would involve the use of standard construction equipment including, but not limited to, heavy haul trucks, crane barges, tugboats, and pile drivers. Airborne noise generated by construction activities would generally be consistent with the existing ambient noise environment at this industrial and commercial waterfront location, including the remainder of Pier 53 that currently serves as an active container terminal. Noise associated with tugboats and other vessels involved in construction activities would also be consistent with the ambient noise environment given the existing marine vessel traffic within Honolulu Harbor. Down-the-hole drilling, vibratory pile driving, and impact pile driving would be the predominant noise sources during construction and would determine the maximum airborne noise levels in the vicinity of the property acquisition parcel and Base Honolulu. However, noise-generating in-water construction activities would be limited to the construction phase and would not persist in the long-term. Therefore, the increase in noise levels would be intermittent and temporary.

11. Have a substantial adverse effect or is likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

As described in Section 4.4, *Geological Resources* and Section 4.6, *Safety,* the proposed construction of the proposed bulkhead, pile-supported pier, and floating dock would comply with modern seismic safety standards under the International Building Code. Implementation of the Proposed Action would result in minor beneficial impacts related to overall reductions in potential vulnerability to geologic hazards.

12. Have a substantial adverse effect on scenic vistas and view planes identified in county or state plans or studies.

Implementation of the Proposed Action would result in short-term visual impacts associated with the operation of heavy construction equipment in the vicinity of the project site necessary to implement the construction portion of the Action. However, the project site is located within an industrial harbor setting and it not readily visible from public viewing points. Further, construction impacts on visual resources would be temporary, lasting for a maximum of up to 6 months. Therefore, short-term visual impact associated with implementation of the Proposed Action would be minor.

Upon completion of construction, the project site would appear as developed industrial waterfront largely indistinguishable from, and visually consistent with the developed waterfront of the adjacent Base Honolulu. Long-term impacts to visual resources would be negligible.

13. Require substantial energy consumption or emit substantial greenhouse gas.

As described in Section 4.1, *Air Quality*, implementation of the Proposed Action would result in short-term, temporary greenhouse gas emissions during construction activities. However, construction activities would occur of a period of no more than 6 months. Therefore, these emissions would be minor. Over the

long-term, the Proposed Action would add utility services including electricity, water, sanitary sewer, and communications to the new pier to accommodate mooring of existing vessels. However, the proposed facilities are not expected to result in a substantial increase in utility demands over existing conditions and there would be no significant impacts.

SECTION 5
CUMULATIVE IMPACTS

Cumulative impacts on environmental resources result from incremental impacts of the Proposed Action which, when combined with other past, present, and reasonably foreseeable future projects in an affected area, may collectively cause more substantial impacts. Cumulative impacts can result from minor but collectively substantial actions undertaken over a period of time by federal, state, or local or individual developers. In accordance with NEPA, a discussion of cumulative impacts resulting from projects which are proposed, under construction, recently completed, or anticipated to be implemented in the near future is required.

5.1 PROJECTS CONSIDERED

Analysis of cumulative projects in this EA has been limited to proposed or recently approved (i.e., within the last 5 years) projects within Honolulu Harbor. Based on a review of public documents made available by DLNR and HDOT-Harbors, two recently completed projects and three in-progress projects are located within the in the immediate vicinity of project area. Further, a USCG project located at Base Honolulu Berths F and G immediately adjacent to the project area is currently undergoing NEPA review and planning. A navigational channel dredge project is also being contemplated by the USACE and is in its feasibility study phase. Since the timing, breadth, and related details of this action are not yet determined by the USACE, this project has been excluded from this cumulative effects analysis. A summary of each of these cumulative projects is provided in Table 5-1.

5.2 EVALUATION OF CUMULATIVE EFFECTS

The exact timing of development for the projects described in Table 5-1 is not yet known; however, a number of these projects may be implemented concurrently with the Proposed Action.

Table 5-1. Cumulative Projects and Plans

Location Affected	Project	Important Project Dates	Implementation Status	Description
Honolulu Harbor	Pier 2 Cruise Ship Terminal Improvements	Organization and Functionality Improvements (September 2023)	Completed (September 2023)	The HDOT has revamped the area fronting the Honolulu Harbor, Pier 2 terminal to improve the organization, functionality, and safety for ground transportation companies servicing cruise ship passengers. The new layout was designed to reduce congestion on Channel Street, improve the flow through the area, and streamline the exit to Papu Street. Changes went into effect starting on September 9, 2023 (HDOT 2023a).
Honolulu Harbor	Honolulu Harbor Improvement Project	Utilities Improvements Project at Piers 24-28	Completed (2021)	On May 27, 2020, the HDOT announced that the Piers 24-28 Utilities Improvements Project had been awarded to MIRA Image Construction, LLC. This project is part of the overall Harbors Modernization Plan and provides for needed infrastructure improvements to harbor users. The awarded contract amount is nearly $12.8 million for construction of a new sewer system, potable water, fire hydrants, communication, and electrical services. It also involves demolition and partial removal of the existing electrical system and the stub outs to each subdivided lot for the Harbor tenants to make their connection to bring utilities into their areas (HDOT 2020a).
Honolulu Harbor	Kapalama Container Terminal and Tenant Relocations (Phase 2)	Awarded contract of $350 million which features waterside construction at Piers 40-43 (Spring 2021)	In-Progress (Expected Complete in Summer 2025)	HDOT-Harbors, in partnership with the Hawaii Harbors User Group, has developed a system-wide harbor modernization plan (HDOT 2023b). The plan will implement harbor infrastructure improvements to address projected increases in ocean transportation of cargo and passengers through the 2030s. Plans for Honolulu Harbor call for waterside construction at Piers 40-43 in Honolulu Harbor that will add 18.5 acres of fast-land, including 1,860 linear feet of new berthing space for two container ships to dock simultaneously and up to six gantry cranes. The work also includes dredging along the waterfront and up to the federal channel and widening of the water basin between Piers 40 and 41, which will create important barge berthing space along Pier 41. This

Location Affected	Project	Important Project Dates	Implementation Status	Description
				Phase 2 project will address sea level rise by increasing the pier height that will match the Phase 1 elevated backlands in construction.
Honolulu Harbor	Pier 7 Improvements	Evaluation of Loss of Integrity (May 2023) Falls of Clyde Updates (June 2023)	In-Progress	HDOT is working to redevelop Pier 7 at Honolulu Harbor, which has been vacant and inactive for the last 14 years, after Bishop Museum closed the Hawai'i Maritime Center. One of the challenges to redevelopment has been the disposition of the Falls of Clyde—the historic vessel that was gifted to the museum—which remains moored at Pier 7. In order to facilitate the disposition of the vessel and prepare for the issuance of a new Request for Proposals for its removal from the harbor, HDOT has taken on the responsibility of completing the planning and entitlement processes. One of the steps in this process is the delisting of the vessel from the Hawaii Register of Historic Places. This step is not at all a reflection of the vessel's important history (HDOT 2023c).
Sand Island Wastewater Treatment Plant	Sand Island Wastewater Facility Upgrades	Phase I Construction: Notice to Proceed (January 2022) Phase II Construction Notice to Proceed (January 2030)	In-Progress (Expected Complete in Winter 2035)	A 7-month-long sewer improvement project began on April 12, 2021 at the Sand Island State Recreation Area. Phase 2 of this project includes a new pump station, comfort station sewer lines, force main to the Sand Island Wastewater Treatment Plant and connecting sewer lines. The second phase of sewer improvements is targeted at deteriorating infrastructure. The contractor for this project is Peterson Bros., Inc. and the overall cost is $1,515, 616 (DLNR 2021; City and County of Honolulu 2022b).
Honolulu Harbor	USCG Seagoing Buoy Tender Mooring and Structural Pier Upgrades	Construction anticipated in 2024 or 2025	Environmental Review Completed in Summer 2024	The USCG is proposing to extend Berth G by constructing a fixed, file-supported pier extending approximately 110 feet from Berth G to accommodate berthing of a second seagoing buoy tender at Base Honolulu. The USCG would also demolish and dispose of the existing floating dock. Optionally, the USCG is considering a lateral extension at Berth G to close a triangular-shaped gap that creates a safety hazard. The upgraded mooring and structural pier upgrades

Location Affected	Project	Important Project Dates	Implementation Status	Description
				would include hardware and utility connections including new switching and circuit breakers, isolation transformer, motor control center, additional conduit, and power mound to meet vessel requirements.
Honolulu Harbor	Honolulu Deep-Draft Harbor Modification	USACE Smart Planning Feasibility Study Process began in September 2022 and is expected to conclude in September 2025	In Conceptual Development	The existing Honolulu Harbor Federal project was constructed prior to 1981. Since completion, the world fleet has changed to include longer deeper drafting vessels with larger beams than were considered during prior studies. While port infrastructure is expanding to accommodate changes in maritime supply change demands, there are currently inefficient operations and limited maneuverability in the harbor. Inefficiencies are exacerbated by ongoing and projected changes in vessel dimensions. USACE is conducting a feasibility study to evaluate the advisability of modifications to the Honolulu Harbor to accommodate the current and future vessel fleet. Major outputs of the feasibility study will be a Final Integrated Feasibility Report and NEPA document.

5.2.1 Short-term Cumulative Impacts

Honolulu Harbor is the principal seaport for the Hawaiian Islands, and it is conceivable that the cumulative projects listed in Table 5-1 and other similar projects may occur within the harbor in the near future (e.g., within 5 to 10 years). These potential future construction and maintenance projects within the harbor may include the same stressors as the proposed project such as underwater noise, water quality impacts (i.e., turbidity, potential for spills, etc.), and habitat modification. However, it is unlikely that a limited number of the 30 major berth facilities within the harbor would have projects of similar size and scope occurring at the same time as the proposed project. Construction noise and turbidity impacts are generally short-term in duration, and cumulative effects are less likely to occur when projects are spaced in time. Potential long-term or permanent impacts include spills, habitat modification, and introduction of invasive species. Any non-federal projects would also need to be permitted through similar state and county agencies and adhere to the ESA and the MSA and analyze impacts on federally listed species, federally designated critical habitat, and EFH. Therefore, there would be no significant cumulative impacts related to construction noise, decreased water quality, and habitat modification.

While a majority of the projects included in Table 5-1 would involve in-water work, standard BMPs would be implemented to reduce impacts to biological and water resources, including visual scanning for the presence of marine mammals and implementation of a soft start process (to allow marine fauna that are sensitive to noise to depart without risk of harm). Additionally, no federally listed species would be impacted, and the affected coral species are typical of the vast majority of naturally occurring Hawaiian coral communities. Consequently, with the implementation of NMFS recommendations, the Proposed Action, when considered with the cumulative projects listed in Table 5-1, would not have a substantial contribution on cumulative impacts related to marine biological resources and water quality, and construction activities would be temporary and sporadic. Therefore, cumulative impacts would be minor.

Cumulative impacts related to air quality and hazards and hazardous materials would also be negligible since all individual projects would be required to

implement standard BMPs to reduce air emissions and to reduce the potential for exposure to hazardous contaminants below significance thresholds. Therefore, cumulative impacts to these resource areas would be minor as well.

5.2.2 Long-term Cumulative Impacts

Honolulu Harbor is highly developed, and the Kapalama Channel and Main Harbor Basin are regularly trafficked by large container ships. Further, Base Honolulu is an active port facility. Upon completion of construction, shoreside and in-water components of the Proposed Action would be visually consistent with the existing structures at Base Honolulu. The proposed mooring configurations would not be substantially different relative to the existing industrial character of the waterfront. Due to the low public visibility of Base Honolulu, the area is not considered a sensitive visual environment. Given the limited scale of the visual alteration and the low sensitivity of the area, long-term impacts to visual resources would be negligible.

SECTION 6
SUMMARY OF FINDINGS

A summary and comparison of environmental impacts anticipated to result from the implementation of the Proposed Action and its alternatives is provided in Table 6-1.

Table 6-1. Summary of Potential Impacts to Affected and Non-Affected Environmental Resources

Environmental Resource (with Subcategory as identified)		Potential Impacts (Classification and Duration)		
		Proposed Action: Real Property, Pile-Supported Pier, and Floating Dock	Alternative 1: Real Property and Pile-Supported Pier	No-Action Alternative
Air Quality and Climate Change	Air Quality	Short-term, minor	Short-term, minor	No Impact
	Climate Change	Negligible	Negligible	No Impact
Biological Resources	Coral Communities	Negligible	Negligible	No Impact
	Forage Fish and Invertebrates	Short-term, minor Negligible	Short-term, minor Negligible	No Impact
	EFH	Short-term, minor	Short-term, minor	No Impact
	Federally Listed Species	Short-term, minor	Short-term, minor	No Impact
	Federally Designated Critical Habitat	Negligible	Negligible	No Impact
Cultural Resources		Negligible	Negligible	No Impact
Geological Resources		Long-term, minor	Long-term, minor	No Impact
Hazardous Materials and Wastes		Negligible	Negligible	No Impact
Safety		Long-term, minor, beneficial	Long-term, minor, beneficial	No Impact
Visual Resources		Short-term, minor	Short-term, minor	No Impact
Water Resources	Surface Water	Short-term, minor	Short-term, minor	No Impact
	Groundwater	Negligible	Negligible	No Impact
	Wetlands	Negligible	Negligible	No Impact
	Floodplain	Negligible	Negligible	No Impact

A summary and comparison of environmental impacts anticipated to result from the implementation of the Proposed Action and its alternatives as they relate specifically to HRS 343 is provided in Table 6-2.

Table 6-2. Summary of Impact Conclusions Relevant to HRS 343

HAR 11-200-12(b) Significance Criteria		Potential Impacts (Classification and Duration)		
		Proposed Action: Real Property, Bulkhead, Pile-Supported Pier, and Floating Dock	Alternative 1: Real Property and Pile-Supported Pier	No-Action Alternative
1	Irrevocable commitment to loss or destruction of any cultural resource	Negligible to short-term, minor	Negligible to short-term, minor	No impact
2	Curtail beneficial uses of the environment	Negligible to short-term, minor	Negligible to short-term, minor	No impact
3	Conflicts with Hawaii's long-term environmental policies or goals or guideline	Negligible to short-term, minor	Negligible to short-term, minor	No impact
4	Substantially affect economic welfare, social welfare, and cultural practices	No impact	No impact	No impact
5	Affects public health	Long-term, minor, beneficial	Long-term, minor, beneficial	No impact
6	Substantial secondary impacts, such as population changes or effect on public facilities	Negligible	Negligible	No impact
7	Substantial degradation of environmental quality	Negligible to short-term, minor	Negligible to short-term, minor	No impact
8	Cumulative impacts	Minor	Minor	No impact
9	Affects rare, threatened, or endangered species or habitats	Short-term, minor	Short-term, minor	No impact
10	Detrimentally affects air or water quality or ambient noise levels	Short-term, minor	Short-term, minor	No impact
11	Affects or is likely to suffer damage by being located in an environmentally sensitive area: • Floodplain • Tsunami Zone • Beach • Erosion-prone area • Geologically hazardous area • Estuary • Fresh water • Coastal water	Long-term, minor, beneficial	Long-term, minor, beneficial	No impact
12	Affects scenic vistas and viewplanes	Short-term, minor	Short-term, minor	No impact
13	Requires substantial energy	Negligible	Negligible	No impact

SECTION 7
SPECIAL PROCEDURES

Impact evaluations conducted during preparation of this EA have determined that no significant or otherwise substantial environmental impacts would result from implementation of the Proposed Action. This determination is based on a thorough review and analysis of existing resource information and coordination with knowledgeable, responsible personnel from the USCG and relevant local, state, and federal agencies (e.g., NMFS).

In addition to standard BMPs such as implementation of control measures for reducing fugitive dust emissions; conforming to all federal, state, and local requirements related to stormwater pollution prevention during construction activities; and safe removal of any potentially hazardous materials prior to demolition activities, the following special procedures, which have been agreed to by NMFS, would be required prior to and/or during implementation of the Proposed Action.

Biological Resources. The final project design would include the implementation of proposed BMPs agreed to by NMFS (see Appendix C) to minimize potential impacts to coral communities, forage fish and invertebrates, EFH, federally listed species, and federally designated critical habitat:

1. Prior to mobilizing, the contractor would ensure that all construction equipment, ballast, and vessel hulls do not pose a risk of introducing new invasive species and would not increase abundance of those invasive species present in Honolulu Harbor.
2. Where practicable, in-water work would be conducted at low and/or slack tide. As practicable, in-water and over-water work would be conducted during calm sea states with work stoppages during high surf, winds, and currents. In the event of approaching foul weather (i.e., tropical storms and hurricanes), equipment would either be removed from the project site or adequately secured.
3. In-water work would only be conducted during normal business hours (i.e., 8 am to 5 pm) and would avoid one of the two most of the sensitive

spawning periods associated with the phase of the moon between the 3rd quarter and new moon during the summer months When the construction schedule is determined, the USCG will contact NMFS to verify the sensitive summer spawning periods for that year.

4. To the maximum extent practicable, equipment and material would be lowered to the bottom in a controlled manner. This can include the use of cranes, winches, or other equipment that affect positive control over the placement and rate of decent.
5. Only materials that are non-toxic to aquatic organisms would be used. For piles, concrete or steel would be used. All concrete grout, cement, and sealant used would be non-toxic and non-hazardous to aquatic organisms. Materials and equipment that enter the water would be clean and free of pollutants.
6. Temporary in-water tethers, as well as mooring lines for vessels and marker buoys shall be kept taut to the minimum length necessary and shall remain deployed only as long as needed.
7. When piloting vessels, vessel operators shall alter course to remain at least 100 meters, or 328 feet, from whales and at least 50 meters (164 feet) from other marine mammals and federally listed marine animals. Reduce vessel speed to 10 knots or less when piloting vessels in proximity of federally listed marine mammals, sharks, and rays; and 5 knots or less in areas of suspected sea turtle activity. If a marine mammal or turtle approaches the vessel, the vessel operator would put the engine in neutral until the animal is at least 15 meters (~50 feet) away, and then slowly move away to the prescribed distance. Marine mammals and sea turtles shall not be encircled or trapped between multiple vessels or between vessels and the shore.
8. If a federally listed species is adversely affected as a result of the project, all work must stop until coordination with NMFS has been completed.
9. To the maximum extent possible, project-related debris would not be allowed to enter the water. Any project-related debris that inadvertently

enters the water would be removed. A containment system would be placed under the deck during installation. A temporary floating debris boom would be installed around all work located below the high tide line. The location of the boom would shift as a result of in-water work shifts during Project phasing.

10. The contractor would be required to implement a SWPPP to control/eliminate stormwater runoff from entering the harbor.
11. Construction equipment is to be kept in good repair without leaks of hydraulic or lubricating fluids. Equipment would be checked daily, and leaks or drips occur, they shall be cleaned up immediately. Drip pans shall be utilized when construction equipment is parked. Equipment maintenance and/or repair would be confined to one location. Runoff from this area would be controlled to prevent contamination of soils and water.
12. Fueling of land-based vehicles and equipment shall take place at least 50 feet away from the water (and away from drains), preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities. Any fuel spilled would be cleaned up immediately and the pads and materials would be properly disposed of.
13. The Base has an existing Spill Prevention Control and Countermeasure Plan that would be followed to prevent hazardous materials from entering the marine environment. The USCG will require the construction contractor to follow this plan or adopt their own to prevent hazardous spills.
14. Spill kits with appropriate materials to contain and clean a spill would be kept on site at all times.
15. Concrete for decking would be pumped into watertight forms. All precautions shall be followed to prevent concrete from mixing with water and to prevent concrete from flowing through water. Concrete shall be pumped through hoses or tremied and started with the nozzle facing downward at the deepest part of the placement. The concrete placement

shall be continuous with the nozzle several feet below the top surface of the fluid concrete. Water displaced by the concrete shall be captured and treated or removed from the site. The top portion of the concrete that has mixed with water shall be captured and removed from the site. Anti-washout admixture shall be required, and provided per the manufacturer's recommendation, or 10 ounces per 100 pounds of cement, whichever is greater.

16. During all in-water and over-water work that may increase turbidity (e.g., pile installation), silt curtains would completely enclose the work area to the maximum extent practicable to reduce the potential for sediments to leave the immediate vicinity. Silt curtains would be monitored for damage, dislocation, or gaps on a daily basis, and immediately repaired where any such damage or issues are detected.
17. The contractor would conduct turbidity monitoring in accordance with CWA 401 standards. The PSO would have project shut down authorization if turbidity levels exceed levels in permit standards. The monitoring would also evaluate the silt curtains to make sure they are working properly and would stop work to adjust if needed.
18. It is likely that bottom substrate would not allow vibratory installation, and piles may need to be installed by impact pile driving. Hammer cushions and/or bubble curtains would be used to reduce underwater sound created during pile driving. The top 6 feet would be pre-drilled to provide a soft start when an impact hammer is used.
19. Pile driving would employ soft-start or ramp-up techniques (slow increase in hammering intensity) at the start of each workday or following any break of more than 30 minutes.
20. Pile driving would only be conducted during normal business hours (i.e., 8 am to 5 pm) and when no sea turtles or marine mammals have been observed in the areas of impact for these species.
21. A PSO competent in the identification of marine mammals and sea turtles would ensure that the Level A (injury) and Level B (behavioral) zones are

clear of those species 30 minutes prior to underwater noise activities, following any break of more than 30 minutes, and for 30 minutes following the daily conclusion of pile driving. The observer would be required to monitor the area of noise impact continuously throughout each day during in-water activities and shall have the authority to halt operations if a marine mammal or sea turtle enters its area of impact. The PSO would ensure they have visibility of the entire area of noise impact. For some activities, this may entail more than one PSO to ensure suitable coverage. Suggested locations could include both Pier 28 and Pier 33 to ensure effective visibility for marine mammals or sea turtles that could enter the harbor, but close enough to the project site to be able to identify sea turtles that may be more difficult to detect from greater distances.

22. For pile installation, operations would be postponed or halted when any sea turtles or marine mammals are within their area of noise impact. This area differs for marine mammals and sea turtles. For all marine mammals including the Hawaiian monk seal, this distance is up to 6,309.6 meters. For sea turtles, this distance is up to 100 meters. Operations may not resume until that species has voluntarily departed its area of impact. These distances are an overestimation since the extent of noise propagation is limited based on local shoreline topography that would interrupt and reduce maximum noise transmission (Figures 3 and 4).

23. For non-pile related activities, work shall be postponed or halted when a marine mammal or sea turtle is within 50 meters (164 ft) of the non-pile related work and would only begin/resume after the animal has voluntarily departed the area. If a marine mammal or sea turtle is noticed within 50 meters (164 feet) after work has already begun, then work may continue only if, in the best judgement of the PSO, the activity would not adversely affect (i.e., disturb or harm) the animal(s). For example, divers performing underwater work (excluding the use of toxic chemicals) such as surveys would likely be permissible, whereas operation of heavy equipment is not.

24. If a Hawaiian monk seal is sighted, the PSO would immediately report the sighting to the NOAA Statewide Hawaii Marine Wildlife Hotline at 888-256-9840. The observer would be prepared to provide information about the sighting location and other site-specific information to help the operator determine the most appropriate response, if any.
25. The USCG would submit a report to NMFS within 90 calendar days upon the completion of the project including the following information:
    a. Observer logs. All interactions with marine mammals and sea turtles must be documented.
    b. Monitoring logs shall be completed daily. If no federally listed species are observed, the observer would record "0" in the daily report.
    c. The monitoring logs would be submitted in a digital and query able format to NMFS, with the following information:
        - Total hours and dates of monitoring including time of arrival and departure and time of pile driving commences and finishes,
        - Identification of which ESA species were observed and in what location and circumstances, including date, time, numbers of individuals of species observed, the outcome of the species observance relative to the authorized project, and any factors which may have affected visibility,
        - If applicable, observed federally listed species behaviors and movement types relative to the project activity at time of observation, and
        - Any work stoppage, and length of stoppage time.

In addition to the proposed BMPs agreed to by NMFS, the USCG is working with NMFS and DLNR-DAR to identify appropriate coral translocation areas to minimize loss, and potential projects or activities that would offset any

unavoidable loss of corals. These offset measures are intended to benefit coral habitat and/or water quality in the vicinity of the project area.

In addition to the proposed BMPs agreed to by NMFS, the USCG is working with NMFS and DLNR-DAR to identify appropriate coral translocation areas to minimize loss, and potential projects or activities that would offset any unavoidable loss of corals. These offset measures are intended to benefit coral habitat and/or water quality in the vicinity of the project area.

Coral Translocation

Hawaii's DLNR-DAR is the primary agency for coordinating reef management efforts in the Main Hawaiian Islands (DLNR-DAR 2023). If the final Pier 53 design is determined to create over-water coverage on individual corals, the USCG would work with NMFS and DLNR-DAR to develop a Coral Translocation Plan. This plan would include specifics on numbers of individual corals that would need to be translocated, recipient location, translocation method, installation methods, and a monitoring plan that would ensure the translocations are successful. Generally larger (>10 cm), non-encrusting corals would be translocated. All smaller corals (0-10 cm) and all encrusting corals would not be as successful to translocate.

Since Harbor *Porites* are present, only sites within Honolulu Harbor would be appropriate recipient sites for these corals to minimize any further spread of this non-native species. Corals that would be translocated would be of sufficient size and species that are known to successfully translocate. No Harbor *Porites* within the project footprint will be translocated but will be included in the proposed offset plan.

Potential areas for translocation include Pier 5/6 on the north side of the Main Harbor and Berth A at Base Honolulu. Other potential sites may be suitable and would be included in the planning. Corals would be translocated in approximately the same depth of water of their origin, or slightly deeper. Recipient sites would be surveyed prior to selection to determine suitability and approved by NMFS and DLNR-DAR. The timing of coral translocation would not coincide with any sensitive spawning windows.

Offset Measures

For corals that are not possible to translocate due to size or type (i.e., encrusting corals), the USCG is considering several options to offset these unavoidable losses. These options include the following, which are described in more detail in the Biological Assessment and its supporting documents (see Appendix C):

- Submerged Debris Cleanup on Base
- Anuenue Fisheries Research Center Water Intake Pump

The USCG would try to minimize the area of corals that would be covered by reducing the project footprint with the finalized design. Using survey results, the USCG would estimate the amount of unavoidable loss the proposed project would incur and would work with NMFS and DLNR-DAR to determine the appropriate offsets that would be required. The following are example projects that may be appropriate offsets for unavoidable loss. Additional projects may be identified as the project progresses, and the USCG would discuss and future options with NMFS and DLNR-DAR.

Hazardous Materials and Wastes. See Water Resources below.

Water Resources. Prior to construction, the USCG would be responsible for the development of a SWPPP, or update to the existing Base Honolulu SWPPP as appropriate and subject to requirements for a NPDES permit from the State of Hawaii Clean Water Branch. Conditions of the SWPPP would likely include measures such as:

1. To the maximum extent practicable, project-related debris shall not be allowed to enter the water; any project-related debris that inadvertently enters the water shall be removed.

2. Construction equipment shall be kept in good repair without leaks of hydraulic or lubricating fluids. If such leaks or drips occur, they shall be cleaned up immediately. Drip pans shall be utilized when vehicles are parked. Equipment maintenance and/or repair would be confined to one location. Runoff from this area shall be controlled to prevent

contamination of soils and water. Fueling of land-based vehicles and equipment shall take place at least 50 feet (15 meters) away from the water (and away from drains), preferably over an impervious surface. Fueling of vessels shall be done at approved fueling facilities.

3. To the maximum extent possible, equipment and material shall be lowered to the bottom in a controlled manner. This can include the use of cranes, winches, or other equipment that affect positive control over the placement and rate of descent.

4. Spill kits shall be kept on site at all times.

5. The contractor shall be required to implement a SWPPP to control / eliminate stormwater runoff from entering the harbor.

6. A containment system shall be placed under the deck during removal and installation.

7. Concrete for decking shall be pumped into watertight forms.

8. A contingency plan to control toxic materials shall be developed and followed to prevent toxic materials from entering or remaining in the marine environment during the project.

9. Floating turbidity barriers shall be provided around limits of work during all phases of in-water work. Debris booms shall be positioned to enclose the entire work area and have a freeboard of 8 to 12 inches above the water surface and a draft of 16 to 36 inches below the water surface. The silt curtain shall be positioned to enclose the work area to minimize turbidity; extend below water to within 2 feet of mudline at the mean lower low water; and be suitably anchored to prevent movement.

SECTION 8
REFERENCES

Balazs, G.H. 1979. Growth, Food Sources and Migrations of Immature Hawaiian Chelonia. Marine Turtle Newsletter 10: p.1–3.

Balazs, G.H. 1980. Synopsis of Biological Data on the Green Turtle in the Hawaiian Islands. U.S. Department of Commerce.

Balazs, G.H. 1982. Growth Rates of Immature Green Turtles in the Hawaiian Archipelago. In Biology and Conservation of Sea Turtles, 117–126. Smithsonian Institution Press, Washington, D.C.

Balazs, G.H., R.G. Forsyth, and A.K. Kam. 1987. Preliminary Assessment of Habitat Utilization by Hawaiian Green Turtles in their Resident Foraging Pastures. U.S. Department of Commerce.

California Department of Transportation (Caltrans). 2020. Technical Guidance for the Assessment of Hydroacoustic Effects of Pile Driving on Fish. Final Report CTHWANP-RT-20-365.01.04. October 2020. 532 pp.

City and County of Honolulu Department of General Planning. 1990. Oahu Water Management Plan. Available at: https://files.hawaii.gov/dlnr/cwrm/planning/wudpoa1990.pdf

City and County of Honolulu. 2015. Tsunami Evacuation Zones - Oahu Map 19 (Inset 2) Downtown. Available at: https://static.pdc.org/tsunami/index.html Recovered on: May 13, 2024.

City and County of Honolulu 2021. Oahu General Plan. November. Available at: https://www.honolulu.gov/dpp/planning/planning-documents/oahu-general-plan.html

City and County of Honolulu. 2022a. Tsunami Evacuation Zones. Honolulu Land Information System – HOLIS. Available at: https://www.honolulugis.org/apps/39a9e07068a14d01a85b437adcf50beb/explore.City and County of Honolulu 2022b. Sand Island Wastewater Treatment Plant

City and County of Honolulu. 2022b. Wastewater Consent Decree Annual Report. Available at: https://www.honolulu.gov/rep/site/env/wwm_docs/2022.01.25_CD_2020-2021_Annual_Report_final_.pdf

Dahl, P., C. de Jong, and A. Popper. 2015. The Underwater Sound Field from Impact Pile Driving and Its Potential Effects on Marine Life. Acoustics Today, 11(2). Available: http://acousticstoday.org/wp-content/uploads/2015/06/The-Underwater-Sound-Field-from-Impact-

Pile-Driving-and-Its-Potential-Effects-on-Marine-Life-Peter-H.-Dahl-Christ-A.-F.-de-Jong-and-Arthur-N.-Popper.pdf

Datta, M., K. Guljsyi, and G.V. Rao. 1982. Engineering Behavior of Carbonate Soils of India and Some Observations on Classification of Such Soils. In Demars & Chaney (Eds.), Geotechnical Properties, Behavior, and Performance of Calcareous Soils.

Denes, S., G. Warner, M. Austin, and A. MacGillivray. 2016. Hydroacoustic Pile Driving Noise Study – Comprehensive Report. Document Number 001285, Version 2.0. Technical report by JASCO Applied Sciences for Alaska Department of Transportation and Public Facilities.

Department of Land and Natural Resources (DLNR). 2012. Hawaii State Historic Preservation Plan October 2012 to October 2017. Available at: https://dlnr.hawaii.gov/shpd/about/preservation-plan/#:~:text=The%20plan%20assesses%20historic%20preservation,Archaeological%20sites

DLNR. 2023. Sand Island State Recreation Area. Available at: https://dlnr.hawaii.gov/dsp/parks/oahu/sand-island-state-recreation-area/

Federal Emergency Management Agency (FEMA). 2024. National Flood Hazard Layer. Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd

Foster, K.B., and N. Sukhraj. 2015. Pre-Draft Planning Aid Report Fish and Wildlife Coordination Act Phase 1 Marine Habitat Characterization Planned Modification U.S. Coast Guard - Sand Island Honolulu Commercial Harbor. U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, Honolulu, Hawaii.

Hawaii Climate Change Mitigation and Adaptation Commission. 2017. Hawaii Sea Level Rise Vulnerability and Adaptation Report. Available at: https://climateadaptation.hawaii.gov/wp-content/uploads/2017/12/SLR-Report_Dec2017.pdf

Hawaii Department of Health Clean Water Branch (HIDOH-Clean Water Act). 2022. State of Hawaii Water Quality Monitoring and Assessment Report. Available at: https://attains.epa.gov/attains-public/api/documents/cycles/11424/206016

HIDOH. 2024a. Clean Air Branch. Hawaii Ambient Air Quality Data. Available at: https://air.doh.hawaii.gov/home/map

HIDOH. 2024b. Clean Air Branch. Air Quality Stations Report. Available at: https://air.doh.hawaii.gov/Report/stationreport

HIDOH-Safe Drinking Water Branch. 2024. Hawaii Groundwater Contamination Viewer. Available at: https://eha-cloud.doh.hawaii.gov/sdwb/#!/viewer

Hawaii Department of Transportation (HDOT). 2020. Honolulu Harbor. Hawaii Department of Transportation. HDOT Harbors Division Announces Award for Critical Improvements Project. Available at: https://hidot.hawaii.gov/harbors/hdot-harbors-division-announces-award-for-critical-improvements-project/#:~:text=The%20awarded%20contract%20of%20%24350%20million%20features%20the,dock%20simultaneously%20and%20up%20to%20six%20gantry%20cranes

HDOT. 2023a. Honolulu Harbor. Hawaii Department of Transportation. Honolulu Harbor Pier 2, Cruise Ship Terminal, Ground Transportation Area. Available at: https://hidot.hawaii.gov/harbors/honolulu-harbor-pier-2-cruise-ship-terminal-ground-transportation-area/

HDOT. 2023b. HDOT-Harbors. 2023b. Monthly Report No.032. Kapalama Container Terminal Wharf and Dredging Project. December 2023. Available at: https://www.kctinfo.com/wp-content/uploads/2024/02/Kapalama-Container-Terminal-Job-H.C.-10498-Monthly-Report-for-December-2023.pdf

HDOT. 2023c. HDOT-Harbors. 2023c. Honolulu Harbor. Hawai`i Department of Transportation. Falls of Clyde Update. Available at: https://hidot.hawaii.gov/harbors/falls-of-clyde-update/

HDOT-Harbors. 2012. Honolulu Harbor. Hawai`i Department of Transportation. Available at: http://hidot.hawaii.gov/harbors/files/2012/10/Honolulu-Harbor-Oahu.pdf

HDOT-Harbors. 2022. Honolulu Harbor. Hawaii Department of Transportation. Honolulu Harbor 2050 Master Plan. Available at: https://honoluluharbormp.com/

Hawai'i Emergency Management Agency. 2024. Tsunami Evacuation Zones Maps. Available at: https://dod.hawaii.gov/hiema/public-resources/tsunami-evacuation-zone/

Hawaiian Historical Society. 1934. Forty-Second Annual Report of the Hawaiian Historical Society for the Year 1933. Available at: https://evols.library.manoa.hawaii.edu/server/api/core/bitstreams/102bc661-a3b2-4ab1-9f06-8f2f085dac9a/content

Japanese Cultural Center of Hawaii. 2010. History of the Internment in Hawaii. Available at: http://www.hawaiiinternment.org/history-of-internment

Katahira, L.K., C.M. Forbes, A.H. Kikuta, G.H. Balazs, and M. Bingham. 1994. Recent Finding and Management of Hawksbill Turtle Nesting Beaches in Hawaii.

Marine Research Consultants, Inc. (MRCI). 2015. Preliminary Assessment of Marine Biotic Communities off Berthing Piers at U.S. Coast Guard Base Honolulu, Honolulu Harbor, Oahu, Hawaii. Honolulu, Hawaii.

MRCI. 2023. Biological Assessment, Underwater Biological Survey for WLB Mooring and Structural Pier Upgrades. USCG Base Honolulu, Hawaii.

MRCI. 2024. Assessment of Marine Community Structure, Real Property Acquisition and Construction at Pier 53 – USCG Base Honolulu, Hawaii.

National Marine Fisheries Service (NMFS). 2021. Understanding Vessel Strikes. Available at: https://www.fisheries.noaa.gov/national/vessel-strikes.

NMFS. 2022a. Acoustic Guidance for Assessment of Down-the-Hole (DTH) Systems November 2022. Available at: https://media.fisheries.noaa.gov/2022-11/PUBLIC%20DTH%20Basic%20Guidance_November%202022.pdf

NMFS. 2022b. Optimal Multi-Species Pile Driving Calculator. Version 1.2-Multi-Species. 2022. Available at: https://www.fisheries.noaa.gov/southeast/consultations/section-7-consultation-guidance

National Park Service (NPS). 2024a. Kamehameha the Great. Available at: http://www.nps.gov/nr/research/

NPS. 2024b. Listed Properties on the National Register. Available at: http://www.nps.gov/nr/research/

National Weather Service. 2024. Climate of Hawai'i. Available at: https://www.weather.gov/hfo/climate_summary

Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey - Island of Oahu, Hawaii (HI990) - Based on Soil Survey of the Islands of Kauai, Oahu, Moui, Molokai, and Lanai, State of Hawaii 1972. Available at: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Oahu Metropolitan Planning Organization (OMPO). 2011. Transportation Asset Climate Change Risk Assessment Project. Available at: http://www.oahumpo.org/wp-content/uploads/2013/02/OahuMPO-CC-Report-FINAL-Nov-2011.pdf

Ocean Resources Management Plan Working Group (ORMP). 2009. A Framework for Climate Change Adaptation in Hawai`i. Available at: http://www.tribesandclimatechange.org/docs/tribes_307.pdf

Oki, D.S., S.B. Gingerich, and R.L. Whitehead. 1999. Ground Water Atlas of the United States Alaska, Hawai`i, Puerto Rico, and the United States Virgin Islands HA 730-N. Available at: http://pubs.usgs.gov/ha/ha730/ch_n/index.html

Pacific Islands Fisheries Science Center (PIFSC). 2009. Hawaiian Monk Seal Use of Honolulu Harbor. PIFSC Internal Report IR-09-026, Issued 20 August 2009.

PIFSC. 2012. Hawaiian Monk Seal Use of the Southern Coast of Oahu, within a Ten-Mile Radius of Honolulu Harbor. PIFSC Internal Report IR-12-011, Issued 13 March 2012.

Richardson, W. J., C. R. Greene, Jr., C. I. Malme, and D. H. Thomson. 1995. Marine Mammals and Noise. Academic Press, Inc., San Diego, CA.

Sherrod, D.R., Sinton, J.M., Watkins, S.E., and K.M. Brunt. 2021. Geologic Map of the State of Hawai'i – Island of Oahu. U.S. Geological Survey Scientific Investigations Map SIM-3143. Scale: 1:250,000.

Theiss, S.E., and J.A. Reyff. 2007. Compendium of Pile Driving Sound Data.

University of Hawaii. 2009. A Framework for Climate Change Adaptation in Hawaii. Available at: https://files.hawaii.gov/dbedt/op/czm/ormp/reports/climate_change_adaptation_framework_final.pdf

U.S. Army Corps of Engineers (USACE). 2015. Final Environmental Assessment for Proposed Dredging of Honolulu Harbor. Available at: http://www.poh.usace.army.mil/Portals/10/docs/Civil%20Works%20Dredging/Honolulu%20Harbor%20Maint%20Dredge%20(EA)%20151208.pdf

U.S. Coast Guard (USCG). 1992. Base Honolulu Master Plan. U.S. Coast Guard, Honolulu, Hawaii.

USCG. 2015. Environmental Assessment for National Security Cutter Assignment and Required Facility Improvements at U.S. Coast Guard Base Honolulu.

USCG. 2016. Supplemental Environmental Assessment for National Security Cutter Assignment and Required In-Water and Over-water Upgrades at U.S. Coast Guard Base Honolulu.

USCG. 2022. Welcome to the U.S. Coast Guard Fourteenth District. Available at: https://www.uscg.mil/Our-Organization/D14/

USCG. 2023. Final Unified Spill Prevention Control and Countermeasure Plan, Oil and Hazardous Substance Pollution Contingency Plan, and Stormwater Pollution Prevention Plan. November 2023.

U.S. Environmental Protection Agency (USEPA). 2024a. 2008 Ozone NAAQS Nonattainment Actions. Available at: https://www.epa.gov/ground-level-ozone-pollution/2008-ozone-national-ambient-air-quality-standards-naaqs-nonattainment

USEPA. 2024b. Nonattinament Areas for Criteria Pollutants (Green Book). Available at: epa.gov/green-book

USEPA. 2024c. Multi-System Search. Available at: https://enviro.epa.gov/envirofacts/multisystem/search.

U.S. Fish and Wildlife Service (USFWS). 2017. Candidate Species Section 4 of the Endangered Species Act. U.S. Fish and Wildlife Service Endangered Species Act. Available at: https://www.fws.gov/sites/default/files/documents/Candidate-Species.pdf

USFWS. 2023. Information for Planning and Consultation (IPaC). Available: https://ecos.fws.gov/ipac/

USFWS. 2024. National Wetlands Inventory Mapper. Available at: https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper

U.S. Geological Survey (USGS), Department of the Interior (DOI), C.G. Fletcher III, E.E. Grossman, B.M. Richmond, and A.E. Gibbs. 2002a. Atlas of Natural Hazards in the Hawaiian Coastal Zone. US Government Printing Office. Available at: http://pubs.usgs.gov/imap/i2761/sections/1_Intro.pdf.

USGS, DOI, C.G. Fletcher III. E.E. Grossman, B.M. Richmond, and A.E. Gibbs. 2002b. Atlas of Natural Hazards in the Hawaiian Coastal Zone- Oahu. US Government Printing Office. Available at: http://pubs.usgs.gov/imap/i2761/sections/3_Oahu.pdf

USGS Hawaiian Volcano Observatory. 2024. Earthquakes, Hazards of Hawaii. Available at: https://www.usgs.gov/observatories/hvo

Western Pacific Region Fishery Management Council (WPRFMC). 1979. Fishery Management Plan for the Precious Coral Fisheries (and associated non-precious corals) of the Western Pacific Region. Available at: https://www.wpcouncil.org/precious/Documents/FMP/Precious%20Corals%20FMP%201979.pdf

WPRFMC. 1983. Spiny Lobster Fisheries of the Western Pacific Region. Available at: https://www.wpcouncil.org/former-fishery-management-plans/crustaceans-fishery-management-plan/

WPRFMC. 1986a. Combined Fishery Management Plan, Environmental Assessment and Bottomfish and Seamount Groundfish Fisheries of the

Western Pacific Region Final March 1986. Available at: http://www.wpcouncil.org/bottomfish/Documents/FMP/FisheryManagementPlan.pdf

WPRFMC. 1986b. Fishery Management Plan (FMP) for the Pelagic Fisheries of the Western Pacific Region. Available at: https://www.wpcouncil.org/wp-content/uploads/2020/09/FMP-2-f.pdf

WPRFMC. 2001. Coral Reef Ecosystems of the Western Pacific Region. Available at: https://www.wpcouncil.org/wp-content/uploads/2013/03/COMPLETE-CRE-FMP-CD.pdf

WPRFMC. 2009a. Fishery Ecosystem Plan for the Hawaii Archipelago. Honolulu, HI: N.P., 2009. Available at: http://www.wpcouncil.org/fep/WPRFMC%20Hawaii%20FEP%20(2009-09-21).pdf

WPRFMC. 2009b. Fishery Ecosystem Plan for the Pacific Pelagic Fisheries of the Pacific Region. Available at: http://www.wpcouncil.org/fep/WPRFMC%20Pelagic%20FEP%20(2009-09-21).pdf

Western Regional Climate Center. 2014. Honolulu WB Airport 703, Hawaii. Available at: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?hihono

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Appendix B

Scoping Letter and Responses

U.S. Department of Homeland Security
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Email: Jordan.C.Bogden@uscg.mil

23 February 2024

Dear Interested Party,

The U.S. Coast Guard (USCG) is proposing a land acquisition of and shoreside improvements to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. The purpose of the proposed action is to support current and future berthing needs at USCG Base Honolulu.

An undeveloped 0.71-acre portion of a larger 1.28-acre waterside parcel is located at Pier 53, abutting USCG Base Honolulu to its east and south, and Matson operations to its west (see Figure 1). That parcel was previously owned by the USCG and is now owned by the Hawaii Department of Transportation (HDOT) Harbors Division (HDOT-Harbors). The parcel is identified by the City and County of Honolulu Real Property Assessment Division as Tax Key (1) 1-5-041-321.

To support current and future berthing needs, the USCG proposes to subdivide and acquire the Pier 53 parcel, which consists of a non-serviceable waterside property. In addition to the real property acquisition, the USCG proposes construction of a new pier. The proposed construction includes a fixed, pile-supported pier extending approximately 325 feet westward from USCG Base Honolulu Berth G to the Matson property boundary (see Figure 2). The proposed action also includes the installation of fenders, mooring hardware, and utilities. Support pile materials have not been determined at this design stage, but could include steel, concrete (precast or auger-cast), or pressure-treated lumber. Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the fixed pier. The floating dock would include hardware and utility connections.

Pursuant to the National Environmental Policy Act (NEPA at 40 Code of Federal Regulations [CFR] §1501.5) and Hawaii Revised Statutes (HRS) Chapter 343, the USCG intends to prepare an Environmental Assessment (EA) to evaluate the potential environmental effects of proposed land acquisition of and shoreside improvements as well as the No Action Alternative. The EA is expected to be released for public review in late Spring to early Summer 2024. The EA will include the purpose and need for the land acquisition and improvements project; a detailed description of alternatives under consideration; the affected environment; potential environmental consequences of implementation of the alternatives; and cumulative effects of the project. The EA will also incorporate results from a site-specific benthic habitat survey to be performed at the project area and the surrounding vicinity.

The USCG respectfully requests that your agency or organization review the proposed action and provide comments and any available information that your agency or organization may have regarding resources in the project area. At this time, we are seeking input to help identify regulatory concerns, required approvals, and any other relevant information. Please provide any comments by 5:00 pm on March 11, 2024 to Mr. Matthew Casey, at (206) 820-3967, by e-mail at matthew.c.casey@uscg.mil, or by mail at 300 Ala Moana Blvd. Rm 8-134, Honolulu, HI 96850-3460.

Sincerely,

LCDR Jordan Bogden
Commanding Officer
USCG Civil Engineering Unit Honolulu

Enclosures: Figure 1 – USCG Base Honolulu and Vicinity
Figure 2 – Proposed Land Acquisition and Shoreside Improvements

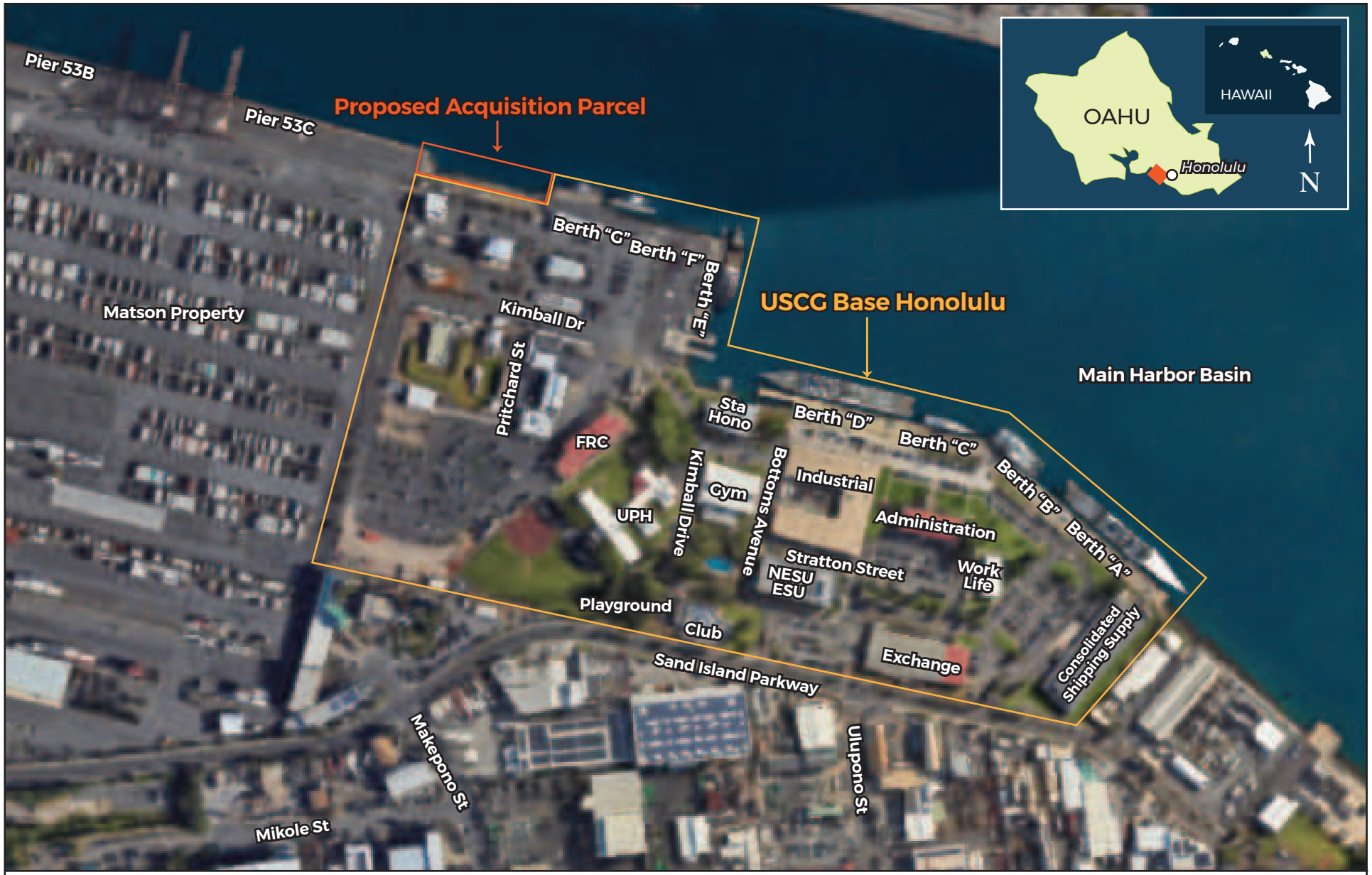

Figure 1: Regional Project Site

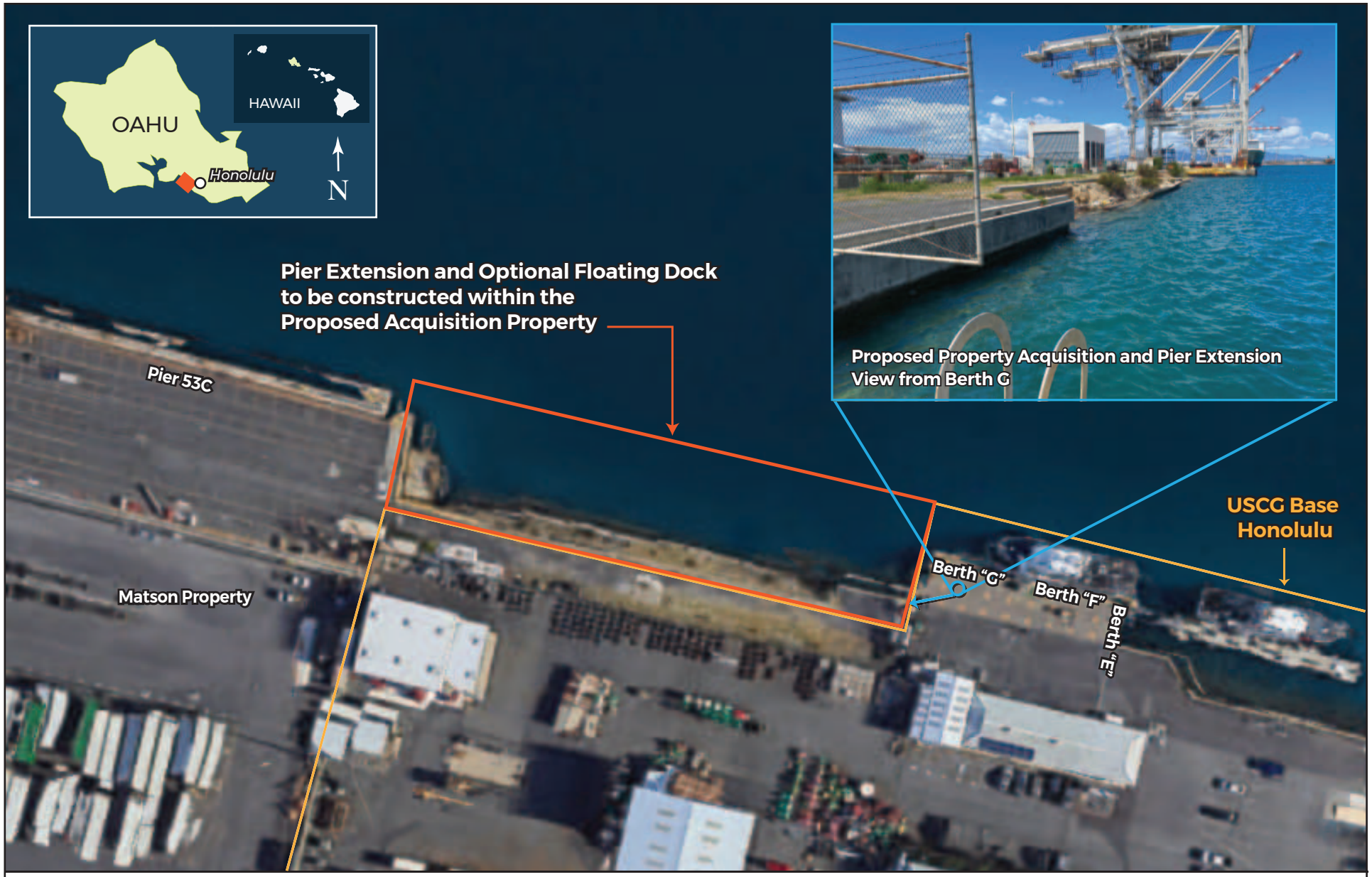

Figure 2. Proposed Property Acquisition and Pier Extension

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Environmental Review Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented Development

Statewide Geographic Information System

Statewide Sustainability Branch

March 4, 2024

Mr. Matthew Casey
USCG Civil Engineering Unit Honolulu
PJKK Federal Building
300 Ala Moana Blvd. Rm 8-134
Honolulu, HI 96850-3460

Dear Mr. Casey:

Subject: Land Acquisition and Shoreside Improvements at 400 Sand Island Parkway, Honolulu, Oahu, Hawaiʻi; Tax Map Key: (1) 1-5-041-321

The Office of Planning and Sustainable Development (OPSD) is in receipt of your early consultation request, dated February 23, 2024, on the preparation of an Environmental Assessment (EA), for the proposed land acquisition of and shoreside improvements to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of U.S. Coastal Guard (USCG) Base Honolulu, Hawaii.

According to the request, the USCG proposes to subdivide and acquire the Pier 53 parcel, which consists of a non-serviceable waterside property. In addition to the property acquisition, the USCG proposes construction of a new pier. The proposed construction includes the following components:

- A fixed, pile-supported pier extending approximately 325 feet westward from USCG Base Honolulu Berth G to the Matson property boundary.
- Installation of fenders, mooring hardware, and utilities.

Pursuant to the National Environmental Policy Act and Hawaii Revised Statutes (HRS) Chapter 343, an EA will be prepared for the proposed action.

The OPSD has reviewed the subject request, and has the following comments to offer:

1. The EA shall discuss all triggers of the subject EA set forth in Hawaii Revised Statutes (HRS) Chapter 343, and list all required permits and approvals for the proposed action.

2. The State of Hawaii Coastal Zone Management (CZM) Area encompasses the entire state. The Hawaii CZM Law, HRS Chapter 205A, requires all state and

county agencies to enforce the CZM objectives and policies. The subject EA should include an assessment with mitigation measures, if needed, as to how the proposed development conforms to each of the CZM objectives and supporting policies set forth in HRS Chapter 205A-2, as amended.

3. Given that the new pier facility may serve as a critical infrastructure, the OPSD suggests that the EA assess and illustrate potential impacts of 3.2-foot sea level rise and even further 6-foot sea level rise, and consider long-term mitigation measures or plans to mitigate the impacts of low-lying area flooding and high wave flooding from sea level rise on the subject facility and its operation.

4. Pursuant to HRS §§ 205A-30.5(b)(2) and 205A-71(b), for artificial lighting provided by a government agency or its authorized users for government operations, security, public safety, or navigational needs, a government agency or its authorized users shall make reasonable efforts to properly position or shield lights to minimize adverse impacts.

5. Pursuant to Hawaii Administrative Rules (HAR) § 11-200.1-18(d), the EA needs to consider alternatives and assess their potential impacts. The OPSD recommends that the site-specific Best Management Practices (BMPs) shall be developed and implemented to prevent any runoff, sediment, soil and debris potentially resulting from associated construction activities from adversely impacting the coastal ecosystems and the State waters as specified in HAR Chapter 11-54.

6. The OPSD is the lead state agency with the authority to conduct CZM Act federal consistency reviews. Please consult with the OPSD for the requirements of CZMA federal consistency review.

If you respond to this comment letter, please include DTS202402231154NA in the subject line. For any questions regarding this letter, please contact Mary Lou Kobayashi of our office at (808) 587-2808 or by email at marylou.kobayashi@hawaii.gov.

Sincerely,

Mary Alice Evans

Mary Alice Evans
Interim Director

Meisinger, Nick

To: Casey, Matthew C CIV (USA)
Cc: Goldschmidt, Aaron
Subject: RE: Acquisition of a 0.71-acre Property at 400 Sand Island Parkway East of Pier 53

From: Shoji, Joyce M. <jshoji@honolulu.gov>
Sent: Wednesday, March 6, 2024 10:36 AM
To: Casey, Matthew C CIV (USA) <Matthew.C.Casey@uscg.mil>
Subject: [Non-DoD Source] Acquisition of a 0.71-acre Property at 400 Sand Island Parkway East of Pier 53

Dear Mr. Matthew Casey:

The Department of Planning and Permitting has the following comments regarding your proposal:

1. The site is in the Special Management Area; any development is subject to compliance with Hawaii Revised Statutes Chapter 205A and the Revised Ordinances of Honolulu Chapter 25 related to Coastal Zone Management and Special Management Areas, respectively. The Environmental Assessment should discuss the proposed method of compliance.

2. The Environmental Assessment should include an exhibit showing the 0.71-acre portion of Tax Map Key (1) 1-5-041: 321 proposed to be acquired.

Thank you for the opportunity to comment on the proposal.

Sincerely,

Joyce Shoji

JOYCE SHOJI
Land Use Approval Branch
Land Use Permits Division
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813
Phone: (808) 768-8014

DEPARTMENT OF DESIGN AND CONSTRUCTION
KA 'OIHANA HAKULAU A ME KE KĀPILI
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR • HONOLULU, HAWAI'I 96813
PHONE: (808) 768-8480 • FAX: (808) 768-4567 • WEBSITE: honolulu.gov

RICK BLANGIARDI
MAYOR
MEIA

HAKU MILLES, P.E.
DIRECTOR
PO'O

BRYAN GALLAGHER, P.E.
DEPUTY DIRECTOR
HOPE PO'O

March 8, 2024

SENT VIA EMAIL

Matthew Casey
matthew.c.casey@uscg.mil

Dear Mr. Casey:

Subject: USCG Base Honolulu Pier 53 Acquisition, Honolulu, Hawai'i

Thank you for the opportunity to review and comment. The Department of Design and Construction has no comments to offer at this time.

Should you have any questions, please contact me at (808) 768-8480.

Sincerely,

For Haku Milles, P.E., LEED AP
Director

HM:krn (917558)

Meisinger, Nick

To:	Casey, Matthew C CIV (USA)
Cc:	Bogden, Jordan C LCDR USCG CEU HONO (USA); Samantha Tremaine - PIB; Tiffany Brevard - PIB; Monica Pech - 9PZR; Goldschmidt, Aaron
Subject:	RE: [Non-DoD Source] USCG Base Honolulu Pier 54 Acquisition - NMFS HCD Comments

From: Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov>
Sent: Monday, March 11, 2024 10:37 AM
To: Casey, Matthew C CIV (USA) <Matthew.C.Casey@uscg.mil>
Cc: David Delaney - NOAA Federal <david.delaney@noaa.gov>; Sean Hanser - NOAA Federal <sean.hanser@noaa.gov>
Subject: [Non-DoD Source] USCG Base Honolulu Pier 54 Acquisition - NMFS HCD Comments

Aloha Mr. Mathew Casey,

The National Marine Fisheries Service (NMFS), Pacific Islands Regional Office (PIRO), Habitat Conservation Division (HCD) received a request from your contractor, WSP USA Environment & Infrastructure Inc., on the behalf of U.S. Coast Guard (USCG), for comments on potential adverse effects to the marine environment from the proposed acquisition of Pier 53 adjacent to USCG Base Honolulu. Our technical assistance is provided below and is intended to help you avoid and minimize potential adverse effects to NOAA trust resources, including essential fish habitat (EFH). This technical assistance does not fulfill any federal responsibilities and does not constitute an EFH consultation. In addition to being the federal regulatory agency responsible for implementing the Magnuson-Stevens Fishery Conservation and Management Act (MSA; Section 305(b)(2) as described by 50 CFR 600.920), PIRO oversees consultations for compliance with the Endangered Species Act (ESA) and other statutory mandates. For all questions related to consultations with us in the future, please contact us through the email address EFHESAconsult@noaa.gov.

An EFH consultation with NMFS pursuant to the MSA is required when a federal action agency works in an area that will adversely affect EFH (i.e., the federal agency is directly conducting, funding, or permitting work) (MSA; Section 305(b)(2) as described by 50 CFR 600.920). The EFH consultation process entails the federal agency contacting NMFS and providing an EFH Assessment (EFHA), which contains key mandatory information: a description of the proposed action, a determination from the federal agency as to how the action will affect EFH, an assessment of those adverse effects, and proposed ways to mitigate for the adverse effects, if applicable. An adverse effect to EFH is anything that reduces the quality and or quality of EFH. It may include direct, indirect, and site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of an action. NMFS will then review the assessment and may provide conservation recommendations to avoid, minimize, or offset the listed adverse effects to EFH.

Project Description
To support current and future berthing needs, the USCG proposes to subdivide and acquire the Pier 53 parcel from the Hawaii Department of Transportation Harbors Division; the portion being acquired consists of a non-serviceable waterside property. The USCG proposes construction of a new fixed, pile-supported pier extending approximately 325 feet westward from USCG Base Honolulu Berth G to the Matson property boundary. The proposed action also includes the installation of fenders, mooring hardware, and utilities. Support pile materials have not been determined at this design stage, but could include steel, concrete (precast or auger-cast), or pressure-treated lumber. Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the fixed pier. The floating dock would include hardware and utility connections.

Baseline Condition
PIRO HCD has been engaged in discussion about the USCG Base Honolulu's Berths F & G dock extension since July 2023.

Berths F and G are adjacent to the Pier 53 parcel. The area around the berths contains hundreds of corals that cover 80-100% of the available hard substrate. Members of the EFH team recently visited the site of the dock extension, but only scanned the action area in the Pier 53 Parcel. It is likely that some corals are present in the area that will be lost due to proposed dock construction unless they are re-located. The EFH team would like to visit the site to determine the EFH present.

Essential Fish Habitat

Currently in the Hawai'i archipelago, the marine water column from the surface to a depth of the marine water column from the surface to a depth of 3,280.8 feet (1,000 meters (m)) from shoreline to the outer boundary of the Exclusive Economic Zone (200 nautical miles), and the seafloor from the shoreline out to a depth of 2,296 feet (700 m) around each of the Hawaiian Islands, have been designated as EFH. As such, the water column and bottom of Honolulu Harbor action area has been designated as EFH and supports various life stages for the management unit species (MUS) identified under the Western Pacific Regional Fishery Management Council's Pelagic, Crustacean and Hawai'i Archipelago Fishery Ecosystem Plans. EFH is designated for the following MUS and life stages: eggs, larvae, and juveniles of Bottomfish MUS, Crustacean MUS, and Pelagic MUS. Specific types of habitat considered as EFH include coral reef, patch reefs, hard substrate, artificial substrate, seagrass beds, soft substrate, mangrove, lagoon, estuarine, surge zone, deep-slope terraces and pelagic/open ocean.

NMFS Concerns

NMFS is concerned that certain aspects of the proposed project may adversely affect EFH due to in-water construction. Specifically, NMFS is concerned that:

1) The in-water construction may result in a loss of EFH, including coral colonies growing where the new dock will be

2) Pile-driving will result in acoustic stress to EFH and designated ecosystem component species

3) Increased turbidity due to activities in the water may increase mortality of eggs, larvae, and juvenile life stages of federally managed fish species (e.g., Bottomfish, Pelagic, and Crustacean species MUS) and ecosystem component species, including the corals located nearby at Berths F and G.

4) Pier designs that include treated lumber, either with creosote, copper treatments, or other methods of preventing degradation also present long-term threats to the marine environment through the leaching of chemicals into the water and substrate.

Adverse Effects of Pier Construction:

i. Physical Damage/Removal: Construction of a new pier may result in a loss of benthic habitat, infaunal organisms, and corals growing on and in the existing benthos. Physical damage to principle benthic organisms from removal and installation of structures in the water may result in breakage or dislocation (i.e., mortality, or sub-lethal tissue abrasion) in corals. Corals, which are primarily responsible for the structural complexity of coral reefs, are particularly vulnerable to physical damage because their slow-growing carbonate skeleton is relatively brittle and their polyps are easily damaged. Corals often colonize artificial structures, such as pipes. Literature reviews (Newell et al., 1998; ICES 2016) suggest that the successional marine community requires at least six to eight months to recover back to initial levels after removal, although broken coral will take many years to regrow if significant biomass is removed (Minton 2013).

ii. Sedimentation and Turbidity: Sedimentation may smother nearby corals and seagrass. Elevated turbidity levels reduce light penetration and photosynthesis in corals and seagrass. These adverse effects may cause short-term, long-term to permanent and cumulative adverse effects to habitat forming EFH such as corals and seagrass. Consider developing measures to avoid and minimize these adverse effects such as the installation of silt curtains and planning operation activities around the low tide

iii. Noise (environmental stressor): In-water construction will expose individual habitat-forming marine organisms to

sound and vibratory stressors. Behavioral changes can occur, resulting in animals leaving feeding or reproduction grounds (Cox et al., 2018) or becoming more susceptible to mortality through decreased predator-avoidance responses (Simpson et al., 2016). Less intense but chronic noise, such as that produced by continuous boating, can cause a general increase in background noise over a large area. Although not likely to kill organisms, chronic noise can mask biologically important sounds and alter the natural soundscape, cause hearing loss, and/or have an adverse effect on an organism's stress levels and immune system. Use a vibratory hammer to install piles when possible. Under conditions where impact hammers are required, when possible, drive as deep as possible with a vibratory hammer prior to the use of an impact hammer. Implement measures to attenuate the sound or minimize impacts to aquatic resources during pile installation. Methods to mitigate sound impacts include, but are not limited to, the following: surround the pile with a dewatered cofferdam and/or air bubble curtain system.

iv. Chemical Contamination (pollution stressor): There is a risk of chemical contamination from an accidental spill of oil, fuel, or hydraulic fluid from the boats and equipment that will be used to construct a wharf. Materials used to construct wharves and piers can also release chemicals into the environment. Chemical pollutants can have a variety of lethal and sublethal effects on habitat-forming marine organisms, including alteration of growth, interference with reproduction, disruption of metabolic processes, and changes in behavior. These adverse effects can cascade through ecosystems, altering species composition and ecosystem functions and services. Petroleum contamination can adversely affect coral, with results including mortality, inhibition of reproduction, reduced calcium deposition, alteration of physiological processes, tissue loss, and reduced carbon fixation (Turner and Renegar 2017).

We greatly appreciate the opportunity to provide comments. For all additional questions related to this, please contact us through the email address: efhesaconsult@noaa.gov

Best,
Alexandria

References

Cox, K., Brennan, L.P., Gerwing, T.G., Dudas, S.E. and Juanes, F. 2018. Sound the alarm: A meta-analysis on the effect of aquatic noise on fish behavior and physiology. *Global Change Biology,* 24(7), pp.3105-3116.

ICES. 2016. Effects of extraction of marine sediments on the marine environment 2005–2011. ICES Cooperative Research Report No. 330. 206 pp.

Minton, D. 2013. Review of growth rates for indo-pacific corals final report. National Oceanic and Atmospheric Administration Pacific Islands Regional Office.

Newell, R.C., Seiderer, L.J. and Hitchcock, D.R. 1998. The impact of dredging works in coastal waters: a review of the sensitivity to disturbance and subsequent recovery of biological resources on the sea bed. Oceanography and *Marine Biology: An Annual Review*, 36, pp.127-178.

Simpson, S.D., Radford, A.N., Nedelec, S.L., Ferrari, M.C., Chivers, D.P., McCormick, M.I. and Meekan, M.G. 2016. Anthropogenic noise increases fish mortality by predation. *Nature Communications*, 7(1), p.10544.

Turner N, Renegar D. 2017. Petroleum hydrocarbon toxicity to corals: A review. *Marine Pollution Bulletin*. 119(2):1-16.

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Alexandria Barkman, PhD.
EFH Consulting Biologist, PIRO Habitat Conservation Division

National Marine Fisheries Service | U.S. Department of Commerce

Office: (808) 725-5150

www.fisheries.noaa.gov

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

In Reply Refer To:
1EPIF00-2024-0065003

March 19, 2024

LCDR Jordan Bogden
Commanding Officer
USCG Civil Engineering Unit
Honolulu, Hawai‘i 96813

Subject: Fish and Wildlife Coordination Act Interagency Coordination Request: Land Acquisition and Shoreside Improvement, 400 Sand Island Parkway

Dear LCDR Bogden:

The Pacific Islands Fish and Wildlife Office, U.S. Fish and Wildlife Service (Service) received notice of the U.S. Coast Guard (USCG) proposal for land acquisition and improvements at 400 Sand Island Parkway in Honolulu, Hawaii in a letter dated 23 February 2024. In response to the proposed action, the Service herein requests formal initiation of interagency Coordination according to the Fish and Wildlife Coordination Act of 1934 [16 U.S.C. 661 et seq.; 48 Stat. 401], as amended (FWCA), Section 404 of the Clean Water Act of 1977 [33 U.S.C. 1251 et seq.; 62 stat. 1155], as amended (CWA), and Section 7 of the Endangered Species Act [16 U.S.C 1531 et seq.], as amended (ESA).

The FWCA requires that acting agencies initiate formal coordination for projects that impact waterways and require federal permits and funds. The proposed project would require federal permitting, use federal funds, and could potentially cause direct and indirect impacts to protected coastal ecosystems. Coordination is mandated for the proposed project and can help to ensure that the project includes sufficient consideration of fish and wildlife trust resources, and potential loss of those resources.

The FWCA is an important authority used to evaluate project impacts on corals and other coastal fish and wildlife resources. Coral reefs in nearshore waters of Hawai’i potentially include species that require special protection. Recent surveys in Honolulu Harbor indicate that corals are likely present near the proposed action site. Waters adjacent to the proposed work may also include marine turtles and other protected species. FWCA Coordination can help to identify and mitigate for any impacts relevant to ESA, the Clean Water Act, and other environmental legislation. FWCA directs the Service to evaluate project impacts based on scientifically robust surveys and investigations. Coral reefs in the project area should be assessed for potential impacts from the proposed action. In the case of the proposed project, appropriate data may already exist due to

recent marine surveys in Honolulu Harbor related to proposed U. S. Army Corps of Engineers projects.
FWCA Coordination is intended to begin early in the project feasibility study process and include the Service and additional appropriate state, territory, and federal natural resource management agencies. Each relevant resource agency should have the opportunity to contribute their expertise to minimize and mitigate project impacts through FWCA Coordination. The Service can help to ensure that appropriate agencies are engaged.

Thank you for the opportunity to provide input on the proposed land acquisition and shoreside improvement action at 400 Sand Island Parkway. The Service remains available for the FWCA Coordination process. If you have questions regarding our comments or need further assistance, please contact our project review lead Dan Polhemus (dan_polhemus@fws.gov).

Sincerely,

Deputy Field Supervisor
Programmatic Operations

Appendix C

Agency Consultation Materials

U.S. Department of Homeland Security
United States Coast Guard

Commanding Officer
United States Coast Guard
Civil Engineering Unit Honolulu

PJKK Federal Building
300 Ala Moana Blvd, Room 8-134
Honolulu, HI 94850-4982
Phone: (808) 535-3490
Email: Jordan.C.Bogden@uscg.mil

06 August 2024

Gerald Davis
Assistant Regional Administrator
NOAA Fisheries, Pacific Islands Regional Office, Habitat Conservation Division
NOAA Inouye Regional Center
1845 Wasp Blvd.
Honolulu, HI 96818

Dear Mr. Davis,

The U.S. Coast Guard (USCG) is proposing a land acquisition of and shoreside improvements to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. The purpose of the proposed action is to support current and future berthing needs at USCG Base Honolulu.

To initiate consultation with the National Marine Fisheries Service (NMFS), the USCG has prepared a Biological Assessment and Essential Fish Habitat Assessment to serve as the basis for a determination of effects of the project on species and habitat listed by the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act (MSA), and the 1996 Sustainable Fisheries Act (Enclosure 1).

In accordance with the requirements of the MSA, the USCG is requesting concurrence from NMFS that the proposed project *may adversely affect* Essential Fish Habitat (EFH) for various federally managed fish species under the Hawaii Fishery Ecosystem Plan (FEP) and Pacific Pelagic Fishery FEP. The Management Unit Species (MUS) that are applicable to the project include Bottomfish and Seamount Groundfish MUS (all life stages), Crustacean MUS (spiny and slipper lobsters, Kona crab), Coral Reef Ecosystems MUS (all life stages), and Pelagic MUS (all life stages). There are no Habitat Areas of Particular Concern (HAPCs) in the Action Area.

With best management practices implemented during project operations and proposed minimization and offsets, this project is not expected to have substantial population level effects on any MUS present in the Action Area and would have *no adverse effect* on HAPCs.

The USCG requests your concurrence with its determination. Please contact Mr. Matthew Casey at Matthew.C.Casey@uscg.mil if you have any questions.

Sincerely,

Digitally signed by BOGDEN.JORDAN.CAPON.1368959339
Date: 2024.08.06 16:45:03 -10'00'

J. C. BOGDEN
Lieutenant Commander, U.S. Coast Guard
Commanding Officer

Enclosures: (1) Biological Assessment and Essential Fish Habitat Assessment

Copy: Alexandria Barkman (NMFS)
Sean Hanser (NMFS)
David Delaney (NMFS)
Matthew Casey (USCG)

U.S. Department of Homeland Security
United States Coast Guard

Commanding Officer
United States Coast Guard
Civil Engineering Unit Honolulu

PJKK Federal Building
300 Ala Moana Blvd, Room 8-134
Honolulu, HI 94850-4982
Phone: (808) 535-3490
Email: Jordan.C.Bogden@uscg.mil

06 August 2024

Dawn Golden
Assistant Regional Administrator
NOAA Fisheries, Pacific Islands Regional Office, Protected Species Division
NOAA Inouye Regional Center
1845 Wasp Blvd.
Honolulu, HI 96818

Dear Ms. Golden,

The U.S. Coast Guard (USCG) is proposing a land acquisition of and shoreside improvements to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. The purpose of the proposed action is to support current and future berthing needs at USCG Base Honolulu.

In accordance with the requirements of Section 7 of the Endangered Species Act, the USCG is requesting concurrence from the National Marine Fisheries Service (NMFS) that the proposed action is *not likely to adversely affect* the following ESA-listed species and is *not likely to adversely modify* proposed critical habitat for the green sea turtle:

- Green sea turtle (*Chelonia mydas*) and proposed critical habitat
  - Central North Pacific Distinct Population Segment, ESA-listed as *threatened*
- Hawksbill sea turtle (*Eretmochelys imbricata*)
  - ESA-listed as *endangered*
- Hawaiian monk seal (*Neomonachus schauinslandi*)
  - ESA-listed as *endangered*

To initiate consultation with the National Marine Fisheries Service (NMFS), the USCG has prepared a Biological Assessment and Essential Fish Habitat Assessment to serve as the basis for a determination of effects of the project on species and habitat listed by the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, and the 1996 Sustainable Fisheries Act (Enclosure 1).

The USCG requests your concurrence with its determination. Please contact Mr. Matthew Casey at Matthew.C.Casey@uscg.mil if you have any questions.

Sincerely,

Digitally signed by BOGDEN.JORDAN.CAPON.1368959339
Date: 2024.08.06 17:00:01 -10'00'

J. C. Bogden
Lieutenant Commander, U.S. Coast Guard
Commanding Officer

Enclosures: (1) Biological Assessment and Essential Fish Habitat Assessment

Copy: Jamie Marchetti (NMFS)
Matthew Casey (USCG)

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Regional Office
1845 Wasp Blvd., Bldg 176
Honolulu, Hawaii 96818
(808) 725-5000 · Fax: (808) 725-5215

Jessica Parks
U.S. Coast Guard
5505 Robin Hood Road Suite K
Norfolk, VA 23513

September 11, 2024

Ms. Parks,

The National Marine Fisheries Service (NMFS), Pacific Islands Regional Office (PIRO), Habitat Conservation Division (HCD) received the Essential Fish Habitat Assessment (EFHA) and request for consultation for the Real Property Acquisition and Pier Construction at U.S. Coast Guard (USCG) Base Honolulu, Hawaii on August 12, 2024. NMFS appreciates the opportunity to review the proposed permit action pursuant to the EFH provisions (Section 305(b) as described by 50 CFR 600.920) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA; 16 U.S.C. 1855(b)). After reviewing the consultation enclosures, we have determined that there may be adverse effects to EFH. We are providing conservation recommendations pursuant to the EFH provision within Section 305(b)(2) of the MSA. Adherence to these conservation recommendations along with the Best Management Practices (BMPs) and mitigation plan you provided will help ensure that adverse effects to EFH are avoided, minimized, or offset.

Consultation History

The USCG and NMFS have been engaged in early coordination for this project and the Berths F and G upgrades at the adjacent parcel on USCG Base Honolulu. NMFS commented on the Draft Environmental Assessment for the Acquisition on March 11, 2024. The NMFS EFH team participated in a site visit to view the proposed action area on April 12, 2024. NMFS concluded the EFH consultation on the Berths F and G structural upgrades on the adjacent parcel to this project on July 8, 2024. HCD received the request for consultation on August 12, 2024. After more information was gathered from the applicant, the consultation was initiated on August 16, 2024.

Project Description

The purpose of the Proposed Action is to acquire and develop the Pier 53 area to provide additional mooring capacity for USCG Base Honolulu. The proposed project includes 1) the acquisition of a 0.71 acre property; 2) stabilization of the shoreline with a bulkhead and

development of a new, pile supported pier; 3) optional construction of a floating dock. It is possible that not all components will be constructed. The EFHA included an evaluation of impacts of the maximum development potential of all construction components.

Acquisition
The USCG will acquire a 0.71-acre portion of an existing 1.28-acre parcel, owned by the Hawaii Department of Transportation-Harbors, which abuts Base Honolulu to its east. While the western portion of the parcel is currently developed with Matson cargo facilities including a pier with heavy-lift cargo cranes, the 0.71-acre eastern portion of the parcel proposed for acquisition by the USCG is currently undeveloped.

Pile-supported Pier and Bulkhead Construction
Once acquired, the parcel would be cleared of debris including discarded concrete piles along the shoreline. Following completion of site preparation activities, the USCG would stabilize the shoreline with a bulkhead, similar to and in line with neighboring Berth G. Bulkhead construction will likely require excavation of sediment and placement of fill behind the bulkhead to level and stabilize 340 feet (ft) of shoreline. The bulkhead will be constructed with 170 24-inch steel sheet pile segments forming a wall that will hold the edge of the fast land in place.

A 340 ft long and 60 ft wide pier with a total footprint of 20,400 ft^2 will be constructed. The pier deck will likely include 25 bents, each supported by either six or eight piles and horizontal concrete supports to distribute loading under the deck every 14 ft. The final design is not determined, but the pier deck is assumed to be concrete and would be supported by a total of 180 24-inch diameter steel or concrete piles.

Floating Dock
The USCG is considering the option of constructing a precast concrete floating dock to extend the pile supported pier and expand vessel mooring space. If the floating dock option is chosen, the extent of the pile supported pier would be reduced, and a 15 ft wide floating dock would attach to the end of the new pile supported pier via a small gangway. Together, the floating and pile supported piers would have the same 340 ft by 60 ft maximum footprint as the proposed pile supported pier previously described. The floating dock would be held in place by up to 20 24-inch diameter concrete guide piles along the dock centerline. Guide piles will be installed using the down-the-hole (DTH) drilling and impact pile driving.

Construction Methods
All work will be conducted from the upland portion of the parcel adjacent USCG property and from support barges. The temporary staging area will be located on the paved parking area adjacent to the Pile Supported Pier to be constructed.

Each 24-inch pile will require 50 minutes of DTH drilling to create a 6-ft-deep socket into which the concrete pile would be inserted. The pile driving will be completed with an impact hammer that is estimated to require up to 286 strikes per pile. A maximum total of 180 24-inch diameter steel or concrete piles would be installed in the greatest pile supported pier and floating dock footprint of 565 ft^2. Sheet piles will require an estimated 44 strikes per minute with an impact hammer, for a total of 600 strikes. A maximum of 16 sheet pile segments can be installed per

day. A hammer cushion and/or a bubble curtain would be used to attenuate underwater sound created by the impact pile driver. Cross-bracings and bents would be installed using a combination of power tools and hand tools.

Timing
The project is anticipated to take approximately two years to complete, with in-water work to take up to 12 months to complete. The year in which the project will take place has not been determined. The USCG will notify NMFS when the timeline is determined.

Essential Fish Habitat

The marine water column from the surface to a depth of 3,281 ft (1,000 m) from the shoreline to the outer boundary of the EEZ (200 nautical miles), and the seafloor from the shoreline out to a depth of 2,297 ft (700 m) around each of the Hawaiian Islands, have been designated as EFH. As such, the water column and bottom of the Pacific Ocean around Oahu are designated as EFH, and support various life stages for the management unit species (MUS) identified under the Western Pacific Fishery Management Council's Pelagic and Hawaii Archipelago Fishery Ecosystem Plans. The MUS and life stages found in these waters include eggs, larvae, juveniles, and adults of Bottomfish, Crustacean, and Pelagic MUS. Specific types of habitat considered as EFH include coral reef, patch reefs, hard substrate, artificial substrate, seagrass beds, soft substrate, lagoon, estuarine, surge zone, deep-slope terraces and pelagic/open ocean.

Coral reef ecosystem MUS (CREMUS) are no longer listed as MUS in the Hawaii Archipelago FEP (WPFMC 2018). The species were reclassified as ecosystem component species (ECS). Species that were CREMUS are no longer managed as federal fisheries species in Hawaii but as ECS; they continue to be important elements of coral reef and other nearshore ecosystems.

Baseline condition
A marine biotic survey at Pier 53 was conducted to identify and quantify corals and other marine resource that could be impacted by the proposed construction. Biologists conducted fish surveys and acquired orthomosaic images of approximately one third of the action area. The benthic surveys identified where corals could occur in the area along the 340 ft shoreline, and extending 23 ft into the harbor to the harbor floor. The zones at Pier 53 include a vertical wall, shelf, shelf break and slope, and the harbor floor consisting of soft sediment. The entire survey area contained 12 distinct species of coral.

The submerged concrete ledge and sloping channel wall provides suitable habitat for corals. The vertical wall and shelf were primarily colonized by Harbor *Porites* and fouling organisms such as tunicates, bryozoans, and sponges. Harbor *Porites i*s a coral recently discovered in Honolulu Harbor that has unique characteristics, making its origin and species identification unclear (Brown et al. 2020). At low tidal stands, the upper portion of the wall is exposed to the atmosphere. Some areas of the shelf were devoid of macrobiotic cover while other sections were nearly completely colonized by coral, which consisted primarily of Harbor *Porites*.

The submerged shelf break and slope at Pier 53 was colonized with a variety of coral species including large encrustations of *Montipora patula* and *M. capitata,* as well as branching hemispherical colonies of *Pocillopora meandrina*. The shelf break and slope included several large hemispherical colonies of *Porites lobata, and* short-branched mounding colonies of *Porites*

compressa. Many of the colonies were 3-4 ft in diameter, indicating that they have been growing undisturbed for at least several decades. Other coral species that were observed on the shelf break and slope but with less frequency were *Leptastrea bewickensis*, *Leptastrea purpurea*, *Pavona varians*, *Pocillopora grandis*, and *Porites evermanni*. The flat harbor floor consists of soft sediments with some debris that provides hard substrate for coral settlement and growth.

Adverse Effects

Potential stressors related to in-water construction include physical damage to corals and non-invasive sponges nearby, increased sedimentation and turbidity, elevated noise levels, chemical contamination, and introduction or spread of invasive species (Minton 2017).

Physical Damage/Removal (physical stressor): In-water work will result in smothering, breakage, dislocation (i.e., mortality), sub-lethal tissue abrasion, and unavoidable loss of corals. There are encrusting corals growing on the concrete debris in the area that will be removed, and on the harbor wall and shelf where the pier will be constructed. The area around the site of the proposed dock contains hundreds of corals that will be directly impacted by the proposed action, some of which are too small or encrusting and cannot be translocated. Corals, which are primarily responsible for the structural complexity of coral reefs, are particularly vulnerable to physical damage because their slow-growing carbonate skeleton is relatively brittle and their polyps are easily damaged. In general, lobate, encrusting, and other massive colony morphologies tend to withstand breakage better than foliose, table, plating, and branching morphologies; more fragile forms tend to have higher growth rates (Rützler 2001). Reduction of topographic complexity in the habitats of the coral reef ecosystem reduces biodiversity and productivity (Alvarez-Filip et al. 2009). Literature reviews (Newell et al. 1998; ICES 2016) suggest that the successional marine community requires at least six to eight months to recover back to initial levels after removal, although broken coral will take many years to regrow if significant biomass is removed (Minton 2013).

Sedimentation (pollution stressor): In-water work including pile driving, debris removal, bulkhead construction, and other construction activities may increase suspended sediments in the water column. Suspended sediments can elicit short- and long-term responses from aquatic organisms depending on the quantity, quality, and duration of suspended sediment exposure (Kjelland et al. 2015). Coral reef organisms are easily smothered by sediment and can experience both physiological and lethal responses to concentrations below 10 milligrams (mg)/cm^2 /day and 10 mg/Liter (L) (Tuttle and Donahue 2022). Adverse effects from deposited sediment can occur as low as 1 mg/cm^2/day for larvae and 4.9 mg/cm^2/day for adult tissue (Tuttle and Donahue 2022). Suspended sediment levels of 10 mg/L can lead to reduced growth rates and levels of 3.2 mg/L can cause bleaching and tissue mortality (Tuttle and Donahue 2022), although corals show considerable interspecific variability. Increased turbidity can cause changes in fish behavior, including altered predator-prey relationships (Higham et al. 2015). Increased vessel activity in the area after completion of the pier may result in increased periodic or persistent turbidity, reducing the likelihood that corals can recolonize the area.

Chemical Contamination (pollution stressor): The sediments of Honolulu Harbor may contain contaminants that will be stirred up and introduced back into the water column during construction. The use of vessels and construction equipment may also lead to introduction of chemical pollutants like oil to the project area. Chemical pollutants may also enter the marine environment through runoff from land-based construction. Contaminants can have a variety of

lethal and sublethal effects on habitat-forming marine organisms, including alteration of growth, interference with reproduction, disruption of metabolic processes, and changes in behavior. These adverse effects can cascade through ecosystems, altering species composition and ecosystem functions and services. Some pollutants are environmentally persistent and can take years or even decades to biodegrade, and others can bioaccumulate or biomagnify through the food chain, eventually posing a direct threat to human health. Contaminant concentrations in fishes are linked to locations with increased urbanization and military history (Nalley et al. 2021; 2023).

Noise (environmental stressor): The construction activities will expose individual fish and habitat-forming marine organisms to a temporary increase in noise from drilling, construction, and pile driving. The spectrum of vibratory pile driving has the greatest energy in low frequencies (typically 15–35 Hertz [Hz]) with some energy in spectral lines at higher frequencies that are intervals (harmonically-related frequencies) of the fundamental frequency (Dahl et al. 2015). Studies evaluating how fish detect particle motion components of sound indicate that exposure levels associated with continuous sound, such as vibratory pile driving and drilling, do not produce tissue damage (Hastings 2014; Hawkins and Popper 2018a, 2018b). Research has shown that stress from noise is greater from intermittent sounds (impulsive) than for continuous sounds (non-impulsive; Popper et al. 2014). Noise from impulse sources such as impact pile driving can have significant effects on fish, especially in cases of over-exposure, where dead or stunned fish float to the surface soon after an acoustic event (Popper et al. 2014). DTH drilling (non-impulsive) would possibly elicit behavioral reactions from fish such as temporary avoidance of the area but is less likely to cause injuries to fish or have persistent effects on local fish populations.

Behavioral changes can occur due to increased noise, resulting in animals leaving feeding or reproduction grounds (Slabbekoorn et al. 2012) or becoming more susceptible to mortality through decreased predator-avoidance responses (Simpson et al. 2016). Less intense but chronic noise, although not likely to kill organisms, can mask biologically important sounds and alter the natural soundscape, cause hearing loss, and/or have an adverse effect on an organism's stress levels and immune system.

Invasive Species (biological stressor): Use of in-water construction equipment that has been used at other sites, or vessels may introduce invasive species from outside of the harbor. Introduced species are organisms that have been moved, intentionally or unintentionally, into areas where they do not naturally occur. Invasive species rapidly increase in abundance to the point that they come to dominate their new environment, creating adverse ecological effects to other species of the ecosystem and the functions and services it may provide (Goldberg and Wilkinson 2004). Nearly 500 introduced species have been identified in Hawaii (Randall 1987; Coles and Eldredge 2002; Carlton and Eldredge 2014). Invasive species can decrease species diversity, change trophic structure, and diminish physical structure, but adverse effects are highly variable and species-specific.

Irradiance (environmental stressor): Light availability may be altered due to the construction of the new pier and staging of equipment such as the barge. The activity will temporarily to permanently reduce light attenuation through the water column, varying spatially as the sun transits its daily arc. Turbidity from support vessels, pile driving, and construction activities may adversely affect water column EFH by decreasing water clarity and light availability. Reduced

irradiance generally can reduce photosynthetic rates (Besssell-Browne et al. 2017), mask spawning cues, and reduce fecundity (Erftemeijer et al. 2012). When this stress is acute, photosynthetic organisms receive less energy for carbon fixation, potentially impairing a host of metabolic processes at the individual scale. Shading from the new pile supported pier will permanently reduce light availability in the site, reducing habitat suitability for photosynthetic organisms.

Mitigation

Best Management Practices

The EFHA describes many mitigation measures that will reduce the adverse effects of the action including those due to increased sedimentation, turbidity, chemical contamination, risk of spreading invasive species, and noise. These BMPs include avoiding in-water work during a 22-day blackout period around coral spawning, using bubble curtains to attenuate sound, and using silt curtains to reduce increased turbidity outside of the action area. BMPs also include a Stormwater Pollution Prevention and Control Plan, spill kits on site, and daily equipment checks to prevent contamination. Adherence to the BMPs described in the EFHA will minimize most adverse effects of the project on EFH.

Coral Translocation

In addition to the BMPs, corals will be translocated from the action area to minimize the loss of corals due the construction. If the final design is determined to create over-water coverage or physical damage to individual corals, the USCG would work with NMFS and the Department of Land and Natural Resources, Division of Aquatic Resources to develop a final Coral Translocation Plan. Healthy, branching corals that would be otherwise unavoidably lost will be translocated to Pier 5/6 in Honolulu Harbor, the same area to be used as a receiving site for the Berths F and G project. If the maximum footprint is chosen, up to 824 corals will be translocated. The corals to be translocated range in size from 10 cm to 160 cm. The final number of successful coral transplants will be determined once the translocation is complete. The corals that cannot be translocated due to size or morphology will be included in the offset plan.

Compensatory mitigation/ offset

Corals that are smaller than 10 cm and/or encrusting will not be translocated, and will likely be unavoidably lost due to the project. It was difficult to identify the individual colonies of Harbor *Porites*, so the area covered was used to quantify the presence of coral. Using survey results, the USCG has estimated the maximum amount of unavoidable loss would be 5.9 ft^2 from the 280 corals less than 10 cm, 68.1 ft^2 from encrusting corals greater than 10 cm, and 3,208 ft^2 from Harbor *Porites* for a total of 3,282 ft^2. This area was determined by using the median size class within each size category to calculate the approximate total area. The USCG proposed a ratio of marine debris removal by area to coral lost by area as 1.3:1 for encrusting corals, and 3:1 for branching corals. The USCG has estimated the maximum amount of unavoidable loss of encrusting corals, including Harbor *Porites*, would be 3,276.1 ft^2, and 5.9 ft^2 for branching corals that are too small to translocate. The USCG has committed to offsetting the loss with 4,276.6 ft^2 marine debris removal if the maximum impact design is chosen. A marine debris survey of Honolulu Harbor identified large debris such as a car, tires, and other debris that, if dislodged during a storm, could damage EFH. Removal of the debris will improve the habitat in Honolulu Harbor. The offset ratios and amount of mitigation proposed by the USCG are generally acceptable to NMFS with some concerns stated below.

USCG Conclusion

The USCG determined that the proposed project may adversely affect EFH due to habitat loss and/or conversion, decreased water quality, and noise. The USCG determined that the project would not adversely affect EFH due to increased risk of the spread invasive species.

NMFS Concerns

NMFS is concerned that the adverse effects of the construction activity, including noise, water quality changes, reduction in light availability, and potential invasive species introductions, may adversely impact EFH if mitigation measures are not properly implemented. NMFS is also concerned that planned in-water construction may cause loss of EFH from corals unavoidably lost due to the action and from corals that will not be successfully translocated or offset. The USCG may need to conduct more offset if the translocated corals do not survive.

Additionally, NMFS is concerned that the marine debris removed for the Berths F and G project may be double counted as offset for both projects. It is important that the marine debris removed to enhance the habitat near the action area is not double counted for this Acquisition project and the Berths F and G project. Also, the debris removal required for the preparation of the site cannot be considered as part of the marine debris offset since it is already part of the project plan. The planned offset must be done in addition to the action to offset losses caused by the project.

NMFS also has concerns related to the proposed project plan not being fully developed because the timing and construction methods may change prior to the initiation of construction. If construction takes place five years after the initial benthic surveys were conducted, the surveys will be considered outdated. In the case, the USCG should resurvey the site to determine the appropriate minimization and offset plans. The benthic cover in the area may be impacted by planned construction at the adjacent parcel to be completed by December 2026, or corals could grow significantly larger during the elapsed time between the surveys and construction. Changes to conditions outside of USCG control, such as a thermal stress event, spill event, or storm, could also change the benthic compositions of the site. The impacts of the project cannot be fully assessed until the project timeline and design is finalized.

NMFS is concerned that the planned Acquisition and Pier construction along with pier upgrades planned for Berths F and G will have cumulative impacts on EFH in the area. Since a timeline has not been determined for this project, the planned work on adjacent parcels may take place concurrently, or in succession, resulting in years of construction activity in the area. Mobile fish species will have to disperse due to disturbed habitat during construction, which may take place concurrently on adjacent parcels. The recovery of benthic organisms at the sites will take longer due to years of decreased water quality from the projects on adjacent lots. The project will result in increased vessel activity in the Pier 53 area, which is currently undeveloped, resulting in regularly elevated turbidity and increased risk of chemical contamination at the site.

Conservation Recommendations

Pursuant to Section 305(b)(2) (as described by 50 CFR 600.920 and 600.925(b)) of the MSA, we provide the following conservation recommendations that when implemented, will ensure that potential adverse effects to EFH at the proposed action areas are avoided, minimized, and offset.

Conservation Recommendation 1: Share the final coral translocation plan with NMFS prior to translocating corals. The plan should include a reference location and survival health metrics that will be used to determine translocation success after two years of monitoring.

Conservation Recommendation 2: Share a report with NMFS detailing the results of the translocation efforts and post-translocation monitoring. This report should detail the number of corals successfully translocated, the number of branching corals that were considered too small to be translocated, and the number healthy corals after 2 years. NMFS expects 70% or greater survival of translocated corals. This information will help determine the offset needed because additional offset will be needed if corals do not survive translocation.

Conservation Recommendation 3: If marine debris offset is necessary, share a finalized marine debris removal offset plan with NMFS describing the amount, location, and removal methods to be employed. Ensure the removal team will continue to adhere to all other relevant project BMPs, including avoiding direct and indirect impacts to coral and seagrass. The marine debris offset should take place shortly after the coral translocation to reduce the temporal loss of habitat caused by the action. Provide NMFS with a description and quantification of the marine debris removed after this mitigating action is complete.

Conservation Recommendation 4: Marine debris removal as mitigation cannot be double counted for the Berths F and G project and the Pier 53 Acquisition Projects.

Conservation Recommendation 5: If the construction will begin 5 years or more after the benthic surveys were completed, resurvey the area.

Conservation Recommendation 6: Re-initiate consultation with NMFS if the final construction methods, impacts, or action area are different than those proposed and described in the EFHA.

Conclusion

NMFS greatly appreciates the efforts of USCG to comply with the EFH provision of the MSA and recognizes that USCG proposed BMPs and mitigation strategies that, when adhered to and implemented, may avoid, minimize, and otherwise offset adverse effects to EFH. However, due to the proposed project activities, potential long-term or permanent impacts to EFH may result in substantial adverse effects to nearshore EFH from physical damage and associated spatial and temporal losses of function and service. NMFS agrees with the determination of USCG that the project may adversely affect EFH due to conversion or loss of habitat, decreased water quality and increased noise. NMFS determined this project may also adversely affect EFH due to introduction of invasive species if the BMPs are not followed. We have determined that the proposed project may adversely affect EFH and provided explanations of our concerns and conservation recommendations for implementation to avoid and minimize them.

Please be advised that regulations Section 305(b)(4)(B) (as described by 50 CFR 600.920) to implement the EFH provisions of the MSA require that federal agencies provide a written response to this letter within 30 days of its receipt; a preliminary response is acceptable if more time is needed. The final response must include a description of measures to avoid, minimize, or offset effects to EFH from the proposed activities. If the response is inconsistent with our EFH conservation recommendations, an explanation for not implementing them must be provided at least 10 days prior to the final approval of the proposed activities.

Please contact Alexandria Barkman at alexandria.barkman@noaa.gov or 808-725-5150 with any comments, questions, or concerns. Thank you for coordinating on this proposed action.

Sincerely,

Gerry Davis
Assistant Regional Administrator
Habitat Conservation Division

cc by email:

Malia Chow, NMFS

David Delaney, NMFS

Sean Hanser, NMFS

Jordan Bogden, USCG

Matthew Casey, USCG

Ingrid Larsson, WSP

Nick Meisinger, WSP

Aaron Goldschmidt, WSP

References Cited

Alvarez-Filip, L, Dulvy, N, Gill, J, Côté, I, Watkinson, A. 2009. Flattening of Caribbean coral reefs: Region-wide declines in architectural complexity. *Proceedings of the Royal Society B: Biological Sciences*. 276(1669):3019-3025.

Bessell-Browne, P., Negri, A.P., Fisher, R., Clode, P.L., Duckworth, A. and Jones, R. 2017. Impacts of turbidity on corals: The relative importance of light limitation and suspended sediments. *Marine Pollution Bulletin*, *117*(1-2), pp.161-170.

Brown, N.P., Forsman, Z.H., Tisthammer, K.T. and Richmond, R.H. 2020. A resilient brooding coral in the broadcast spawning *Porites lobata* species complex: a new endemic, introduced species, mutant, or new adaptive potential?. *Coral Reefs*, *39*(3), pp.809-818.

Carlton, J.T. and Eldredge, L.G., 2015. Update and revisions of the marine bioinvasions of Hawai‘i: The introduced and cryptogenic marine and estuarine animals and plants of the Hawaiian Archipelago. *Bishop Museum Bulletin in Zoology*, *9*, pp.25-47.

Coles, S.L. and Eldredge, L.G., 2002. Nonindigenous species introductions on coral reefs: a need for information. *Pacific Science*, *56*(2), pp.191-209.

Dahl, P.H., Dall'Osto D. R., and Farrell, D.M. 2015. The underwater sound field from vibratory pile driving. *The Journal of the Acoustical Society of America*, 137(6), pp.3544-3554.

Erftemeijer, P.L., Riegl, B., Hoeksema, B.W. and Todd, P.A. 2012. Environmental impacts of dredging and other sediment disturbances on corals: a review. *Marine Pollution Bulletin*, *64*(9), pp.1737-1765.

Goldberg, J. and Wilkinson, C. 2004. Global threats to coral reefs: coral bleaching, global climate change, disease, predator plagues and invasive species. *Status of Coral Reefs of the World*, *2004*, pp.67-92.

Hastings, M. C. 2014. A model to predict tissue damage in fishes from vibratory and impact pile driving. *The Journal of the Acoustical Society of America*, *136*(4), 2206-2206.

Hawkins, A. D. and Popper, A.N. 2018a. The importance of particle motion to fishes and invertebrates. *The Journal of the Acoustical Society of America*, 143(1), 470-488.

Hawkins, A. D. and Popper, A.N. 2018b. Directional hearing and sound source localization by fishes. *The Journal of the Acoustical Society of America*, 144(6), 3329-3350.

Higham, T.E., Stewart, W.J. and Wainwright, P.C. 2015. Turbulence, temperature, and turbidity: the ecomechanics of predator–prey interactions in fishes. *Integrative and Comparative Biology*, 55(1), pp.6-20.

ICES. 2016. Effects of extraction of marine sediments on the marine environment 2005–2011. *ICES Cooperative Research Report No. 330*. 206 pp.

Kjelland, M., Woodley, C., Swannack, T., and Smith, D. 2015. A review of the potential effects of suspended sediment on fishes: potential dredging-related physiological, behavioral, and transgenerational implications. *Environment Systems and Decisions*, 35:334-50.

Minton, D. 2013. Review of growth rates for indo-pacific corals final report. National Oceanic and Atmospheric Administration Pacific Islands Regional Office.

Minton, D. 2017. Non-fishing Effects that may Adversely Affect Essential Fish Habitat in the Pacific Islands Region. *Honolulu, HI. NOAA National Marine Fisheries Service, Pacific Islands Regional Office. 206pp.*

Nalley, E.M., Tuttle, L.J., Barkman, A.L., Conklin, E.E., Wulstein, D.M., Richmond, R.H. and Donahue, M.J. 2021. Water quality thresholds for coastal contaminant impacts on corals: A systematic review and meta-analysis. *Science of The Total Environment*, *794*, p.148632.

Nalley, E.M., Pirkle, C.M., Schmidbauer, M.C., Lewis, C.J., Dacks, R.S., Thompson, M.D., Sudnovsky, M.D., Whitney, J.L. and Donahue, M.J. 2023. Trophic and spatial patterns of contaminants in fishes from the Republic of the Marshall Islands in the equatorial Pacific. *Chemosphere*, *314*, p.137593.

Newell, R.C., Seiderer, L.J. and Hitchcock, D.R. 1998. The impact of dredging works in coastal waters: a review of the sensitivity to disturbance and subsequent recovery of biological resources on the sea bed. *Oceanography and Marine Biology: An Annual Review*, 36, pp.127-178.

Popper, A. N., Hawkins, A. D., Fay, R. R., Mann, D. A., Bartol, S., Carlson, T. J. and Tavolga, W. N. 2014. Sound exposure guidelines. In *ASA S3/SC1. 4 TR-2014 Sound Exposure Guidelines for Fishes and Sea Turtles: A Technical Report prepared by ANSI-Accredited Standards Committee S3/SC1 and registered with ANSI*. Springer, Cham, Edinburgh. pp. 33-51.

Randall, J.E. 1987. Introductions of marine fishes to the Hawaiian Islands. *Bulletin of Marine Science, 41*(2), pp.490-502.

Rützler, K. 2001. Exploring Neptune's gardens: From landlubber to reef biologist. Washington, D.C.: National Museum of Natural History, Smithsonian Institution.

Simpson, S.D., Radford, A.N., Nedelec, S.L., Ferrari, M.C., Chivers, D.P., McCormick, M.I. and Meekan, M.G. 2016. Anthropogenic noise increases fish mortality by predation. *Nature Communications*, 7(1), p.10544.

Slabbekoorn, H., Yang, X.J. and Halfwerk, W. 2012. Birds and Anthropogenic Noise: Singing Higher May Matter: (A Comment on Nemeth and Brumm,"Birds and Anthropogenic Noise: Are Urban Songs Adaptive?"). *The American Naturalist*, 180(1), pp.142-145.

Tuttle, L.J. and Donahue, M.J. 2022. Effects of sediment exposure on corals: a systematic review of experimental studies. *Environmental Evidence, 11*(1), pp.1-33.

WPFMC. 2018. *Amendment 4 – Fishery Ecosystem Plan for American Samoa; Amendment 5 – Fishery Ecosystem Plan for the Mariana Archipelago; Amendment 5 – Fishery Ecosystem Plan for the Hawaii Archipelago – Ecosystem Components*. Western Pacific Regional Fishery Management Council, Honolulu, Hawaii. 165 + vi pp.

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September 22, 2024

Gerald Davis
Assistant Regional Administrator
NOAA Fisheries, Pacific Islands Regional Office, Habitat Conservation Division
NOAA Inouye Regional Center
1845 Wasp Blvd.
Honolulu, HI 96818

Dear Mr. Davis,

Thank you for providing the U.S. Coast Guard (USCG) with a response to the Essential Fish Habitat Assessment for the proposed acquisition of and shoreside improvements to a 0.71-acre property located in Honolulu Harbor at 400 Sand Island Parkway on the east side of Pier 53 adjacent to the current, northwest boundary of the USCG Base Honolulu.

Pursuant to the Statutory Response Requirement for Essential Fish Habitat (EFH) Conservation Recommendations, the USCG will adopt all conservation recommendations in full. The following are the six EFH Conservation Recommendations that the National Marine Fisheries Service (NMFS) has provided, followed by USCG responses:

Conservation Recommendation 1: Share the final coral translocation plan with NMFS prior to translocating corals. The plan should include a reference location and survival health metrics that will be used to determine translocation success after two years of monitoring.

USCG Response: The USCG will share the final translocation plan with NMFS prior to translocating corals. This plan will include a control or reference site, monitoring criteria or survival health metrics that will help determine if the translocation is successful.

Conservation Recommendation 2: Share a report with NMFS detailing the results of the translocation efforts and post-translocation monitoring. This report should detail the number of corals successfully translocated, the number of branching corals that were considered too small to be translocated, and the number healthy corals after 2 years. NMFS expects 70% or greater survival of translocated corals. This information will help determine the offset needed because additional offset will be needed if corals do not survive translocation.

USCG Response: The USCG will submit reports to NMFS after the translocation of corals and subsequent monitoring visits. The post-translocation report will include numbers of corals that were successfully translocated, and the final number of non-encrusting (branching) corals that were not able to be translocated due to small size or damage. The monitoring reports will include details on health of the translocated corals during each visit to determine if additional offset is needed.

Conservation Recommendation 3: If marine debris offset is necessary, share a finalized marine debris removal offset plan with NMFS describing the amount, location, and removal methods to be employed. Ensure the removal team will continue to adhere to all other relevant project BMPs, including avoiding direct and indirect impacts to coral and seagrass. The marine debris offset should take place shortly after the coral translocation to reduce the temporal loss of habitat caused by the action. Provide NMFS with a description and quantification of the marine debris removed after this mitigating action is complete.

USCG Response: Once the final design has been selected, the amount of offset from lost corals will be known. The USCG will share a marine debris removal offset plan that includes general locations, amount (in area) of the debris to be removed that would be commensurate with the corals that would be lost in the ratios that the EFHA has proposed. The plan would also include removal methods and BMPs to avoid direct and indirect impacts to adjacent corals and seagrass. The marine debris removal will occur shortly after corals are translocated from the project footprint, and prior to the start of construction. Once the appropriate amount of marine debris has been removed, the USCG will share a final report that summarizes the amount of debris, location, and type that was removed.

Conservation Recommendation 4: Marine debris removal as mitigation cannot be double counted for the Berths F and G project and the Pier 53 Acquisition Projects.

USCG Response: The USCG understands that the marine debris removal for both the Berth F/G and Pier 53 projects are separate offset amounts and will not be double counted. Both projects will focus on debris removal adjacent to each project site in order to directly benefit coral communities within the area. Additional debris removal may be necessary for one or both projects and will be removed from locations within Base Honolulu.

Conservation Recommendation 5: If the construction will begin 5 years or more after the benthic surveys were completed, resurvey the area.

USCG Response: If construction is expected to occur 5 years or more after the benthic surveys were completed, the USCG will resurvey the area to accurately re-calculate potential impacts due to coral growth or loss from unforeseeable climate, storm, or spill events. The USCG will inform NMFS when more information is known regarding the project construction schedule.

Conservation Recommendation 6: Re-initiate consultation with NMFS if the final construction methods, impacts, or action area are different than those proposed and described in the EFHA.

USCG Response: The USCG has intentionally consulted on the maximum design of the footprint, methods, and impacts at Pier 53 in order to avoid delays in the permitting/consultation process. It is expected that the final design is the same or less than those described in the consultation. However, the USCG will re-initiate consultation with NMFS if the methods, impacts, or action area are expected to be greater than those described in the current consultation.

The USCG appreciates your guidance on this project. Please contact Mr. Matthew Casey at Matthew.C.Casey@uscg.mil if you have any questions. If our responses suffice, we look forward to your notification of the conclusion of this consultation.

Sincerely,

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Date: 2024.09.22 20:55:44
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J. C. Bogden
Lieutenant Commander, U.S. Coast Guard
Commanding Officer

Meisinger, Nick

From: Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov>
Sent: Wednesday, October 2, 2024 10:15 AM
To: Larsson, Ingrid
Cc: Goldschmidt, Aaron; Meisinger, Nick; Sauter, Matt; Casey, Matthew C CIV (USA); Gerry Davis - NOAA Federal; Malia Chow - NOAA Federal; David Delaney - NOAA Federal; Sean Hanser - NOAA Federal; Parks, Jessica E CIV USCG FDCC (USA)
Subject: Re: USCG Base Honolulu - Biological Assessment and Essential Fish Habitat Assessment Submittal - Property Acquisition Pier 53

Aloha Ingrid,

Thank you for agreeing to implement the conservation recommendations for the Real Property Acquisition and Pier Construction Project at USCG Base Honolulu. The EFH consultation is complete. NMFS appreciates the early coordination for this project, and looks forward to updates on the mitigation plan as the project progresses.

Regards,
Alex

On Mon, Sep 23, 2024 at 9:19 AM Larsson, Ingrid <ingrid.larsson@wsp.com> wrote:

> Aloha Alex and Gerry,
>
> On behalf of the USCG, I am pleased that the USCG accepts all six conservation recommendations. Details on the coral translocation, marine debris offsets, and commitments with timing of the project are included in the attached signed response letter. We greatly appreciate your guidance with this project and look forward to keeping you updated on its progress. Please note that Matt Casey is the main USCG contact for the Pier 53 Acquisition project, and Jessica Parks for the Berth F/G Project. We apologize for any confusion.
>
> Very Respectfully,
>
> Ingrid
>
> From: Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov>
> Sent: Wednesday, September 11, 2024 1:30 PM
> To: Parks, Jessica E CIV USCG FDCC (USA) <jessica.e.parks@uscg.mil>
> Cc: Larsson, Ingrid <ingrid.larsson@wsp.com>; Goldschmidt, Aaron <aaron.goldschmidt@wsp.com>; Meisinger, Nick <nick.meisinger@wsp.com>; Sauter, Matt <matthew.sauter@wsp.com>; Casey, Matthew C CIV (USA)

<matthew.c.casey@uscg.mil>; Gerry Davis - NOAA Federal <gerry.davis@noaa.gov>; Malia Chow - NOAA Federal <malia.chow@noaa.gov>; David Delaney - NOAA Federal <david.delaney@noaa.gov>; Sean Hanser - NOAA Federal <sean.hanser@noaa.gov>
Subject: Re: USCG Base Honolulu - Biological Assessment and Essential Fish Habitat Assessment Submittal - Property Acquisition Pier 53

Aloha Ms. Parks,
The Habitat Conservation Division of the National Marine Fisheries Service, Pacific Islands Regional Office (NMFS) received the U.S. Coast Guard's request for an abbreviated essential fish habitat (EFH) consultation regarding the Real Property Acquisition and Pier Construction Project at USCG Base Honolulu. We reviewed the submitted EFH Assessment and provided conservation recommendations pursuant to the EFH provisions of the Magnuson-Stevens Fishery Conservation and Management Act in the attached EFH Consultation letter.

Thank you for your early coordination with NMFS during the planning phase of this important project.

Regards,
Alex

On Tue, Aug 20, 2024 at 8:00 AM Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov> wrote:

> Aloha Ingrid,
>
> Thank you for the responses clarifying the project timeline. It is important to note that if the action takes place 5 years after the surveys were completed, the surveys will be considered outdated.
>
> The EFH consultation for the Pier 53 property acquisition and development project has been initiated, I will reach out if I have more questions as I continue to review the EFHA.
>
> Regards,
>
> Alex
>
> On Fri, Aug 16, 2024 at 10:39 AM Larsson, Ingrid <ingrid.larsson@wsp.com> wrote:
>
> > Aloha Alex,

We have discussed and have responses below in blue to your questions.

Thanks!

Ingrid

From: Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov>
Sent: Wednesday, August 14, 2024 2:52 PM
To: Larsson, Ingrid <ingrid.larsson@wsp.com>
Cc: Sean Hanser - NOAA Federal <sean.hanser@noaa.gov>; David Delaney - NOAA Federal <david.delaney@noaa.gov>; Goldschmidt, Aaron <aaron.goldschmidt@wsp.com>; Meisinger, Nick <nick.meisinger@wsp.com>; Sauter, Matt <matthew.sauter@wsp.com>
Subject: Re: USCG Base Honolulu - Biological Assessment and Essential Fish Habitat Assessment Submittal - Property Acquisition Pier 53

Aloha Ingrid,

I have some questions about the timeline for the proposed project.

I read in the EFHA that the year of construction has not been determined yet. When will the timing of the project be determined? Construction timing has not been determined since this project is dependent upon the property acquisition between the State and the USCG. When we have more information, we will relay this to NMFS.

Will construction take place in the next 3 to 5 years? The coral community may change at the site if the construction will not take place for a while, so it is difficult to assess the impacts of the proposed project without a better understanding of the timeline. We expect property acquisition, design and construction to be completed within the 3-5-year timeframe. If the acquisition takes longer than expected, is there something we can include to cover this scenario? During translocation prior to construction, we could get a better estimate of what corals can/will be moved and what area would need to be offset.

Will the acquisition of the parcel and construction of the pier take place before or after the work at the adjacent Berths F and G? Is there a possibility of the projects taking place concurrently? We do have updated information on Berth F/G in that the construction contract was awarded and the construction

is expected to be completed by December 2026. Given this timeline, it is possible that both projects could occur concurrently, but Berth F/G is much further ahead in the planning process than Pier 53, so it is hard to say for sure.

Also, we recommend identifying a reference site to survey that is near the coral receiving site. If translocated corals do not survive, the reference site will be used to help us understand whether the loss of corals was due to translocation methods, or a natural event, for example. A reference site should be established for the translocation of corals from the Berths F and G project as well, as mentioned as CR for that consultation. Yes, we will include a reference site and its purpose in the translocation plan for both projects. Thanks for this reminder.

I am happy to get on a call to discuss.

Regards,

Alex

On Tue, Aug 13, 2024 at 6:08 AM Larsson, Ingrid <ingrid.larsson@wsp.com> wrote:

Excellent, thank you for this confirmation of receipt!

From: Alexandria Barkman - NOAA Federal <alexandria.barkman@noaa.gov>
Sent: Monday, August 12, 2024 8:05 PM
To: Larsson, Ingrid <ingrid.larsson@wsp.com>
Cc: Sean Hanser - NOAA Federal <sean.hanser@noaa.gov>; David Delaney - NOAA Federal <david.delaney@noaa.gov>; Goldschmidt, Aaron <aaron.goldschmidt@wsp.com>; Meisinger, Nick <nick.meisinger@wsp.com>; Sauter, Matt <matthew.sauter@wsp.com>
Subject: Re: USCG Base Honolulu - Biological Assessment and Essential Fish Habitat Assessment Submittal - Property Acquisition Pier 53

Aloha Ingrid.

The National Marine Fisheries, Pacific Islands Regional Office, Habitat Conservation Division has received your Essential Fish Habitat (EFH) Assessment and request for an EFH consultation. We will reach out with questions as we review the submission.

Regards,

Alex

On Mon, Aug 12, 2024 at 8:41 AM 'Larsson, Ingrid' via _NMFS PIR ESHESA <efhesaconsult@noaa.gov> wrote:

> Hello Dawn and Gerry,
>
> On behalf of the USCG, attached to this email are two cover letters and the combined Biological Assessment (BA) and Essential Fish Habitat Assessment (EFHA) with associated Appendices for the proposed Real Property Acquisition and Pier Construction Project at USCG Base Honolulu in Hawaii. Per guidance received during NMFS meetings with ESA and EFH staff from the previous project, the USCG has combined the BA and EFHA in one document as many sections would pertain to both assessments. Sections 2 and 5 pertain to ESA species and proposed critical habitat and Sections 3 and 6 pertain to EFH.
>
> Please find attached:
>
> - ESA cover letter
> - EFH cover letter
> - Combined BA and EFHA with attached Appendices
>
> Thank you for your guidance and we appreciate your review and consideration for concurrence on this project. Please do not hesitate to reach out if there is anything we can do to assist you with your review.
>
> Very Respectfully,
>
> Ingrid

Ingrid Larsson

Lead Consultant, Biologist

M.E.M.

She/her

T+ 1 503-803-8326

WSP USA

15862 SW 72nd Ave., Suite 150

Portland, OR, 97224

wsp.com

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Alexandria Barkman, PhD.

EFH Consulting Biologist, PIRO Habitat Conservation Division

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Alexandria Barkman, PhD.

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Regional Office
1845 Wasp Blvd., Bldg 176
Honolulu, Hawaii 96818
(808) 725-5000 · Fax: (808) 725-5215

October 8, 2024

Ingrid Larrson
United States Coast Guard
Facilities Design & Construction Center
5505 Robin Hood Road, Suite K
Norfolk, VA 23513-2431

RE: Request for Informal ESA Consultation and Conference on the Proposed Acquisition of and Shore Side Improvements to a 0.71-acre Property in Honolulu Harbor (PIRO-2024-02174, I-PI-24-2363-DG).

Dear Ms. Larsson:

On August 12, 2024, NOAA's National Marine Fisheries Service (NMFS) received your written request for informal consultation and conference on the U.S. Coast Guard's (USCG) proposed action to acquire a 0.71-acre property in Honolulu Harbor at 400 Sand Island Parkway and conduct shore side improvements, including bank stabilization, the construction of a pile supported pier, and the installation a new floating dock. The proposed action may affect the endangered or threatened species and proposed critical habitat under our jurisdiction, as identified below in Table 1. On August 16, 2024, we received all the necessary information to evaluate the proposed action and initiated a section 7 consultation and conference.

We prepared this response to your request pursuant to section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. §1531 *et seq*.), implementing regulations at 50 CFR 402, and agency guidance for the preparation of letters of concurrence. This letter also underwent pre-dissemination review using standards for utility, integrity, and objectivity in accordance with applicable guidelines issued under the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). A complete record of this consultation is on file at the Pacific Island Regional Office, Honolulu, Hawaii.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 Fed. Reg. 24268). We are applying the updated regulations to this consultation. The 2024 regulatory changes, like those from 2019, were intended to improve and clarify the consultation process, and, with one exception from 2024 (offsetting reasonable and prudent measures), were not intended to result in changes to the Services' existing practice in implementing section 7(a)(2) of the Act. 84 Fed. Reg. at 45015; 89 Fed. Reg. at 24268. We have considered the prior rules and affirm that the substantive analysis and conclusions articulated in this letter of concurrence would not have been any different under the 2019 regulations or pre-2019 regulations.

Under section 7(a)(4) of the ESA, each Federal agency shall confer with the Secretary on any agency action which is likely to jeopardize the continued existence of any species proposed to be

listed or result in the destruction or adverse modification of critical habitat proposed to be designated for such species. While consultations are required when the proposed action may affect listed species, a conference is required only when the proposed action is likely to jeopardize the continued existence of a proposed species or destroy or adversely modify proposed critical habitat. However, Federal action agencies may request a conference on any proposed action that may affect proposed species or proposed critical habitat (USFWS & NMFS 1998).

Proposed Action

The USCG is proposing the acquisition and shore side improvements to a 0.71-acre property located in Honolulu Harbor at 400 Sand Island Parkway on the east side of Pier 53 adjacent to the northwest boundary of USCG Base Honolulu (Figure 1). The overarching need for the proposed project is to address the lack of adequate pier space for USCG vessels currently homeported at Base Honolulu as well as cutters transiting the area in support of USCG strategic missions in the Pacific.

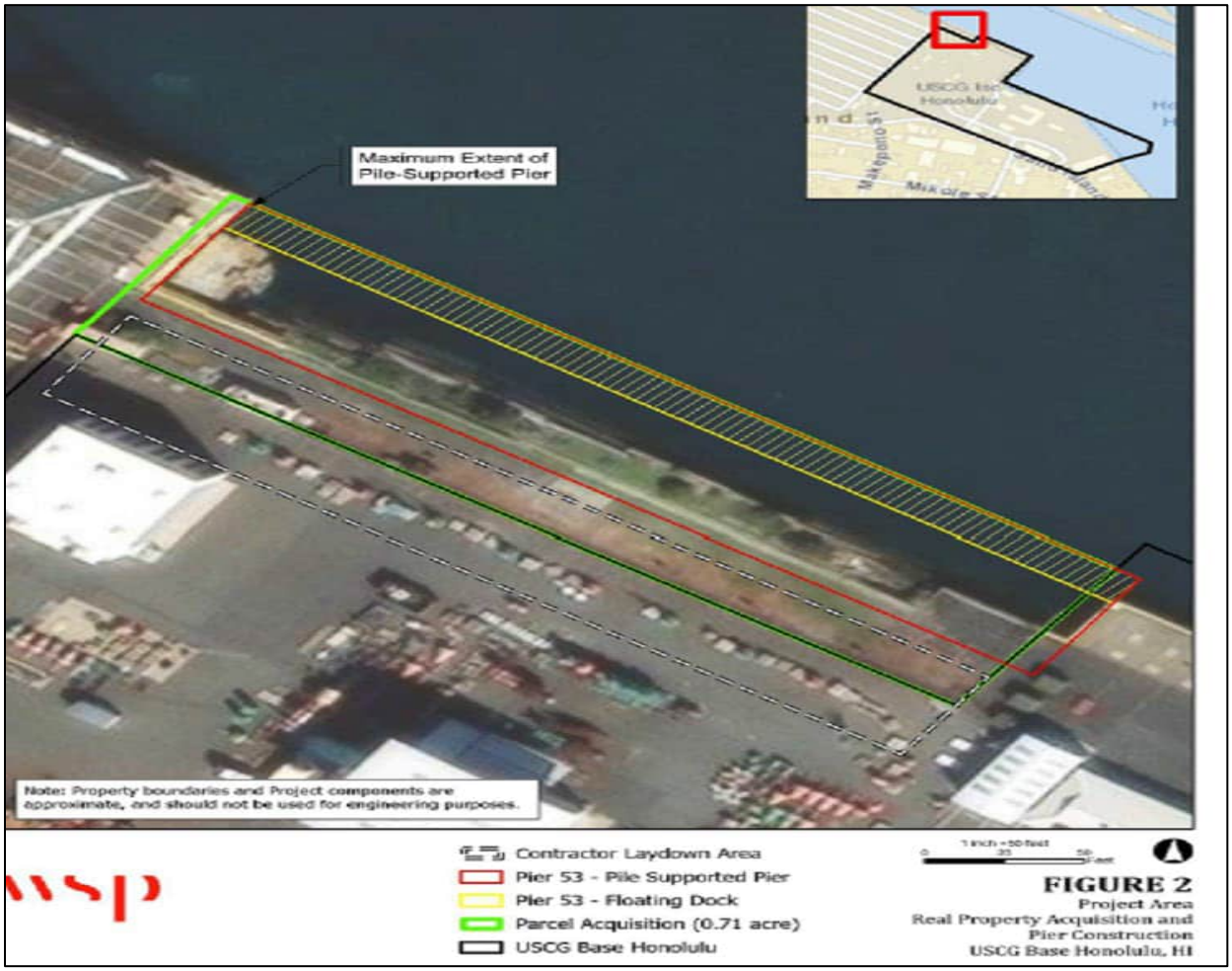


Figure 2: Components of the USCG's proposed action.

The proposed project includes three primary components:

1) The clearing and stabilization of the shoreline via a bulkhead,

2) The development of a new pile-supported pier in the submerged portion of the acquired property, and
3) The construction of a floating dock extending the length of the proposed pile-supported pier.

Shoreline clearing and stabilization

Before construction of the pile-supported pier begins, the acquisition parcel will be cleared of discarded concrete piles and submerged debris. The shoreline stabilization requires placing 340 feet (ft.) of steel sheet piles along the shoreline to act as a bulkhead. It may require the removal, excavation, and placement of fill behind this bulkhead. Sixteen sheet piles in 24-inch (in.) sections will be installed daily via impact pile driving for a maximum of 11 days. A hammer cushion and a bubble curtain will attenuate the underwater sound created by the impact pile driver where feasible.

Construction of a new pier

The proposed construction includes a fixed, pile-supported pier extending westward from USCG Base Honolulu's Berth G to the Matson property boundary. The pile-supported pier will be 340 ft. long and 60 ft. wide and have a total footprint of 20,400 square feet (sf.). The pier deck is made of concrete and supported by 25 concrete support bents placed every 14 ft. to distribute the load. Each bent is supported by six piles: four vertical and two angled piles. Every other bent is assumed to have two extra piles, one at each end of the bent, totaling 180 piles that are 24 in. in diameter and made of concrete. The maximum footprint of the 180 pilings on the harbor floor is up to 565 sf.

Based on previous installation methods conducted in Honolulu Harbor, piles will be installed directly into the bedrock for the first 6 ft. to minimize noise disturbance, requiring approximately 50 minutes of down-the-hole (DTH) drilling. DTH drilling utilizes typical rotary bits for drilling and percussion-type drill devices that break up the rock, allowing for the simultaneous removal of the fragments (Figure 2). Beyond 6 ft., piles will be installed by impact pile driving, and it is estimated that 286 strikes are required to install each 24-in. pile. A maximum of 1 minute of impact hammering is required to proof each pile. It is anticipated that four piles will be installed each day for a maximum of 45 days. A hammer cushion and a bubble curtain will attenuate underwater sound created by the impact pile driver. Cross-bracings and bents are installed using a combination of power tools and hand tools.

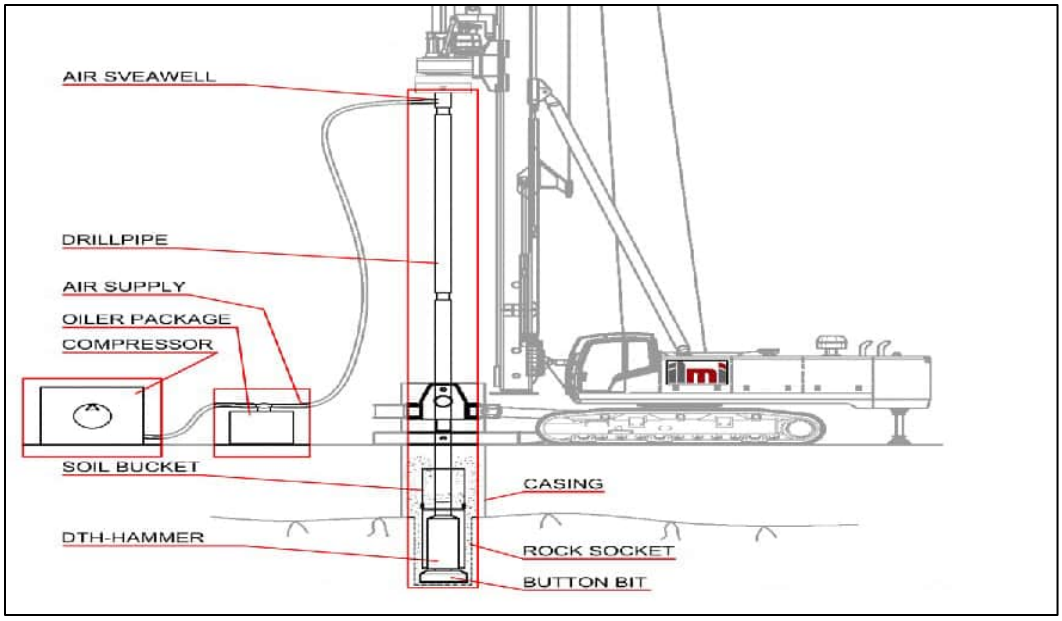


Figure 2: DTH drilling configuration.

Construction of a floating dock

The USCG may construct a new precast concrete floating dock within the same footprint of the new pier. If constructed, the floating pier will replace the distal extent of the pile-supported pier, reducing the pier in extent. The dock would be supported by up to 20 24-in. guide piles.

USCG's Best Management Practices

In order to avoid or minimize effects on the Central North Pacific green, hawksbill sea turtles, and the Hawaiian monk seal, the USCG will implement the following BMPs to ensure that impacts to ESA-listed species and proposed Central North Pacific Green Sea Turtle critical habitat are minimal and would not adversely modify the habitat.

These include:

1. Prior to mobilizing, the contractor will ensure that all construction equipment, ballast, and vessel hulls do not pose a risk of introducing new invasive species and will not increase abundance of those invasive species present in Honolulu Harbor.
2. Where practicable, the USCG will perform in-water work at low/slack tides, and when the sea is calm.
3. To the maximum extent practicable, the USCG will lower equipment and material in a controlled manner.
4. All concrete grout, cement, and sealant used will be non-toxic and non-hazardous to aquatic organisms.
5. Temporary in-water tethers, as well as mooring lines for vessels and marker buoys will remain taut to the minimum length necessary and will remain deployed only as long as needed.
6. When piloting vessels, vessel operators will alter course to remain at least 100 meters (m) from whales, and at least 50 m from other marine mammals and federally listed marine animals.

    a. Vessel speed will be reduced to10 knots or less when piloting vessels in proximity of federally listed marine mammals, sharks, and rays; and 5 knots or less in areas of suspected sea turtle activity.
    b. If a marine mammal or turtle approaches the vessel, the vessel operator will put the engine in neutral until the animal is at least 15 m away.
7. To the maximum extent possible, project-related debris will not enter the water. A temporary floating debris boom will be installed around all work located below the high tide line.
8. The contractor will implement a Storm Water Pollution Prevention Plan to control/eliminate stormwater runoff from entering the harbor.
9. Concrete for decking would be pumped into watertight forms.
10. Construction equipment will be maintained in good condition without hydraulic fluid leaks
    a. Daily equipment checks for leaks or drips will occur.
    b. It is mandatory to use drip pans when parking construction equipment
    c. Fueling of land-based vehicles and equipment will take place at least 50 ft. away from the water (and away from drains), preferably over an impervious surface.
    d. A contingency plan to control toxic materials will prevent toxic materials from entering or remaining in the marine environment during the project.
    e. On site, spill kits with appropriate materials for cleaning and containing spills would always be available.
11. During all in-water and over-water work that may increase turbidity (e.g., pile removal, cutting, installation), silt curtains will completely enclose the work area to the maximum extent practicable to reduce the potential for sediments to leave the immediate vicinity.
    a. Silt curtains will be monitored for damage, dislocation, or gaps on a daily basis, and immediately repaired where any such damage or issues are detected.
    b. The contractor will conduct turbidity monitoring in accordance with CWA 401 standards. This monitoring will have project shut down authorization if turbidity levels exceed levels in permit standards.
12. Pile driving will employ soft-start or ramp-up techniques (slow increase in hammering intensity), at the start of each workday or following any break of more than 30 minutes.
13. Hammer cushions and/or bubble curtains will be used to reduce underwater sound created during pile driving.
14. Pile driving will occur during normal business hours (i.e., 8 am to 5 pm).
15. A Protected Species Observer (PSO) competent in the identification of marine mammals and sea turtles will ensure that the permanent threshold shift (PTS) and behavioral isopleth zones are clear of those species 30 minutes prior to underwater noise activities, following any break of more than 30 minutes, and for 30 minutes following the daily conclusion of pile driving.
    a. The observer will monitor the area of noise impact continuously throughout each day during in-water activities and will have the authority to halt operations if a marine mammal or sea turtle enters its area of impact.
    b. The PSO will ensure they have visibility of the entire area of noise impact.

i. For some activities, this may entail more than one PSO to ensure suitable coverage.

c. For non-pile related activities, work will be postponed or halted when a marine mammal or sea turtle is within 50 m of the non-pile related work, and will only begin/resume after the animals has voluntarily departed the area.
    i. If a marine mammal or sea turtle is noticed within 50 m after work has already begun, then work may continue only if, in the best judgement of the PSO, the activity would not adversely affect (i.e., disturb or harm) the animal.

d. For pile removal/installation, operations will halt when any sea turtles or marine mammals are within their area of noise impact. This area differs for marine mammals and sea turtles. Operations may not resume until that species has voluntarily departed its area of impact.
    i. For all marine mammals including the Hawaiian monk seal, this distance is up to 6309.6 m (limited to the confines of Honolulu Harbor for this action).
    ii. For sea turtles, this distance is up to 100 m.

16. The USCG would submit a report to NMFS within 90 calendar days upon the completion of the project including the following information:
    a. Observer logs. All interactions with marine mammals and sea turtles must be documented.
    b. Monitoring logs will be completed daily. If no federally listed species are observed, the observer would record "0" in the daily report.
    c. The monitoring logs will be submitted in a digital format to NMFS, with the following information:
        i. Total hours and dates of monitoring including time of arrival and departure and time of pile driving commences and finishes
        ii. Identification of which ESA species were observed and in what location and circumstances, including date, time, numbers of individuals of species observed, the outcome of the species observance relative to the authorized project, and any factors which may have affected visibility,
        iii. If applicable, observed federally listed species behaviors and movement types relative to the project activity at time of observation, and
        iv. Any work stoppage, and length of stoppage time.

The property acquisition, design, and construction will require approximately 24 months to complete. The in-water work will require up to 12 months to complete.

Action Area

The action area is defined by regulation as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR §402.02). The action area for the proposed activities encompasses the full extent of the action's modifications to land, water, and air. For this action, the full extent of direct and indirect effects is the potential exposure to elevated noise during pile-driving activities.

Appreciable noise from DTH drilling will extend 6309.6 m from the source. However, local shoreline topography, breakwaters, and ground sediments will interrupt, reduce, and absorb maximum noise transmission. Considering the local shoreline topography that will interrupt and reduce maximum noise transmission, the extent of the noise transmission is limited to the Kapalama Channel and some areas of the Kapalama Basin and the Main Basin (Figure 3). The upland portion of the action area includes all areas disturbed by upland construction activities which includes the parcel acquisition and laydown areas. The extent of the action area equals a total of 113 acres.

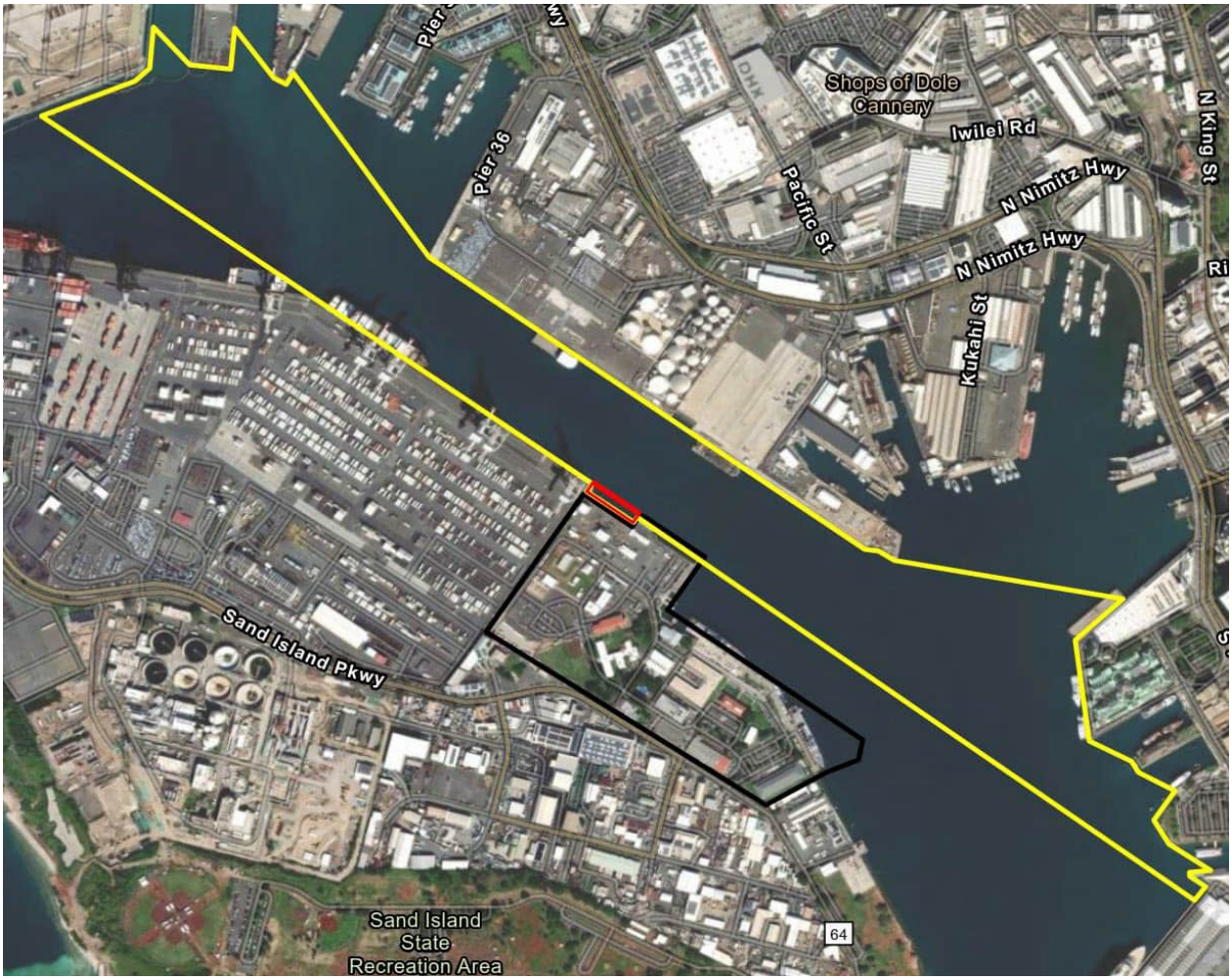


Figure 3: Proposed Action Area.

Listed Species in the Action Area

We are reasonably certain the ESA-listed species and designated critical habitat under our jurisdiction listed in Table 1 occur in the action area, and may be affected by the proposed activities. Detailed information about the biology, habitat, and conservation status of the animals listed in Table 1 is available in their status reviews, recovery plans, federal register notices, and other sources at https://www.fisheries.noaa.gov/species-directory/threatened-endangered.

Table 1. Common name, scientific name, ESA status, effective listing date, critical habitat designation, and recovery plans, with Federal Register reference for ESA-listed species considered in this consultation.

Species/ common name	ESA Status	Effective Listing Date/ FR Notice	Critical Habitat	Recovery Plan
Central North Pacific Green Sea Turtle	Threatened	05/06/2016 81 FR 20057	Proposed 07/19/2023 88 FR 46572	
Eretmochelys imbricata Hawksbill Sea Turtle	Endangered	06/03/1970 35 FR 8491		5/22/98 63 FR 28359
Neomonachus schauinslandi Hawaiian Monk Seal	Endangered	11/23/1976 41 FR 51612	9/21/2015 (revised) 80 FR 50925	8/22/07 72 FR 46966

Proposed Critical Habitat in the Action Area

Central North Pacific Green Sea Turtle. In areas of the MHI, proposed critical habitat for green sea turtles includes the marine environment from the mean high water line to 20 m depth. The specific areas within the proposed designation, with their physical and biological features are:

1. From the mean high water line to 20 m depth, sufficiently dark and unobstructed nearshore waters adjacent to nesting beaches proposed as critical habitat by USFWS, to allow for the transit, mating, and internesting of reproductive individuals, and the transit of post-hatchlings.
2. From the mean high water line to 20 m depth, underwater refugia (*e.g.,* caves, reefs, protective outcroppings, submarine cliffs, and "potholes") and food resources (*i.e.,* seagrass, marine algae, and/or marine invertebrates) of sufficient condition, distribution, diversity, abundance, and density necessary to support survival, development, growth, and/or reproduction.

Detailed information on proposed green sea turtle critical habitat is available at: https://www.fisheries.noaa.gov/action/proposed-rule-designate-critical-habitat-green-sea-turtles.

Analysis of Effects

Under the ESA (50 CFR 402.02), "effects of the action" are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

The applicable standard to find that a proposed action is "not likely to adversely affect" listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial (USFWS & NMFS 1998). Discountable effects are those extremely unlikely to occur. Insignificant effects relate to the size of the impact and should never

reach the scale where take[1] occurs. Beneficial effects are contemporaneous positive effects without any adverse effects.

Despite the USCG's use of all BMPs, we identified the following stressors remain, and have the potential to affect listed marine species and/or critical habitat in the action area:

- Vessel collisions,
- Direct physical impact,
- Disturbance from human activity,
- Exposure to increased turbidity,
- Exposure to elevated noise,
- Exposure to waste and discharge, and
- Loss of habitat.

Vessel collisions

The proposed action will expose the species listed in Table 1 to the risk of vessel collisions when the vessels transit within the action area. The proposed action requires up to three (one barge, one tug, and one skiff) vessels to support the construction activities. The support vessels are expected to remain at the construction site for most of the construction period but may make daily movements within the action area. These movements are relatively minor within busy marine harbor areas, such as those associated with the USCG Base Honolulu. Vessel collisions can cause sharp and blunt force injuries, and lethal effects can occur immediately upon impact or several hours, days, or weeks after the incident (Campbell-Malone et al. 2008).

Sea turtle strikes: In 2020, 22 green sea turtles were struck by vessels in Hawaii, with only one survivor (DLNR 2020). NMFS (2008) estimated 37.5 vessel strikes of green sea turtles per year from an estimated 577,872 trips per year from vessels of all sizes in Hawai'i. The probability of a green sea turtle strike from any vessel trip is extremely low, with a 0.035% yearly average. Although hawksbill sea turtles are less common in Hawaii than green sea turtles, vessel strikes are also a concern and have been known to cause mortality in the Main Hawaiian Islands (Brunson et al. 2022). There were four documented vessel strikes of hawksbill sea turtles between 1984 and 2020 in Hawai'i (Kelly 2020). Hawksbill sea turtles likely have a much lower rate of strikes when compared to green sea turtles due to the hawksbill sea turtle's preference for deeper offshore waters. Sea turtles are unlikely to occur in the action area because the habitat is unsuitable. During the 2013 USFWS survey of Honolulu Harbor, they observed one adult male green sea turtle foraging on seagrass in the entrance channel of Honolulu Harbor, and no hawksbill sea turtles were reported (USFWS 2014).

Sea turtles are most vulnerable to small vessels (<15 m) traveling at fast rates (>10 kts), and thus vessel operators must be responsible for watching out for and avoiding sea turtles (Kelly 2020). Increased vessel speed decreases the ability of sea turtles to recognize a moving vessel in time to dive and escape, as well as the vessel operator's ability to recognize the turtle in time to avoid it. However, vessels used in the proposed action will operate under a speed restriction of 5 knots in areas of known turtle activity or if a turtle is observed. Furthermore, the vessels in the proposed action will use BMPs to reduce the probability of a vessel collision by requiring vessel operators

[1] Under the ESA, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (16 U.S.C. §1532). We further define "harass" as to create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (Wieting 2016).

to maintain a high vigilance for protected species while in transit to avoid vessel collisions and altering the course to remain at least 50 m from sea turtles. Therefore, given the BMPs described above and the low presence of turtles in the action area, the probability of a sea turtle strike is likely less than the overall rate calculated above. Thus, we are reasonably certain the probability of exposure of sea turtles to vessel strikes from this action is extremely unlikely, and therefore discountable.

Hawaiian monk seals: Hawaiian monk seals are highly agile, and vessel strikes with monk seals are infrequent (Carretta et al. 2021). According to PIFSC's database, there have been only four verified vessel strikes of Hawaiian monk seals between 1981 and 2016 (John Henderson, pers. comm., PIFSC 5/4/17). Other wounds and blunt force trauma have been documented but wounds, especially those that have healed, are difficult to distinguish between vessel strikes and other blunt force trauma such as intentional killing. Considering the BMPs included with this action, the rarity of documented vessel strikes, and the low abundance and widely scattered nature of monk seals in the area; we are reasonably certain the likelihood of exposure of any monk seal to vessel strikes from this proposed action is extremely unlikely, and therefore discountable.

Direct physical impact

The action may affect Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals through direct physical impacts during pile-driving and other construction activities. Sea turtles and monk seals are highly motile in the marine environment and will likely avoid work areas due to human presence and noise.

We expect sea turtles and Hawaiian monk seals may enter the action area on an infrequent basis based on previous sighting records (NMFS unpublished data 2018). To the maximum extent practicable, equipment and material will be lowered to the bottom in a controlled manner using cranes or winches that control the rate of decent and allow animals to react. Additionally, PSOs will monitor the area of noise impact continuously throughout each day during in-water activities, and they will have the authority to halt operations if a monk seal or sea turtle enters the area of noise impact. Considering the implemented BMPs, including turbidity curtains that will act as a physical barrier between species and activities, we are reasonably certain that the probability of exposure to direct impacts for Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals is extremely unlikely and therefore discountable.

Disturbance from human activity

Disturbances from human activities, including land-based equipment operation, the presence of construction workers, and vessel transit within the action area may overlap with foraging and resting locations for Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals. ESA-listed species are likely habituated to moderate human activity (Martin and Jones 2017), but despite this habituation, increased human activity may disturb their behaviors.

Construction equipment and the presence of construction workers may cause a visual disturbance to ESA-listed species. Land-based equipment operation will occur from shore and produce in-air noise. Elevated in-air noise is unlikely to generate underwater noise above ambient levels because the sound does not efficiently transfer from the air into the water column. Anticipated responses to visual disturbances by ESA-listed species may include a startled reaction resulting in active avoidance or fleeing from the area (Meadows 2004). However, the most frequent response to this type of interaction is a low-energy behavioral avoidance, and ESA-listed species

could move from the harbor to deeper water. This low-energy behavioral avoidance could temporarily displace feeding and resting activities.

Honolulu Harbor has a moderate level of vessel activity, and the action will add three new vessels transiting within the harbor. Disturbances from vessel movement may cause a behavioral response in monk seals and sea turtles. Typical behavioral responses may include temporarily masking communications and acoustic environmental cues, alteration of ongoing behaviors, and avoidance. Hawaiian monk seals and sea turtles are large and agile and capable of swimming away safely from any disturbance that would harm them. While these disturbances may result in a behavioral response, the effects are temporary as the vessel passes and are limited spatially and temporally.

The USCG will monitor the area before in-water work and shut down construction activities if they observe ESA-listed species within the established distances for all activities. Halting work when turtles or monk seals are within these ranges will minimize exposure and the severity of their response. Additionally, the USCG has established BMPs that vessel operators will alter course to remain at least 50 yds. away from ESA-listed species. Considering the BMPs, we are reasonably certain the effects on Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals from human disturbance will not reach the scale where harm or harassment occurs and are therefore insignificant.

Exposure to increased turbidity

The construction of a continuous bulkhead at Pier 53 will halt shoreline erosion, although the removal and filling of the bulkhead, the installation of piles using DTH drilling, and impact pile driving may result in new localized re-suspension of sediments. These turbidity levels may expose Central North Pacific green turtles, hawksbill sea turtles, and Hawaiian monk seals to short-term increases in elevated turbidity.

Ambient turbidity levels in Honolulu Harbor are high and constitute water quality impairment. These turbid conditions result from sediment-laden stream discharge and frequent passage of large vessels that suspend bottom sediment (USACE 2015). The size and shape of the turbidity plumes are difficult to quantify because of variability in naturally occurring conditions, such as wind and currents, type of pile driving/extraction equipment used, and substrate composition. Using available information from a project in the Hudson River, we expect pile-driving activities to produce total suspended sediment concentrations of approximately 5.0 to 10.0 mg/L above background levels within approximately 300 ft. of the pile-driving (FHWA 2012). The small resulting sediment plume will settle out of the water column within a few hours.

Turbidity in waters can reduce sea turtles' and monk seals' ability to detect predators (Oliver et al. 2000), and sedimentation on coral reefs and seagrass can negatively influence turtle food sources (NMFS and USFWS 1998). Sea turtles and monk seals are highly motile and may temporarily avoid localized turbidity plumes in favor of clear water, reducing their exposure risk. These minor movements are too small to be meaningfully measured or detected. Considering Honolulu Harbor is already a marginal foraging habitat, we do not expect any elevated turbidity to create long-term effects on these species by altering the trophic structure within the action area (Weiffen et al. 2006; Chivers et al. 2013).

The deployment of a full-length, turbidity curtain during pile driving will minimize the spread of turbidity and prevent Central North Pacific green turtles, hawksbill sea turtles, and Hawaiian monk seals from entering turbidity plumes. Additional BMPs for all activities will minimize the

exposure of ESA-listed species to turbidity, including postponing all work when ESA-listed marine species are within 50 m of the activity and conducting turbidity monitoring in accordance with CWA 401 standards. Given the temporary, localized nature of turbidity caused by the project activities and the implemented BMPs, we are reasonably certain the effects from exposure to increased turbidity for Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals will not reach the scale where harm or harassment occur, and are therefore insignificant.

Exposure to elevated noise

Activities including impact pile driving, DTH drilling, and vessel operations may produce in-water sound levels capable of injury or adverse behavioral modifications for Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals. The effects of exposure to sound vary with the frequency, intensity, duration, and hearing characteristics of the affected animals. The ambient noise levels in harbors are a sum of the sounds associated with vessels, construction activities, and natural environmental sounds (Richardson et al. 1995; USCG 2017). Baseline noise levels in harbor areas similar to Honolulu Harbor have a broadband width of 95 to 120 dB at 1m root mean square (re 1µPa-1m RMS) (USACE 2015).

Sounds associated with this action can affect animals exposed to them in two ways: loss expressed in PTS and behavioral responses or changes. O'Hara and Wilcox (1990) found that loggerhead turtles exhibited avoidance behavior at estimated sound levels up to 175 dB RMS re 1µPa at 1 m in a shallow canal. McCauley et al. (2000) reported a noticeable increase in swimming behavior for green and loggerhead turtles at received levels of 166 dB RMS, and at 175 dB RMS, green and loggerhead turtles displayed increased swimming speed and increasingly erratic behavior (McCauley et al. 2000). Our publicly available NMFS multi-species, acoustic calculator (https://www.fisheries.noaa.gov/southeast/consultations/section-7-consultation-guidance) uses a 160 dB re 1µPa threshold for behavioral impacts on sea turtles, and a 120 dB re 1µPa threshold for the onset of behavioral disturbance for all marine mammals (NMFS 2018).

Disturbance from vessel noise may cause a behavioral response in monk seals and sea turtles due to increased noise and movement. Vessels associated with the action will generate noise that could range from 170 – 182 dB re 1µPa at 1 m (Veer et al. 2016). Vessel noise attenuates below the behavioral response threshold for Hawaiian monk seals at 0.6 m and at 0.0 m for sea turtles. The USCG has established BMPs that vessel operators will alter course to remain at least 50 m from ESA-listed species. While this noise may result in a behavioral response, the effect will be temporary as the vessel passes. Any masking of communication or acoustic environmental cues, alteration of ongoing behaviors, or avoidance is limited spatially and temporally. While ESA-listed species may hear some noise as a result of this action, given the BMPs we are reasonably certain the effects from vessel noise will not reach the scale where harm or harassment occur and are therefore insignificant.

The USCG will drive 24 in. concrete piles and sheet-piles using impact pile driving and conduct vibratory and impact DTH drilling. We have summarized the USCG's calculated isopleths for elevated underwater sound from activities associated with the action for the turtles and monk seal exposure in Table 2.

Table 2: PTS and behavioral isopleth distances for sea turtles and Hawaiian monk seals.

Pile Removal/Installation Activity	Projected Distances to Thresholds (m)			
	PTS isopleth		Behavioral isopleth	
	Sea turtles	Monk seal	Sea turtles	Monk seal
DTH Pile Driving: 24 in. concrete piles (vibratory)	0.7	10.8	1.4	6,309.6
Impact Proof 24 in. diameter concrete piles	23.6	316.3	100	1,000
Impact Drive: 24 in. sheet piles.	48.2	646.1	39.8	398.1
DTH Pile Driving: 24 in. concrete piles	11.3	151.6	1.4	13.6

Impact pile driving of 24 in. sheet piles will produce the largest isopleths for PTS onset for sea turtles and monk seals. It will take 660 strikes per pile and up to sixteen piles per day, resulting in the cumulative sound exposure level (SEL_{cum}) of 214 dB re 1µPa, which produces an isopleth of 48.2 m for PTS onset for sea turtles, and a 646.1 m isopleth for PTS onset for Hawaiian monk seals. The first 6 ft. of DTH pile driving (vibratory) of 24 in. concrete piles will produce the largest isopleths for behavioral disturbances to Hawaiian monk seals. DTH drilling of up to four piles per day will take 50 minutes per pile, resulting in a SEL_{cum} of 221 dB re 1µPa, which produces an isopleth of 6309.6 m for behavioral disturbances for Hawaiian monk seals.

Regardless of the specific value, we assume that a direct line of sight provides a clear path for sound to travel. However, Honolulu Harbor contains shallow, nearshore waters with irregular bottoms and high levels of sand and silt, which is a poor environment for acoustic propagation. It contains structures, piers, and topography that will interrupt and reduce maximum noise transmission, and significant attenuation losses will occur. Sound typically dissipates more rapidly under these conditions than in open waters. Therefore, considering the local shoreline topography will interrupt and reduce maximum noise transmission, the extent of noise considered in this action is limited to the Kapalama Channel and some areas of Kapalama Basin and the Main Basin (Figure 3).

BMPs establish that a bubble curtain will enclose pile-driving activities, act as a barrier for the sound to pass through, and reduce the radiation of sound from the pile into the water by producing low-density bubbles close to the pile (Caltrans 2020). Additionally, pile driving will employ soft-start or ramp-up techniques at the start of each day or following any break of more than 30 minutes and will occur during business hours. A PSO will monitor the area of noise impacts for green sea turtles, hawksbill sea turtles, and Hawaiian monk seals. If any ESA-listed species enters the area of noise impacts from pile driving operations, the PSO will shut down project operations until the individual has left the area. The PSO will ensure they have visibility of the entire area of noise impacts for each species and may require using multiple PSOs to ensure suitable coverage. Suggested locations include Pier 28 and Pier 33 to ensure visibility of monk seals or sea turtles that may enter the harbor or are at the project site. For non-pile-related

activities, work will be postponed or halted when a monk seal or sea turtle is within 50 m and will only resume after the animals have voluntarily departed the area. Therefore, while ESA-listed species may hear some noise from pile driving activities, given the BMPs we are reasonably certain the effects from elevated noise will not reach the scale where harm or harassment occur and are therefore insignificant.

Exposure to waste and discharge

The action involves activities that may expose Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals to waste and discharge. Construction waste and debris, including plastic bags and other items, may enter the water, and construction equipment can cause accidental spills of petroleum-based products (lubricants, oil, and fuel).

Local and federal regulations prohibit the intentional discharge of pollutants into the marine environment. BMPs establish that the project will maintain an oil spill contingency plan to control and clean spilled petroleum products, and construction equipment and vehicles are checked daily before commencing work to reduce the risk of leaks and discharge. Activities will cease if leaks are detected from heavy equipment operations and will not proceed until repaired. If any accidental spill occurs, it is anticipated to be small in size, contained, and quickly cleaned up before entering the aquatic environment.

Based on the low likelihood of an ESA-listed species in the vicinity in the unlikely event of a spill and the adherence to the BMPs that will prevent or minimize potential exposure from spills, we are reasonably certain the probability of exposure to Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals, is extremely unlikely and, therefore discountable.

Loss of habitat

The action may expose Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals to potential habitat changes when the installation of 180 piles, including 15,000 ft^2 of new overwater coverage, occurs at USCG Base Honolulu. Habitat complexity within Honolulu Harbor is relatively low due to shoreline development, high vessel traffic use, and repeated exposure to dredging and construction activities. Nearshore habitat diversity near the project is limited to unconsolidated sediment/mud in the deeper areas, piles, over-water structures provided by piers and docks, and hard substrate on which corals have varying presence.

Benthic disturbances may reduce foraging opportunities for sea turtles by removing or burying food items. Benthic surveys performed in 2023 did not identify any seagrass or macroalgae within the project footprint, and foraging habitat (i.e., seagrass beds and algae) is minimal within the harbor. Green sea turtles are more likely to occur in the entrance channel and nearshore waters where seagrass beds are present (USACE 2015), though there is potential for this species to transit within the area. Using stranding data (encounters with individuals who are sick, injured, or dead), hawksbill sea turtles have been found in Pearl Harbor and near Honolulu Harbor (Brunson et al. 2022), though it is unlikely that a healthy hawksbill sea turtle would be present within the action area.

Monk seals generally forage at or near the seafloor, prefer prey that hide in the sand or under rocks (NOAA Fisheries, 2023), and tend to avoid areas with human activity (Carretta et al. 2021). The action area does not contain suitable haul-out habitat for the Hawaiian monk seal, and

though some foraging habitat does occur, it is a marginal habitat due to the busy harbor and industrialized setting.

While the action area may provide minimal aquatic habitat for Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals, the areas are not unique and do not provide any type, quantity, or quality of forage that is not found nearby. Furthermore, nearby reefs outside of Honolulu Harbor provide better foraging habitats. Therefore, we are reasonably certain the effects of loss of habitat on Central North Pacific green sea turtles, hawksbill sea turtles, and Hawaiian monk seals will not reach the scale where harm or harassment occurs and are therefore insignificant.

Proposed Critical Habitat

The proposed activities overlap with the proposed critical habitat for Central North Pacific green sea turtles. Physical and biological features of the proposed green sea turtle critical habitat that may be affected by the action include; 'from the mean high water line to 20 m depth, underwater refugia and food resources of sufficient condition, distribution, diversity, abundance, and density necessary to support survival, development, growth, or reproduction'. Potential stressors that may affect the critical habitat and will not occur but for the proposed action include the loss of habitat, exposure to wastes and discharge, and exposure to increased turbidity.

Loss of the essential features of the Central North Pacific green sea turtle's proposed critical may occur when the proposed project installs up to 20,400 ft^2 of new pier extensions including 15,000 ft^2 of overall water coverage. Nearshore habitat diversity is limited to unconsolidated sediment/mud in the deeper areas, piles, over-water structures provided by piers and docks, and hard substrate on which corals have varying presence. Considering the poor quality of the habitat for foraging, we are reasonably certain the effects of this loss of habitat will not measurably affect the physical or biological features of the proposed critical habitat for the Central North Pacific green sea turtle and are therefore insignificant.

Pile driving and other in-water activities may cause temporary, localized, and short-term turbidity and disruptions of food distribution in the foraging area. We expect that turbidity may temporally impact water quality but do not expect significant changes to sediment characteristics, water quality, or changes in prey quality. As discussed in the exposure to increased turbidity section, silt containment devices will minimize turbidity and siltation associated and contain any short-term turbidity events. Based on the implemented BMPs, we are reasonably certain, that the probability of appreciable exposure to elevated turbidity to essential features of Hawaiian monk seal and Central North Pacific green sea turtle critical habitat is extremely unlikely and therefore discountable.

Exposure to the essential features of the proposed critical habitat for Central North Pacific green sea turtles to waste and discharge may occur due to accidental leaks or spills from equipment associated with the action. As discussed in the exposure to waste and discharges section, the implemented BMPs will prevent any discharge into the marine environment and manage leaks or spills. As a result, we are reasonably certain the probability of exposure to any appreciable amounts of waste and discharge on the proposed Central North Pacific green sea turtle critical habitat is extremely unlikely and is therefore discountable.

Conclusion

Considering the information and assessments presented in the consultation request and available reports and information, and in the best scientific information available about the biology and

expected behaviors of the ESA-listed marine species considered in this consultation, all effects of the proposed action are either discountable or insignificant. Accordingly, we concur with your determination that the proposed action is not likely to adversely affect the following ESA-listed species and proposed critical habitats: endangered Hawaiian monk seals; threatened Central North Pacific green turtles; endangered hawksbill turtles; and Central North Pacific green sea turtle proposed critical habitat.

This concludes informal consultation under section 7 of the ESA for species under our jurisdiction. Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act directs Federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect essential fish habitat (EFH). If necessary, it is your responsibility to request EFH consultation for this action with NMFS' Habitat Conservation Division.

Reinitiation Notice

Reinitiation of consultation is required and shall be requested by the USCG or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and if:

a) Take occurs to an ESA-listed species;
b) New information reveals effects of the action that may affect ESA-listed species or designated critical habitat in a manner or to an extent not previously considered;
c) The identified action is subsequently modified in a manner that causes an effect to ESA-listed species or designated critical habitat that was not considered in this concurrence; or
d) A new species is listed or critical habitat designated that may be affected by the identified action.

If you have further questions, please contact Jamie Marchetti at (808) 725-5108 or Jamie.marchetti@noaa.gov. Thank you for working with us to protect our nation's living marine resources.

Sincerely,

Dawn Golden

Dawn Golden
Assistant Regional Administrator
Protected Resources Division

NMFS File No.: PIRO-2024-02174
PIRO Reference No.: I-PI-24-2363

Literature Cited

Brunson S., Gaos, A., Kelly, I.K., Van Houtan, K.S., Swimmer, Y., Hargrove, S., Balazs, G.H., Work, T.M., Jones, T.T. 2022. Three decades of stranding data reveal insights into endangered hawksbill sea turtles in Hawai‘i. Endangered Species Research: Vol. 47: 109.

Caltrans. 2020. Technical Guidance for the Assessment of Hydroacoustic Effects of Pile Driving on Fish. Final Report CTHWANP-RT-20-365.01.04. October 2020. 532 pp.

Campbell-Malone, R., Barco, S. G., Daoust, P. Y., Knowlton, A. R., McLellan, W. A., Rotstein, D. S., Moore, M. J. 2008. Gross and histologic evidence of sharp and blunt trauma in North Atlantic right whales (*Eubalaena glacialis*) killed by vessels. J. Zoo Wildl. Med. 39(1):37-55.

Carretta, J. V., E.M. Oleson, K.A. Forney, M.M. Muto, D.W. Weller, A.R. Lang, J. Baker, B. Hanson, A.J. Orr, J. Barlow, J.E. Moore, and R.L. Brownell Jr. 2021. U.S. Pacific Marine Mammal Stock Assessments: 2020. National Marine Fisheries Service. NOAA-TM-NMFS-SWFSC-646.

Chivers, D. P., Al-Batati, F., Brown, G. E., Ferrari, M. C. O. 2013. The effect of turbidity on recognition and generalization of predators and non-predators in aquatic ecosystems. Ecology and Evolution. 3(2):268-277.

DOSITS. 2022. Discovery of Sound in the Sea.

FHWA (Federal Highway Administration). 2012. Tappan Zee Hudson River Crossing Project. Final Environmental Impact Statement. August 2012.

Hawaii Department of Land and Natural Resources (DLNR). 2020. Latest Turtle Hit by a Boat is Euthanized. Available: https://dlnr.hawaii.gov/blog/2020/12/11/nr20-193/. Accessed August 2023.

Kelly, I. K. 2020. A review of vessel collision threat to sea turtles in Hawaii. Review paper, NOAA Pacific Islands Regional Office Internal Report.

Martin, S. L, Jones, T. T. 2017. Sea Turtle Tagging in the Naval Base Guam Area. PIFSC Data Report DR-17-026, Interagency Agreement NMFS-PIC-14-004-0001-000.

McCauley, R., Fewtrell, J., Duncan, A., Jenner, K., Jenner, M., Penrose, J., Prince, R., Adhitya, A., Murdoch, J., McCabe, K. 2000. Marine Seismic Surveys – A Study of Environmental Implications. APPEA Journal. 40.

Meadows, D. 2004. Behavior of green sea turtles in the presence and absence of recreational snorkelers. Marine Turtle Newsletter. 103: 1-4.

NAVFAC. 2022. Draft Integrated Natural Resources Management Plan for Joint Base Pearl Harbor Hickam, O‘ahu. August 2022.

NMFS. 2008. Biological Opinion on effects of Implementation of Bottomfish Fishing Regulations within Federal Waters of the Main Hawaiian Islands on ESA-listed marine species. Pacific Islands Region. 35 p.

O'Hara, J., Wilcox, J. 1990. Avoidance Responses of Loggerhead Turtles, *Caretta caretta*, to Low Frequency Sound. Copeia, 1990(2), 564-567.

Oliver, L.J., Salmon, M., Wyneken, J., Hueter, R., Cronin, T. W. 2000. Retinal anatomy of hatchling sea turtles: anatomical specializations and behavioral correlates. Mar. Fresh. Behav. Physiol. 33: 233-248.

Richardson, W. J., Greene, C. R., Malme, C. I., Thomson, D. H. 1995. Marine Mammals and Noise. Academic Press, Inc., San Diego, CA.

USACE. 2015. Final Environmental Assessment for Proposed Dredging of Honolulu Harbor.

USCG. 2017. Final Environmental Assessment for Proposed Shipbreaking of a Coast Guard Island Class Cutter at USCG Base Honolulu, Hawai`i.

U.S. Fish and Wildlife Service and National Marine Fisheries Service. 1998. Endangered Species Consultation Handbook. Procedures for Conducting Consultation and Conference Activities under Section 7 of the Endangered Species Act.

USFWS. 2014. Phase I Marine Habitat Characterization, Honolulu Commercial Harbor, Oahu, Hawaii. Maintenance Dredging 2015: Planning Aid Report – Fish and Wildlife Coordination Act. Draft Report. June.

Veirs S., Veirs V., Wood J.D. 2016. Ship noise extends to frequencies used for echolocation by endangered killer whales. Peer J.

Weiffen, M., B. Möller, B. Mauck, and G. Dehnhardt. 2006. Effect of water turbidity on the visual acuity of harbor seals (*Phoca vitulina*). Vision Research. 46 (11):1777-1783.

Wieting, D. S. 2016. Interim Guidance on the Endangered Species Act Term "Harass". U.S. Dept. of Commerce, NOAA, NMFS, Office of Protected Resources, Silver Spring, MD, October 21, 2016. Memorandum from the Director of the NMFS Office of Protected Resources to NMFS Regional Administrators.

Appendix D

Notice of Availability

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT FOR
REAL PROPERTY ACQUISITION AND PIER CONSTRUCTION
U.S. COAST GUARD BASE HONOLULU

The U.S. Coast Guard (USCG) has prepared a Draft Environmental Assessment (EA) for Real Property Acquisition and Pier Construction to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. This Draft EA has been prepared pursuant to the requirements of the National Environmental Policy Act of 1969 (NEPA); Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of NEPA* (40 Code of Federal Regulations [CFR] Parts 1500-1508); Department of Homeland Security Management Directive 023-01; and Coast Guard Commandant Instruction (COMDTINST) 5090.1, *U.S. Coast Guard Environmental Planning Policy and Environmental Planning Implementing Procedures* (April 2019). Additionally, given the USCG's proposed acquisition of property currently owned by the Hawaii Department of Transportation (HDOT) Harbors Division (HDOT-Harbors), this EA has also been prepared pursuant to the requirements of the Hawaii Environmental Policy Act (HEPA) statute and its implementing rules, codified in Hawaii Revised Statutes (HRS) Chapter 343 as well as Hawaii Administrative Rules (HAR) Chapter 11-200 and 11-201.

The USCG is proposing acquisition of an undeveloped 0.71-acre portion of a larger 1.28-acre waterside parcel located at Pier 53, abutting USCG Base Honolulu to its east. In addition to the real property acquisition, the USCG proposes construction of a new pier to support current and future berthing needs. The proposed construction includes a fixed, pile-supported pier extending up to 340 feet westward from USCG Base Honolulu Berth G to the Matson property boundary. The proposed action also includes the installation of fenders, mooring hardware, and utilities. Support pile materials have not been determined at this design stage, but could include steel, concrete (precast or auger-cast), or pressure-treated lumber. Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the fixed pier. The floating dock would include hardware and utility connections.

This Draft EA provides evidence and analysis for determining whether a Finding of No Significant Impact (FONSI) is appropriate or whether an Environmental Impact Statement (EIS) is necessary. The Draft EA presents the purpose and need for the action, the proposed action and alternatives, a description of the affected environment, and an analysis of environmental consequences. The Draft EA also documents cumulative impacts from projects in the vicinity that are proposed, under construction, recently completed, or anticipated to be implemented in the near future.

The Draft EA is available for public review electronically at:
https://uscghonolulupier53ea.azurewebsites.net/USCG-Base-Honolulu-Pier-53-Draft-EA.pdf.

Please provide any comments related to the technical sufficiency and adequacy of the EA to Mr. Matthew Casey by e-mail at matthew.c.casey@uscg.mil, or by mail at 300 Ala Moana Blvd. Rm 8-134, Honolulu, HI 96850-3460. Comments must be received no later than 9 December 2024.

Appendix E

Intergovernmental Review

U.S. Department of Homeland Security

United States Coast Guard

Commanding Officer
United States Coast Guard
Civil Engineering Unit Honolulu

PJKK Federal Building
300 Ala Moana Blvd Rm 8-134
Honolulu, HI 96850-4982
Phone: (808) 535-3460

October 28, 2024

Dear Interested Party,

The U.S. Coast Guard (USCG) is proposing a land acquisition of and shoreside improvements to a 0.71-acre property located at 400 Sand Island Parkway on the east side of Pier 53 and adjacent to the northwest boundary of USCG Base Honolulu, Hawaii. The purpose of the proposed action is to support current and future berthing needs at USCG Base Honolulu.

An undeveloped 0.71-acre portion of a larger 1.28-acre waterside parcel is located at Pier 53, abutting USCG Base Honolulu to its east and south, and Matson operations to its west. That parcel was previously owned by the USCG and is now owned by the Hawaii Department of Transportation (HDOT) Harbors Division (HDOT-Harbors). The parcel is identified by the City and County of Honolulu Real Property Assessment Division as Tax Key (1) 1-5-041-321.

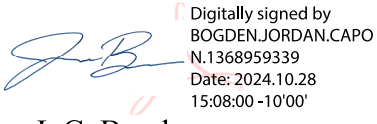
To support current and future berthing needs, the USCG proposes to subdivide and acquire the Pier 53 parcel, which consists of a non-serviceable waterside property. In addition to the real property acquisition, the USCG proposes construction of a new pier. The proposed construction includes a fixed, pile-supported pier extending up to 340 feet westward from USCG Base Honolulu Berth G to the Matson property boundary. The proposed action also includes the installation of fenders, mooring hardware, and utilities. Support pile materials have not been determined at this design stage, but could include steel, concrete (precast or auger-cast), or pressure-treated lumber. Optionally, the USCG proposes to construct a precast concrete floating dock that would attach to the fixed pier. The floating dock would include hardware and utility connections.

Pursuant to the National Environmental Policy Act (NEPA), the USCG has prepared an Environmental Assessment (EA) that evaluates the potential effects on the environment of proposed in-water modifications as well as the No Action Alternative. The Draft EA includes the purpose and need for the in-water modifications project; a detailed description of alternatives under consideration; the affected environment; environmental consequences of implementation of the alternatives; and cumulative effects of the project. The EA will also incorporate results from a site-specific benthic habitat survey which will include the project area and its vicinity.

The USCG respectfully requests that your agency or organization review the Draft EA, which is available at https://uscghonolulupier53ea.azurewebsites.net/USCG-Base-Honolulu-Pier-53-Draft-EA.pdf.

Please provide any comments related to the technical sufficiency and adequacy of the EA to Mr. Matthew Casey by e-mail at matthew.c.casey@uscg.mil, or by mail at 300 Ala Moana Blvd. Rm 8-134, Honolulu, HI 96850-3460. Comments must be received no later than December 9, 2024.

Sincerely,



J. C. Bogden
Lieutenant Commander, U.S. Coast Guard
Commanding Officer

Enclosure: Draft Environmental Assessment for Real Property Acquisition and Pier Construction U.S. Coast Guard Base Honolulu