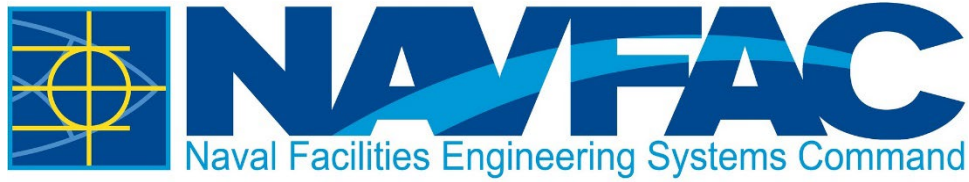


PRE-DECISIONAL



**Naval Facilities Engineering Systems Command Hawaii
JBPHH HI**

Draft Final

Community Involvement Plan

JOINT BASE PEARL HARBOR-HICKAM OAHU HI

**BARBERS POINT NAS, HONOLULU NCTAMS, PEARL
HARBOR JBPHH, PEARL HARBOR PWC, NMC EAD DET
PH, PEARL HARBOR FISC, PEARL HARBOR NSB, PEARL
HARBOR NSY**

September 2025



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HARBOR NSY**

September 2025

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CONTENTS

1.	Introduction	1-1
1.1	Community Involvement Plan Objectives and Goals	1-1
1.2	Guide to the Community Involvement Plan	1-2
2.	The Navy in Hawaii	2-1
2.1	Historical Perspective	2-1
2.2	History of Environmental Restoration in Hawaii	2-2
2.3	Environmental Restoration Program	2-2
2.3.1	Installation Restoration Program	2-3
2.3.2	Military Munitions Response Program	2-3
2.4	Environmental Restoration Program in Hawaii	2-3
2.5	The Navy's Community Involvement Program in Hawaii	2-4
2.5.1	Community Involvement Plans	2-5
2.5.2	Restoration Advisory Boards	2-5
3.	Community Profiles	3-1
3.1	JBPHH Main Base	3-1
3.1.1	Site Overview	3-1
3.1.2	Community Background and Profile	3-7
3.2	JBPHH Wahiawa Annex	3-11
3.2.1	Site Overview	3-11
3.2.2	Community Background and Profile	3-12
3.3	JBPHH Lualualei Annex	3-15
3.3.1	Site Overview	3-15
3.3.2	Community Background and Profile	3-16
3.4	Former JBPHH Waikale Annex	3-21
3.4.1	Site Overview	3-21
3.4.2	Community Background and Profile	3-22
3.5	JBPHH Kalaeloa	3-25
3.5.1	Site Overview	3-25
3.5.2	Community Background and Profile	3-26
3.6	Former Hickam Petroleum, Oil, and Lubricants Pipeline	3-31
3.6.1	Site Overview	3-31
3.6.2	Community Background and Profile	3-31
4.	Community Involvement History	4-1
4.1	Past Community Involvement	4-1
4.2	Previous Community Surveys	4-2
4.3	2024 Online Community Survey	4-2
4.4	Response to Community Concerns	4-3
5.	Community Involvement Plan	5-1
5.1	Communications Involvement Activities	5-1
5.1.1	Points of Contact	5-1
5.1.2	Governmental Agency Participation	5-2
5.1.3	Local Community and Media Communication Mechanisms	5-2

5.2	Community Involvement Activities and Schedule	5-6
5.2.1	Ongoing Community Involvement Activities	5-6
5.2.2	Project Milestone Community Involvement Activities	5-6
5.3	Community Grant Opportunities	5-8
6.	References	6-1

APPENDIXES (INCLUDED ON CD-ROM)

A	Glossary of Environmental Terms
B	Environmental Concerns Survey
C	Status of Environmental Restoration Program Sites
D	Concurrence/Response to Comments

FIGURES

1-1	JBPHH Locations	1-3
2-1	Navy Site Investigation and Cleanup Process	2-7
3-1	JBPHH Main Base Geographic Study Areas	3-5
3-2	Communities Near JBPHH Main Base	3-9
3-3	Communities Near JBPHH Wahiawa Annex	3-13
3-4	Communities Near JBPHH Lualualei Annex	3-19
3-5	Communities Near Former JBPHH Waikale Annex	3-23
3-6	Communities Near JBPHH Kalaeloa	3-29
3-7	Communities Near Former Hickam POL Pipeline	3-33

PHOTOS

5-1	Pearl Harbor-Hickam-Kalaeloa RAB Meeting Presentation (June 2024)	5-4
5-2	Community Members at Pearl Harbor-Hickam-Kalaeloa RAB Meeting (June 2024)	5-5
5-3	Pearl Harbor-Hickam-Kalaeloa RAB Meeting Presentation (September 2024)	5-5

TABLES

5-1	The Navy's Tools for Community Involvement	5-2
5-2	Administrative Record and Information Repositories	5-3
5-3	Additional Online Resources	5-4
5-4	Project Milestone Community Involvement Activities	5-7

ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
Army	United States Army
BRAC	Base Realignment and Closure
CDP	census-designated place
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIP	community involvement plan
CRP	community relations plan
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DOH	Department of Health, State of Hawaii
EPA	Environmental Protection Agency, United States
ER	Environmental Restoration
FFA	Federal Facility Agreement
GSA	geographic study area
IR	installation restoration
IRP	Installation Restoration Program
JBPHH	Joint Base Pearl Harbor-Hickam
MRP	Munitions Response Program
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Systems Command
NAVMAG	Naval Magazine
NAVMAG PH	Naval Magazine, Pearl Harbor
Navy	Department of the Navy, United States
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NCTAMS	Naval Computer and Telecommunications Area Master Station
NCTAMS PAC	Naval Computer and Telecommunications Area Master Station Pacific
NMCPAC EAD	Navy Munitions Command Pacific East Asia Division
NPL	National Priorities List
NRTF	Naval Radio Transmitting Facility
PHNC	Pearl Harbor Naval Complex
POL	petroleum, oil, and lubricants
RAB	Restoration Advisory Board
RHBFSF	Red Hill Bulk Fuel Storage Facility
TASC	Technical Assistance Services for Communities
U.S.	United States

1. Introduction

This community involvement plan (CIP) for Naval Facilities Engineering Systems Command (NAVFAC), Hawaii was developed to encourage and facilitate two-way communication between the United States (U.S.) Department of the Navy (Navy) and local communities concerning environmental investigation and cleanup activities being conducted as part of the Environmental Restoration (ER) Program at Joint Base Pearl Harbor-Hickam (JBPHH) on the island of Oahu, Hawaii (Figure 1-1). This report covers the following six geographically separate locations that are all a part of JBPHH:

- JBPHH Main Base
 - Includes Navy Munitions Command Pacific East Asia Division (NMCPAC EAD) West Loch Annex, Waipio Peninsula, Pearl City Peninsula, Ford Island, Richardson, Makalapa Crater, Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, NAVFAC Hawaii Compound, Red Hill Bulk Fuel Storage Facility (RHBFSF), Hickam Field, and several additional outlying facilities in the Pearl Harbor area.
- JBPHH Wahiawa Annex (Naval Computer and Telecommunications Area Master Station [NCTAMS] Pacific [NCTAMS PAC])
- JBPHH Lualualei Annex
 - Composed of two separate yet contiguous facilities, NMCPAC EAD Lualualei Annex and Naval Radio Transmitting Facility (NRTF) Lualualei.
- Former JBPHH Waikale Annex
- JBPHH Kalaeloa (Navy-retained land at the former Naval Air Station [NAS] Barbers Point)
- Former Hickam Petroleum, Oil, and Lubricants (POL) Pipeline

The previous CIP for these locations, titled *Community Involvement Plan COMNAVREG Hawaii Installation Restoration Program, Oahu Installations, Hawaii* (EPA, State of Hawaii, and DON 2009), was last updated in 2005. The previous CIP for Hickam Air Force Base (AFB), currently known as Hickam Field, was also last updated in 2005 (USAF 2005). In 2010, Pearl Harbor Naval Complex (PHNC) and the adjoining Hickam AFB merged to form JBPHH. This CIP merges the two previous CIPs and provides an update on current community involvement activities.

1.1 COMMUNITY INVOLVEMENT PLAN OBJECTIVES AND GOALS

The Navy has determined that the CIP should be updated to accomplish the following objectives:

- Update information in the previous CIP for naval facilities on the island of Oahu.
- Reflect the Navy's progress on the cleanup of impacted property (or sites) at JBPHH.
- Update the public on changes to the proposed cleanup action for a few select sites.
- Describe environmental conditions at new sites undergoing investigation.
- Reflect current interests and concerns of the communities.
- Establish a framework for open and meaningful dialogue between the Navy and the public throughout the ER process.

Through implementation of this updated CIP, the Navy intends to achieve the following goals:

- Keep communities located near JBPHH informed of the status of environmental conditions and cleanup activities.
- Solicit community involvement throughout the entire process of the ER Program.
- Increase awareness and understanding of current community concerns and interests to improve the Navy's overall public outreach and involvement.
- Effectively and expediently address community concerns and suggestions identified during recently conducted community surveys.
- Enhance two-way communication between the public and the Navy.
- Invigorate the existing Restoration Advisory Boards (RABs) by attracting new members and by conducting activities that are meaningful to the RABs.

This CIP was prepared for NAVFAC Hawaii under the Comprehensive Long-Term Environmental Action Navy V program, contract number N62742-17-D-1800, contract task order number N6274219F0120. The plan incorporates guidance in the U.S. Environmental Protection Agency (EPA) *Superfund Community Involvement Handbook* (EPA 2020).

1.2 GUIDE TO THE COMMUNITY INVOLVEMENT PLAN

This CIP is organized as follows:

- *Section 1, Introduction:* Provides the objectives and goals of this CIP.
- *Section 2, The Navy in Hawaii:* Provides the background information, regulatory framework, and guidance used to develop the CIP. Historical and community characteristics that are common to all JBPHH locations are also discussed.
- *Section 3, Community Profiles:* Provides an overview of the site histories and community profiles of the individual JBPHH locations.
- *Section 4, Community Involvement History:* Provides community profiles and presents a discussion of the community involvement history.
- *Section 5, Community Involvement Plan:* Presents a discussion of communication activities and mechanisms, points of contact, governmental agency participation, local community and media communication, outreach activities, and community grant opportunities.
- *Section 6, References:* Presents a list of references used as resources in the development of the CIP.
- *Appendixes:*
 - *Appendix A, Glossary of Environmental Terms:* Provides a list of definitions of common environmental terms.
 - *Appendix B, Environmental Concerns Survey:* Provides a copy of the environmental concerns survey distributed to the public and an analysis of the survey results.
 - *Appendix C, Status of Environmental Restoration Program Sites:* Contains a table listing and discussing the status of ER Program sites.
 - *Appendix D, Concurrence/Response to Comments:* Includes responses to regulatory agency comments on the CIP.

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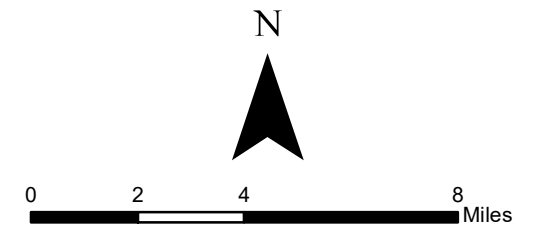
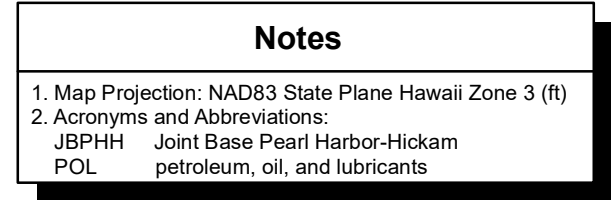
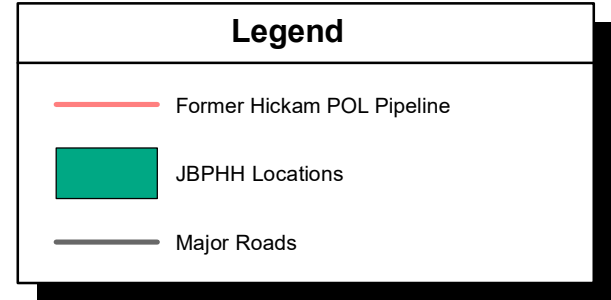
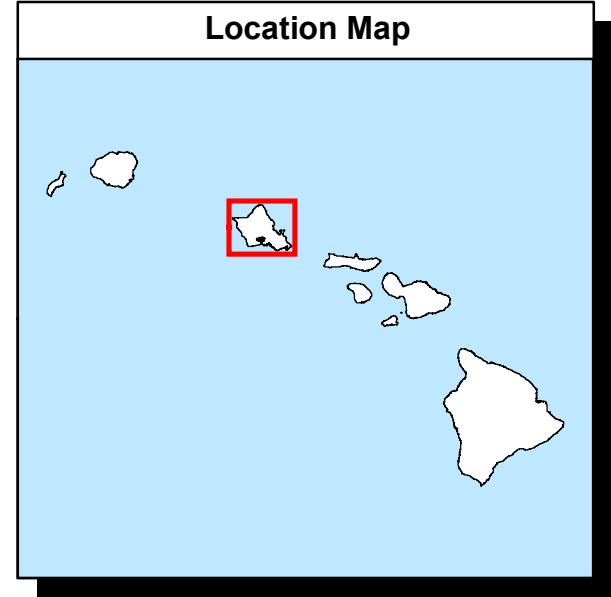
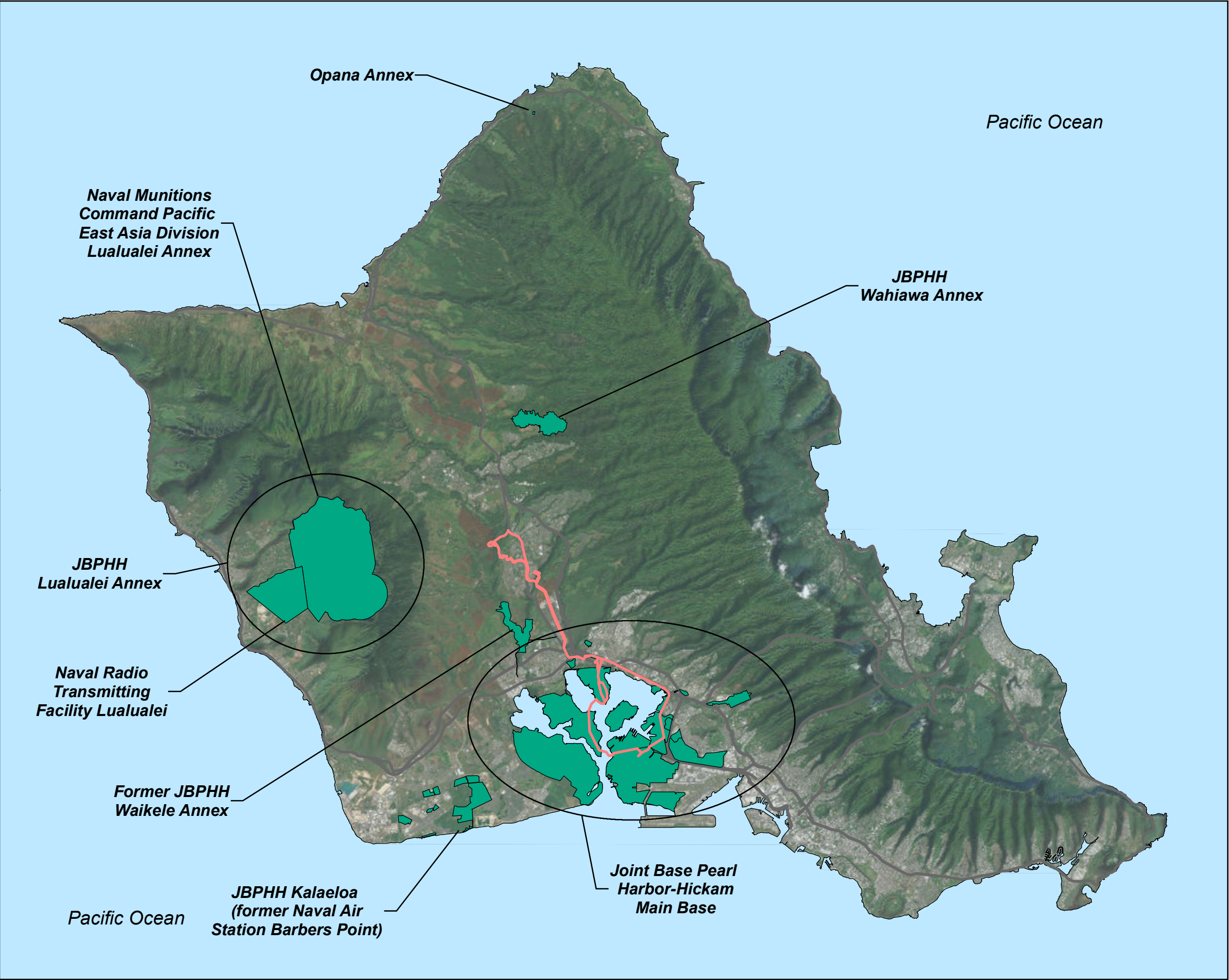


Figure 1-1
JBPHH Locations
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

2. The Navy in Hawaii

2.1 HISTORICAL PERSPECTIVE

The Navy's first presence in Hawaii was established at Pearl Harbor. To bolster a military presence in Hawaii, Prince Jonah Kuhio Kalaniana'ole engaged in lobbying efforts to persuade U.S. Congress to fund the dredging and construction of a dry dock at Pearl Harbor, which was completed in 1919 (Red Hill WAI 2023). Subsequent work in the 1920s to widen and deepen the channel allowed the harbor to then be navigable for any Navy battleship. By the late 19th century, the United States had gained exclusive use of the harbor and began its military presence there (DON 2003). By the early 20th century, the harbor was dredged, the channel was enlarged, and shore facilities were developed that could support the Navy's largest ships. During the next decade, ships and submarines were relocated to the harbor and the physical plant of the PHNC grew steadily.

Around the same time, the Army Air Corps was looking to expand their presence in Hawaii. They selected an area of tangled brush and sugarcane fields to the southwest of the new PHNC to construct a modern airdrome. On May 31, 1935, the new facility was dubbed Hickam Field after the late Lt. Col. Horace Meek Hickam. The base was officially activated on September 15, 1938, and became the principal army airfield in Hawaii (15th Wing 2010).

As world tensions increased in the 1930s and early 1940s leading to World War II, the military rapidly increased its presence and number of facilities in Hawaii. During this period, the following activities were established and expanded throughout Oahu:

- NCTAMS PAC Wahiawa and NRTF Lualualei (jointly responsible for operating and maintaining communication facilities and equipment for Navy shore installations, fleet units in the Pacific Basin, and the Defense Communications System; these activities are located at the JBPHH Wahiawa Annex and JBPHH Lualualei Annex, respectively)
- Naval Magazine (NAVMAG), Pearl Harbor (NAVMAG PH) Lualualei Branch (tri-service facility that provides ordnance storage, transfer, and maintenance for the Navy, U.S. Army [Army], and Air Force; now known as NMCPAC EAD, Lualualei Annex)
- NAVMAG PH Waikale Branch (decommissioned facility that formerly provided ordnance storage, transfer, and maintenance; now referred to as the former JBPHH Waikale Annex)
- NAS Barbers Point (formerly consisted of runways and air support facilities for Naval airplanes; Navy-retained portions of the former NAS Barbers Point are now referred to as JBPHH Kalaeloa)
- Former Hickam POL Pipeline (deactivated set of pipelines and facilities that formerly delivered fuel to PHNC and Hickam AFB)

Navy presence, workforce, and operational support in Hawaii were heavily relied upon during World War II and the Korean and Vietnam Wars that followed. On January 31, 2010, Naval Station Pearl Harbor and the adjoining Hickam AFB merged to form JBPHH. JBPHH manages 21,090 acres of land and approximately 40,199 acres of water (DON 2024). JBPHH is the larger of Navy Region Hawaii's two installations and home to more than 270 tenant commands and several ships, submarines, and fixed-wing aviation squadrons. The total JBPHH umbrella includes a population of 107,000 people, including active service members, civilian employees, families, and contractors (CNRH 2022).

2.2 HISTORY OF ENVIRONMENTAL RESTORATION IN HAWAII

During World War II and the post-war period, common military practices sometimes resulted in the release of chemicals to the environment. At the time, scientific and community understanding of the adverse impacts such releases could have on human health and the environment was limited and few government regulations were aimed at preventing or cleaning up such releases. Since then, the military and civilian authorities have learned much more about the potential environmental problems that can result from releasing chemicals to the environment. As a result of this growing awareness, environmental protection and restoration laws and guidance were developed and have evolved. In the late 1970s, the Navy began to follow strict management guidelines to minimize the use of potentially harmful chemicals and to ensure that they are safely recycled or disposed of during Navy operations.

In 1980, U.S. Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund (42 U.S. Code §§ 9601–9675). CERCLA provides the federal government with the authority to address releases or potential releases of hazardous substances that might endanger human health or the environment.

CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations Part 300) require that communities potentially impacted by environmental impacts on federal property be informed about and involved in the federal cleanup process. The public that is potentially affected by a CERCLA site has the following rights:

- To know about environmental conditions at the site and associated health risks
- To know how government agencies and private property owners are addressing impacts at the site
- To participate in the decision-making process pertaining to the cleanup of that site

When CERCLA was first implemented, its requirements did not apply to federal facilities. Therefore, the Department of Defense (DoD) established its own cleanup program, the Installation Restoration (IR) Program (IRP), which parallels the CERCLA requirements. Since the early 1980s, the Navy has been applying these programs at installations worldwide to identify, characterize, and clean up these sites of historical contamination.

2.3 ENVIRONMENTAL RESTORATION PROGRAM

In 1986, U.S. Congress amended CERCLA with the Superfund Amendments and Reauthorization Act. This required the DoD and other federal facilities to meet CERCLA requirements, which led to the creation of the Defense Environmental Restoration Program (DERP) to provide guidance and funding for investigation and cleanup of environmental impacts on military property in a manner consistent with CERCLA.

The purpose of the ER Program is to reduce the risk to human health and the environment from historical waste disposal operations and hazardous substance spills on Navy properties. The ER Program follows CERCLA as a model for its response process and is fully compliant with EPA regulations and federal law. Figure 2-1 displays the steps of the CERCLA process.

The DoD has two distinct programs within the ER Program to effectively address remediation of its sites: the IRP and the Munitions Response Program (MRP). Sites within the ER Program are typically investigated and addressed under the CERCLA process; however, in some circumstances, the Resource

Conservation and Recovery Act corrective action process is implemented. Regardless of the regulatory drivers, the CERCLA process guides all community involvement activities for the Navy ER Program.

2.3.1 Installation Restoration Program

The IRP focuses on releases of hazardous substances, pollutants, and chemicals that pose environmental health and safety risks. Under the IRP, the Navy follows this process:

- Investigate the nature and extent of impacts caused by releases of hazardous substances to the environment from past naval operations.
- Assess the potential risks to human health and the environment posed by these impacts.
- Determine the appropriate method to clean up the sites.
- Design and implement a remedy for each site.

Figure 2-1 identifies the investigation and cleanup approach under the IRP and outlines the response phases and steps. The Navy's environmental response process is consistent with the requirements of CERCLA and the NCP, as amended. Under these laws, the Navy may implement restoration activities to investigate and clean up environmental impacts.

In implementing the IRP at each installation, the Navy follows the *Department of the Navy Environmental Restoration Program Manual* (DON 2018) and other federal and state guidance. The Navy works in close cooperation with the State of Hawaii Department of Health (DOH), EPA Region 9, Natural Resource Trustees (e.g., U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and State of Hawaii Department of Land and Natural Resources), and the public.

2.3.2 Military Munitions Response Program

Historically, the Navy has conducted live-fire training and testing of weapon systems at some of its properties in Hawaii to ensure military readiness to protect and defend our nation. As a result, some Navy range properties may contain unexploded ordnance, waste military munitions, or chemical residues of munitions.

The Navy follows the DoD MRP, established as an element of the DERP in 2001, to address the potential environmental, health, and safety issues presented by munitions materials at inactive firing ranges. Munitions response actions follow the CERCLA investigation and cleanup process due to the MRP being implemented under the ER Program.

A discussion of MRP management structure, program policies, and requirements for conducting a munitions response is presented in the DoD *DERP Management Manual* (DoD 2012). The U.S. Congress further broadened the MRP by enacting Sections 311 through 313 of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107-107).

2.4 ENVIRONMENTAL RESTORATION PROGRAM IN HAWAII

In the 1980s, before the implementation of the IRP, the Navy began to implement preventive and mitigative procedures in conjunction with its base operations to prevent the release of hazardous chemicals to the environment. However, previous military operations at JBPHH resulted in chemical releases to the harbor, soil, and groundwater in some areas of the base. These chemicals include volatile and semivolatile organic compounds, heavy metals, polychlorinated biphenyls, pesticides, petroleum products, and solvents. Concern over these releases led the Navy to identify 30 sources of potential releases of hazardous waste in 1983.

The National Priorities List (NPL) is a designation by the EPA for the nation's most serious uncontrolled or abandoned hazardous waste sites. Two NPL sites are located at JBPHH: the PHNC NPL site and the NCTAMS PAC NPL site. The PHNC and NCTAMS PAC NPL sites were added to the EPA's NPL on October 14, 1992, and May 31, 1994, respectively. JBPHH's inclusion in the NPL made it eligible for priority funding. For each NPL site, the EPA, the DOH, and the Navy signed a Federal Facility Agreement (FFA) that identified procedures for addressing chemical impacts. The FFA for the PHNC NPL was signed in March 1994 and the FFA for the NCTAMS PAC NPL was signed in March 2009 (EPA, State of Hawaii, and DON 1994; 2009). These agencies have been working towards this goal in an active partnership since that time. The Navy is also conducting environmental investigation and cleanup activities for areas within JBPHH that are not included in the designated PHNC or NCTAMS PAC NPL sites under both the IRP and the MRP. Appendix C lists all ER Program sites and their response phase status.

An additional important aspect of the Navy ER Program in Hawaii is the monitoring and response to emerging contaminants. The DoD defines emerging contaminants as "a chemical or material that is characterized by a perceived or real threat to human health or the environment with no published health standard, or an evolving standard" (NAVFAC EXWC 2024). Emerging contaminants that are frequently associated with past Navy operations include: per- and polyfluoroalkyl substances, 1,4 -dioxane, and perchlorate. Provisions for incorporating emerging contaminants into existing ER Program procedure are included in the Navy ER Program manual (DON 2018).

Of note, the ER Program currently governs two sites within the RHBFSF, which are described in Appendix C; however, the ER Program does not include response efforts for the fuel releases discovered in 2014 and in 2021 at the RHBFSF. Instead, these releases are being managed under the Resource Conservation and Recovery Act and administrative consent orders issued in 2015 (EPA Region 9 and DOH 2015) and 2023 (EPA Region 9 2023). Pursuant to these documents, the Navy's community involvement programs include the formation of the Community Representation Initiative, regular meetings and updates, and the creation of new educational websites and online tools including webinars. Links to online information resources related to the fuel release are included in Table 5-3.

2.5 THE NAVY'S COMMUNITY INVOLVEMENT PROGRAM IN HAWAII

Community involvement is a vital component of the Navy ER Program, which ensures that people living near military cleanup sites have the opportunity to influence cleanup decisions. The Navy has established a community involvement program for its JBPHH locations to facilitate and provide a framework for public involvement.

The Navy community involvement programs are conducted in accordance with the requirements of CERCLA, the NCP, and EPA guidance (EPA 1990; 1996a; 1996b; 1998a; 1998b; 1999a; 1999b; 1999c; 1999d; 2001a; 2001b; 2002a; 2002b; 2003a; 2003b) as summarized in the EPA *Superfund Community Involvement Handbook* (EPA 2020). The Navy, as the lead agency for community involvement activities, is responsible for meeting all of the legal requirements relative to community involvement and for ensuring that the public has been given a meaningful opportunity to participate in the process.

The Navy implemented its community involvement programs for its Oahu installations beginning in 1989 with a briefing to the media regarding its IRP at JBPHH. The Navy programs continue to emphasize frequent and direct contact between Navy personnel and local residents through community meetings and outreach activities. Specific information on current community outreach is included in Section 5.2.

2.5.1 Community Involvement Plans

CIPs are developed and periodically updated to identify specific outreach activities that should be conducted to meet the information needs of communities near Navy ER Program sites. CIPs should be updated regularly as new information becomes available, typically every 3 to 5 years (DON 2018). CIPs provide guidance to Navy personnel and community members on how to effectively implement the Navy community involvement program at each installation. In the 1990s, the Navy prepared, and in some cases updated, community relations plans (CRPs) (the predecessor to CIPs) in accordance with the requirements of CERCLA and the NCP for the following:

- PHNC (Hill and Knowlton 1992; PRC 1996)
- NAVMAG PH Lualualei Branch (DON 1991)
- NCTAMS PAC Wahiawa (DON 1995; Hill and Knowlton 1992; PRC 1991)
- NRTF Lualualei (DON 1995; Hill and Knowlton 1992)
- Kalaeloa (DON 1997) (discusses ER sites addressed under the Navy Base Realignment and Closure [BRAC] program)
- Hickam AFB (USAF 2005)

This was followed in 2005 by the publication of the *Community Involvement Plan COMNAVREG Hawaii Installation Restoration Program, Oahu Installations, Hawaii* (DON 2005), which consolidated information from the CRPs listed above, as well as information about the former JBPHH Waikale Annex, into one document. This CIP presents an update to the previous version and incorporates Hickam Field and the Former Hickam POL Pipeline.

2.5.2 Restoration Advisory Boards

The DERP and Navy ER Program Manual require that the Navy establish RABs at installations where ER activities are planned or are being implemented under the ER Program (DON 2018). The RAB is a citizen advisory board or group of individuals that meets regularly with representatives of the Navy and regulatory agencies to discuss the progress of Navy investigation and cleanup efforts and to solicit community input. Members of the RAB receive current information about environmental conditions, investigations, potential risks to human health and the environment, and subsequent cleanup activities at Navy ER Program sites. RAB members are encouraged to share that information with their respective community members. In this manner, the RAB provides community stakeholders with the opportunity to offer advice and express community opinions on cleanup goals, priorities, methods, and concerns. Details on the history and structure of the RAB program for JBPHH are discussed in Section 4.



Steps in the Environmental Restoration Program Process

Preliminary Assessment (PA): The first step in the cleanup program is to identify sites that may need to be cleaned up. This first step is designed to distinguish between sites that pose little or no threat to human health or the environment and sites that may pose a threat and require further investigation. The PA involves a review of historical documents and a visual site inspection.

Site Inspection (SI): The SI step collects more information through sampling and laboratory analysis. Media samples (e.g., water and soil) are typically collected during the SI step to confirm the presence of and identify potentially hazardous substances.

Remedial Investigation (RI): The RI step determines the type and extent of contamination at the site. The RI is designed to learn more about the site contamination and determine if any known contamination is leaving (i.e., migrating from) the site. During this step samples are usually collected from the soil, groundwater, surface water (such as creeks or lakes), soils, and sediments. The RI includes a risk assessment to identify potential impacts on human health and the environment.

Feasibility Study (FS): The FS develops and evaluates remedial (i.e., cleanup) alternatives for cleaning up the site based on the data collected during the RI.

Proposed Plan (PP): The PP summarizes the remedial alternatives presented in the FS and proposes a preferred remedy. A formal comment period is held for each Proposed Plan to provide an opportunity for public participation in the decision-making process. Site information is compiled and placed in an information repository for public review.

Record of Decision (ROD): The ROD documents the selected remedial action. Comments received during the public comment period are summarized and addressed in the ROD.

Remedial Design (RD)/Remedial Action (RA): The RD includes development of technical specifications and design of the cleanup remedies. The RA is the actual construction or implementation phase of the cleanup process.

Note that removal actions may take place at any time during the process if there is an imminent threat to human health and the environment (i.e., time-critical removal action [TCRA] or non-time-critical removal action [NTCRA]).

Five-Year Review (FYR): Once the remedy is in place, a review is completed to determine if it continues to remain protective of human health and the environment.

Operation and Maintenance (O&M): After the construction is complete, O&M activities are put in place to ensure that the cleanup actions remain protective of human health and the environment.

NPL Deletion: Once cleanup goals have been achieved and a site is deemed fully protective of human health and the environment, it is deleted from the National Priorities List (NPL).

Figure 2-1: Navy Site Investigation and Cleanup Process
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3. Community Profiles

The following subsections present site details and community characteristics specific to each of the six areas of JBPHH:

- *Section 3.1: JBPHH Main Base*
 - Includes NMCPAC EAD West Loch Annex, Waipio Peninsula, Pearl City Peninsula, Ford Island, Richardson, Makalapa Crater, Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, NAVFAC Hawaii Compound, RHBFSF, Hickam Field, and other facilities in the Pearl Harbor area
- *Section 3.2: JBPHH Wahiawa Annex (NCTAMS PAC)*
- *Section 3.3: JBPHH Lualualei Annex*
 - Composed of two separate but contiguous facilities: NMCPAC EAD Lualualei Annex and NRTF Lualualei
- *Section 3.4: Former JBPHH Waikele Annex*
- *Section 3.5: JBPHH Kalaeloa (Navy-retained land at the former NAS Barbers Point)*
- *Section 3.6: Former Hickam POL Pipeline*

These focused sections cover the site history and current description of each area of JBPHH. They also include a brief overview of the communities occupying the area surrounding the respective location. These overviews discuss population, economic characteristics, education, and military impact. Each section also covers the history of the ER Program at each site. Specific details on ER Program efforts at JBPHH are presented in Appendix C, which lists sites where environmental investigation and cleanup activities are currently being managed and funded under the Navy ER Program.

Data for the community profile presented for each area of JBPHH were obtained from the U.S. Census Bureau for 2020 unless noted otherwise (U.S. Census 2020a). Communities are defined as census-designated places (CDPs) or Hawaiian Home Lands as determined by the 2020 census. Hawaiian Home Lands are public lands reserved for homesteading activities by people of Native Hawaiian descent, defined as 50 percent Native Hawaiian blood (DHHL 2025). Community concerns and other information directly related to community involvement are discussed in Sections 4 and 5.

3.1 JBPHH MAIN BASE

3.1.1 Site Overview

The following sections describe the history, mission, natural resources, and environmental conditions of the JBPHH Main Base.

3.1.1.1 SITE HISTORY

To ancient Hawaiians, Pearl Harbor was known as Wai Momi, meaning “pearl waters,” and named for the pearl oysters that thrived there. These early residents used the area now known as Pearl Harbor as a site for fishpond construction and taro cultivation. After the arrival of Europeans in Hawaii, much of the land was converted to rice production as diets shifted throughout the 19th century (CNRH 2008). Despite a coral reef that blocked entry to the harbor for deep-draft vessels, several foreign nations vied for control of Pearl Harbor as a potential fuel and supply base. In October 1887, the United States ratified a treaty with King Kalakaua granting the United States the exclusive right to develop Pearl

Harbor into a coaling and repair station to refuel ships. In exchange, the United States allowed Hawaiian sugarcane to enter the United States duty-free (Paul H. Rosendahl, Ph.D., Inc. et al. 2000).

In the early 1900s, the harbor was dredged, the channel was enlarged, and shore facilities were developed that could support the Navy's largest ships. During the next decade, ships and submarines were relocated to the harbor and the physical plant of the PHNC grew steadily. Early base developments included naval communication facilities installed at Hospital Point and a landing strip at Ford Island to accommodate the new flying machines. From the 1920s to early 1940s, the Navy acquired additional land, continued development of shore facilities, and began wharf improvements on the south side of Ford Island, the area later known as Battleship Row.

Around the same time, the Army Air Corps was looking to expand their presence in Hawaii. They selected an area of tangled brush and sugarcane fields to the southwest of the new PHNC to construct a modern airdrome. On May 31, 1935, the new facility was dubbed Hickam Field after the late Lt. Col. Horace Meek Hickam. The base was officially activated on September 15, 1938, and aircraft stationed at Luke Field on Ford Island transferred to the new facility. Hickam Field became the principal army airfield in Hawaii, and the only one able to accommodate B-17 bombers (15th Wing 2010).

After the outbreak of war in Europe, the military engaged in extensive construction at PHNC and Hickam Field. In spring 1940, the Navy moved its Pacific Fleet ships to Hawaii due to rising tensions in the Pacific. Soon thereafter, the United States entered World War II prompted by the attack on Pearl Harbor on December 7, 1941. The attack cost 2,403 American lives and established a permanent place in history for Pearl Harbor. Hickam Field was hit hard during the attack and suffered extensive damage to its runways and aircraft.

In the years that followed, Navy presence, workforce, and operational support at Pearl Harbor were heavily relied upon during World War II and the Korean and Vietnam Wars. Hickam Field became Hickam AFB after the establishment of the U.S. Air Force as a separate branch of the military. Hickam AFB became the home for the Air Force 15th Wing, which went on to support many critical missions throughout the second half of the 20th century, including support for the Apollo missions and later the space shuttle program (15th Wing 2010).

In 1964, the Secretary of the Interior declared the U.S. Naval Base, Pearl Harbor, a National Historic Landmark. It was placed on the National Register of Historic Places in 1966. The Navy, the Advisory Council of Historic Preservation, and the State of Hawaii Historic Preservation Office executed a Memorandum of Agreement in 1979 that addressed actions to be taken to avoid or mitigate adverse impacts on its historic characteristics (Paul H. Rosendahl, Ph.D., Inc. et al. 2000). In 1980, Hickam AFB was similarly recognized.

Today, Hawaii is home to the Navy's largest and most strategic island base in the Pacific. On October 1, 2010, PHNC was officially merged with the adjoining Hickam AFB to form JBPHH (DON 2024).

3.1.1.2 SITE DESCRIPTION

JBPHH Main Base is located on the southern portion of the Ewa Plain (Figure 1-1), approximately 6 miles northwest of downtown Honolulu. JBPHH plays a crucial role in the nation's defense. This complex consists of facilities needed to support the Pacific Fleet. JBPHH Main Base includes locations such as NMCPAC EAD West Loch Annex, Waipio Peninsula, Pearl City Peninsula, Ford Island, Richardson, Makalapa Crater, Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, NAVFAC Hawaii Compound, RHBFSF, Hickam Field, and several additional outlying facilities in

the Pearl Harbor area. JBPHH Main Base also covers approximately 40,199 acres of water both in the harbor and offshore (DON 2024).

3.1.1.3 ENVIRONMENTAL RESTORATION PROGRAM— SITE INVESTIGATIONS AND CLEANUP

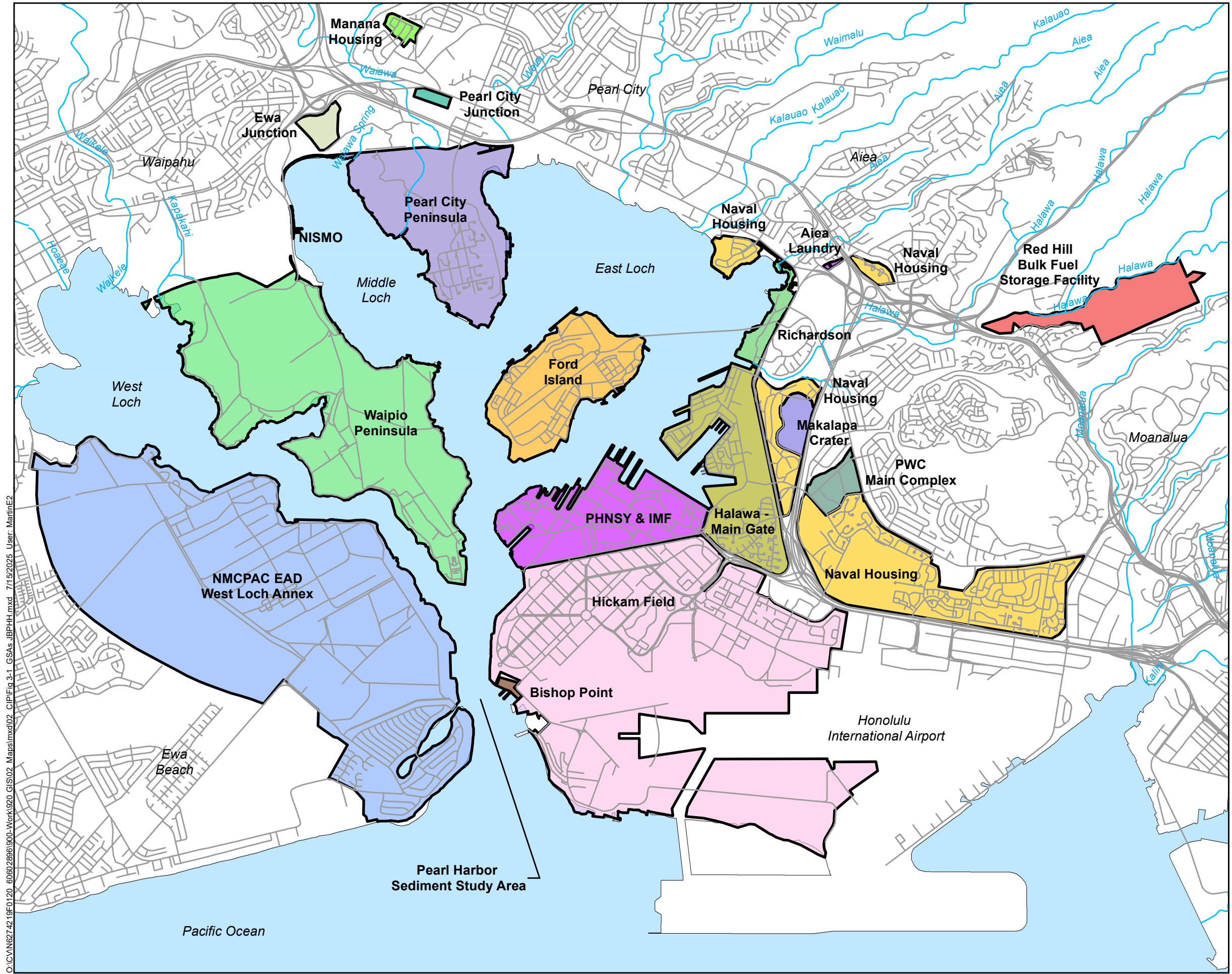
In the 1980s, the Navy began to implement preventive and mitigative procedures in conjunction with its base operations to prevent the release of hazardous chemicals to the environment. However, concern over past releases led the Navy to identify 30 sources of potential releases of hazardous waste in 1983. There is one EPA designated NPL site located within the JBPHH Main Base, the PHNC NPL site, which was added to the NPL on October 14, 1992. In March 1994, the EPA, the DOH, and the Navy signed a FFA that identified procedures for addressing impacts at PHNC NPL site (EPA, State of Hawaii, and DON 1994).

The PHNC NPL includes the following 19 discrete geographic study areas (GSAs) within the JBPHH Main Base area (Figure 3-1):

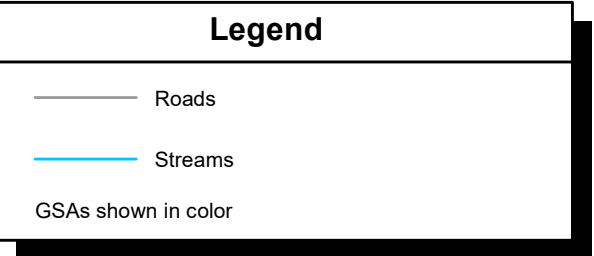
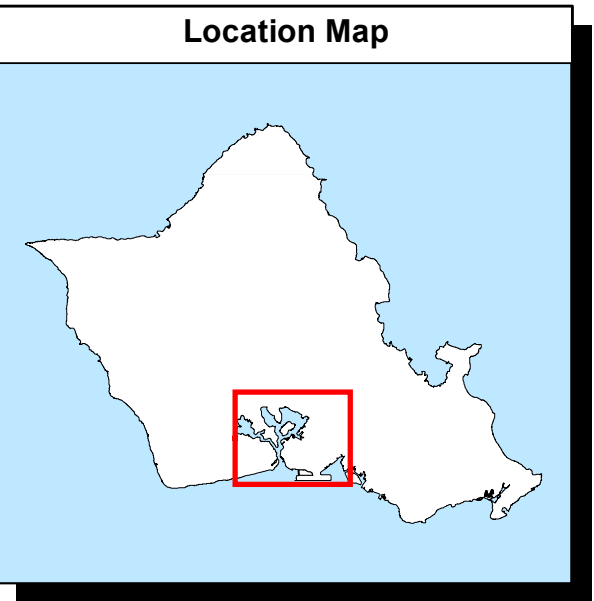
- Former Aiea Laundry
- Former Ewa Junction
- Former Manana Storage
- Former Pearl City Junction
- Pearl Harbor Sediment Study Area
- Red Hill
- Bishop Point
- Ford Island
- Halawa Main Gate
- Makalapa Crater
- Naval Housing (multiple locations)
- Naval Sea Systems Command Inactive Ships On-Site Maintenance Office Pearl City Peninsula
- NAVFAC Hawaii Compound (Former Public Works Center Main Complex)
- Richardson
- Shipyard
- Waipio Peninsula
- West Loch

GSAs were designated based mostly on geography, land use, and naval activities occurring within the area. Environmental sites within a GSA might be related by a common impact source(s), anticipated response action(s), or location within a drainage area. These sites might be studied on an individual or a group basis.

The JBPHH Main Base also includes Hickam Field, which is not on the NPL. ER efforts on all JBPHH sites are guided by the CERCLA process regardless of NPL status. Appendix C lists environmental sites currently being addressed at JBPHH Main Base locations under the Navy ER Program.



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Notes	
1. Map Projection: NAD83 State Plane Hawaii Zone 3 (ft)	
2. Acronyms and Abbreviations:	
EAD	East Asia Division
GSA	Geographic Study Area
IMF	Intermediate Maintenance Facility
JBPHH	Joint Base Pearl Harbor-Hickam
NISMO	Naval Sea Systems Command (NAVSEA)
	Inactive Ships On-Site Maintenance Office
NMCPAC	Navy Munitions Command Pacific
PHNSY	Pearl Harbor Naval Shipyard
PWC	Public Works Center

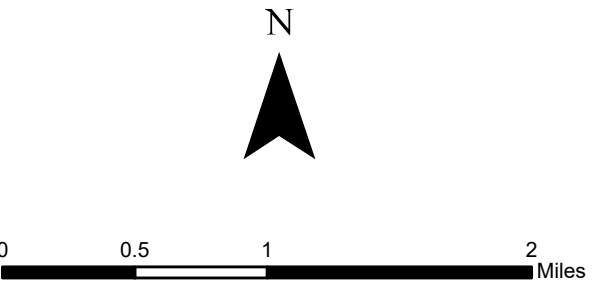


Figure 3-1
JBPHH Main Base Geographic Study Areas
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.1.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for 15 CDPs and one Hawaiian Home Land area that border or are near JBPHH (Figure 3-2) (U.S. Census 2020a):

- Aiea, to the northeast
- Ewa Villages, to the southwest
- Ewa Gentry, to the southwest
- Ewa Beach, to the south
- Halawa, to the east
- Hickam Housing, slightly southeast
- Iroquois Point, to the south
- Pearl City, to the north
- Pearl City Hawaiian Home Land, to the north
- Royal Kunia, to the northwest
- Urban Honolulu, to the east
- Waikēle, to the northwest
- Waimalu, to the northeast
- Waipahu, to the northwest
- Waipio, to the northwest
- West Loch Estate, to the west

Halawa, Aiea, Waimalu, and Pearl City are heavily urbanized, with various industries and businesses located near the H-1 Freeway and Kamehameha and Farrington highways. These include shopping centers, restaurants, movie theaters, hospitals, car dealerships, nurseries, manufacturing and storage facilities, industrial areas, and access to the Skyline rail system. The northern upland areas of Pearl City and Aiea also support significant residential communities. To the east, the Urban Honolulu CDP is a vast, densely populated area that extends far beyond JBPHH. Within this area, the neighborhoods of Salt Lake and Moanalua are close to both JBPHH and the RHBFSF, playing a significant role in the JBPHH community. Additionally, Foster Village, located in Halawa, is part of this region. These neighborhoods contain military residential communities including Aliamanu Military Reservation and Red Hill Housing, as well as Moanalua Hillside Apartments. Military housing is also present within the nearby Fort Shafter installation. Further north and west are Waipio, Waikēle, Royal Kunia, and the more densely populated community of Waipahu. Ewa Villages, Ewa Gentry, West Loch Estate, and Ewa Beach are primarily residential, although some industry is present in the area. Iroquois Point is a moderately populated naval housing area, and Hickam Housing is within the Hickam Field property.

Services supporting the area include fire stations (two each in the communities of Pearl City and Waipahu, and one each in the communities of Aiea, Salt Lake, and Ewa Beach); libraries in Aiea, Ewa Beach, Pearl City, and Waipahu; and nearly a dozen clinics, rehabilitation centers, and major medical facilities, including the Pali Momi Medical Center in Aiea, Tripler Army Medical Center in Moanalua, and The Queen's Medical Center – West Oahu in Ewa Beach. Numerous neighborhood boards operate in the communities surrounding JBPHH.

Recreational facilities include golf courses, numerous community and neighborhood parks, bike trails, and community recreation centers. Large sections of public beach are accessible through Ewa Beach.

Population: The area around JBPHH Main Base is densely populated. As of the 2020 U.S. Census, the total population of the JBPHH Main Base area communities is 230,111 (excluding the Urban Honolulu CDP) (U.S. Census 2020b). The personnel at JBPHH Main Base have varied over the years because of mission changes, BRAC activities, and fluctuations in the number and type of aircraft stationed at the base. Military personnel at JBPHH may be housed either in military-controlled housing units or in private housing within the local community. According to the Navy, over 107,000 active duty, civilian, retired, and contractor personnel live within the umbrella of JBPHH as of 2022 (CNRH 2022).

Income and Employment: As of the 2020 U.S. Census, JBPHH Main Base area communities showed a range of economic conditions. Some communities have median household income levels that are higher than those for the City and County of Honolulu as a whole, as well as those for the State of Hawaii. Other communities are much lower income with median household incomes notably below the city and county and the state.

JBPHH Main Base area communities have a diverse array of businesses and industries befitting a large urban center. The largest presence in the majority of JBPHH Main Base communities is from the educational, health, and social services sectors. Arts, entertainment, recreation, accommodation, and food services industries are also a significant presence in these communities.

JBPHH, and the DoD generally, has a strong regional economic impact on the State of Hawaii. As of fiscal year 2022, the defense industry is the second largest industry statewide, contributing 8.9 percent to Hawaii's gross domestic product. During the same year, the military spent \$3.2 billion on defense contracts statewide. This spending has been growing for several years and the Navy and Air Force spend well above half of the amount (OLDCC 2023).

JBPHH as a whole maintains more than 36,000 active duty and 17,000 civilian DoD personnel. These personnel live in the community, spend money in the local economy and use amenities and resources. JBPHH itself also spends money on goods and services purchased in the local community. Thus, the payroll and expenditures of JBPHH have a compounding impact in the local economy (CNRH 2022).

Education: Numerous public elementary, intermediate, and high schools as well as several private schools serve the JBPHH Main Base area communities. Leeward Community College in Pearl City provides higher education for area students.

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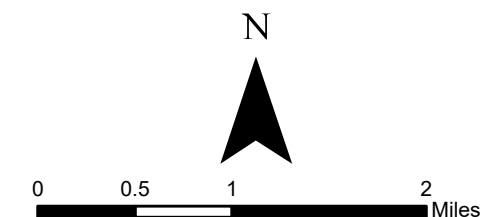
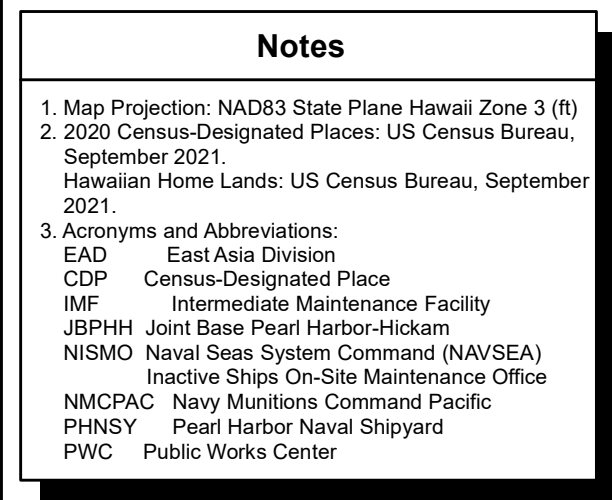
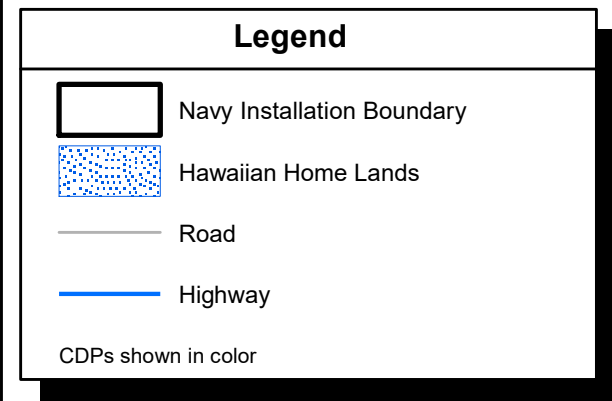
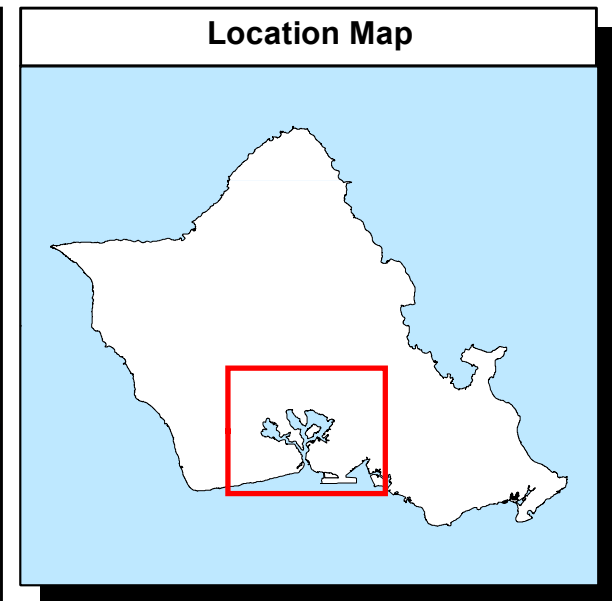


Figure 3-2
Communities Near JBPHH Main Base
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.2 JBP HH WAHIAWA ANNEX

3.2.1 Site Overview

The following sections describe the history, mission, natural resources, and environmental conditions of JBP HH Wahiawa Annex.

3.2.1.1 SITE HISTORY

JBP HH Wahiawa Annex is located in central Oahu, Hawaii (Figure 1-1) and is part of the NCTAMS PAC command (formerly known as NCTAMS Eastern Pacific). NCTAMS PAC functions as the Master Station for the Pacific area of the naval telecommunications system. The command operates and maintains communication facilities and equipment for Navy shore installations, fleet units in the Pacific Basin, and the Defense Communications System (DON 1995). In addition to the Wahiawa station, NCTAMS PAC includes NRTF Lualualei, located on the Waianae coast of Oahu (Section 3.3).

Naval communication facilities were first installed on the Hawaiian Islands in 1916 at Hospital Point, Pearl Harbor, Oahu. In 1931, the federal government purchased 1,700 acres of land in Lualualei Valley on the Waianae coast of Oahu for construction of a naval radio facility (i.e., NRTF Lualualei). This facility was activated in 1936 (DON 1995).

Continued growth of Navy communications requirements led to the 1940 construction of NCTAMS PAC Wahiawa, now known as JBP HH Wahiawa Annex. After the 1941 attack on Pearl Harbor, the Navy faced an urgent need to expand island radio facilities. To meet this need, functions were consolidated at NCTAMS PAC Wahiawa, expanding the station's capabilities and facilities (DON 1995).

In 1970, Army, Coast Guard, and Air Force communications facilities were consolidated and moved to NCTAMS PAC Wahiawa.

3.2.1.2 SITE DESCRIPTION

JBP HH Wahiawa Annex is located on approximately 700 acres of land in central Oahu (Figure 1-1). JBP HH Wahiawa Annex includes both operations and community support facilities, single and family housing, the Navy Exchange Mini Mart, a gymnasium, a youth center, a fitness center, a soccer field, and a movie theater.

The nearest town of Whitmore Village lies approximately 1 mile west of the base. The community of Wahiawa lies approximately 3 miles southwest of the facility and is separated from JBP HH Wahiawa Annex by a deep gulch. The Army Schofield Barracks Military Reservation surrounds the west and southeast portions of Wahiawa, and Wheeler Army Airfield borders Wahiawa on its southwest side. Helemano Military Reservation, a 282-acre Army sub-installation, is located north of JBP HH Wahiawa Annex. Other land near JBP HH Wahiawa Annex consists of the Ewa Forest Reserve (to the northeast). Kamehameha Highway transits through Wahiawa in a north-south direction.

3.2.1.3 ENVIRONMENTAL RESTORATION PROGRAM—SITE INVESTIGATIONS AND CLEANUP

The Navy began its ER Program at JBP HH Wahiawa Annex with an initial assessment in 1986 (NEESA 1986). The JBP HH Wahiawa Annex was designated by EPA as part of the NCTAMS PAC NPL site in May 1994. In March 2009, the EPA, the DOH, and the Navy signed a FFA that identified procedures for addressing impacts at the NCTAMS PAC NPL site. Appendix C presents a list of environmental sites the Navy ER Program is currently addressing at JBP HH Wahiawa Annex.

The NCTAMS PAC NPL is comprised of two noncontiguous areas: JBP HH Wahiawa Annex and NRTF Lualualei. An overview of NRTF Lualualei is discussed in Section 3.3.

3.2.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for four CDPs (referred to herein as communities) near JBPHH Wahiawa Annex, central Oahu (Figure 3-3) (U.S. Census 2020a):

- Wahiawa, to the southwest
- Whitmore Village, to the southwest
- Schofield Barracks Military Reservation (Army), to the south and southwest
- Helemano, to the north

Figure 3-3 also identifies Poamoho Camp (a residential community) located near JBPHH Wahiawa Annex. The U.S. Census Bureau has not designated this area and CDP data are not available.

Wahiawa is a quiet community with several active business and service organizations (e.g., Lions Club, Rotary Club, Wahiawa Community and Business Association) and a neighborhood board. Within Wahiawa are the Wahiawa Freshwater State Recreation Area and the Wahiawa Botanical Gardens. The Wahiawa Reservoir, also known as Wilson Lake, is used for recreational boating and fishing.

Whitmore Village is located along Whitmore Avenue, a road that terminates at JBPHH Wahiawa Annex. The village originated as a Dole Plantation Camp, but the community has gradually become less agricultural and more residential in nature. The most recent census data show jobs in the service industry as the most common source of employment (U.S. Census 2020d).

Schofield Barracks is an Army installation that borders Wahiawa to the south and west, extending eastward to about the Ewa Forest Reserve and southward to the Schofield Barracks Forest Reserve.

The Queen's Medical Center – Wahiawa, a public library, and a fire station serve the area. There are also several shopping malls, small businesses, restaurants, and two military golf courses.

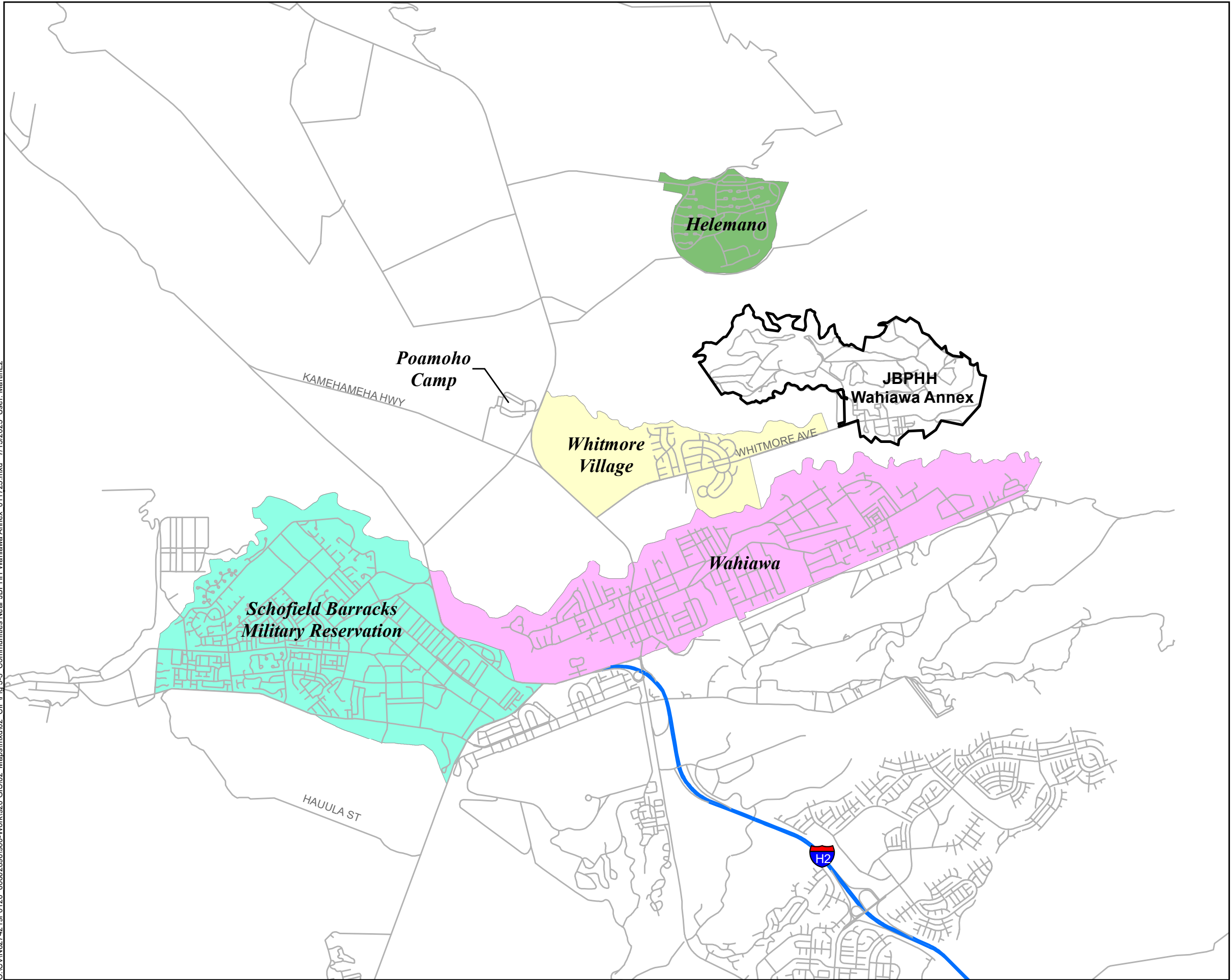
Population: The area around JBPHH Wahiawa Annex is moderately populated. As of the 2020 U.S. Census, the total population of the JBPHH Wahiawa Annex area communities is 40,998 (U.S. Census 2020c). The personnel at JBPHH Wahiawa Annex have varied over the years as a result of mission changes. Military personnel at JBPHH may be housed either in military-controlled housing units or in private housing within the local community. According to the Navy, over 107,000 active duty, civilian, retired, and contractor personnel live within the umbrella of JBPHH as of 2022 (CNRH 2022).

Income and Employment: As of the 2020 U.S. Census, JBPHH Wahiawa Annex area communities are lower income than other areas on Oahu, with all communities having median household incomes well below the median income level for the City and County of Honolulu and the State of Hawaii as a whole.

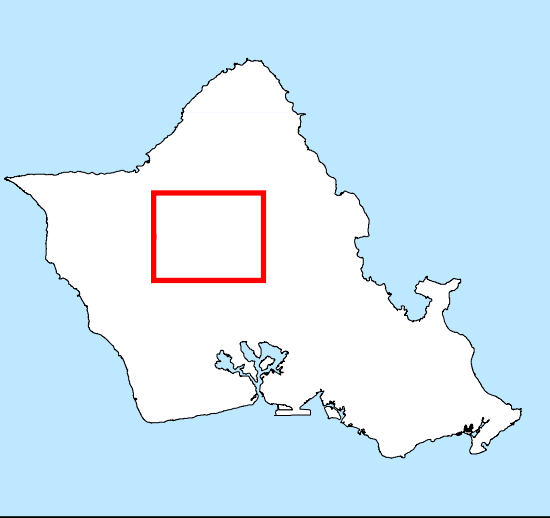
JBPHH Wahiawa Annex area communities have a diverse array of businesses and industries, with the largest presence in the majority of its communities being from the educational, health, and social services sectors. The public administration industry is also well represented in these communities.

Education: Public schools serving the JBPHH Wahiawa Annex area communities include several elementary schools, an intermediate school, and Leilehua High School, as well as private schools and military academies.



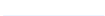
O:\CVN\6274219\F0120_6060289\900-Work\920 GIS\02 Maps\mxd\02_CIP\Fig 3-3 Communities Near JBPHH Wahiawa Annex_011725.mxd 7/15/2025 User: MartinE2



Location Map



Legend

-  LandParcel_Wahiawa
-  Road
-  Highway
- CDPs shown in color

Notes

1. Map Projection: NAD83 State Plane Hawaii Zone 3 (ft)
2. 2020 Census-Designated Places: US Census Bureau, September 2021.
3. Acronyms and Abbreviations:
 - CDP Census-Designated Place
 - JBPHH Joint Base Pearl Harbor-Hickam

N



0 0.25 0.5 1 Miles

Figure 3-3
Communities Near JBPHH Wahiawa Annex
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.3 JBP HH LUALUALEI ANNEX

3.3.1 Site Overview

The following sections describe the history, mission, and current status of JBP HH Lualualei Annex. JBP HH Lualualei Annex consists of two separate yet contiguous facilities: NMCPAC EAD Lualualei Annex and NRTF Lualualei (Figure 1-1).

3.3.1.1 HISTORY

The land that would later become JBP HH Lualualei Annex was originally occupied by Hawaiian farmers and contained many places of significance in Hawaiian culture. Between 1929 and 1931, the U.S. government purchased fee simple more than 4,200 acres of this land from private landowners to house the future NMCPAC EAD, Lualualei Annex and NRTF Lualualei (DON 2024). Approximately 4,600 acres of forest reserve land were transferred from the Territory of Hawaii between 1931 and 1933. NRTF Lualualei was first activated in 1936.

The Naval Ammunition Depot that would later become NAVMAG PH Lualualei was activated in 1934. The depot was converted in 1974 to a NAVMAG to serve as a tri-service military facility and renamed the NAVMAG Lualualei, Headquarters Branch, providing ordnance support to the Navy, Air Force, and Army. In January 2000, the magazine was again renamed to the NAVMAG PH Lualualei Branch as a result of the command's headquarters' move from the Lualualei Branch to the NAVMAG PH West Loch Branch. Subsequently, NAVMAG PH Lualualei Branch was changed to its current name, NMCPAC EAD Lualualei Annex.

3.3.1.2 SITE DESCRIPTION

NRTF Lualualei is located in West Oahu on approximately 1,700 acres of Lualualei Valley adjacent to NMCPAC EAD Lualualei Annex. Together, these two facilities compose the JBP HH Lualualei Annex (Figure 1-1). NRTF Lualualei includes communication towers, an area of vacant housing, and operational support facilities.

NMCPAC EAD Lualualei Annex consists of 7,498 acres of land in the upper Lualualei valley to the west of NRTF Lualualei.

Agricultural and small areas of urban and conservation land use districts surround JBP HH Lualualei Annex. The nearest urban area is the town of Maili, approximately 1 mile west of the station. The towns of Waianae and Nanakuli are also located nearby. The Waianae Kai Forest Reserve lies to the northeast, and Schofield Barracks Forest Reserve lies to the north. Kolekole Pass Road runs northeast through JBP HH Lualualei Annex over the Waianae Mountain Range to Schofield Barracks in central Oahu.

3.3.1.3 ENVIRONMENTAL RESTORATION PROGRAM – SITE INVESTIGATION AND CLEANUP

NRTF Lualualei was designated by the EPA as part of the NCTAMS PAC NPL site in May 1994. In March 2009, the EPA, the DOH, and the Navy signed a FFA that identified procedures for addressing impacts at the NCTAMS PAC NPL site. The NCTAMS PAC NPL is comprised of two noncontiguous areas: JBP HH Wahiawa Annex and NRTF Lualualei. An overview of JBP HH Wahiawa Annex is discussed in Section 3.2.

JBP HH Lualualei Annex also includes NMCPAC EAD, which is not on the NPL. Currently, the Navy is performing investigations and cleanup actions at several environmental sites at JBP HH Lualualei Annex under the ER Program (Appendix C).

3.3.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for three CDPs and six Hawaiian Home Land areas (referred to herein as communities) located near JBPHH Lualualei Annex (Figure 3-4) (U.S. Census 2020a):

- Nanakuli, to the southwest
- Maili, directly to the west
- Waianae, to the northwest
- Lualualei Hawaiian Home Land
- Maili Hawaiian Home Land
- Nanakuli Hawaiian Home Land
- Princess Kahanu Estates Hawaiian Home Land
- Waianae Hawaiian Home Land
- Waianae Kai Hawaiian Home Land

Figure 3-4 also identifies the community of Lualualei that has not been designated by the U.S. Census Bureau and for which CDP data are not available.

The Waianae district has the largest native Hawaiian population on Oahu and is characterized by large extended families with strong ties to one another and the land. Hawaiian activism is strong and vocal in this area. In addition, the average family income is lower in the West Oahu communities than in other towns on Oahu.

The Waianae district was historically reliant on agriculture as the region's primary industry. While this reliance has declined in recent years, this is still one of the most agriculturally important areas on Oahu. Agriculture in this area is diversified without a single crop being dominant. The State of Hawaii Department of Agriculture maintains lands set aside specifically for agriculture at the Waianae Agricultural Park (UH Hilo 2020).

West Oahu has a fair number of small businesses, a few shopping centers, but little industry. One notable exception is the Hawaiian Electric Company power plant located in Kapolei near Nanakuli. Farrington Highway runs along the coast, which features some of the island's most scenic shoreline. The area contains numerous beach parks and two golf courses. A boat harbor in Waianae supports commercial and recreational fishing activities.

Fire stations in Nanakuli and Waianae, a public library, and the Waianae Coast Comprehensive Health Center support the Waianae coast communities.

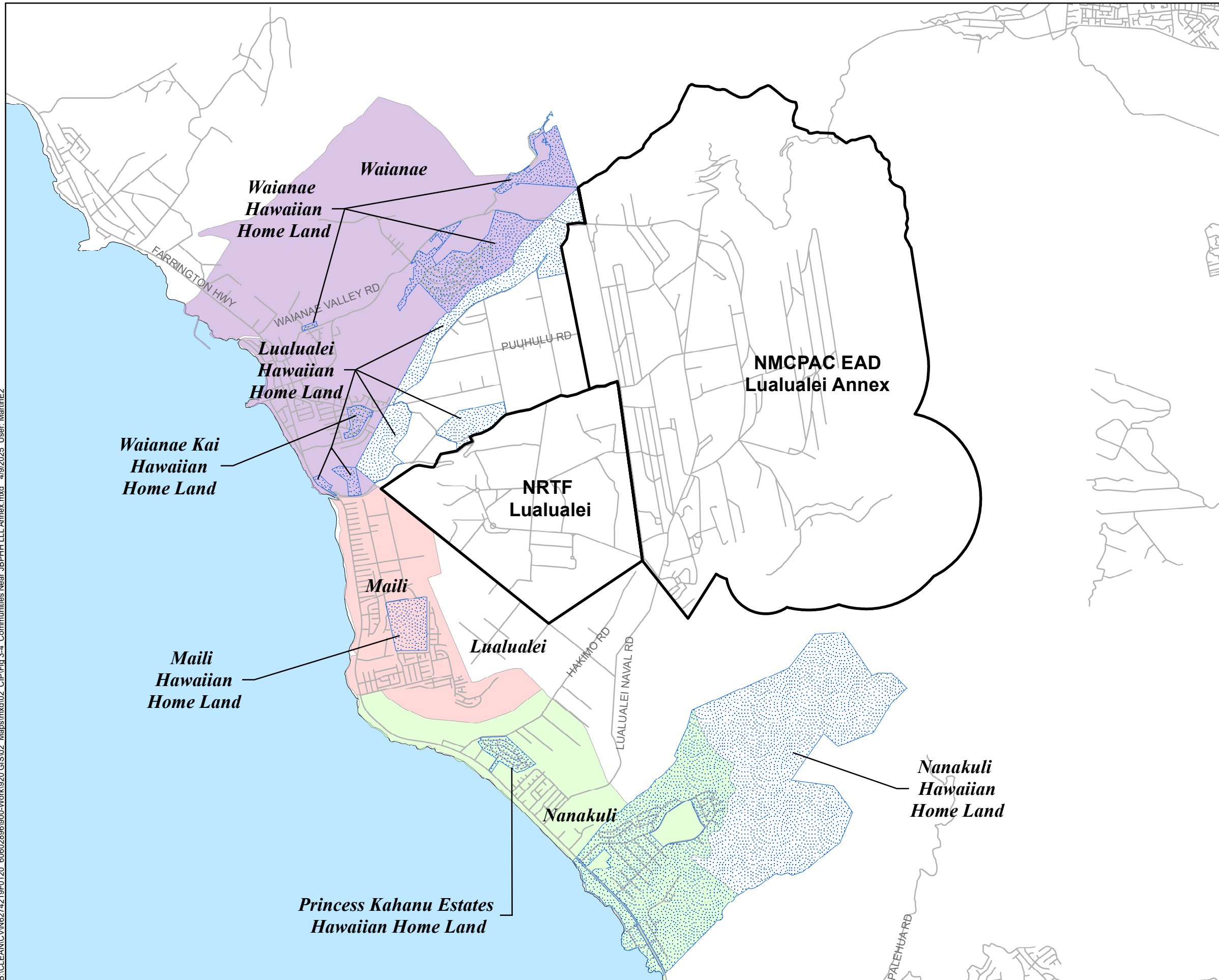
Population: Historically, the Waianae district has been a relatively isolated rural community. However, it has been experiencing steady population growth in recent years. As of the 2020 U.S. Census, the total population of the JBPHH Lualualei Annex area communities is 46,339 (U.S. Census 2020c). The personnel at JBPHH Lualualei Annex have varied over the years as a result of mission changes. Military personnel at JBPHH may be housed either in military-controlled housing units or in private housing within the local community. According to the Navy, over 107,000 active duty, civilian, retired, and contractor personnel live within the umbrella of JBPHH as of 2022 (CNRH 2022, 4).

Income and Employment: JBPHH Lualualei Annex area communities are lower income than other areas on Oahu. The majority of the communities have a median household income well below the median income level for the City and County of Honolulu and the State of Hawaii as a whole.

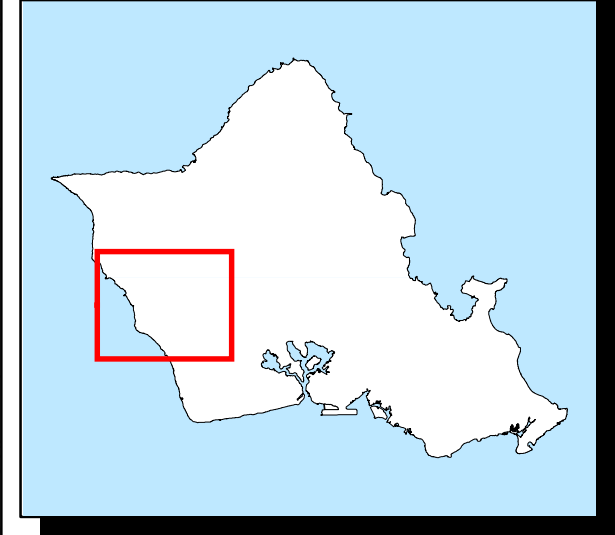
The industries with the largest presence in the JBPHH Lualualei Annex area of communities are those from the educational, health, and social services sectors.

Education: Two public high schools and numerous intermediate and elementary schools serve the JBPHH Lualualei Annex area communities.


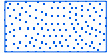
B:\CLEAN\C\N6274219F0120_60602896900-Work\1920_GIS\02_Maps\mxd\02_CIP\Fig 3-4_Communities Near JBPHH LLL Annex.mxd 4/9/2025 User: MartinE2



Location Map



Legend

-  Navy Installation Boundary
-  Hawaiian Home Lands
-  Road
- CDPs shown in color

Notes

- Map Projection: NAD83 State Plane Hawaii Zone 3 (ft)
- 2020 Census-Designated Places: US Census Bureau, September 2021.
Hawaiian Home Lands: US Census Bureau, September 2021.
- Acronyms and Abbreviations:
 - CDP Census-Designated Place
 - EAD East Asia Division
 - NMCPAC Navy Munitions Command Pacific
 - NRTF Naval Radio Transmitting Facility

N

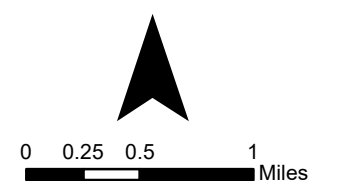


Figure 3-4
Communities Near JBPHH
Lualualei Annex
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.4 FORMER JBPHH WAIKELE ANNEX

3.4.1 Site Overview

The following sections describe the history, mission, natural resources, and environmental conditions of former JBPHH Waikēle Annex.

3.4.1.1 HISTORY

In the 1920s, the Oahu Railway and Land Company operated a railway along Waikēle Stream, and the Oahu Sugar Company had a multiple-track railway along Kipapa Stream. Both railway lines passed through the future NAVMAG PH Waikēle Branch facility and connected agricultural fields to the town of Waipahu. In 1927, only one building adjacent to the Oahu Railway and Land Company railway was present on the subject property.

The federal government acquired the land adjacent to these streams from various owners between 1942 and 1946. During this period, the Army constructed 120 tunnel magazines into the sides of the valley walls to store ordnance. Additional military support facilities were constructed at the facility during the 1950s and 1970s. Military support facilities and structures (i.e., offices and barracks) were generally located at the upper elevation area near the main gate. Facilities for weapons storage, transfer, operations and maintenance were located in the lower valley areas. The upper bluff and lower gulch areas were controlled and administered by the Navy and referred to as NAVMAG PH Waikēle Branch, though it is now referred to as JBPHH Waikēle Annex.

The number of structures at the Waikēle facility decreased in the 1980s through the 1990s. NAVMAG PH Waikēle Branch was then decommissioned in 1993 and all ordnance was removed by the end of that year. Following closure, areas of the former annex began being transferred to private entities for residential and commercial development (DON 1999). As of 2025, the Navy no longer owns any land within the footprint of the former JBPHH Waikēle Annex.

3.4.1.2 SITE DESCRIPTION

The former JBPHH Waikēle Annex is located on the southern edge of the Schofield Plateau in south-central Oahu (Figure 1-1). It is approximately 0.5 miles north of the town of Waipahu. The H-1 Freeway forms the north boundary of Waipahu. Farrington Highway, the primary location for community and industrial businesses, runs along the southern portion of Waipahu. Mililani sits on a ridge overlooking the annex. Kamehameha Highway borders Waipio on its west flank. Open grass and residential areas lie between Kamehameha Highway and former JBPHH Waikēle Annex.

The former JBPHH Waikēle Annex occupies 515 acres of land, which has two distinct topographic areas:

- An upper, fairly level area inside the main entrance on the eastern side of the valley
- A lower gulch area along the streams

The transition between these areas is relatively steep. A road descends from the upper area to the stream valleys (DON 1999).

Land adjacent to the facility is a combination of agricultural land and developed residential and commercial parcels.

3.4.1.3 ENVIRONMENTAL RESTORATION PROGRAM— SITE INVESTIGATIONS AND CLEANUP

Appendix C lists environmental sites currently being addressed under the Navy ER Program.

3.4.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for five CDPs (referred to herein as communities) near the former JBPHH Waikele Annex (Figure 3-5) (U.S. Census 2020a):

- Mililani Town, a residential community to the north and west
- Waipio, directly to the east
- Waikele, to the southeast
- Waipahu, to the south
- Royal Kunia, directly to the west

Two fire stations in Waipahu and two in Mililani, libraries in both Waipahu and Mililani, and several clinics and a rehabilitation center serve the area. Other community facilities include numerous malls and shopping centers and four golf courses (the Royal Kunia Country Club is directly west of former JBPHH Waikele Annex, and the Waikele Country Club is nearby to the east). Several neighborhood and community parks are present throughout the area.

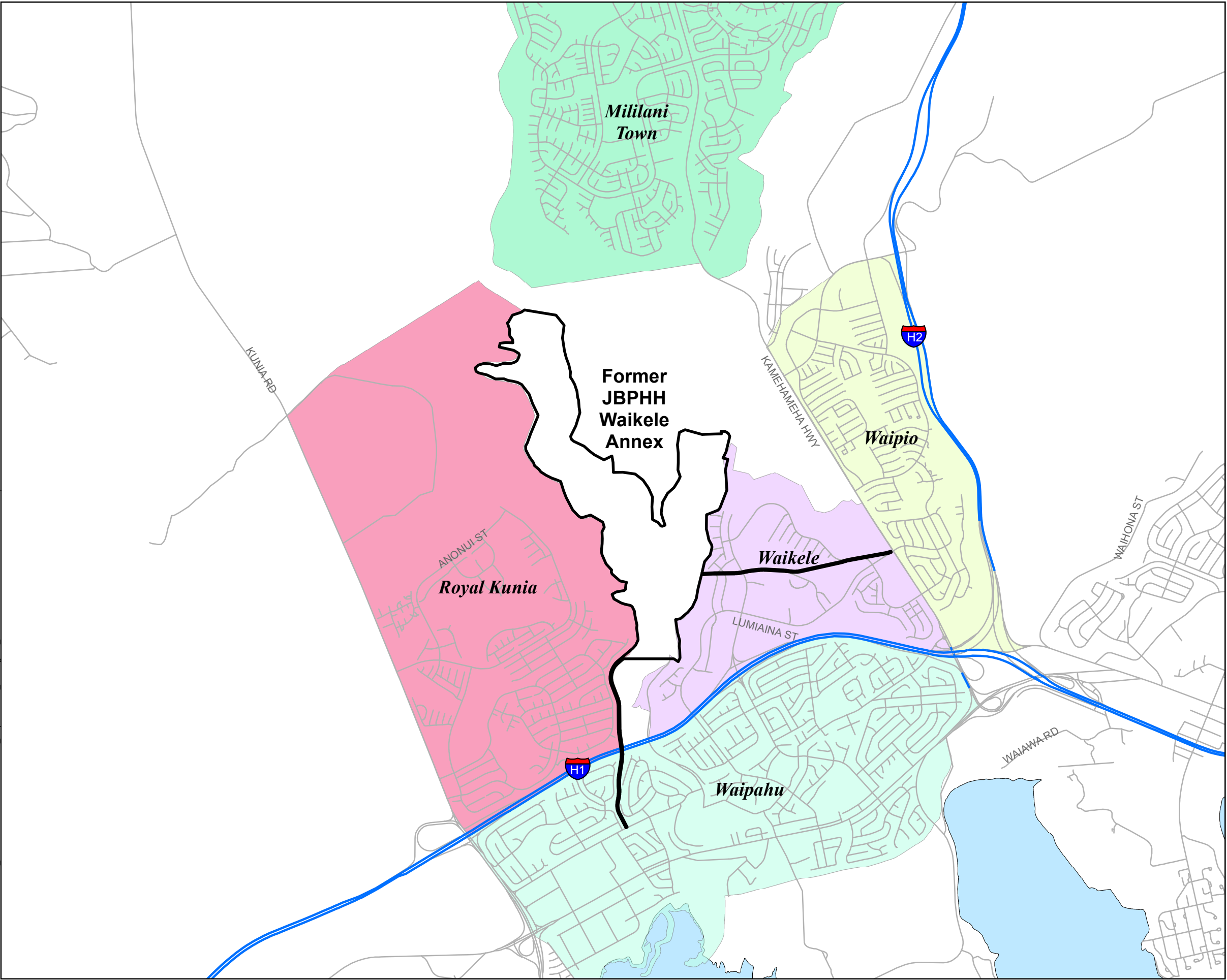
Population: The area around former JBPHH Waikele Annex ranges from moderately to densely populated. As of the 2020 U.S. Census, the total population of the area communities near the former JBPHH Waikele Annex is 106,903 (U.S. Census 2020c). Since its closure in 1993, no military personnel were housed at the former JBPHH Waikele Annex.

Income and Employment: As of the 2020 U.S. Census, area communities near the former JBPHH Waikele Annex are largely representative of economic trends on Oahu with the majority of household incomes near or slightly above the median income level for the City and County of Honolulu and the State of Hawaii as a whole (U.S. Census 2020c). Waipahu is the exception, with a median household income below the average for both the city and county and state.

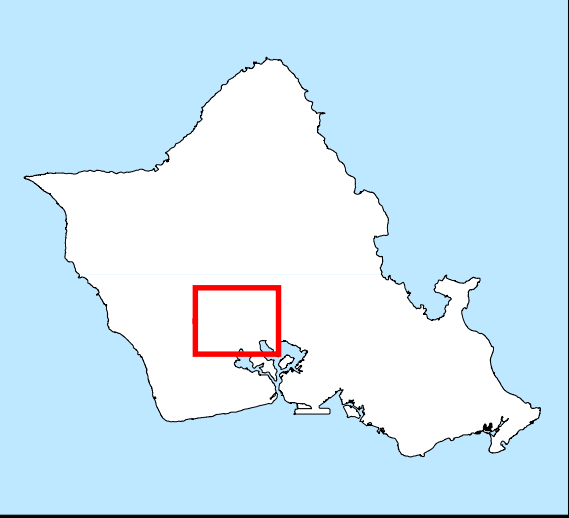
Former JBPHH Waikele Annex area communities have a diverse array of businesses and industries, with the largest presence in the majority of communities being from the educational, health, and social services sectors. The arts, entertainment, recreation, accommodation, and food services industries also maintain a significant presence in these communities.

Education: Public schools are present in all former JBPHH Waikele Annex area communities, including several elementary schools throughout the five communities and intermediate/middle and high schools in Waipahu and Mililani Town.




B:\CLEAN\C\NV6274219\F0120_60602896900-Work\1920_GIS\02_Maps\mxd\02_CIP\Fig 3-5 Communities Near Former JBPHH Waikale Annex.mxd 4/3/2025 User: MartinE2



Location Map



Legend

-  Navy Installation Boundary
 -  Road
 -  Highway
- CDPs shown in color

Notes

- Map Projection: NAD83 State Plane Hawaii Zone 3 (ft)
- 2020 Census-Designated Places: US Census Bureau, September 2021.
Hawaiian Home Lands: US Census Bureau, September 2021.
- Acronyms and Abbreviations:
CDP Census-Designated Place
JBPHH Joint Base Pearl Harbor-Hickam

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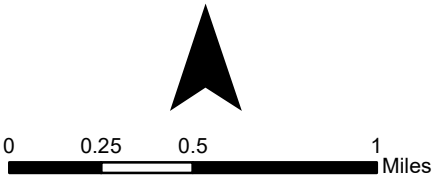


Figure 3-5
Communities Near Former
JBPHH Waikale Annex
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.5 JBP HH KALAELOA

3.5.1 Site Overview

The following sections describe the history, mission, and current conditions of JBP HH Kalaeloa.

3.5.1.1 HISTORY

U.S. military operations at the former NAS Barbers Point (now called JBP HH Kalaeloa) began in the 1930s when the Navy leased a parcel of land from the Estate of James Campbell, one of Hawaii's largest landowners (Figure 1-1). This lease is the earliest recorded involvement of the Navy in the area. At that time, the Navy constructed an emergency landing field to support airfield activities at Ford Island. In 1940, additional operational airfields were urgently needed in Hawaii due to mounting military threats in the Pacific. Therefore, the Navy acquired more than 3,500 acres of Kalaeloa land upon the expiration of the lease and converted the existing emergency landing field into an interim runway with increased service capabilities. Soon afterward in the early years of World War II, the Navy constructed and activated two complexes of runways and air support facilities on the property known as NAS Barbers Point and Ewa Marine Corps Air Station. NAS Barbers Point absorbed Ewa Marine Corps Air Station in the later 1940s (CNRH 2008).

NAS Barbers Point's mission was to provide services and materials to support various Navy operational units. For 20 years, NAS Barbers Point was home to the Commander Fleet Air Hawaii and Fleet Air Wing Two. Over the years, the base was modernized and expanded and served primarily as a major training area for aircraft carrier readiness exercises in Southeast Asia. It also played a key logistics and support role in the Korean and Vietnam Wars in the 1950s and 1960s, respectively. After the Vietnam War, NAS Barbers Point was the largest NAS in the Pacific under the Commander, Naval Air Forces Pacific. It was homeport to several maritime surveillance and antisubmarine warfare aircraft squadrons, the U.S. Coast Guard, and United Nations forces and personnel.

The BRAC Commission selected NAS Barbers Point for closure in 1993. ER efforts conducted to support base closure and property transfer under the BRAC program resulted in the identification of approximately 2,400 acres of land as uncontaminated and suitable for transfer (referred to as BRAC property). The base was operationally closed in July 1999, allowing for subsequent property transfers to occur through 2004. Future land uses for the transferred land include airport runways and facilities, parks, homes, utility systems, a water desalination plant, and roads. Many military functions previously assumed by former NAS Barbers Point have been moved to Marine Corps Base Hawaii at Kaneohe Bay, Oahu, Hawaii.

As of 2025, the Navy has retained approximately 923 acres of land from the former footprint of NAS Barbers Point in several noncontiguous parcels, including housing and shoreline recreational areas (hereinafter referred to as Navy-retained property).

3.5.1.2 SITE DESCRIPTION

JBP HH Kalaeloa is located along the southwest shoreline of the island of Oahu. It is approximately 8 nautical miles west of Daniel K. Inouye International Airport and about 20 miles via highway west of downtown Honolulu. The station is bordered by Campbell Industrial Park to the west, the city of Kapolei to the north, Ewa Beach residential communities, open space to the northeast and east, and the Pacific Ocean to the south. Before its closure, the base occupied approximately 3,709 acres, much of which had been used for Navy airfield operations and open space for the past 50 years (DON 1997). The former airfield facilities at NAS Barbers Point now are a part of Kalaeloa Airport, also known as John Rodgers Field, which is a joint civil-military airport (DON 2024).

3.5.1.3 ENVIRONMENTAL RESTORATION PROGRAM – SITE INVESTIGATIONS AND CLEANUP

Environmental conditions on the former NAS Barbers Point property are being addressed under two separate Navy environmental programs:

- The Navy ER Program addresses impacts on Navy-retained land.
- The Navy BRAC cleanup program addresses impacts on military property that will be or has been transferred under the BRAC.

Both programs follow the same investigation and cleanup regulations and guidance; however, funding for each program comes from different federal sources.

Base closure procedures began in September 1993 with the initiation of an environmental baseline survey at the former NAS Barbers Point to identify potential chemical release sites that require further investigation and cleanup (DON 1994). Some of the sites identified in the BRAC environmental baseline survey were addressed under the ER Program because they were on Navy-retained property. Additional environmental sites have been identified on Navy-retained property during subsequent investigations.

Appendix C lists ER Program sites on the Navy-retained property at JBPHH Kalaeloa.

3.5.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for eight CDPs and six Hawaiian Home Land areas (referred to herein as communities) near JBPHH Kalaeloa (Figure 3-6) (U.S. Census 2020a):

- | | |
|---|--|
| • Makakilo City, to the north | • Ewa Beach, a residential community to the east |
| • Kapolei, to the north | • Kalaeloa |
| • Kapolei Hawaiian Home Land, to the north | • Kalaeloa Hawaiian Home Land |
| • East Kapolei, to the northeast | • Kanehili Hawaiian Home Land, to the north |
| • East Kapolei Hawaiian Home Land, to the northeast | • Kaupea Hawaiian Home Land, to the north |
| • Ewa Villages, to the northeast | • Maluohai Hawaiian Home Land, to the north |
| • Ewa Gentry (Ewa), to the northeast | • Ocean Pointe, to the east |

Figure 3-6 also identifies Campbell Industrial Park. The U.S. Census Bureau has not designated this area and CDP data are not available.

Kenai and Campbell Industrial Parks, which are home to several oil refineries, are located to the west of JBPHH Kalaeloa. Further west is Barbers Point Harbor, the second-largest commercial harbor on Oahu. Kapolei Business Park is located north of the former Navy property. The City and County of Honolulu's Honouliuli Wastewater Treatment Plant, which serves a large part of central and southeast Oahu including the former NAS Barbers Point, lies along the northeast boundary of the Navy property near Fort Weaver Road.

Area medical services include The Queen's Medical Center – West Oahu in Ewa Beach and four other facilities in Ewa Beach and Kapolei. Residents have access to several community, neighborhood, and beach parks. Shopping centers include the large Kapolei Shopping Center as well as the Ka Makana

Alii Mall. Other services include three fire stations in Kapolei and one in Ewa Beach. Kapolei and Ewa Beach each maintain one public library.

Population: The area around JBPHH Kalaeloa is densely populated. As of the 2020 U.S. Census, the total population of the JBPHH Kalaeloa area communities is 118,578 (U.S. Census 2020c). No military personnel currently reside within the Navy-retained land.

Income and Employment: As of the 2020 U.S. Census, Kalaeloa area communities represent a variety of different economic conditions. The majority of these communities have median household incomes greater than the median household income level for the City and County of Honolulu and the State of Hawaii as a whole (U.S. Census 2020c). However, some communities in the areas such as Ewa Villages and East Kapolei have median household incomes well below these benchmarks.

The JBPHH Kalaeloa area has a diverse array of businesses and industries as befits a vibrant urbanized area. The industries with the largest presence in the majority of communities are those in the educational, health, and social services sectors. The retail trade industries also maintain a significant presence in these communities.

Education: JBPHH Kalaeloa area communities are served by numerous public elementary, intermediate, and high schools as well as several private schools. The University of Hawaii – West Oahu, located in Kapolei, provides higher education to local students.

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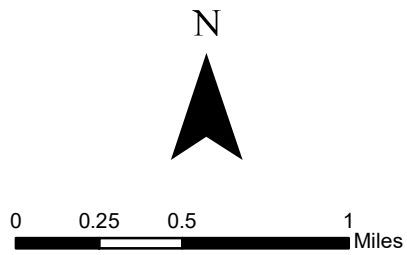
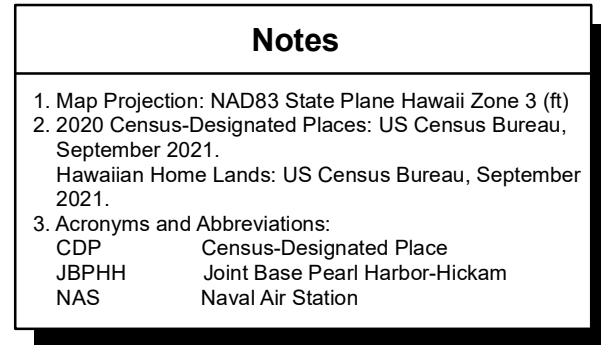
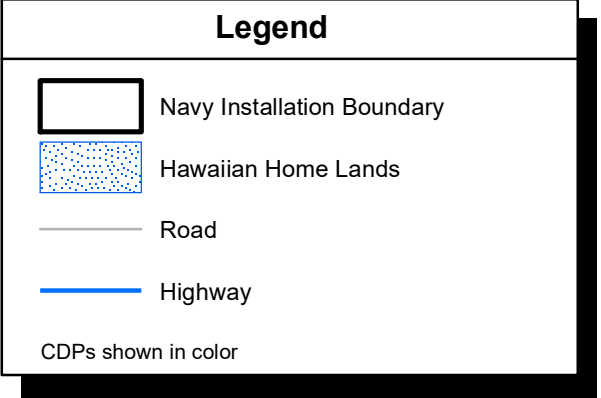
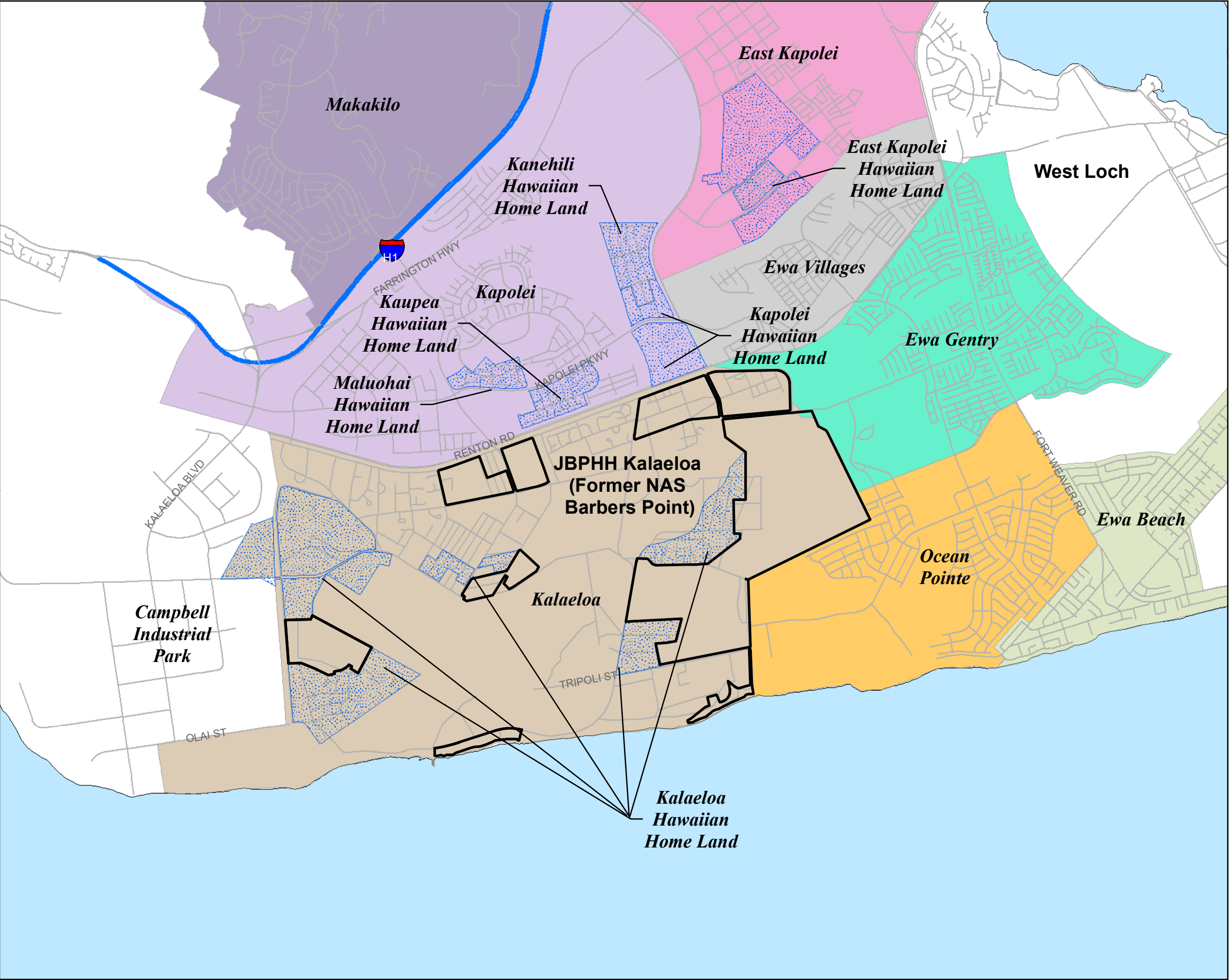


Figure 3-6
Communities Near
JBPHH Kalaeloa
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

3.6 FORMER HICKAM PETROLEUM, OIL, AND LUBRICANTS PIPELINE

3.6.1 Site Overview

The following sections describe the history, mission, and current condition of the Former Hickam POL Pipeline.

3.6.1.1 HISTORY

Designed in 1939, the Former Hickam POL facilities were completed in 1943 with the purpose of providing long-term fuel storage and transmission for Army Air Corps activities. Originally, aviation gasoline and automotive gasoline were distributed through the system. Automotive gasoline was phased out in the 1960s; in 1971, Jet Propellant 4 jet fuel replaced aviation gasoline in the system. Jet Propellant 8 was introduced into the system in October 1992 until system inactivation in March 1993.

Although certain components of the Former Hickam POL Pipeline system had been deactivated and realigned at various times since the mid-1950s, the entire system from Waikakalaua Fuel Storage Area to the Pearl City Tank Farm on Pearl City Peninsula was deactivated in March 1993. The remaining section from the Pearl City Tank Farm to Hickam AFB was rendered inactive in 2001–2002 (USAF 2005).

3.6.1.2 SITE DESCRIPTION

The Former Hickam POL Pipeline begins approximately 1 mile south of Wheeler Army Airfield in the central Schofield Plateau of Oahu and travels southward between the Waianae and Koolau Mountain Ranges, terminating where the broad coastal plain of southern Oahu meets Pearl Harbor. In addition to the former pipeline itself, the Former Hickam POL Pipeline facility sites include associated Fuel Storage Areas at Waikakalaua and Kipapa.

3.6.1.3 ENVIRONMENTAL RESTORATION PROGRAM – Site Investigations and Cleanup

Appendix C lists environmental sites currently being addressed under the Navy ER Program.

3.6.2 Community Background and Profile

The U.S. Census Bureau identifies and provides population data for 11 CDPs and one Hawaiian Home Land area (referred to herein as communities) near the Former Hickam POL Pipeline (Figure 3-7) (U.S. Census 2020a). Figure 3-7 also presents the location of Urban Honolulu in relation to the CDPs. Communities denoted as central have the pipeline passing directly through them:

- Aiea, to the northeast
- Halawa, to the east
- Hickam Housing, to the south
- Mililani Town, central
- Pearl City, to the northeast
- Pearl City Hawaiian Home Land, to the northeast
- Waikale, to the west
- Waimalu, to the northeast
- Waipahu, to the southwest
- Waipio, central
- Waipio Acres, to the north
- Wheeler Army Airfield, to the north

Halawa, Aiea, Waimalu, and Pearl City are heavily urbanized, with various industries and businesses located near the H-1 Freeway and Kamehameha and Farrington Highways. These include shopping centers, restaurants, movie theaters, hospitals, car dealerships, nurseries, manufacturing and storage facilities, industrial areas, and access to the Skyline rail system. The north upland areas of Pearl City and Aiea also support significant residential communities. In the northwest, Waipio, Waikele, and Waipahu are more residential in nature and densely populated. Hickam Housing is within JBPHH Hickam Field. Further north on the Schofield Plateau are the communities of Mililani Town, Waipio Acres, and Wheeler Army Airfield.

Services supporting the area include fire stations (two each in Pearl City, Mililani Town, and Waipahu and one in Aiea); libraries in Aiea, Mililani Town, and Waipahu; and nearly a dozen clinics, rehabilitation centers, and major medical facilities. These include Pali Momi Medical Center in Aiea, and The Queen's Medical Center – West Oahu in Ewa Beach.

Recreational facilities include golf courses, numerous community and neighborhood parks, bike trails, and community recreation centers.

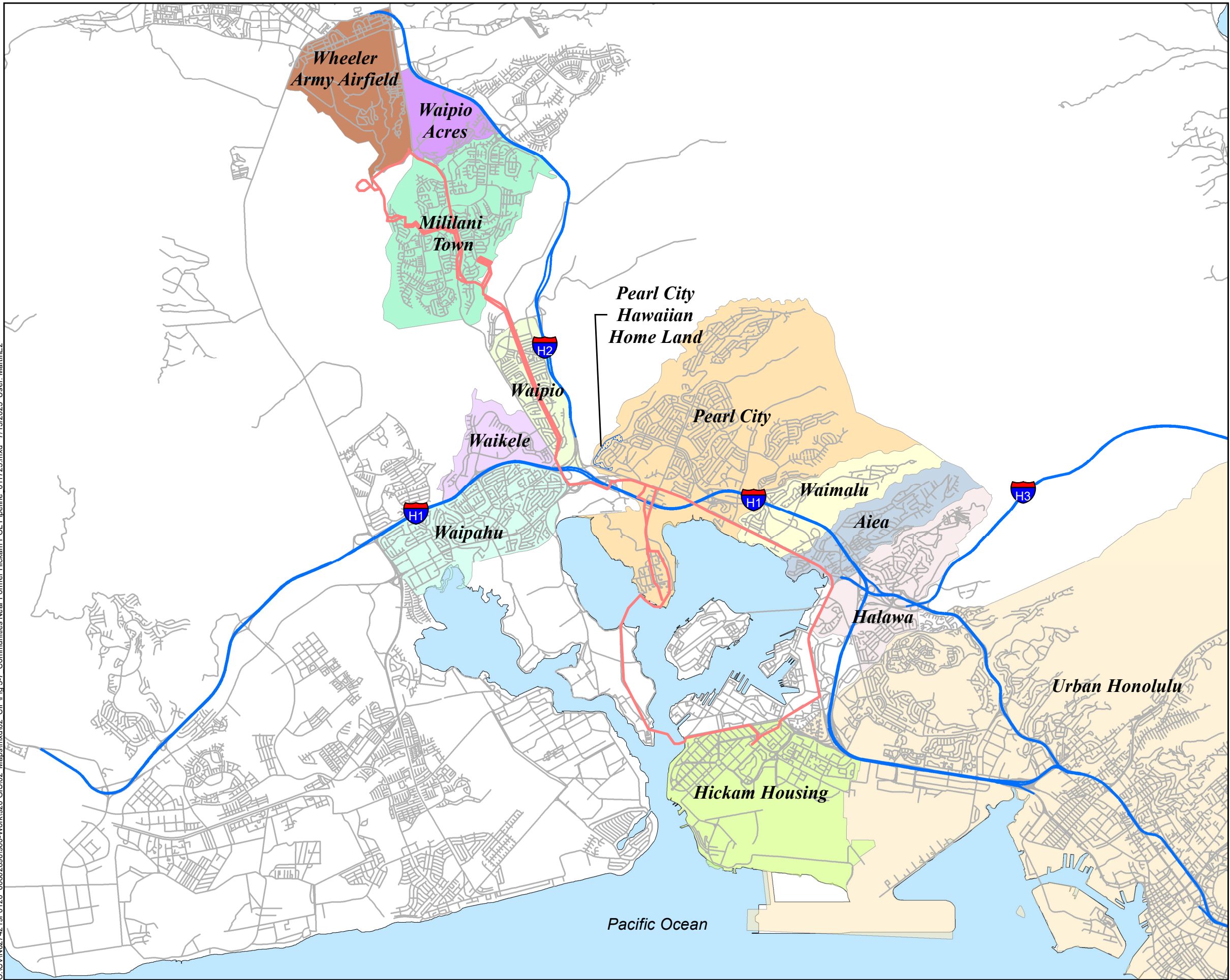
Population: The area around the Former Hickam POL Pipeline ranges from moderately to densely populated. As of the 2020 U.S. Census, the total population of the Former Hickam POL Pipeline area communities is 191,260 (U.S. Census 2020c).

Income and Employment: Former Hickam POL Pipeline area communities are largely representative of economic trends on Oahu, with the majority having median household incomes near or slightly above the median income level for the City and County of Honolulu and the State of Hawaii as a whole. Waipahu is the exception, with a median household income below the average for both the city and county and state.

Former Hickam POL Pipeline area communities have a diverse array of businesses and industries, with the largest presence in the majority of communities being from the educational, health, and social services sectors. The arts, entertainment, recreation, accommodation, and food services industries also maintain a significant presence in these communities.

Education: Public schools are present in all Former Hickam POL Pipeline area communities, including several elementary schools, middle schools, and high schools throughout the five communities. Leeward Community College in Pearl City provides higher education for area students.

O:\CVN\6274219\0120_6060289\900-Work\920_GIS\02_Maps\mxd\02_CIP\Fig 3-7_Communities Near Former Hickam POL Pipeline_011725.mxd 7/15/2025 User: MartinE2



Location Map



Legend

- Former Hickam POL Pipeline
- Hawaiian Home Lands
- Road
- Highway

CDPs shown in color

Notes

- Map Projection: NAD83 State Plane Hawaii Zone 3 (ft)
- 2020 Census-Designated Places: US Census Bureau, September 2021.
Hawaiian Home Lands: US Census Bureau, September 2021.
- The Wheeler AFB CDP has been renamed "Wheeler Army Airfield" to match the current name of the installation that shares the same footprint.
- Acronyms and Abbreviations:
AFB Air Force Base
CDP Census-Designated Place
POL petroleum, oil, and lubricants

N

0 0.5 1 2 Miles

Figure 3-7
Communities Near Former
Hickam POL Pipeline
Community Involvement Plan
Joint Base Pearl Harbor-Hickam
Oahu, Hawaii

4. Community Involvement History

4.1 PAST COMMUNITY INVOLVEMENT

The Navy has a long history of community involvement in the area of JBPHH and its predecessor installations. These efforts have been undertaken to identify issues of community interest and concern and to focus the JBPHH community relations resources on addressing them. These efforts began in 1989 when the Navy initiated its community relations program for ER Program work by developing an IR public affairs plan. The Navy developed the first CRP for an Oahu installation, NAVMAG PH Lualualei (now NMCPAC EAD Lualualei Annex), in 1991, demonstrating the Navy's intent to inform the public and to involve interested parties in the IR decision-making process. In 1992, a CRP was published for NCTAMS PAC and discussed both annexes under that command: NCTAMS PAC Wahiawa and NRTF Lualualei (PRC 1991). At that time, a remedial investigation was being conducted at two sites at NCTAMS PAC Wahiawa and at two transformer locations within NRTF Lualualei. This CRP was then updated in 1995 (DON 1995). Also in 1992, the Navy published the CRP covering PHNC (Hill and Knowlton 1992). This CRP was updated in 1996 to reflect the current interests and concerns of the local community at that time (PRC 1996). In 1994, a CRP was developed under the Navy BRAC program and published for the former NAS Barbers Point (now known as JBPHH Kalaeloa), then updated in 1997 (DON 1997).

In 2005, in an effort to better evaluate and respond to community concerns, the Navy published a CIP for naval installations on Oahu that covered all the locations previously served by the aforementioned CRPs, as well as added the former JBPHH Waikale Annex (DON 2005). An updated CIP was also published for Hickam AFB in 2005 as it was a separate installation at the time (USAF 2005, 20). This current document is intended to include updates on the JBPHH area community concerns and the Navy's community involvement activities, as well as to reflect changes to the installation since JBPHH was established in 2010.

In addition to publishing CIPs (and the predecessor CRPs), the Navy established three RABs under the ER Program for three regions on Oahu to meet specific geographic and community needs:

- The Pearl Harbor-Hickam-Kalaeloa RAB, established in 1994 (converted from the Technical Review Committee, established in 1990), which now covers:
 - JBPHH Main Base including outlying areas
 - Former JBPHH Waikale Annex
 - JBPHH Kalaeloa
- The Central Oahu RAB, established in 1995, which now covers:
 - JBPHH Wahiawa Annex
 - Former Hickam POL Pipeline
- The Waianae Coast/Lualualei RAB, established in 1996, which now covers:
 - JBPHH Lualualei Annex

Each RAB has held several meetings, environmental site tours, and other outreach activities over the years. RAB members, government regulators, special interest groups, and the general public are encouraged to attend these events. Members of the public are also invited to become official RAB members. Minutes from previous RAB meetings are available to the public via the Administrative Record (Table 5-2). A review of the recent history of the JBPHH RABs and plans for future meetings is presented in Section 5.1.3.1.

4.2 PREVIOUS COMMUNITY SURVEYS

Since 1989, the Navy has sought community feedback for the ER Program through community surveys. Throughout the 1990s, the JBPHH area communities were surveyed several times. The most recent surveys prior to the current survey effort were conducted between October 2002 and February 2003 as a part of the preparation of the 2005 CIP (DON 2005). These interviews involved the participation of 40 persons representing local RABs; community centers; businesses; churches; schools; hospitals; neighborhood boards; labor and farm organizations; and government, Hawaiian, and environmental organizations. Detailed information on these surveys and their results, as well as summaries of previous years surveys, are in the *Community Involvement Plan COMNAVREG Hawaii Installation Restoration Program, Oahu Installations, Hawaii* (DON 2005). Between March and April 2004, the U.S. Air Force conducted similar interviews with 22 community members for its Hickam AFB CIP, including interviews with community members of Hickam AFB and Former Hickam POL Pipeline which this CIP now covers (USAF 2005).

4.3 2024 ONLINE COMMUNITY SURVEY

The Navy developed an environmental concerns survey in accordance with NCP and EPA guidance. The survey was hosted online through Google Forms. The survey link was distributed at the Pearl Harbor-Hickam-Kalaeloa RAB meetings held on June 26 and September 25, 2024. The goal was to obtain input from community members living and working near JBPHH. Information that was sought included:

- The general level of knowledge and familiarity that community members have with the Navy, its ER Program activities, and the CERCLA cleanup process
- The overall perception that local communities have of the Navy and its environmental investigation and cleanup efforts
- Community concerns and expectations regarding these efforts
- The needs of each community regarding environmental information and education
- How community members prefer to access this information
- The types and levels of involvement that community members would like to have during environmental investigation and cleanup activities

In addition to the distribution of the survey link at the June 26 and September 25, 2024, meetings of the Pearl Harbor-Hickam-Kalaeloa RAB, the survey was also posted on the JBPHH Public Affairs Office Facebook page. Survey results were collected from June 26 to November 30, 2024. Survey questions as well as results and analyses of individual survey questions are included in Appendix B. Due to the online distribution of the survey through the means noted above, an exact count of the number of surveys distributed was not possible. Survey links will also be distributed at future meetings of the Central Oahu and Waianae Coast/Lualualei RABs when those meetings resume. Survey results for these meetings will be included in subsequent versions of this document.

The survey results indicate strong community concerns around health risks and communication shortcomings related to JBPHH. Most respondents are residents living in close proximity to the base and feel they are directly affected by issues like drinking water and groundwater impacts, soil vapor, and exposure to chemicals such as per- and polyfluoroalkyl substances. The survey results highlight a significant lack of confidence in the Navy's ability to address these environmental problems, with more than half of the respondents expressing no confidence in the Navy's actions or transparency.

Additionally, many community members are unaware of the Navy's environmental programs, restoration efforts, and RABs, which can further exacerbate mistrust.

Despite this, the results show a strong interest in community engagement, with more than half of respondents expressing a desire to participate in RABs. This emphasizes the importance of the Navy improving its outreach, transparency, and community involvement. By addressing these concerns, particularly through more frequent updates, direct community engagement, and efforts to rebuild trust, the Navy can foster more inclusive and effective ER efforts, ensuring that the voices of affected residents are heard and acted upon. The Navy's approach to this is detailed as follows.

4.4 RESPONSE TO COMMUNITY CONCERNS

The Navy is committed to the following approaches to address environmental concerns in the community:

- *Demonstrate Responsiveness:* Responsiveness is critical to the success of the Navy's outreach efforts and to the overall public perception of the Navy and its commitment to the community. Following through on commitments in a timely manner also enhances the Navy's credibility. Therefore, the Navy will strive to respond to public inquiries, issues, and concerns in a timely manner.

The public can only appreciate a response if they are aware of it. When the Navy takes action that is in direct response to an issue raised in the community, the Navy will strive to make that action known to the public.

- *Consider Public Input:* The Navy will make good faith efforts to consider substantive suggestions made by the public when planning and implementing outreach activities.
- *Maintain a Consistent Presence in the Community:* The continuity of the Navy's presence in the community builds trust and credibility and forges a positive, productive relationship able to endure issues that arise. Therefore, the Navy will strive to maintain a consistent level of interaction with local communities and to avoid lulls in outreach efforts during periods of uneventful ER Program project activity.
- *Employ a Risk Communication Approach:* Risk communication is a tool that enables users to provide information, to ask questions, and to solicit input in a manner that is non-threatening to the audience. The Navy will use risk communication during outreach efforts. Specific risk communication techniques should be applied to both oral and written presentations.
- *Broaden Outlook:* Often, members of the public raise questions and make suggestions to members of one Navy command or activity that relate better to a different command or activity. Navy Region Hawaii will continue to improve procedures for intra-agency communication among Navy commands and activities. They can then effectively share and disseminate public feedback and provide the public with a unified and comprehensive response.

5. Community Involvement Plan

This section describes the CIP at JBPHH and outlines opportunities for interested stakeholders to participate in the cleanup process.

The goal of the JBPHH CIP is to provide effective, open communication among Navy personnel; JBPHH's military and civilian workforce and residents; various federal, state, and local community agencies; business people; and local residents and the public. This CIP has been designed to meet the requirements of the following federal regulations and guidelines:

- CERCLA, 1980 (Public Law 96-510), as amended, including Section 117 of the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499, October 17, 1986)
- *Department of the Navy Environmental Restoration Program Manual* (DON 2018)
- EPA guidance and publications, including:
 - *Superfund Community Involvement Handbook* (EPA 2020)
 - *Superfund Community Involvement Toolkit* (EPA 2002a)

5.1 COMMUNICATIONS INVOLVEMENT ACTIVITIES

This CIP presents an active approach to develop, maintain, and enhance community involvement by identifying and addressing public concerns about environmental issues at JBPHH, with an emphasis on investigations and remedial actions.

Sections 5.1.1 through 5.1.3 present the community involvement strategy JBPHH may use to address the community involvement objectives and the information needs of the local community. Community involvement activities that may be used at project milestones are presented in Section 5.2.

Programs available to assist communities with obtaining the resources needed to review and evaluate ER activities are presented in Section 5.3.

5.1.1 Points of Contact

One of the main objectives of this CIP is to provide a point of contact for the exchange of information regarding the ER work at JBPHH. The primary point of contact for ER work at JBPHH is the NAVFAC Hawaii Public Affairs Office. The Public Affairs Office is responsible for ensuring that inquiries regarding the progress of the investigation status, remedial actions, and other decisions regarding JBPHH are responded to in a timely and accurate manner. The address, email address, and phone number of the primary point of contact for the Public Affairs Office (Public Affairs Liaison) are listed below:

Public Affairs Officer, Code 09PAO

Naval Facilities Engineering System Command, Hawaii
400 Marshall Road
JBPHH, HI 96860-3139
808-471-7300
NFHI_PAO_DL@us.navy.mil

5.1.2 Governmental Agency Participation

Effective interagency communication is essential for addressing community concerns. This CIP is designed to provide effective communication and information exchange among the Navy, DOH, EPA Region 9, Natural Resource Trustees (e.g., U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and State of Hawaii Department of Land and Natural Resources), other local officials and agencies, and the public.

5.1.3 Local Community and Media Communication Mechanisms

The Navy is committed to open communication and collaboration with the local community. Table 5-1 details the Navy's tools and strategies for community involvement at JBPHH. Most of the communication tools and outreach activities discussed above are also described in the *Superfund Community Involvement Toolkit* (EPA 2002a), which presents more than 40 recommended communication tools that are applicable in community involvement planning.

Table 5-1: The Navy's Tools for Community Involvement

Tool	More Details
Points of Contact	The Navy will ensure that there are designated points of contact to which the community can address questions and issues. See Section 5.1.1 for further details.
Administrative Record and Information Repositories	The Navy maintains a collection of documents, reports, and other ER Program materials for public access as a part of the Administrative Record. The Navy will publish the availability of new reports associated with site investigation and cleanup milestones as they become available in the Administrative Record. Access information is included in Table 5-2.
Restoration Advisory Boards	Members of the RABs receive current information about environmental conditions, investigations, potential risks to human health and the environment, and subsequent cleanup activities. RAB meetings are open for the public to attend. See Sections 2.5.2 and 5.1.3.1 for further details.
Emailing List	The Navy will maintain a digital mailing list of local community leaders, representatives, and members interested in Navy ER Program activities. Individuals on the mailing list will receive notice of upcoming RAB meetings and other ER Program community involvement opportunities.
Newsletters/Fact Sheets	The Navy will issue periodic press releases, brochures, and project-specific fact sheets about cleanup activities, significant milestones, technical information, and project findings.
Community Outreach	The Navy will provide frequent opportunities for public comment and respond to comments received. The Navy may also conduct public meetings to discuss site investigation, cleanup activities, and associated community concerns.
Site Visits	The Navy will conduct public tours of ER Program sites or related areas.
Community Involvement Plan	This CIP is considered a living document and will be updated over time to reflect updates to ER Program sites and changes in the community.

5.1.3.1 RESTORATION ADVISORY BOARD PARTICIPATION

The primary venue for community outreach and input for JBPHH has been its RAB program. JBPHH has hosted RAB meetings in three regions of Oahu since the mid-1990s: the Pearl Harbor RAB (now known as the Pearl Harbor-Hickam-Kalaehoa RAB), the Central Oahu RAB, and the Waianae Coast/Lualualei RAB. A RAB covering Kalaehoa has met in the past; currently, the Kalaehoa area has been added to the Pearl Harbor-Hickam-Kalaehoa RAB. Between 2007 and 2018, all three RABs met regularly on an at least annual basis, and often held several meetings per year. In 2019, all JBPHH RABs stopped meeting as a result of the Coronavirus Disease 2019 pandemic. The Pearl Harbor-Hickam-Kalaehoa RAB has since resumed meeting, with recent meetings on June 26, September 25, and December 11, 2024, as well as April 16 and August 27, 2025. The Navy plans to continue to hold these meetings three times per year, as outlined in the RAB Charter. The RAB Charter

for Pearl Harbor-Hickam-Kalaheo outlines its mission to facilitate open dialogue between the Navy, regulatory agencies, and the local community regarding environmental restoration efforts. It establishes the roles and responsibilities of members, meeting procedures, and guidelines for community involvement in decision-making processes. The RAB Charter also states that the Navy will conduct site visits for confirmed RAB members twice per calendar year to a site managed under the ER Program.

5.1.3.2 ADMINISTRATIVE RECORD FILE AND INFORMATION REPOSITORIES

The Navy maintains a collection of documents, reports, and other ER Program materials for public access as a part of its Administrative Record. The Navy will publish the availability of new reports associated with site investigation and cleanup milestones. This information is available both online and physically at several information repositories. Specific access information is available in Table 5-2. Additional online resources related to the Navy's ER Program can be found in Table 5-3.

Table 5-2: Administrative Record and Information Repositories

JBPHH Location	Address	Telephone Number
Administrative Record File		
All JBPHH sites	NAVFAC Pacific 258 Makalapa Drive, Suite 100 JBPHH HI 96860	Records Manager 808-472-1428
Information Repositories		
All JBPHH sites	University of Hawaii at Manoa Hamilton Library 2550 McCarthy Mall Honolulu, HI 968227	808-956-7214
JBPHH Main Base; former JBPHH Waikale Annex	Aiea Public Library 99-374 Pohai Place Aiea, HI 96701	808-483-7333
	Pearl City Public Library 1138 Waimano Home Road Pearl City, HI 96782	808-453-6566
	Ewa Beach Public and School Library 91-950 North Road Ewa Beach, HI 96706	808-689-1204
JBPHH Kalaheo (former Naval Air Station Barbers Point)	Ewa Beach Public and School Library 91-950 North Road Ewa Beach, HI 96706	808-689-1204
	Kapolei Public Library 1020 Manawai Street Kapolei, HI 96707	808-693-7050
JBPHH Wahiawa Annex	Wahiawa Public Library 820 California Avenue Wahiawa, HI 96786	808-622-6345
JBPHH Lualualei Annex (NMCPAC EAD Lualualei Annex and NRTF Lualualei)	Waianae Public Library 85-625 Farrington Hwy Waianae, HI 96792	808-697-7868
State of Hawaii Hazardous Release Sites (on Navy Property)	Office of HEER Hawaii State Department of Health 2385 Waimano Home Road #100 Pearl City, HI 96782	808-586-4249
Online Administrative Record		
NAVFAC Hawaii Environmental Restoration Program Administrative Record	https://www.navfac.navy.mil/Divisions/Environmental/Products-and-Services/Environmental-Restoration/Hawaii	N/A

Table 5-3: Additional Online Resources

Online Resource	Website Address
Navy Environmental Restoration Program	https://www.navfac.navy.mil/Divisions/Environmental/Products-and-Services/Environmental-Restoration
Defense Environmental Network and Informational Exchange (DENIX)	https://www.denix.osd.mil/
Red Hill Bulk Fuel Storage Facility	https://cnrh.cnrc.navy.mil/Operations-and-Management/Red-Hill/
JBPHH Safe Waters	https://jbphh-safewaters.org/
Environmental Restoration, Navy (ER,N) Program at Red Hill	www.redhillern.com
EPA Superfund	http://www.epa.gov/superfund/sites/
EPA Red Hill	https://www.epa.gov/red-hill
DOH Office of HEER	https://eha-cloud.doh.hawaii.gov/iheer/#!/site/list
DOH Red Hill Water Information	https://health.hawaii.gov/about/red-hill-water-information/
DOH Underground Storage Tank Program, Navy RHBFSF	https://health.hawaii.gov/ust/ust-home-test/ust-red-hill-project-main/
DOH	Department of Health
HEER	Hazard Evaluation and Emergency Response
N/A	not applicable

**Photo 5-1: Pearl Harbor-Hickam-Kalaeloa RAB Meeting Presentation (June 2024)**



Photo 5-2: Community Members at Pearl Harbor-Hickam-Kalaeloa RAB Meeting (June 2024)



Photo 5-3: Pearl Harbor-Hickam-Kalaeloa RAB Meeting Presentation (September 2024)

5.2 COMMUNITY INVOLVEMENT ACTIVITIES AND SCHEDULE

This section provides a schedule of the community involvement activities to be conducted at each stage of the environmental cleanup process. If the level of public interest in cleanup activities changes, this CIP will be reviewed and the community involvement milestones will be revised as needed. Further discussion of the history and purpose of the Navy's community involvement activities is presented in Section 2.3.

5.2.1 Ongoing Community Involvement Activities

As a means of two-way communication with the public, many community involvement activities are performed on an ongoing basis. These activities inform the public of ER Program cleanup activities not included in specific cleanup stages. These include holding RAB meetings, updating the information repositories and Administrative Record, and providing periodic updates to the CIP. The Navy's approach to these obligations is presented in Table 5-1.

5.2.2 Project Milestone Community Involvement Activities

In addition to ongoing community involvement, some activities are associated with project milestones. To meet the informational needs of the public, the Navy may explain the milestone, announce its completion, or discuss milestone status or results. Project milestones correspond to the CERCLA cleanup program stages and the Navy ER Program. Project milestones and related community involvement activities are presented in Table 5-4.

Table 5-4: Project Milestone Community Involvement Activities

Technical Milestones	Community Involvement Activities
Preliminary Assessment (PA)/ Site Inspection (SI)	<ul style="list-style-type: none"> • Notify federal, state, and local officials of potential or known releases of chemicals. • Notify federal and state natural resource trustees, if appropriate. ^a
Prior to Field Work for the Remedial Investigation (RI)	<ul style="list-style-type: none"> • Conduct community interviews. • Prepare CIP. ^b • Establish information repository at or near site. • Provide notice of Technical Assistance Grants.
Start of RI Phase	<ul style="list-style-type: none"> • Establish AR file. • Publish a notice of availability of AR file in major local newspaper.
Feasibility Study (FS)	None.
Upon Completion of Proposed Plan (PP)	<ul style="list-style-type: none"> • Publish a notice of availability of RI/FS and PP in major local newspaper. • Conduct 30-day public comment period. • Conduct public meeting and prepare meeting transcript. • Place meeting transcript and PP in AR file and information repositories. • Prepare responsiveness summary. • Provide notice and 30-day comment period for settlement agreements.
After Record of Decision (ROD) is Signed ^c	<ul style="list-style-type: none"> • Publish a notice of availability of ROD and responsiveness summary in major local newspaper. • Place ROD and responsiveness summary in AR file and information repositories. • Revise and update CIP, if necessary.
After Completion of Remedial Design (RD)	<ul style="list-style-type: none"> • Prepare fact sheet on RD/RA. • Provide public briefing, as appropriate, to discuss RD/RA.
Remedial Action (RA)	None.
Long-Term Monitoring (LTM)	<ul style="list-style-type: none"> • Publish public notice in local newspapers announcing the commencement of five-year reviews as well as notification of the availability of their reports once completed. • Conduct community interviews.
Throughout Cleanup Process	Conduct regular RAB meetings.
Recommended Ongoing Community Outreach Activities	<ul style="list-style-type: none"> • Maintain dialogue with key community members and media (e.g., conduct periodic phone calls and in-person visits). • Conduct open-house/site tours. • Distribute IR Program, site, and/or issue-specific fact sheets and flyers. • Hold briefings and workshops for general public and RAB members. • Make presentations to community groups and elected officials. • Update Navy information repositories and environmental website (e.g., with RAB minutes and handouts). • Display poster boards in community. • Present video tapes of cleanup activities to community organizations and schools. • Issue press releases, as appropriate. • Update mailing lists.

^a Per 40 CFR 410(g) and EPA direction to combine removal and remedial PA and SIs (EPA 1993; 2000).

^b Per Navy instruction, a formal CIP is required for all IR Program sites, whether or not they are NPL sites (DON 1998).

^c There may be additional community involvement requirements if significant or fundamental changes are made to the proposed or selected remedy. See Appendix B for more information.

5.3 COMMUNITY GRANT OPPORTUNITIES

Additional programs are available through the DoD and EPA to assist communities in obtaining the technical resources needed to effectively review and evaluate ER activities.

The Technical Assistance Grant (TAG) is a program administered by EPA that provides grants to community groups that participate in cleanup decision-making at any installation on the NPL. A TAG may be used to contract outside technical advisors to assist in interpreting information about the nature of the hazard, or the process or results of any of the investigations and plans in the CERCLA process. EPA has specific guidelines for groups that apply for and administer TAG grants up to \$50,000 in value for a qualified group. The EPA also offers the Technical Assistance Services for Communities (TASC) program. This program guides communities through the environmental cleanup and site reuse process. TASC is not a grant but offers communities the opportunity to receive additional technical assistance through the EPA. TASC offers a wide range of services and is applicable to more sites than just those on the NPL.

Further Information on these programs can be found online:

- *TAG*: <https://www.epa.gov/superfund/technical-assistance-grant-tag-program>
- *TASC*: <https://www.epa.gov/superfund/technical-assistance-services-communities-tasc-program>

Additional grant opportunities are available through the DoD. The DoD's Technical Assistance for Public Participation (TAPP) program assists community members of RABs in participating more fully in the cleanup process affecting DoD installations and former defense sites. The TAPP program allows community members to obtain objective, independent scientific and engineering support concerning the restoration process through the issuance of government purchase orders to small businesses. These grants are only available to established RABs that have previously pursued other sources of assistance. TAPP presentation or training can be requested through the RAB's Navy co-chair. Funding is provided at up to \$25,000 per year or 1 percent of the total restoration cost, with a limit of \$100,000 over the life of the program at any single installation.

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Appendix A:

Glossary of Environmental Terms

GLOSSARY

Aboveground Storage Tank (AST): Tanks or other containers that are aboveground, partially buried, bunkered, or in a subterranean vault.

Administrative Record: A file which is maintained and contains all information used by the lead agency to make its decision on the selection of a response action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This file is to be available for public review and a copy is to be established at or near the site, usually at one of the information repositories.

Administrative Order on Consent (AOC): An agreement between regulatory agencies and the owner and/or operator of a facility for achieving compliance.

Applicable or Relevant and Appropriate Requirement (ARAR): CERCLA §121 requires cleanups to meet any legally ARAR, standard, criterion, or limitation that has been promulgated under federal or state environmental laws. The United States Environmental Protection Agency (EPA) can waive the ARARs for a site in some limited situations.

Aqueous Film-Forming Foam (AFFF): A type of foam commonly used to fight fires.

Area of Interest (AOI): A term referring to an area that is of interest to an investigation for further evaluation.

Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX): Term used for BTEX-volatile aromatic compounds typically found in petroleum products, such as gasoline and diesel fuel.

Chemical of Concern (COC): A site-related contaminant that EPA has determined, at the conclusion of a baseline risk assessment, to pose an unacceptable risk to human health and/or the environment. In the Superfund program, COCs are the drivers of (i.e., determine) cleanup actions on the site evaluated in a feasibility study.

Chemical of Potential Concern (COPC): Also called “contaminants of potential concern” in EPA guidance, are defined as “chemicals that are potentially site-related and where data are sufficient quality for use in the quantitative risk assessment” (EPA 1989).

Community Involvement Plan (CIP): A formal plan for community involvement activities at a Superfund site.

Community Relations Program (CRP): A proactive program to inform and involve the public in the Installation Restoration planning process and to respond to the surrounding community’s concerns.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). The act created a special tax that goes into a trust (Superfund) to investigate and remediate inactive, abandoned, or uncontrolled hazardous waste sites. Under the act, the EPA can either (1) pay for site remediation when parties responsible for the impacts cannot be located or are unwilling or unable to perform the work or (2) take enforcement action against the parties responsible for site impacts and oversee its remediation.

Containment: A remediation method that seals off all possible exposure pathways between a hazardous disposal site and the environment, which generally includes capping and institutional controls.

Decision Document (DD): Serve to provide the reasoning for the choice of or changes to a Superfund Site cleanup plan. Decision documents include records of decision (RODs), ROD amendments, Explanations of Significant Differences (ESDs), and other associated memoranda and files.

Engineering Evaluation/Cost Analysis (EE/CA): An analysis of removal alternatives for a site, similar to a remedial program feasibility study (FS). Upon completion, the EE/CA must be made available for a 30-calendar-day public comment period. This comment period must be extended by at least 15 days open timely request.

Environment, as defined by CERCLA §101(8): “(A) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Fishery Conservation and Management Act of 1976, and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States.”

Environmental Hazard Evaluation (EHE): The link between site investigation activities and response actions carried out to address hazards posed by the presence of contaminated soil and groundwater. An EHE should be performed for all sites where contaminated soil and groundwater have been identified.

Environmental Hazard Management Plan (EHMP): If contaminated media is left on-site after the response action is completed, an EHMP must be prepared to manage environmental hazards identified in the EHE over the long term. An EHMP presents all necessary information in a single, stand-alone document that identifies the nature and extent of residual contamination, potential environmental concerns posed by the contamination, and appropriate measures to ensure that these concerns are adequately addressed.

Environmental Restoration (ER) Program: A United States Department of the Navy (Navy) initiative to identify, investigate, and clean up former waste disposal sites on military property. The program’s objectives are to reduce the risk to human health and the environment from past waste disposal operations and hazardous material spills in a cost-effective manner.

Facility, as defined by CERCLA §101(9): “(A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of; or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel.”

Feasibility Study (FS): See remedial investigation (RI) and FS.

Ground Water: Water found beneath the surface of land (or other water resources) that is sometimes used for drinking or irrigation purposes.

Hazard Ranking System (HRS): A scoring system used to evaluate potential risks to public health and the environment from releases or threatened releases of hazardous substances. EPA and the states use the HRS to calculate a site score (0 to 100) based on the actual or potential release of hazardous substances from a site through air, surface water, or groundwater. This score is the primary factor used to decide if a hazardous waste site should be placed on the National Priorities List (NPL).

Hazardous Substance, as defined by CERCLA §101(14): any substance designated or listed under the Federal Water Pollution Control Act, CERCLA, the Resource Conservation and Recovery Act (RCRA), the Clean Air Act, and the Toxic Substances Control Act. The term excludes petroleum, or any fraction thereof, unless it is specifically listed under one of the mentioned laws; it also excludes natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

Information Repository: A file stored in a public location (e.g., a public library) that contains current information, technical reports, and documents regarding Navy installation restoration sites.

In-Situ Chemical Oxidation (ISCO): Chemical oxidation uses chemicals called “oxidants” to help change harmful contaminants into less toxic ones. It is described as “in situ” because it is conducted in place without having to excavate soil or pump out groundwater for aboveground cleanup. ISCO can be used to treat many types of contaminants like fuels, solvents, and pesticides. ISCO is usually used to treat soil and groundwater contamination in the source area where contaminants were originally released.

Installation Restoration Program (IRP): A subsection of the ER Program focusing on releases of hazardous substances, pollutants, and impacts that pose environmental health and safety risks.

Institutional Controls (ICs): Measures, such as access restrictions and deed restrictions, that separate people from the source of impacts. More than one institutional control may be used at a site.

Land Use Control (LUC): Controls that may consist of non-engineered instruments, such as administrative and legal controls or engineered and physical barriers, such as fences and security guards. LUCs help to minimize the potential for exposure to contamination and/or protect the integrity of a response action and are typically designed to work by limiting land and/or resource use or by providing information that helps modify or guide human behavior at a site.

Light Non-Aqueous Phase Liquid (LNAPL): Non-aqueous phase liquids (NAPLs) are hydrocarbons that exist as a separate, immiscible phase when in contact with water and/or air. Differences in the physical and chemical properties of water and NAPL result in the formation of a physical interface between the liquids that prevents the two fluids from mixing. LNAPL is a type of NAPL that is lighter than water, generally petroleum hydrocarbon liquids such as gasoline.

Long-Term Monitoring (LTM): Following achievement of the response complete milestone, monitoring long-term protectiveness of the remedy may be required during the LTM phase. The LTM phase is required when the remedial action objectives do not allow unrestricted use of the property. Actions during this phase may involve monitoring site conditions, implementing and managing land use controls, and performing five-year reviews.

Munitions Response Program (MRP): A subsection of the ER Program addressing munitions and explosives used or released on military sites from past operations and activities. Because the MRP is implemented under the ER Program, the response actions follow the CERCLA response process as described in this plan.

National Oil and Hazardous Substances Pollution Contingency Plan or National Contingency Plan (NCP): The EPA policy and regulatory directive for federal response actions under CERCLA. It sets out the organizational structure and procedures for responding to releases of hazardous substances, pollutants, and impacts. Published in 40 Code of Federal Regulations, Part 300.

National Priorities List (NPL): The EPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund. The list is based primarily on the score a site receives from the HRS. EPA is required to update the NPL at least once a year.

Natural Resources, as defined by CERCLA §101(16): "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States...any state or local government, any foreign government, any Indian tribe..."

No Further Action (NFA): Designation for a site where there is no unacceptable risk to human health or the environment and it has been determined that no additional site investigation and/or cleanup are warranted.

Non-Time-Critical Removal Action (NTCRA): A removal action conducted at a Superfund site when the lead agency determines, based on the site evaluation, that a removal action is appropriate, and a planning period of at least 6 months is available before on-site activities must begin.

Per- and Polyfluoroalkyl Substances (PFAS): Group of human-made chemicals that includes perfluorooctanoic acid, perfluorooctanesulfonic acid, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries in the United States and around the globe since the 1940s. Perfluorooctanoic acid and perfluorooctanesulfonic acid have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body, meaning they do not break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

Petroleum, Oil, and Lubricants (POL): A broad term that includes all petroleum and associated products used by the Department of the Navy.

Polychlorinated Biphenyl (PCB): A group of toxic, persistent chemicals used in electrical transformers and capacitors for insulating purposes, and in gas pipeline systems as lubricant. The sale and new use of these chemicals, also known as PCBs, were banned by law in 1979.

Polynuclear Aromatic Hydrocarbon (PAH): Synonymous with polyaromatic hydrocarbon. Aromatic hydrocarbons containing more than one fused benzene ring.

Preliminary Assessment (PA): The process of collecting and reviewing available information about a known or suspected hazardous waste site or release. This information is used to determine whether the site requires further study. If further investigation is required, a site inspection (SI) is performed. Typically, site media (e.g., soil, groundwater) is not sampled and analyzed for impacts during the PA.

Project Action Level (PAL): A numerical value that helps the decision-makers target a course of action from the project's data. They may be regulatory standards, risk-based concentration levels, or technology limitations.

Proposed Plan (PP): A fact sheet or report document that summarizes for the public the preferred cleanup strategy for an environmental site, rationale for the preference, alternative cleanup methods considered, and waivers to cleanup standards of 121(d)(4) that may be proposed. The PP is a public participation requirement of CERCLA and NCP.

Public Comment Period: A period of time during which the public can review and comment on a particular cleanup action being proposed for the site under the IRP, including various documents and actions taken by the Navy, the State of Hawaii Department of Health, or the EPA.

Record of Decision (ROD): The primary legal decision document that explains the cleanup alternative(s) to be used at a NPL site as well as the factors that led to its selection.

Remedial Action: Typically, a long-term action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to public health. Remedial actions are most often conducted when the circumstances of the impact are complex in nature, for example where: multiple types of chemicals have been released and are commingled at a site; there is widespread impact; both soil and groundwater media have been impacted, and/or the impact presents a potential risk to both humans and animals.

Remedial Action Area (RAA): The area for which a remedial action is performed.

Remedial Action Completion Report (RACR): Documents the completion of a remedial action. The RACR must be approved in writing by the designated regional official (as determined by the EPA Region) to achieve completion of the remedial action project.

Remedial Action Work Plan (RAWP): Describes those actions that are needed to ensure viability of both long-term engineered and institutional control remedies.

Remedial Design (RD): An engineering phase that follows the publication of the decision document for a site during which technical specifications are developed for the selected remedial action.

Remedial Investigation (RI) and Feasibility Study (FS): Two distinct but related studies that are often performed concurrently. The RI is intended to gather necessary data to determine the type and extent of impact at a site and establish criteria for site remediation. The FS is intended to identify options for remedial actions, analyze and compare the technological and cost benefits of these remedial options, and propose a preferred cleanup option (to be summarized in a PP).

Remedial Project Manager (RPM): The federal (e.g., Navy) official responsible for overseeing on-site investigation and response action.

Remediation: Actions taken to clean up existing hazardous substances at site caused by past or present human activities. The term remediation, or cleanup, is sometimes used interchangeably with the terms remedial action, removal action, response action, remedy, or corrective action.

Removal Action: Actions conducted over a relatively short-term period to address a release or threatened release of hazardous substances. Removal action is most appropriate when site conditions are simple and straight forward or there is a need to expedite cleanup.

Response Action: A general term that collectively refers to remedial, removal, and enforcement action(s).

Response Complete: The stage in cleanup when physical construction of all cleanup remedies is complete, all immediate threats have been addressed, and all long-term threats are under control. Though long-term cleanup actions (e.g., monitored natural attenuation) may still be occurring, the site is often ready for economic, social, or environmental reuse.

Responsiveness Summary: A summary of oral and/or written public comments received during the comment period on key draft documents and the responses to those comments. The responsiveness summary is especially valuable during the PP or remedial action planning phase where it highlights community concerns and cleanup preferences for the decision makers.

Restoration Advisory Board (RAB): A board comprised of community members representing a diverse cross section of the community, and representatives from the Navy, the State of Hawaii Department of Health, and the EPA. The RAB's principal objective is to provide opportunity for community stakeholders to participate in the review and formulation of site cleanup plans and related documents.

Release, as defined by CERCLA §101(22): "...any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant)."

Remedial/Removal Site Evaluation (RSE): An initial site evaluation phase consisting of the PA and SI. The site information gathered may be used to calculate a HRS score for the site to determine whether response action is needed.

Removal Verification Report (RVR): A report documenting a removal action, such as a TCRA or an NTCRA.

Resource Conservation and Recovery Act of 1976 (RCRA), as amended: The principal federal law that regulates the definition, transportation, and disposal of hazardous wastes (as well as solid wastes in general). A key difference from the CERCLA is that RCRA addresses current and future waste disposal practices and the clean up of recent hazardous waste spills, while CERCLA was established to clean up releases of hazardous substances that typically occurred in the distant past.

Risk Assessment: A qualitative and quantitative evaluation performed as part of the site investigation phase to assess conditions at a site and determine the health risks posed to the public and environment.

Soil Vapor Extraction (SVE): An in situ remedial technology that reduces concentrations of volatile constituents in petroleum products adsorbed to soils in the unsaturated (vadose) zone. In this technology, a vacuum is applied to the soil matrix to create a negative pressure gradient that causes movement of vapors toward extraction wells. Volatile constituents are readily removed from the subsurface through the extraction wells. The extracted vapors are then treated, as necessary, and discharged to the atmosphere or reinjected to the subsurface (where permissible) (EPA 2017).

Site Inspection (SI): A technical phase that follows a PA, the SI is designed to collect more extensive information on a hazardous waste site. Limited site media (e.g., soil, groundwater) may be sampled and analyzed for impacts during the SI phase.

Superfund: The common name used for the trust fund established by CERCLA; also referred to as the Trust Fund.

Superfund Amendments and Reauthorization Act (SARA): Amendments to CERCLA expanding its scope, enacted on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies; required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased State involvement; increased the focus on

human health problems; encouraged greater citizen participation; and increased the size of the Trust Fund.

Technical Assistance Grant (TAG) Program: A grant program that provides funds for qualified citizens groups to hire independent technical advisors to help them understand and comment on technical decisions relating to CERCLA cleanup actions.

Technical Assistance for Public Participation (TAPP): A Department of Defense program to assist the community members of RABs and Technical Review Committees in understanding the technical and scientific aspects of ER at Department of Defense installations near their communities. The TAPP provides RAB/Technical Review Committee members this objective scientific and engineering support through independent contractors procured via government purchase orders.

Tetrachloroethene (PCE): A nonflammable, colorless liquid. Other names for PCE include perchloroethylene, perc, tetrachloroethene, and perchlor. PCE is used as a dry cleaning agent and metal degreasing solvent. It is also used as a starting material (building block) for making other chemicals and is used in some consumer products.

Time-Critical Removal Action: A type of action that includes emergency removal actions lasting more than 30 calendar days and releases requiring initiation of on-site activities within 6 months of the lead agency's determination, based on the site evaluation that a remedial action is appropriate.

Total Petroleum Hydrocarbons (TPH): A measure of the concentration or mass of petroleum hydrocarbon constituents present in a given amount of air, soil, or water.

Trichloroethylene (TCE): A stable, low boiling-point colorless liquid that is toxic if inhaled. Used as a solvent or metal degreasing agent, and in other industrial applications.

Underground Storage Tank (UST): A tank and any underground piping connected to the tank that has at least 10 percent of its combined volume underground.

Volatile Organic Compound (VOC): A compound that has a high vapor pressure and low water solubility. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants. VOCs typically are industrial solvents, such as trichloroethylene; fuel oxygenates, such as methyl tert-butyl ether; or by-products produced by chlorination in water treatment, such as chloroform. VOCs are often components of petroleum fuels, hydraulic fluids, paint thinners, and dry cleaning agents. VOCs are common groundwater contaminants.

Appendix B: Environmental Concerns Survey

Appendix B.1:
Environmental Concerns Survey

ENVIRONMENTAL CONCERNS SURVEY

Please complete the Navy's 20-question Environmental Concerns Survey. The survey will be open from June 26, 2024, to November 30, 2024. It is anonymous and may take up to 20 minutes depending on your level of engagement. This survey will help the Navy understand your level of awareness and concerns about Environmental Restoration sites at Joint Base Pearl Harbor-Hickam. The results of the survey will be used to inform the development of the Navy's Environmental Restoration Program, Community Involvement Plan that will be made available to the public. This plan lays out information on the sites and helps the community understand how they can stay informed and involved in the cleanup process. If you have questions concerning this survey email NFHI_PAO_DL@us.navy.mil.

1. Are you a resident of Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu), or the surrounding areas?
☐ Yes
☐ No
2. How long have you been a resident?
☐ Less than 1 year
☐ Between 1 and 5 years
☐ Between 5 and 10 years
☐ Between 10 and 15 years
☐ More than 20 years
3. What is your zip code?
4. How far do you live from Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
☐ Within 2 miles
☐ Between 2 and 5 miles
☐ Between 5 and 10 miles
☐ Between 10 and 15 miles
☐ More than 20 miles
5. How would you describe your current affiliation with Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
☐ Former Navy Employee
☐ Former Navy Contractor
☐ Business Owner
☐ Military/Former Military
☐ Public/Elected Official
☐ Civic Group/Homeowner Association
☐ Environmental Group

☐ Restoration Advisory Board Member

☐ Current Navy Employee

6. Based on your awareness of Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu), how important is each environmental issue to you?

Surface Water:

☐ Extremely Important

☐ Very Important

☐ Moderately Important

☐ Slightly Important

☐ Not Important

☐ Unaware or Not Applicable

Ground Water:

☐ Extremely Important

☐ Very Important

☐ Moderately Important

☐ Slightly Important

☐ Not Important

☐ Unaware or Not Applicable

Drinking Water:

☐ Extremely Important

☐ Very Important

☐ Moderately Important

☐ Slightly Important

☐ Not Important

☐ Unaware or Not Applicable

Soil:

☐ Extremely Important

☐ Very Important

☐ Moderately Important

☐ Slightly Important

☐ Not Important

☐ Unaware or Not Applicable

Soil Vapor:

- ☐ Extremely Important
- ☐ Very Important
- ☐ Moderately Important
- ☐ Slightly Important
- ☐ Not Important
- ☐ Unaware or Not Applicable

7. In relation to Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu), are there specific chemicals that concern you?
 - ☐ Yes
 - ☐ No
 - ☐ Not sure/I am not aware of specific chemicals
8. Prior to taking this survey were you aware the Navy has established an Environmental Restoration Program to identify, investigate, and clean up former waste disposal sites on military property?
 - ☐ Yes
 - ☐ No
9. Prior to taking this survey, were you aware the Department of Defense (DOD) established Restoration Advisory Boards (RABs) across the country that consist of community members, who help address environmental restoration at military installations and former installations, within their respective community, and share their knowledge of the restoration being performed by the DOD with the broader local community?
 - ☐ Yes, I am aware of RABs and have attended a RAB meeting
 - ☐ Yes, I am aware of RABs but have never attended a RAB meeting
 - ☐ No, I am not aware of RABs
10. Which statement best describes your interest in the Restoration Advisory Board (RAB) supporting Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
 - ☐ I am interested in learning more about the RAB or how I can serve on the RAB
 - ☐ I am not interested in learning more about or serving on the RAB
11. If you are interested in learning more about the RAB or how you can serve on the RAB contact the Navy at NFHI_PAO_DL@us.navy.mil. Someone will provide you with information and an application. You can also go to the Navy's Joint Base Pearl Harbor-Hickam website to learn more (<https://cnrh.cnmc.navy.mil/Installations/JP-Harbor-Hickam/>)
 - ☐ I have saved this information
12. Please rate your confidence in the Navy to address environmental issues at Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu): I am _____ in the Navy to address environmental issues at Joint Base Pearl Harbor-Hickam.

- ☐ Not Confident at all
- ☐ Slightly Confident
- ☐ Somewhat Confident
- ☐ Fairly Confident
- ☐ Completely Confident
13. Are you confident in the Navy to keep you fully informed about the state of the environment issues at Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
- ☐ Very Confident
- ☐ Slightly Confident
- ☐ Not Confident at All
14. How are you currently kept informed about the Navy's efforts to address environmental issues at Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
- ☐ I am not kept informed
- ☐ RAB members/meetings
- ☐ I go to the Navy website
- ☐ News media
- ☐ Social media
- ☐ Email
15. How would you prefer to be kept informed about the Navy's efforts to address environmental issues at Joint Base Pearl Harbor-Hickam (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?
- ☐ RAB members/meetings
- ☐ The Navy's website
- ☐ News media
- ☐ Regular emails
- ☐ Social media
- ☐ I am not interested in being kept informed about this
16. Have you visited the Navy's website for Joint Base Pearl Harbor-Hickam located at <https://cnrh.cnrc.navy.mil/Installations/JB-Pearl-Harbor-Hickam/>
- ☐ Yes
- ☐ No
17. If you have visited the website for Joint Base Pearl Harbor-Hickam, please provide any feedback you may have regarding the website, or other comments or suggestions on how we can improve the website.

Appendix B.2: Survey Analysis

CONTENTS

Acronyms and Abbreviations B.2-iii

1. Environmental Concerns Survey Results Summary B.2-1

FIGURES

1 Are You a Resident of JBPHH? Responses B.2-3

2 How Far Do You Live from JBPHH? Responses B.2-4

3 Confidence in the Navy to Address Environmental Issues at JBPHH?
Responses B.2-6

4 Confidence in the Navy to Keep You Fully Informed about the State of
Environment Issues at JBPHH? Responses B.2-7

ACRONYMS AND ABBREVIATIONS

%	percent
JBPHH	Joint Base Pearl Harbor-Hickam
Navy	Department of the Navy, United States
PFAS	per- and polyfluoroalkyl substances
RAB	Restoration Advisory Board

1. Environmental Concerns Survey Results Summary

Below is a high-level summary of the Joint Base Pearl Harbor-Hickam (JBPHH) Environmental Concerns Survey:

1. *Residency Status:* Out of 86 respondents, 74 percent (%) are residents of JBPHH or surrounding areas, while 26% are not. The high proportion of residents provides valuable insights into community concerns directly tied to the environmental and operational impact of the base.
2. *Duration of Residency:* Among the 56 who responded, 78% (44) have lived in the area for 1–10 years. Meanwhile, only 9% of residents have been local for over 20 years and 9% for less than a year. This tenure diversity reflects both newer residents and those with long-standing experience in the community, highlighting evolving concerns about environmental issues.
3. *Zip Code Distribution:* The majority of respondents (35%) are from the 96818 zip code, and 24% did not specify their zip code. Other prominent areas include 96701 and 96782 zip codes. These locations demonstrate the concentration of the community's environmental concerns around the base and its immediate surroundings.
4. *Proximity to the Base:* Of the 72 respondents, 46% live within 2 miles of the base, 18% live between 2 and 5 miles away, 17% live between 5 and 10 miles away, 8% live between 10 and 15 miles away, and 11% are more than 20 miles away. The close proximity of many respondents underscores their direct exposure to potential environmental hazards from the base, including water and air impacts.
5. *Affiliation with JBPHH:* Of the 69 respondents, 48% have a military affiliation (current or former military) while 26% are local residents unaffiliated with the base. Additionally, 19% are current United States Department of the Navy (Navy) employees. The strong military representation highlights the dual role of the base as both an employer and a potential environmental risk to the community.
6. *Environmental Concerns:* Drinking water and ground water impacts are the top concern, with 91% of respondents rating it as “extremely important.” Groundwater was rated “extremely important” for 84% of respondents, and surface water was similarly rated, with 74% calling it “extremely important.” The strong consensus reflects a critical focus on water and soil quality as major environmental justice issues for the community, as these concerns impact health and livelihoods.
7. *Chemical Concerns:* A significant amount (79%) of respondents are concerned about specific chemicals, including per- and polyfluoroalkyl substances (PFAS) jet fuel, lead and arsenic. The community's specific fears surrounding chemicals like PFAS and jet fuel, linked to military operations and spills, highlight ongoing concerns about the long-term effects on public health and the environment.
8. *Awareness of Environmental Programs:* Of the 65 respondents, 69% are aware of the Navy's Environmental Restoration Program, while 31% are unaware. This split points to a need for improved outreach and communication regarding the Navy's cleanup efforts.

9. *Awareness of Restoration Advisory Boards (RABs)*: Of the 64 respondents, 23% were aware of RABs and had attended meetings, while another 39% knew of RABs but had not attended any meetings. However, 38% were unaware of RABs altogether. These results indicate a significant opportunity for improving engagement with the local community on restoration activities and increasing participation in RABs.
10. *Interest in RABs*: 53% of respondents expressed interest in learning more about RABs or potentially serving on one, while 47% are not interested. The high level of interest suggests that the community wants a more active role in environmental oversight, a key component of environmental justice.
11. *Confidence in the Navy*: Confidence in the Navy's ability to address environmental issues is low, with 51% of respondents "not confident at all" and 16% "slightly confident." Only 7% are "completely confident." This low level of confidence reflects deep mistrust, especially given the community's concerns over transparency and past incidents like the Red Hill fuel spill.
12. *Confidence in Communication*: When asked about their confidence in the Navy's ability to keep them informed, 66% of respondents are "not confident at all," with only 8% expressing "very confident." This lack of confidence highlights the Navy's communication gaps with the community, which need to be addressed to foster transparency and engagement.
13. *Information Sources*: Most respondents rely on news media (58%) and social media (63%) for information about the Navy's environmental efforts. Only 39% go directly to the Navy's website and 19% are informed via RAB members or meetings. These results show that the Navy must diversify its communication channels to reach a broader audience, particularly through community meetings and regular updates.
14. *Preferred Communication*: In terms of preferred communication methods, social media news media and emails are the most favored. This points to a clear need for digital engagement strategies to keep the public informed.
15. *Website Use*: Of the 59 respondents, 76% have visited the Navy's JBPHH website. Respondents offered various feedback about the website, calling for more transparency, easier navigation, and a focus on environmental updates.

The question-by-question responses to the survey are summarized as follows:

1. *Are you a resident of JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu) or the surrounding area? (86 responses.)*

The responses were: Yes (64) and No (22) (Figure 1). Of the respondents, 74% are residents (64 out of 86), while 26% are not (22 out of 86). A strong majority of the respondents live on or near the base, indicating that feedback primarily comes from local community members who may be directly impacted by environmental and operational issues related to the base.

Are You a Resident of JBPHH?

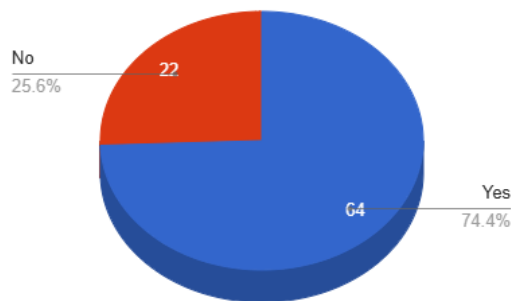


Figure 1: Are You a Resident of JBPHH? Responses

2. *How long have you been a resident? (56 responses.)*

The responses were: 32 (between 1 and 5 years), 12 (between 5 and 10 years), 2 (between 10 and 15 years), 5 (more than 20 years), and 5 (less than 1 year). Of the respondents, 57% (32) have been residents between 1 and 5 years, while 21% (12) have lived there between 5 and 10 years. A smaller portion (5 respondents) have been residents for over 20 years. Over a quarter of survey respondents have been in the area for at least 5 years, which suggests that their feedback is informed by several years of experience living near the base, making them familiar with local issues.

3. *What is your zip code?*

Zip code tally:

00000: 1	71111: 1	96706: 6	96797: 1	96815: 1	96826: 1
32218: 1	80013: 1	96734: 2	96801: 1	96816: 1	96826: 1
56478: 1	921090: 1	96782: 5	96813: 2	96818: 34	96860: 1
62269: 1	96701: 7	96792: 1	96814: 1	96819: 3	N/A: 23

Most responses came from the 96818 area (35%). A significant number of respondents (24%) left their zip codes as N/A. Responses are concentrated in certain zip codes, with many residing close to the base, further validating that feedback is likely influenced by direct or nearby environmental and military presence.

4. *How far do you live from JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)? (72 responses.)*

The responses were: 33 (within 2 miles), 13 (between 2 and 5 miles), 12 (between 5 and 10 miles), 6 (between 10 and 15 miles), and 8 (more than 20 miles). Of the respondents, 46% live within 2 miles, 18% between 2 and 5 miles, 17% between 5 and 10 miles, 8% between 10 and 15 miles, and 11% live more than 20 miles away. Majority of respondents live within a 2-mile radius of the base, highlighting how survey respondents are near military activities that may influence their environmental health concerns. Additionally, the

environmental justice screening occurs within 2 miles of the base, reflecting the majority of the survey respondents' environmental concerns.

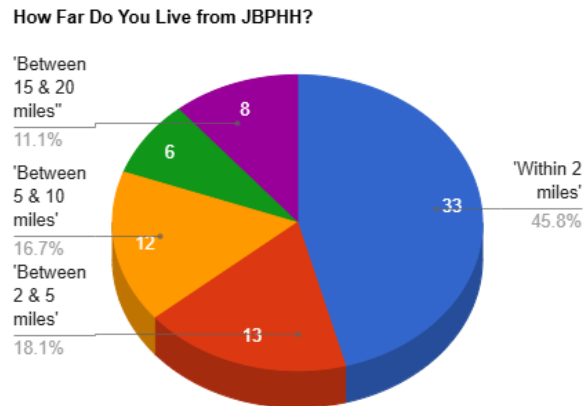


Figure 2: How Far Do You Live from JBPHH? Responses

5. *How would you describe your current affiliation with JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)? (69 responses.)*

Former Navy employee (1), former Navy contractor (2), local resident (18), business owner (1), military/former military (33), public elected official (1), civic group association (0), environmental group (0), RAB (0), and current Navy employee (13). Of the respondents, 48% are military or former military personnel, with 26% identifying as local residents. Other categories such as former Navy employees and current Navy employees comprise smaller groups. The mixture of military, former military, and local residents provides a broad perspective on how different community groups interact with the base and its operations.

6. *Based on your awareness of JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu), how important is each environmental issue to you? (70 responses.)*

The responses were:

- *Surface Water*: 52 extremely important, 13 very important, 3 moderately important, 2 slightly important, 0 not important, 0 unaware of not applicable.
- *Ground Water*: 59 extremely important, 8 very important, 2 moderately important, 0 slightly important, 1 not important, 0 unaware of not applicable.
- *Drinking Water*: 64 extremely important, 5 very important, 1 moderately important, 0 slightly important, 0 not important, 0 unaware of not applicable.
- *Soil*: 49 extremely important, 10 very important, 8 moderately important, 2 slightly important, 1 not important, 0 unaware of not applicable.
- *Soil Vapor*: 42 extremely important, 13 very important, 7 moderately important, 4 slightly important, 0 not important, 4 unaware of not applicable.

The top three environmental issues important to survey respondents are drinking water, ground water, and surface water, highlighting that overall water quality is a significant concern in the community. Drinking water is the number one concern based on all respondents ranking the issue from “very” to “extremely” important.

7. *In relation to JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu), are there specific chemicals that concern you? (70 responses.)*

The responses were: Yes (55) and No (2), Not Sure/I am not aware of specific chemicals (13).

If you stated, “yes, there are specific chemicals that concern you,” please let us know what concerns you most about these chemicals?

Of the survey respondents, majority have specific chemicals that concerns them. PFAS and jet fuel are the most frequently mentioned chemicals, with concerns about health impacts and long-term environmental damage. Concerns about specific chemicals, particularly related to fuel spills and hazardous substances, dominate responses, highlighting the critical need for transparency in environmental cleanup efforts. Effects on health and the environment, mistrust due to the Red Hill fuel spill, and concerns about the laundry facility located by St. Elizabeth’s church and adjacent to Aiea Elementary School were mentioned as well.

8. *Prior to taking this survey, were you aware the Navy established an Environmental Restoration Program to identify, investigate, and clean up former waste disposal sites on military property? (65 responses.)*

The responses were: Yes (45) and No (20). This split of responses reflects that there is room to improve public awareness and education about the Navy’s environmental efforts because nearly half of respondents were previously unaware.

9. *Prior to taking this survey, were you aware the Department of Defense established RABs across the country that consist of community members, who help address environmental restoration at military installations and former installations, within their respective community, and share their knowledge of the restoration being performed by the Department of Defense with the broader local community?*

The responses were: Yes, I am aware of RABs and have attended a RAB meeting (15), Yes, I am aware of RABs but have never attended a RAB meeting (25), and No, I am not aware of RABs (24). Of the respondents, 62% are at least familiar with RABs with 23% have attended meetings. Communication and outreach efforts to involve the communication in future meetings and restoration efforts are needed to bring their knowledge and lived community experience.

10. *Which statement best describes your interest in the RAB supporting JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)?*

The responses were: I am interested in learning more about the RAB or how I can serve on the RAB (34), and I am not interested in learning more about or serving on the RAB (30). Of the respondents, almost half, 53% are interested in learning more or serving on the RAB while 47% are not. The majority of respondents being interested reflect the community’s desire for deeper involvement, which can be leveraged to increase participation in environmental programs.

11. *If you are interested in learning more about the RAB or how you can serve on the RAB, contact the Navy at NFHI_PAO_DL@us.navy.mil. Someone will provide you with information and an application. You can also go to the Navy's JBPHH website to learn more. <https://cnrh.cnrc.navy.mil/Installations/JB-Pearl-Harbor-Hickam>*

45 survey participants saved this information.

12. *Please rate your confidence in the Navy to address environmental issues at JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu). (61 responses.)*

I am _ in the Navy to address environmental issues at JBPHH.

The responses were: Not confident at all (31), slightly confident (10), somewhat confident (11), fairly confident (5), and completely Confident (4).

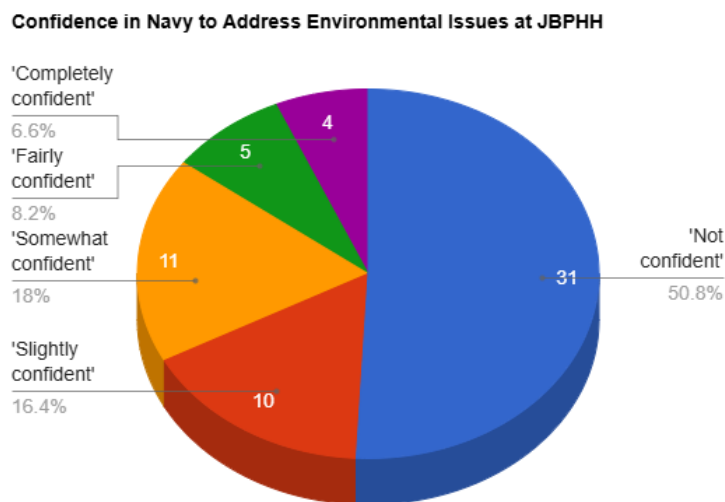


Figure 3: Confidence in the Navy to Address Environmental Issues at JBPHH? Responses

Of the respondents, 51% (31) are “not confident at all,” with 4 respondents being “completely confident.” A lack of trust in the Navy’s ability to address environmental issues is a recurring theme, likely driven by past incidents such as the Red Hill fuel spill.

13. *Are you confident in the Navy to keep you fully informed about the state of the environment issues at JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)? (61 responses.)*

The responses were: Very confident (5), slightly confident (16)), and not confident at all (40).

Confidence in Navy to Keep You Fully Informed about the state of Environmental Issues at JBPHH

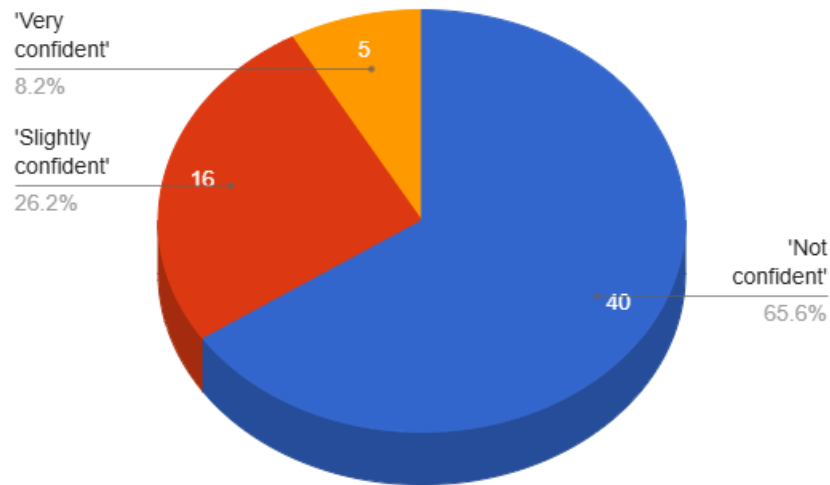


Figure 4: Confidence in the Navy to Keep You Fully Informed about the State of Environment Issues at JBPHH? Responses

Of the respondents, 66% are “not confident at all” in the Navy’s communication efforts, reflecting a major communication gap between the community and a feeling of overall being underinformed and disconnected from the base.

14. *How are you currently kept informed about the Navy’s efforts to address environmental issues at JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)? (59 responses.)*

The responses were: I am not kept informed (14), RAB members/meetings (11), I go to the Navy website (23), news media (34), social media (37), and email (16). Traditional media (58%) and social media (63%) are the top methods of communication for the respondents to stay informed.

15. *How would you prefer to be kept informed about the Navy’s efforts to address environmental issues at JBPHH (which includes areas located near Pearl Harbor-Hickam, Waianae Coast/Lualualei, and Central Oahu)? (56 responses.)*

The responses were: RAB members/meetings (23), the Navy’s website (39), news media (36), regular emails (35), social media (34), and I am not interested in being kept informed about this (1). News and social media are both the top preferred methods of communication which is reflected in how respondents are currently kept informed in Navy activities. However, 70% would like the Navy’s website and regular emails (63%). These results indicate a demand for multiple channels of communication, emphasizing the need for the Navy to diversify their community outreach methods.

16. *Have you visited the Navy’s website for JBPHH located at <https://cnrh.cnmc.navy.mil/Installations/JB-Pearl-Harbor-Hickam/>? (59 responses.)*

The responses were: Yes (45) and No (14). While 76% of respondents have visited the website, the majority expressed improvements are needed to enhance its usability, content, and relevance to local community issues and concerns.

17. *If you have visited the website for JBPHH, please provide any feedback you may have regarding the website, or other comments or suggestions on how we can improve the website.*

The survey responses about the website and improvement suggestions center on several recurring themes:

1. *Transparency and Trust*

- a. Respondents frequently express a lack of trust, with many feeling that the Navy is not transparent about environmental damage, particularly the Red Hill water crisis.
- b. There is a demand for honest reporting of chemical impact levels and environmental harm without hiding behind policies or standards.

2. *Environmental and Health Concerns*

- a. Many responses highlight concerns about water quality, soil impacts, and military-related environmental damage. Specific references are made to fuel spills, toxic soil, and water impacts affecting both local communities and military personnel.
- b. Some respondents mention health issues they suspect are related to water impacts, such as itchy skin and red eyes.

3. *Website Usability*

- a. While some respondents appreciate the site's overall quality compared to other military websites, others find it difficult to navigate, lacking intuitive design and ease of access to important documents and information, particularly on environmental topics like the Red Hill fuel spill.

4. *Engagement with the Community*

- a. There is frustration with the lack of engagement from military leadership, especially in attending community meetings (e.g., Red Hill Community Representation Initiative meetings) and responding to local concerns.
- b. Several respondents call for better communication and involvement with community organizations and a more genuine effort to rebuild trust.

5. *Military Presence and Responsibility*

- a. Some respondents, particularly those identifying as kanaka maoli (Native Hawaiians), question the military's presence in Hawaii and call for education about settler responsibilities. There are also demands for reparative actions, such as addressing environmental justice, housing, and community health.

6. *Public Relations and Accountability*

- a. Many feel that the website is overly focused on portraying the Navy positively and lacks substantial facts about environmental issues. This contributes to the perception that Navy leadership is more concerned with public relations than actual problem-solving.

7. *Suggestions for Improvement*

- a. Specific suggestions include adding QR codes on print materials for easier access, providing regular updates on environmental conditions, and making emergency contact information more accessible. Some also recommend including more local context, history, and educational material on the website.

Appendix C:
Status of Environmental Restoration Program Sites

Appendix C.1:
Pearl Harbor-Hickam-Kalaheo RAB

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (HICKAM)			
Fire Training Pit and Former Fire Protection Training Area, Hickam	This includes two separate areas at Hickam with similar past activities: a former fire protection training area and a fire training pit. The former fire protection area was used from 1941 to 1977; the fire training pit is currently being used and the area was not lined prior to 2000. Sampling was conducted as part of an installation-wide site inspection (SI) in 2022, and groundwater (GW) and soil were found above screening levels. A remedial investigation (RI) is planned to evaluate per- and polyfluoroalkyl substances (PFAS) at the two locations.	Plan to initiate PFAS RI in 2027.	Plan to initiate PFAS RI in 2027.
Vickers Avenue Area (ST32)	110 underground storage tanks (USTs)/fuel pipelines are located in the Vickers Avenue area. Chemicals of potential concern (COPCs) include total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylenes (BTEX), polynuclear aromatic hydrocarbons (PAHs), lead, and methane. Fuel impacts related to former flightline operations was found beneath Onizuka Village housing. COPCs include TPH-gasoline and methane.	No further action (NFA) approved by the State of Hawaii Department of Health (DOH) August 2014 for Vickers Avenue USTs. Soil vapor extraction (SVE) unit constructed to address soil gas concerns in Onizuka Village. SVE System was shut down in June 2020 after remedial action cleanup goals had been met.	Draft environmental hazard management plan (EHMP) (2025).
Building (Bldg.) 2036H	Sampling was conducted as part of an installation-wide SI in 2022, and soil and GW were found above screening levels. A RI is planned to evaluate PFAS.	Plan to initiate PFAS RI in 2025.	Plan to initiate PFAS RI in 2025.
Bldg. 3004H and Bldg. 3006H	Sampling was conducted as part of an installation-wide SI in 2022, and soil and GW were found above screening levels. A RI is planned to evaluate PFAS.	Plan to initiate PFAS RI in 2025.	Plan to initiate PFAS RI in 2025.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Munitions Response Area (MRAs – 1X)	Consists of two munitions response sites, TS001 and TS01A, both skeet ranges. Chemicals of concern (COCs) include lead, arsenic, and PAHs.	Step-out sampling was conducted at munitions response site TS001 in December 2018 and October 2020, which indicated clay pigeon fragments to a depth of approximately 4 feet below ground surface and PAH and metals exceeding residential and commercial screening levels in soil, subsurface soil, and GW. Additional soil delineation and groundwater sampling is required and will be conducted as part of an RI addendum (fall 2025).	Final RI addendum work plan (WP) for TS001 and TS01A (fall 2025).
Former Landfill Site (LF001)	Site LF01 is located between the Hickam Field taxiways and Daniel K. Inouye International Airport taxiways. Site LF01 was the major on-base landfill from approximately 1942 through the early 1950s. In addition to possible municipal and construction wastes, lubricants, paint wastes, solvents, and sludge were reportedly disposed of in the landfill. The current land uses of Site LF01 are classified as "Airfield Clearance Surface" and "Airfield." COPCs include metals and dioxins.	Annual long-term monitoring (LTM) inspections and five-year reviews required. Land use control (LUC) confirmation soil sampling to be conducted in 2027.	Annual LTM inspections and reports.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Tri-Services Landfill (LF05)	LF05 was the primary on-base landfill (Former Tri-Services Landfill) from the late 1940s to 1965, located in the southeastern part of the base within the active Malama Bay Golf Course. Potential impact sources include heavy-metal sludges from plating operations, petroleum hydrocarbon related wastes, solvents, residual paint and pesticides in empty containers, other industrial wastes, blasting grit, and buried glass bottles filled with liquid containing 1,1,2,2-tetrachloroethane and petroleum hydrocarbons. COCs include chlorinated solvents.	Record of decision (ROD) signed August 2005. Annual monitoring and LUC inspection continues. Additional cleanup is required to prevent trichloroethylene (TCE) and vinyl chloride from reaching Mamala Bay. ROD amendment signed May 2013. Bioreactor installed March 2015. Bioreactor operation ceased October 2019. Soil Investigation Tech Memo (July 2021) recommended in-situ chemical oxidation (ISCO) for destruction/removal of residual TCE source mass. ISCO injection wells were installed February–March 2023. Four injection events occurred between October 2023 and March 2025.	Semi-annual GW monitoring; annual GW monitoring and LUC inspections.
Inactive Landfill 2 (LF014)	Site LF14, formerly Inactive Landfill 2, covers approximately 30 acres in the eastern portion of Joint Base Pearl Harbor-Hickam (JBPHH) and is not a landfill by technical definition. The site is a former soil and debris disposal area, and portions of the site also received green waste. The origination of the debris is believed to be primarily from the demolition of World War II-era ammunition storage bunkers and possibly from other base facilities. Currently, the site is covered by well-established trees and thick grass. Current and expected future land use for the area is industrial because of the site's close proximity to active industrial activities and flightline areas. COPCs include metals, PAHs, TPH-diesel range organics, and pesticides.	Annual LTM inspections and five-year reviews required.	Annual LTM inspections and reports.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Fuel Leak/Valve Pit (SS06)	Site SS06 is located near the flight line. Documentation regarding the repair and/or replacement of petroleum, oil, and lubricants (POL) fuel lines, valve pits, and hydrants dates back to 1968. Impacts in soil and GW were confirmed during a 1983 drilling program in which fuel odor and a surface film were observed in a boring. In the early 1990s, fuel-impacted soil was discovered in the same general area that it was found in 1983. Land use in the vicinity of Site SS06 is industrial. GW beneath the site is not considered a drinking water resource. COPCs include volatile organic compounds (VOCs) and PAHs.	Annual LTM and five-year reviews required.	Annual LTM and inspections and reports.
Fuel Leak Areas 13 and 14; Area G and H (SS01)	A large fuel plume encompasses a majority of the commercial area of the base and some adjacent base housing areas in the northwest part of the base. Potential impact sources include releases of leaded aviation gasoline to the environment from former USTs, aboveground storage tanks (ASTs), and subsurface fuel distribution pipelines and vaults. COCs include light non-aqueous phase liquid (LNAPL), VOCs, and lead.	EHMP completed in September 2021 combining the site with SS156E. Annual gauging is required.	Annual monitoring reports.
Par 3 (SS015)	Site SS15 is located in the north-central portion of Hickam Field and covers approximately 25 acres. The Par 3 Golf Course comprises 80 percent of the site. To the west, across Engine Test Road, the site includes an area with wash racks and support facilities. Subsurface fuels impacts associated with pipelines traversing the site were identified during the 1970s. Land uses in the vicinity of Site SS15 are industrial and recreational. GW beneath the site is not considered a drinking water resource. COPCs include VOCs and PAHs.	Annual LTM and five-year reviews required.	Annual LTM and inspections and reports.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
SS11 POL Area L	Site SS11 is located in the east-central portion of JBPHH, covers approximately 105 acres, and is separated into two portions: SS11 North and SS11 South. SS11 North consists of administrative buildings, maintenance shops, and parking areas, which are generally used to support aircraft operation and maintenance. SS11 South consists of paved airfield and is used for aircraft operations and maintenance. Both SS11 North and SS11 South historically used USTs and fuel pipelines, leading to past fuel releases in these areas.	Following extensive environmental investigations at the site, the final remedy for SS11 of continued GW monitoring for monitored natural attenuation and LUCs is documented in the site's ROD/response action memorandum signed in 2007. Following many years of GW monitoring, SS11's final remedy is currently undergoing optimization and re-evaluation.	Draft remedy optimization WP (2026)
Hickam Runway Area (ST28)	23 USTs/fuel pipelines are present in the Hickam Runway area. COPCs include TPH, BTEX, and PAHs.	All UST removals/pipeline abandonment completed. Since only petroleum was found, the site was transferred out of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and into the State Contingency Plan. Submitted Final Closure Summary Report, Environmental Hazard Evaluation (EHE)/EHMP for Site ST28 (April 2013). Received NFA with institutional control (IC) concurrence from DOH (September 2013). LUC inspection and annual monitoring are no longer required per DOH agreement.	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Aircraft Maintenance/Carburetor Cleaning Area (CG110)	CG110 consists of two impacted areas located on the west portion of Hickam Field, south of Vickers Road, and near the active flight line. The site study area occupies approximately 19 acres and consists of two former areas of concern: EA10 and EA22. EA22 has petroleum constituents in soil and soil gas, and EA10 has TCE in soil gas, soil, and GW.	Annual LTM Inspections and five-year reviews required.	Annual LTM inspections and reports.
POL Valve Pits (SS156)	Fuel releases occurred from POL Valve Pits in a housing area (SS156E) and next to the Air Mobility Command Passenger Terminal (SS156J). COCs include LNAPL, TPH, and benzene.	SS156J: NFA. SS156E: EHMP Completed in September 2021 combining the site with SS01. Annual gauging is required.	Annual monitoring reports.
Signer Boulevard Area (ST30)	29 USTs are present in the Signer Boulevard area. COPCs include TPH, BTEX, and PAHs.	All UST removals completed. Since only petroleum was found, the site transferred out of CERCLA and into the State Contingency Plan. Submitted final closure summary report, EHE/EHMP for Site ST30 (August 2013). Received NFA with IC concurrence from DOH (November 2013).	None.
Hangar Avenue Area (ST31)	48 USTs/fuel pipelines are present in the Hangar Avenue area. COPCs include TPH, BTEX, PAHs, and lead.	All UST removals/pipeline abandonment completed. NFA with LUCs.	None.
Kuntz Avenue Area (ST35)	81 USTs are present in the Kuntz Avenue area. COPCs include TPH, BTEX, and PAHs.	All UST removals completed. Since only petroleum was found, the site was transferred out of CERCLA and into the State Contingency Plan. Received NFA with IC concurrence from DOH (November 2013).	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Former Mess Hall Area	Site CF023, the Former Mess Hall Area, is a 13-acre site located east of the Par 3 Golf Course within the housing and community service areas at the JBPHH. Historically, the site area contained airman dormitories, squadron headquarters, a mess hall, and supporting facilities. The site was initially investigated because several previous UST investigations conducted in the area reported that a buried debris layer containing black ash, of unknown origin, is present at some locations within the site. A SI and an RI were conducted and results indicated elevated levels of VOCs, PAHs, TPH, dioxins/furans, and metals present in subsurface soil. Elevated levels of TPH and dissolved metals are present in GW.	2012 ROD, LUC inspections, and five-year reviews.	Final non-NPL five-year review (summer 2025). Conduct 2025 LUC inspection and annual inspection report (2026).
Stripper Pit # 43	Stripper Pit #43 is located northeast of the Air Mobility Command Passenger Terminal. COCs include LNAPL, PAHs, VOCs, TPH-gasoline range organics, and TPH-diesel range organics.	EHMP finalized July 2018. Site has LUCs with LTM for soil gas.	Annual monitoring and inspection reports.
JOINT BASE PEARL HARBOR-HICKAM (SHIPYARD)			
Bldg. 394	Bldg. 394 is an open-air Pearl Harbor Naval Shipyard (PHNSY) facility that was used for lead/sulfuric acid battery maintenance from 1960 to 1991. Concerns are lead and antimony soil impacts from spent battery acid, and lead residue discharged to an unlined settling pit and runoff to two on-site dry wells.	The site was addressed by a non-time-critical removal action (NTCRA) asphalt/concrete cover and LUCs as recommended in the final RI/feasibility study (FS) and documented in the final AM. The cover was completed and accepted in August 2014. Action documented in a final RVR submitted in April 2015; proposed plan (PP) (July 2015). Discussions with regulatory agencies regarding lead calculations to include in the ROD are in progress. Additional lead sampling will be conducted to evaluate LUC boundary.	LUC boundary report 2025.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Bldg. 8 Site	The Bldg. 8 site includes a subsurface fuel plume from an unknown source, but most likely an accumulation of historical spills from fuel pipelines and ASTs and USTs in the area. The plume is approximately 33 acres in size and portions of the plume contain polychlorinated biphenyls (PCBs) at levels of up to almost 10 parts per million.	A product recovery system was installed in the late 90s that recovered ~40K gallons, but the system has become obsolete and hasn't been operational since 2018. There is quarterly well gauging performed to ensure the plume does not migrate to the harbor. The plume was originally thought to contain only low levels of PCBs (<2 parts per million), but recent sampling has found higher levels. The site is now managed as a CERCLA site (vs. petroleum-only) and is on the National Priorities List (NPL). The United States Environmental Protection Agency (EPA) is requesting that the United States Department of the Navy (Navy) determine if the PCBs could possibly be contributing to the harbor sediment PCB impacts.	An RI was completed in January 2022 and an FS is underway. The draft FS is currently in review. Draft final FS (winter 2026). Well gauging occurs on a quarterly basis and results are documented in a quarterly report.
Transportation Yard – PHNSY Geographic Study Area (GSA)	The Former Shipyard Lower Tank Farm Area in this GSA is currently used for heavy service vehicle storage and maintenance and large equipment staging.	Regulatory agencies concur with recommended alternative of LUCs documented in Final RI/FS. Final PP submitted in June 2015 and concurred with by regulatory agencies. Discussions with regulatory agencies regarding lead calculations to include in Final ROD are in progress.	Final ROD (2027).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Bldg. 6	The Foundry Shop is located in Bldg. 6, within the Controlled Industrial Area, approximately 1,000 ft from Pearl Harbor. Impacted soils were discovered during excavation work for installing new equipment. This site consists of two areas: an excavated area approximately 2,100 square feet (ft ²) located inside Bldg. 6, and a sparsely vegetated area approximately 200 ft ² immediately adjacent to the Foundry Shop. The excavated area within the building once contained a furnace. This area also contained molding sands used for metal casting. The Shipyard collected samples and analyzed the soil and sand, and lead was found. Since the initial investigation was performed, the foundry has been shut down and will no longer be used.	ROD signed in June 2012. Remedial action WP (RAWP) prepared in March 2013. Controls include land use restrictions and notices placed around the perimeter of the site.	Annual LUC inspection reports.
Oscar 2 Pier	This site includes a subsurface fuel plume from former USTs used to fuel a power plant. Fuel has been leaking into the harbor since the 1970s. A barrier wall installed in 1998 has not stopped the leaking.	Site is managed under an EHMP completed in November 2019. The site is managed by maintaining booms and absorbent material to contain the leakage, which is slow but continual.	Quarterly well gauging along with boom/pompom maintenance is the selected alternative. Maintenance inspection results and observations are provided to Navy on a weekly basis.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
LNAPL and PCBs on GW (Dry Docks)	This site is a subsurface petroleum and PCB site that was discovered during a construction project near the Dry Docks.	An RI was completed in February 2022 to investigate the nature and extent of the petroleum non-aqueous-phase liquid within the site's subsurface. COPCs in soil and GW included metals, TPH, PCBs, and PAHs. The RI recommended further action to address non-aqueous-phase liquid at the site and identified the underground storm drain at the site a potential transport pathway for PCBs to Southeast Loch. A draft FS was completed in August 2022.	Final FS (2027).
Former Public Works Center (PWC) Industrial Wastewater Treatment Plant (IWTP)	The former IWTP site, located on Pearl Harbor main base, operated from 1974 to 1998 and treated a variety of waste liquids from Navy's industrial processes. The southeastern portion of the former IWTP site is located within the administrative boundaries for the Lower Tank Farm, where the fuel plume with TPH, BTEX, and PAHs impacted the GW. The IWTP site comprises the former Waste Unloading Area (WUA) and the Collection Sump Area. Previous investigations identified the presence of metals and polychlorinated biphenyls in soil and total petroleum hydrocarbons (TPH) and PFAS in groundwater.	An RI was conducted in 2013 to investigate the potential impact of COPCs (VOCs, semivolatile organic compounds, metals, and PCBs) related to previous waste handling activities in soil, sediment, and GW. The RI recommended NFA at the site. PFAS investigation at the site started in 2018 and is on-going. In 2024, three nearby sites were added for PFAS investigation (Bldg. 1526, Bldg. 1665, and the former PHNSY firefighting training area).	Draft PFAS technical memorandum WP (2026).
Bldg. 67	The Bldg. 67 system was constructed in around 1915 and was designed to manage surface water runoff. Past practices included disposal of liquid industrial waste into the storm drains. Potential impacts include semivolatile organic compounds, PCBs, metals, pesticides, and PFAS.	PFAS RI draft WP in progress.	Draft RI WP (Spring 2026).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Drain Lines – Various Areas at PHNSY GSA	<p>Storm drain inlets at 17 facility sites within PHNSY GSA were identified as potential release sources to the storm drain system. COPCs that exceeded project action levels (PALs) include TPH, metals, and VOCs. Impacted media include surface soil, subsurface soil, GW, soil gas, and sediment (in storm drains).</p> <p>The Navy completed a NTCRA of sediment from various storm drain inlets in 2015 and a draft final FS in 2018 . As of June 2024, the site is pending further investigation of the extent of subsurface soil and GW impacts at or near these storm drain sites.</p>	A technical memorandum was completed in 2022 to identify further investigation needed at various drain sites. A draft RI addendum WP was completed in January 2023 for further investigation at select storm drain sites.	Draft final RI addendum WP (2025).
Shoreline Asbestos Site Northwest of Dry Dock	This flat, narrow piece of land approximately 800 ft long and 8 ft wide, is located along the shoreline in the Controlled Industrial Area of the PHNSY and Intermediate Maintenance Facility. In 2000, a time-critical removal action was completed to remove asbestos-impacted soil to <1%. A ROD was signed in July 2010. A remedial action to install signs and concrete cover over exposed soil was completed in October 2011. A remedial action completion report (RACR) was signed in July 2012, and regulatory concurrence was received in August 2012. LUCs and five-year reviews are required.	Site is currently included in the Shipyard Infrastructure Operations Program (SIOP) footprint; LUC boundary will be re-evaluated after the SIOP Construction phase.	<p>Pearl Harbor Naval Complex (PHNC) CERCLA Five-Year Review for National Priorities List (NPL) Sites completed and final report anticipated fall 2025 and addendum report fall 2025.</p> <p>Annual LUC inspections.</p>
Shipyard Petroleum	There are several potential sources of fuel releases in the Shipyard GSA: the Lower Tank Farm, pipeline corridors, and USTs. Two removal actions have been implemented in the Shipyard GSA, specifically at Bldg. 8 (Naval Shipyard Site 37) and Oscar 2 Pier (Naval Shipyard Site 46), to address fuel releases that were visibly migrating into Pearl Harbor.	Site is currently managed under the 2010 EHE/EHMP which recommends establishing an administrative boundary to prevent or limit exposure to site users. NFA with ICs recommended.	No upcoming deliverables.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Area North of Bldg. 1754, Shipyard GSA	GW impacts were identified during previous investigations for UST Naval Station (NS)-4, which was removed in 1991. COPCs include chlorinated VOCs and PAHs.	Regulatory agencies concur with recommended NFA in August 2016. Formal concurrence letter received in September 2017.	None.
JOINT BASE PEARL HARBOR-HICKAM (HALAWA-MAIN GATE)			
Remedial Action Area (RAA) 11, 12, and 13 – Halawa Main Gate GSA, FISC Area	The site is composed of RAAs 11, 12, and 13. RAA-11/13 are composed of a monitoring well at each location. Vinyl chloride was found in the GW at elevated concentrations. At RAA-12, TCE has been found in GW with potential vapor intrusion issues at four buildings.	The RAA-11/13 NFA ROD was completed in 2013. The RI/FS field work for RAA-12 was completed in 2014. Preparation of a PP is pending Department of Defense (DoD) accepted screening levels which are compatible with the industrial/commercial use of the site. Interim VI monitoring at Bldg. 444, 416, 451K, and 1682 and GW monitoring at the site continues in order to verify that the site is safe for the current use.	Plans are to continue VI monitoring at Bldg. 444, 416, 451K, and 1682 and to continue to sample select GW wells to verify the GW plume is stable. The RAA-12 PP anticipated to incorporate upcoming DoD action level for indoor air.
Bldg. 1554, 1613, and 1721	In December 2019, aqueous film-forming foam (AFFF)-impacted water was released within Bldg. 1721 and flowed to the exterior area. In September 2020, approximately 5,000 gallons of AFFF-impacted water was released and contained within an underground pump house due to an inadvertent trigger of the fire suppression system.	PFAS RI draft WP in progress.	Draft RI WP (spring 2026).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Drainlines – Various Areas at Halawa Main Gate GSA	<p>Storm drain sites at five facility sites located within the Halawa Main Gate GSA were identified as potential release sources to the storm drain system. COPCs that exceeded PALs include PCBs, TPH, PAHs, metals, and dimethylphthalate. Impacted media include surface soil, subsurface soil, GW, and sediment (in storm drains).</p> <p>The Navy completed a NTCRA of sediment from various storm drain catch basins and clean sections of drain pipes in 2015. A final RI/FS of four storm drain sites was completed in 2019. As of June 2024, the site is pending further investigation of the extent of subsurface soil and GW impacts at or near these storm drain sites.</p>	A technical memorandum was completed in 2022 to identify further investigation needed at various drain sites. A draft RI addendum WP was completed in January 2023 for further investigation at select storm drain sites.	Draft final RI addendum WP (2025).
Various Pearl Harbor Naval Complex (PHNC) Transformer Sites: Ford Island, Waipio Peninsula, and Halawa Main Gate	These sites are transformer sites with LUCs. A ROD was signed in 2010.	Annual inspections and five-year reviews.	Annual inspection (2025)

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Subsurface Fuel Sites	The site consists of several subsurface fuel plumes in the Halawa Main Gate area and the Naval Supply Systems Command (NAVSUP) Fleet Logistics Center. The sites are divided into 10 RAAs. The plumes are being monitored and all plumes are currently stable. The fuel release in 2020 at Hotel Pier (RAA-1) is apparently not related to historical impacts.	The site is in long-term management phase. The EHE/management plan was updated in March 2014 to include information from the 2007 release. Each RAA has an agreement memorandum signed by DOH. All 10 RAAs have ICs in-place to deal with future projects. RAAs 1-4 have LTM requirements.	Monitoring reports for RAAs 1-4 are generated annually, semiannually, or on a 5-year basis depending on the site and the results from the monitoring efforts.
Bldg. 644, Halawa Main Gate GSA	Bldg. 644 is a former foundry building near Magazine Loch. The interior of building is mostly paved with asphalt or concrete, but contains two earthen areas covered with steel plates.	Final SI report completed in October 2011. NFA recommended under CERCLA. Petroleum impacts in subsurface managed as part of subsurface fuel sites.	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (PEARL CITY PENINSULA)			
Pearl City Peninsula (PCP) Landfill	The PCP Landfill site consists of contiguous land areas totaling approximately 202 acres that occupy approximately one quarter of the PCP near the western end of the peninsula and is divided into four exposure units for investigation: PCP Landfill, Burn Disposal Area (BDA), Burn Area Site (BAS), and Waiawa Unit (WU). The PCP Landfill covers approximately 67 acres on the northwest side of the PCP, was used unofficially for refuse disposal from the mid-1940s, and operated officially as a sanitary landfill between 1965 and 1976. The PCP Landfill was closed in 1976. The BDA comprises approximately 10 acres in the southeast portion of the landfill and contains a layer of ash that reportedly originated from waste burning operations. The BAS covers approximately 100 acres in the central portion of the PCP and was used for waste disposal activities. The WU is wildlife refuge established in 1972 to provide habitat for endangered and migratory birds. No known Naval operations have occurred at the WU.	The City & County of Honolulu (CCH) property of the site was transferred to and began its separate investigation under the Army's Formerly Used Defense Sites program. The FS will be revised to no longer include this CCH property. To fill data gaps identified in the Draft Final FS, additional soil sampling is planned.	Draft final FS WP (2025)
FISC Fuel Annex	The Pearl City Fuel Annex is a 16.7-acre site on the Pearl City Peninsula (Pearl Harbor, Oahu, Hawaii) that was used to receive, store, issue, and inventory bulk fuels. Potential sources of impacts include: product releases, the sandblasting and painting of aboveground storage tanks and associated pipelines, and past tank and sludge and condensate disposal practices. COPCs include arsenic, lead and antimony, PCBs, TPH, BTEX, PAHs, PFAS in soil and metals, TPH, BTEX, PAH, and PFAS in GW.	RI addendum investigation started in 2021 and is ongoing.	Draft RI addendum WP (2027).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaheo Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (FORD ISLAND)			
Ford Island Landfill	The Ford Island Landfill is a 4.5-acre landfill located on the west end of Ford Island. The landfill was used from the 1930s to 1960s to dispose of waste from maintenance activities on Ford Island. Removal action to construct a vegetated cap completed in 1997.	ROD signed in September 2011. LUCs, long-term maintenance and five-year reviews required. RAWP completed May 2012. LTM plan completed and LUC signs installed in July 2013. Final RACR completed July 2016.	Annual LTM reports and annual inspections.
Various PHNC Transformer Sites: Ford Island, Waipio Peninsula, and Halawa Main Gate	These sites are transformer site with LUCs. A ROD was signed in 2010.	Annual inspections and five-year reviews.	Annual inspections.
Former Bldgs. 80 and 302	Former Bldgs. 80 and 302 are a former garage and grease ramp located on the south end of Ford Island. Prior investigations found elevated concentrations of metals in soil. A 2006 removal action was performed to consolidate impacted soil beneath the asphalt and vegetated cover.	LUCs, long-term maintenance, and five-year reviews required. LTM plan completed and LUC signs installed in July 2013; Final RACR completed June 2016.	Annual LTM reports, annual inspections.
Bldg. 284	Bldg. 284 is a former engine test cell facility located on the southwest corner of Ford Island. Prior investigations found elevated concentrations of metals in soil. A 2006 removal action was performed to construct a vegetated cover.	LUCs, long-term maintenance and five-year reviews required. LTM plan completed and LUC signs installed in July 2013; Final RACR completed June 2016.	Annual LTM reports, annual inspections.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (KALAELOA)			
Former Naval Air Station (NAS) Barbers Point Sanitary Landfill (SLF)	The former Barbers Point SLF is located at Former NAS Barbers Point, JBPHH, Kalaeloa, Oahu, Hawaii. The site is within a portion of the Naval Facilities Engineering Systems Command (NAVFAC), Hawaii Biosolids Treatment Facility, formerly referred to as the Solid Waste Management Facility, used by NAVFAC Hawaii for green waste composting operations or for storage and processing of biosolids and compost. The SLF waste limits encompass approximately 5 acres in an excavated coral pit. Historically, solid wastes including construction debris, municipal waste, pesticide containers, pesticide rinsates, rags impacted with solvents and oils, and asbestos-containing materials were disposed of at the former Barbers Point SLF. The landfill is no longer in operation.	Final decision document (DD) (2021) selected remedy for impermeable landfill cover and LUCs. Final performance design package (August 2024) and final WP for remedial action (August 2024).	Landfill cover construction and monitoring wells completed in August 2024. Draft remediation verification report (2025).
Coral Pit 1	Coral Pit 1 occupies 2 acres. It was excavated from 1960 to the mid-1970s for fill material used in construction projects. It was then used from the mid-1970s through the early 1980s as an active disposal area for construction debris and vegetative waste. COPCs include metals, PCBs, and PAHs in soil.	Annual LTM inspections and five-year reviews required.	Annual LTM inspections and reports.
Coral Pit 2	Coral Pit 2 occupies 13 acres. It was excavated from the 1940s to 1960s. It was then used for disposal of construction and demolition debris. It was also used as a stormwater collection area for runoff generated from the residential developments north of former NAS Barbers Point. The land is currently not being used. COPCs are metals and PAHs in soil.	Annual LTM inspections and five-year reviews required.	Annual LTM inspections and reports.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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Consolidation Unit (CU)	The CU overlies the "Monofill" (existing special waste landfill containing impacted soil, debris, and investigation-derived waste from multiple cleanup sites at the former NAS Barbers Point) at the NAVFAC Hawaii Biosolids Treatment Facility located in the southwestern portion of the former NAS Barbers Point bounded by the SLF to the southwest. The CU was constructed over the entire 5.2-acre footprint of the Monofill site and resembles an oval-shaped, grass-covered, flat-topped hill with sloping sides. The CU includes methane gas vents, monitoring wells, access roads, fencing, and stormwater drainage structures (swales and infiltration pond).	LUC inspections, long-term maintenance and monitoring (LTMM), and CERCLA five-year reviews.	2025 Final LTMM plan (April 2025). 1st quarter 2025 LTM completed in March and semiannual maintenance and monitoring report (August 2025). Final non-NPL five-year review (July 2025).
Barbers Point Installation Restoration Transformer Sites	These sites are transformer sites with LUCs. A ROD was signed in 1999.	Annual inspections and five-year reviews.	Annual inspections.
JOINT BASE PEARL HARBOR-HICKAM (WEST LOCH)			
Former Burn Pit	The Former West Loch Burn Pit is an approximately 0.4-acre site located about 400 ft west of Bldg. 484. The site was identified on archival maps, but information on types of items disposed of at the site during its use was not available. Known ordnance was burned at the NMC EAD DET PH Lualualei Annex Burn Pit sites and it was initially considered that similar burning occurred at this site. No records exist of any munitions and explosives of concern and/or material potentially presenting an explosive hazard burned/buried/disposed or otherwise encountered at this site. The preliminary assessment (PA) and SI recommended further investigation to determine the nature and extent of soil impacts.	Final WP addendum, Phase VI investigation (March 2023).	Phase VI field work completed in November 2023. Draft remedial investigation report (August 2024). Draft final RI report anticipated in September 2025.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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Electrical Component Disposal Area	The site is 0.3 acres in the West Loch and was historically used for the disposal of miscellaneous materials including electrical components, munitions debris, and metal debris. In 2004, an SI was conducted to evaluate COPCs associated with electrical component and other debris disposal at the site. A practice bomb containing a phosphorus charge was discovered on the surface of a debris stockpile of electrical components during the 2004 SI and further evaluation was recommended. During a PA in 2007/2009, the Navy explosive ordnance disposal confirmed the practice bomb and the site was transferred from the Installation Restoration Program to the Munitions Response Program. Additional munitions debris was discovered during the PA and surface removal was recommended. In 2011, a munitions response program SI was conducted and 822 pounds of munitions debris and 4,000 of scrap metal were recovered. An RI/FS is ongoing to delineate the extent of PCBs, metals, and explosives in soils with unexploded ordnance (UXO) avoidance during field sampling activities.	Final RI WP (December 2013). Initial field work started March 2015 and step-out sampling continued through 2021.	Draft final RI report (February 2025).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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4th Street Coral Pit Landfill	The 4th Street Coral Pit Landfill is located at West Loch Branch between 4th Street and the old railway tracks. This site is approximately 1,000 ft in length with a maximum width of about 250 ft. Ground surface elevations range from approximately 15 to 25 ft above mean sea level. In 1930s, the landfill was excavated as a source of coral for use as road construction materials. During World War II, the coral pit was used as a waste disposal site for solvent cans, paint sludges, paint cans, empty transformers, acid-filled automobile batteries, and dunnage. In mid-1970s, the Army Corps of Engineers covered the landfill with coral rock to preclude further disposal of potentially hazardous materials. The landfill cover consists of graded coral rock, which is presently 3-5 ft below the surrounding grade. Scrap metal disposal was permitted at the site later and unauthorized disposal continued.	Annual LUC inspections.	Annual LUC inspections.
West Loch Fuel Waste Storage Area	The West Loch Fuel Waste Storage Area is situated on the south side of 7th Street (at Bldg. 554). From the early 1970s to 1981, solid waste containing fuel designated for incineration was stored in this area to the east of the former incinerator unit (Bldg. 484). Cyanide was detected above a screening criterion (California-designated maximum concentration of 1 milligram per kilogram cyanide in soil to protect marine waters) in a subsurface soil sample. Propylene glycol dinitrate was detected in the GW from one monitoring well.	Field work completed in September 2012. Second round of GW sampling not conducted due to soil and 1st round GW sample results. Final RI report (November 2013). PP (June 2014). Final ROD signed (September 2016). Site closed out.	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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Fuel Storage Facilities AST	The West Loch Fuel Storage Facilities area is comprised of two abandoned ASTs and distribution pipelines: AST at Bravo Road and G Avenue and the Abandoned Diesel Oil Distribution System AST. An SI was completed in June 2004. Only the surface soil samples along the pipeline extending westward from the AST exhibited exceedances of benzo(a)pyrene. TPH (diesel range organics and motor oil range organics) and benzo(a)pyrene were detected above the screening criterion in the surface soil samples along the Abandoned Diesel Oil Distribution System AST.	Field work was conducted in January 2012 and results for surface and subsurface soils were below the PALs. GW was not sampled since results of soil samples were below the PALs. Final RI report completed in April 2013. Obtained DOH concurrence letter for NFA in August 2013. Site closed out.	None.
JOINT BASE PEARL HARBOR-HICKAM (WAIPIO PENINSULA)			
Oahu Sugar Company (OSC) Herbicide/ Fertilizer Mixing Area	The project site is a former pesticide mixing plant on Waipio Peninsula that was operated by the former OSC. Prior to 2022, investigations for the land areas were performed by others, and the Navy performed investigations for marine sediment adjacent to the site in Walker Bay. In 2022, legal issues with the successor to the Former OSC were settled and the Navy became the lead for all CERCLA investigations/actions for the site, including the land areas. An RI is planned to evaluate the extent of impacts for both land and marine sediment.	The Navy prepared a final RI WP for sediment in Walker Bay in February 2019 and field work was completed in June 2019. A draft RI/FS for sediment was prepared in January 2021. Based on resolution of legal issues in 2022, the Navy will take the lead on completing the RI for the entire site. This effort will require an evaluation of historical data collected by others and preparation of RI planning documents.	Draft RI WP for land area (fall 2025).
Confined Disposal Area (CDA)	The CDA is located on the south end of Waipio Peninsula. During construction of a project in January 2001, abandoned metal pallets were discovered and the soils in the area were observed to contain metal and paint debris. Four surface soil samples were collected and the analytical results indicated concentrations of metals above the screening criterion in the surface soil samples.	Draft removal verification report (RVR) completed in November 2021. Currently addressing regulatory agency comments.	Final RVR (2025).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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Waipahu Ash Landfill (WALF)	The WALF is located on the Waipio Peninsula at the end of Waipahu Depot Street, opposite of the former City and County of Honolulu (CCH) Waipahu Incinerator, and covers approximately 41 acres. The southern two-thirds of the WALF is situated on Navy-owned property. The WALF was operated by the CCH between 1960 and 1991 and received municipal solid waste and ash generated by the Waipahu Incinerator. The WALF was capped between 2009 and 2011 and obtained RCRA closure. In accordance with the RCRA and HAR regulations, a long-term, post-closure groundwater monitoring program was established and continues to be conducted semiannually. To obtain closure under CERCLA, additional actions are currently being performed to ensure the protection of human health and the environment. Under CERCLA, the EPA, State of Hawaii DOH, State of Hawaii Department of Land and Natural Resources, Navy, and the CCH entered into an Administrative Order on Consent (AOC) on March 31, 2014. Pursuant to the AOC, the CCH, as the responsible party, will perform a RI and FS for the WALF.	CCH completed the draft final RI report in spring 2025.	Final RI report (2025) Draft FS report (2026)

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaheo Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Sandblast Grit	<p>The site consists of two noncontinuous sandblast grit disposal locations along the Middle Loch shoreline; one is located off the Waipio Peninsula Access Road (middle of the peninsula) and the other is at the southern portion of the peninsula near the Confined Disposal Facility (CDF). The origin of the sandblast grit is unknown, but the Waipio Peninsula was used during World War II as an operating base. Following the discovery and preliminary sample of the sandblast material in 2010, a visual site inspection in 2011 was performed to delineate the visible extent due to exceedances of arsenic and lead. A time-critical removal action was completed in 2012 to remove the visible sandblast grit (a total of approximately 60 tons between the two areas). Confirmation sampling from the excavation areas concluded that delineation in the subsurface was required.</p> <p>An RI is ongoing at the site to perform human health and ecological risk assessments.</p>	<p>A time-critical removal action was completed in May 2012; final RVR (December 2012).</p> <p>Remedial Investigation activities continued from 2014-2021 (draft final RI report, July 2023).</p>	Draft sampling and analysis plan, RI continuation (July 2025). Biological monitoring began in December 2024.
Various PHNC Transformer Sites: Ford Island, Waipio Peninsula, and Halawa Main Gate	These sites are transformer site with LUCs. A ROD was signed in 2010.	Annual inspections and five-year reviews	Annual inspections.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (RICHARDSON FIELD AREA)			
Former Fleet Training Group Fire Fighting Training Area	This former fire-fighting training area (1940s to 1976) is located at Richardson/Marina Park. Sampling was conducted as part of an installation-wide SI in 2022 and GW and soil were found above screening levels. In May 2019, a separate PFAS release occurred when AFFF was used during the emergency response for a barge fire at a nearby location. An RI is planned to evaluate the former fire fighting training area and the barge fire area.	PFAS RI planning efforts initiated in summer 2024.	Draft RI WP (fall 2025).
Inactive Petroleum Pipelines at Halawa Landing	This site is located in an asphalt paved parking area southeast of the USS Bowfin Museum. Inactive 8-inch and 16-inch fuel oil pipelines were cleaned and closed in-place in 2004 as part of a removal action. Petroleum impact was identified in soil at Access Pit #5 during the removal action. The impact was confirmed with additional sampling in 2006.	NFA with ICs	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (NAVFAC HAWAII COMPOUND)			
Bldg. X24 at NAVFAC HI Compound	Bldg. X24 is a Quonset hut that was used for storage. A small tar spill was observed outside the building.	Small tar spill (de minimis release) housekeeping action completed. Lead and arsenic above screening levels remain. Final SI report (May 2019), followed by final RI report (April 2021). Lead-based paint flaking off of the building prevents site from moving forward. Currently working with facilities on abatement.	Draft FS report (2026).
Makalapa Pesticide Rinsate Pit	This site is located near the Namur Road gate on the NAVFAC HI compound. Pesticide equipment was rinsed and the rinse water was released into the two unlined pits.	Final explanation of significant differences signed by both EPA and DOH (February 2016). Final RVR/RACR submitted to EPA and DOH. EPA's NFA letter received August 29, 2016. Site has been closed out.	None.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaheo Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
JOINT BASE PEARL HARBOR-HICKAM (MAKALAPA CRATER AREA)			
Makalapa Crater Early Disposal Area, Former Pesticide Rinsate Area, Landfill Area, and Clean Fill Area	Site includes 4 AOCs: (1) an Early Disposal Area used to dispose of dredge spoils from the 1930s to 1940s and underlies other 3 AOCs; (2) a Former Pesticide Rinsate Area used for pesticide/herbicide container rinsate disposal from the 1950s to 1974; (3) a Landfill Area used for general disposal in the 1950s; and (4) a Clean Fill Area comprising 5 acres where private contractors disposed of construction debris in the mid 1970s. COPCs include munitions constituents, metals, pesticides, herbicides, PCBs, petroleum, VOCs, PAHs, and dioxins.	RI field work completed in May 2013. Additional step-out soil gas samples collected in January 2015. Final RI completed November 2016. RI addendum sampling was performed in 2020 to delineate impacts on the northeast side of site. The draft RI addendum report was completed in December 2020.	Working on regulatory review comments and draft final RI addendum report anticipated in 2026.
Time-Critical Removal Action for Impacted Soil/Debris at Radford High School	Subsurface soil impacts and debris encountered by the State of Hawaii Department of Education during track renovation project in late 2013. Impacts were associated with past disposal activities at a former salvage yard area on the northeast side of Makalapa Crater site. A time-critical removal action was performed to remove impacted soil stockpiles at Radford High School and to address subsurface impacts in order to allow the State of Hawaii Department of Education contractor to complete the track renovation project and replace the system on the football field.	Navy has completed actions to over-excavate and cap areas of impacted soil and debris. Navy completed final site restoration with placement of new sod on football field in April 2016.	None. Future environmental investigation of the former Navy property is being managed by the Army Corps of Engineers under the Formerly Used Defense Sites program.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
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FORMER WAIKELE BRANCH			
Burn Pit Site	The site is a former burn area for ordnance shipping materials and trash. Soil impacted with lead and arsenic has been buried under a soil and vegetative cover.	Site has DD and LUCs in place. LTM was ongoing for inspections and maintenance of the soil and vegetative cover. In 2014, an FS was prepared to re-evaluate remedial alternatives to eliminate or reduce the risk posed to receptors by soil impacts. The remedial alternative to excavate, transport and dispose of material in a CERCLA-approved landfill was selected and would allow for unrestricted use of the site. An amended DD was completed in April 2015. Remedial action field work began April 2015 and completed in February 2016. Final RVR completed in October 2016 and documented metal (lead and arsenic) concentrations met the clean-up goal. Final RACR completed in March 2019. NFA for site.	None.
Bldg. 21	The former building was part of a transportation complex where vehicles were stored and maintained. POL associated waste was investigated.	Impacted surface soils have been remediated. Impacted GW for carbon tetrachloride is still a concern. DDs are in place and the site is in LTM. Annual GW sampling and LUC inspections are being done.	Annual LTM reports.

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
USTs 50/51	The site is the former automotive service station. Two leaking USTs (UST-50/51) were removed in 1993. Near-surface POL-impacted soil has been removed and a SVE system used.	The SVE system has been removed with DOH concurrence. The site has received a conditional NFA from the DOH UST section.	None.
JOINT BASE PEARL HARBOR-HICKAM (VARIOUS AREAS)			
Pearl Harbor Sediments	This site extends within 5,055 acres of the submerged lands of Pearl Harbor. Sediments have potential impacts from water- and land-based Navy activities, past and present commercial and urban activities, past and present agricultural areas, and urban/industrial runoff. COCs include PCBs and metals. Fish tissue samples indicate levels of PCBs in excess of the fish consumption-based screening criteria were present in the bottomfish in several areas within the harbor. A DOH fish advisory is in place for the entire estuary of Pearl Harbor. Approximately 92% of the harbor is safe for human health and the environment. Active remediation is required in 428 acres of submerged land. Remedies currently being implemented consist of monitored natural recovery, placement of activated carbon and sand, and dredging.	ROD signed on September 26, 2018. Remedial action has been partially completed, with some areas of SE loch remaining, as well as DUs N4 and E2, per the final interim remedial action construction report (fall 2024; awaiting distribution) RAWP and environmental monitoring and management plan to be amended prior to future work.	Final LTM WP (summer 2025) RAWP revision (summer 2025)
Former Pearl City Junction	This site was used as a temporary storage area for miscellaneous DoD property from 1944 to 1984. From 1962 to 1984, an unpaved area at the site was reportedly used for storage of deteriorated and leaking materials, including transformers containing PCB-impacted dielectric fluid. As a result of an SI conducted by the Navy in 1990, PCBs and the pesticide Dieldrin were identified as COCs in two different areas of the site.	Draft RAWP for LUCs is next, but issues concerning Navy access to non-Navy property have to be worked out.	Final RAWP and RACR (2028).
Various Transformer Sites, PHNC NPL	These 61 transformer sites have potential PCB impacts in soil and/or concrete. These sites are located throughout areas of JBPHH. The sites were investigated based on the historical maintenance practice of discharging PCB-containing dielectric fluid to the ground.	Final RI report completed November 2016. RI addendum planned for delineation sampling. Draft RI addendum WP completed April 2018.	Draft final RI addendum WP (summer 2025).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Various Areas of Interest (AOIs) for PFAS (PHNC NPL)	An SI was conducted to evaluate potential historical releases of AFFF at various NPL areas at JBPHH. SI sampling includes collection of soil and GW samples at locations with a known or likely past release of AFFF.	Draft SI plan was completed in October 2019. The AOIs planned for SI sampling was updated in a revised draft SI WP completed in May 2021. Field work completed in 2022, and draft SI reports prepared in November 2023.	Errata package (summer 2025).
Various AOIs for PFAS (Non-NPL)	An SI was conducted to evaluate potential historical releases of AFFF at various non-NPL areas at JBPHH. SI sampling includes collection of soil and GW samples at locations with a known or likely past release of AFFF.	Draft SI plan was completed in October 2019. The AOIs planned for SI sampling was updated in a revised draft SI WP completed in May 2021. Field work completed in 2022, and draft SI reports prepared in November 2023.	Errata package (summer 2025).
Various NPL Fire Stations (Ford Island, West Loch, and Main Base)	Sampling was conducted as part of an installation-wide SI in 2022 and soil and GW were found above screening levels. A RI is planned to evaluate PFAS.	Plan to initiate PFAS RI in 2025.	Plan to initiate PFAS RI in 2025.
Underwater Munitions Site in the Pearl Harbor Navy Defensive Sea Area (NDSA)	In the early 20th century, the United States Army built batteries to protect the shores of Oahu. Historical records indicate as part of training, ordnance was fired from these positions into the Pearl Harbor NDSA. The Pearl Harbor NDSA is situated off Iroquois Point, Oahu, Hawaii, and occupies an approximate area of 2,741 acres, including the submerged LUC site of approximately 1,933 acres.	Completed final RI/FS (July 2015) and PP (November 2017) and DD (November 2019). LUC signage installation completed September 2024.	Final non-NPL five-year review (July 2025). Final LUC WP (2025), draft RACR (2025).
Various Sites in PHNC NPL Site	A CERCLA five-year review was conducted for the PHNC NPL site. The five-year review evaluated sites with LUCs to verify that current site conditions (e.g., soil/vegetated covers, asphalt/concrete caps) remain protective of human health and the environment.	Second five-year review completed in September 2019.	PHNC NPL third five-year review report (final anticipated in September 2025).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaeloa Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Various Non-NPL Sites in JBPHH	A CERCLA five-year review conducted for non-NPL sites. The five-year review evaluated sites with LUCs to verify that current site conditions (e.g., soil/vegetated covers, asphalt/concrete caps) remain protective of human health and the environment.	Third five-year review currently being finalized.	JBPHH non-NPL five-year review reports (2025).
OTHER OR OUTLYING AREAS			
Bldg. 612, Camp Smith	Bldg. 612 is located at Camp H.M. Smith. AFFF is stored on two fire trucks and AFFF is refilled at this fire station. A reserve of AFFF was also previously stored at the fire station.	Draft PFAS RI WP under review by regulators.	Final PFAS RI WP (October 2025).
Former Bazooka Practice Range	The Bazooka Practice Area is located north of Baugh Road in the upland (mauka) portion of Camp H.M. Smith, a Marine Corps facility that occupies a total of 220 acres in the foothills of the Koolau Mountain Range on the island of Oahu, Hawaii. Camp H.M. Smith, located approximately 1.5 miles northeast of Pearl Harbor on a ridge known as Halawa Heights, is bounded to the northwest and southwest by residential housing areas. Land to the north and east consists of the steeper slopes of the Koolau Range, which includes a state park and forest reserve lands. The Bazooka Practice Area comprises a heavily vegetated area of approximately 11 acres with moderately steep terrain located north of the Smith Field Helipad in the northeastern portion of Camp H.M. Smith.	RI field work completed in Summer 2022.	Draft RI report (December 2025).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaheo Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Former Aiea Laundry	The Navy Exchange Service Center operated the Former Aiea Laundry Facility until 1998, when operations ceased and the buildings were demolished. Dry cleaning operations were conducted at the site from the early 1950s to mid-1970s using tetrachloroethene (PCE). Stoddard Solvent was then substituted as the primary dry cleaning solvent until 1994, when a self-contained PCE dry cleaning system was installed. PCE was found to have been released and has migrated off the property.	The treatability study (TS) for soil vapor remediation is in-progress at the former Laundry Area and Backyard Area until the ROD is signed for the site. As part of the treatability study, the SVE system continues to operate for mitigation of subsurface vapor impacts. Routine vapor intrusion (air/vapor) and annual GW monitoring continues to be performed. Additional monitoring and investigation at the neighboring property continues. Optimization of the SVE system is in progress.	Technical memorandum (2025). Draft proposed plan (2026).
UST BP-1	The UST was first identified on a 1942 plan file drawing during a site summary evaluation and thought to have contained gasoline. The approximate location of the tank was discovered during a 2008 renovation of Bldg. 19. Investigation of the area detected lead in the soil and indicated three locations where the UST could have been based on the geophysical anomalies detected underground and lead impacts in the area. A dense debris layer was also found, which the incinerator activities that occurred nearby in the 1930s may have contributed.	RI (2015). FS (August 2016). PP (April 2017). Draft ROD (2018). Discussion with regulatory agencies regarding lead calculations is in progress.	Draft final ROD (2027).

Project Status Update Table			
Summary of Active Projects and Upcoming Documents/Events			
Navy Environmental Restoration Program, Pearl Harbor-Hickam-Kalaheo Restoration Advisory Board			
August 27, 2025			
Site Name (Green font = Final remedy is in-place)	Site Description	Project Status	Upcoming Deliverables/Actions (Anticipated Date, i.e., year only [2025]), or Season and Year [Summer 2025])
Former Oily Waste Disposal Facility (OWDF)	The Red Hill Former OWDF was constructed in the 1940s as a collection point for oily waste water generated by the cleaning of the Red Hill Bulk Fuel Storage Facility's 20 large-capacity USTs. Operations at the Former OWDF ceased in 1986. Environmental investigations at the Former OWDF began after an initial assessment in 1983. A two-phase RI and removal actions were conducted between 1991 and 2000. DOH issued a NFA determination for the Former OWDF in 2005. After the NFA determination, all wells except one were subsequently abandoned. GW samples collected from the one remaining OWDF well between 2010 and 2016 reported presence of TPH at levels that exceeded regulatory criteria. These levels occurred both before and after a confirmed release of fuel from Red Hill Bulk Fuel Storage Facility's Tank No. 5 in 2014. The elevated levels of TPH prompted the Navy to proactively begin re-investigation of the Former OWDF in 2016 and initiate the site assessment that is currently underway. The site assessment WP was approved and finalized in February 2021.	The site assessment is currently in-progress and in the data evaluation phase. The NFA determination for the site was rescinded by DOH in May 2024.	Technical memorandum (2025) Draft site assessment report (2026)
Red Hill PFAS Release	A documented release of 1,300 gallons of AFFF concentrate occurred at the Adit 6 location of Red Hill Bulk Storage Facility in November 2022. Spill response cleanup actions were performed to address concrete, asphalt, and soil impacted by the spill area; however, additional long-term response actions are needed to evaluate impacts from PFAS as an emerging concern in soil and GW, as the site is located above a drinking water aquifer.	Spill response completed in January 2023.	Revised draft WP (winter 2026).

Appendix C.2:
Central Oahu RAB
(to be provided in subsequent version)

Appendix C.3:
Waianae Coast/Lualualei RAB
(to be provided in subsequent version)

Appendix D:
Concurrence/Response to Comments

Appendix D.1:
DOH

Project Title: Draft Community Involvement Plan
 Joint Base Pearl Harbor-Hickam, Oahu, HI
 Reviewer: Jennah Oshiro, State of Hawaii Department of Health
 Date: August 4, 2025

Item	Section No.	Comment
1	2.3, Figure 2-1	Non-Time Critical Removal Actions (NCRAs) have been conducted numerous times by the Navy and allows for public comment. The Navy should consider adding a figure or adding to Figure 2-1 describing NCRAs.
Response: Concur. NCRAs have been added to Figure 2-1.		
2	Section 2.4	The sentence states that "...response efforts for the fuel release discovered in 2014 and the 2021 fuel release at the RHBFSF are not being conducted under the ER Program." The Navy should provide an explanation why these releases are not covered and provide a link to the websites where the community can make inquiries. For the Hawaii Department of Health, the website for the Red Hill fuel release response is at https://health.hawaii.gov/ust/ust-home-test/ust-red-hill-project-main/
Response: Concur. This section now includes language clarifying that the RHBFSF release is governed under RCRA and the 2023 AOC, highlighting the distinctions between these programs and CERCLA as well as the ER Program. It explains that this governance framework is the reason the release response is not extensively detailed in this document. Additionally, the Navy's community involvement efforts through the AOC are briefly addressed, and the table referencing online resources, including the HDOH website, is noted.		
3	3.1.1.3, Figure 3-1	The figure should also include military housing (Army) adjacent and downgradient to the Red Hill Bulk Fuel Storage Facility (RHBFSF).
Response: For clarification, Figure 3-1 illustrates the geographic study areas of JBPHH as established by the 1994 Federal Facilities Agreement between the EPA, DOH, and the Navy (see Section 3.1.1.3), so the housing areas are not appropriate for this figure. However, Section 3.1.2 has been updated to include discussions regarding military residential areas and neighborhoods located downgradient of the RHBFSF, including Moanalua Hillside Apartments, Red Hill Housing, Aliamanu Crater Housing, and Foster Village.		
4	3.1.2	The section does not include areas potentially impacted by releases from RHBFSF. Please include these communities including Salt Lake.
Response: Concur. A discussion of the Salt Lake, Moanalua, and Foster Village neighborhoods, as well as the military residential areas of Moanalua Hillside Apartments, Aliamanu Military Reservation, and Red Hill Housing, have been added to this section.		
5	5.1.3.1, Table 5-3	Please add the following links to Additional Online Resources: • HDOH Red Hill Water Information: https://health.hawaii.gov/about/red-hill-water-information/ • HDOH UST Program U.S. Navy Red Hill Build Fuel Storage Facility: https://health.hawaii.gov/ust/ust-home-test/ust-red-hill-project-main/
Response: Concur. These links have been added to Table 5-3.		

Appendix D.2: EPA

Project Title: Draft Community Involvement Plan
 Joint Base Pearl Harbor-Hickam, Oahu, HI
 Reviewer: John Chesnutt, United States Environmental Protection Agency
 Date: June 20, 2025

Item	Section No.	Comment
1	2.4	The Draft CIP includes asbestos and lead as emerging contaminants. Please clarify and revise, as necessary, if asbestos and lead are emerging contaminants.
Response: Concur. Asbestos and lead are not emerging contaminants. Section 2.4 has been revised to remove them.		
2	Figure 3-1	Please revise the figure to reflect the correct boundary for the Red Hill Geographic Study Area (GSA).
Response: Concur. Figure 3-1 has been revised to reflect current Red Hill GSA boundary.		
3	3.1.2	This section does not include the residential areas surrounding the Red Hill GSA. Please revise the Draft CIP to include Moanalua Hillside Apartments, Red Hill Housing, Aliamanu Crater Housing, and Foster Village.
Response: Concur. Discussion of Moanalua Hillside Apartments, Red Hill Housing, Aliamanu Crater Housing, and Foster Village has been added to this section.		
4	3.1.2	The community of Salt Lake also borders JBPHH but is not included in the Community Background and Profile. Please revise the Draft CIP to include the community of Salt Lake.
Response: Concur. Discussion of the Salt Lake neighborhood has been added to this section.		
5	5.1.3	Please consider adding a subsection describing outreach specific to Red Hill GSA (Community Representation Initiative in accordance with 2023 Administrative Order on Consent, Navy open houses, Navy webinars/websites, etc.).
Response: Concur. A discussion of outreach specific to the Red Hill GSA has been added to Section 2.4 rather than Section 5.1.3, because those outreach activities do not fall under the ER Program.		
6	5.1.3.1	The text states that, "The Navy plans to continue these meetings at least twice per year;" however, there have been discussions at RAB meetings to revise the frequency of these meetings. Please revise this section to include discussion on the development of a RAB charter and the frequency of RAB meetings and site visits.
Response: Concur. Section 5.1.3.1 has been revised to state that the Navy will hold Pearl Harbor-Hickam-Kalaheo RAB meetings three times per year and will conduct site visits for RAB members twice per year, as defined in the RAB Charter.		
7	Table 5-3	Please add a link to EPA's Red Hill website at: https://www.epa.gov/red-hill .
Response: Concur. This link has been added to Table 5-3.		
8	6	Please add a reference to the 2023 Administrative Order on Consent for Red Hill: https://www.epa.gov/red-hill/public-engagement#2023 .
Response: Concur. A reference for the 2023 AOC has been added to Section 6, and that reference is cited in Section 2.4.		
9	Appendix A	Ensure acronyms used in Appendix C are included in the glossary in Appendix A (NTCRA, IWTP, PCBs LUCS, RACR, EHE, EHMP, ICs, etc.). Also, the use of the term "SI" in Appendix C seems to have a different meaning than Site Inspection, as defined in Appendix A (see "Oscar 2 Pier," "Burn Pit Site," etc.). Please clarify the meaning of SI throughout Appendix C.
Response: Concur. Appendix A has been updated to include acronyms used in Appendix C, where appropriate. For clarification, some terms were determined to be self-explanatory and therefore unnecessary to define in Appendix A (i.e., IWTP [Industrial Wastewater Treatment Plant]). Proper nouns were also not added to Appendix A. The term "SI" was checked throughout Appendix C and revised where appropriate.		
10	Appendix B.2	The Draft CIP included a high-level summary of the JBPHH Environmental Concerns Survey, but the following requested information is requested. Please revise the Draft CIP to include information on survey distribution method and/or communication channels and the number of surveys sent and to which community areas.
Response: Concur. Details have been added to Section 4.3 that describe how the survey was distributed. For clarification, because the survey was administered online via a website link, an exact count of the surveys distributed could not be determined.		
11	Appendix C	Several items in the "Upcoming Deliverables/Actions" column have dates that indicate the activities are completed, such as Summer 2024 for the Red Hill PFAS Release Draft Work Plan and 2019 for well abandonment in the Bldg. 1754 Shipyard GSA. Please update this column throughout Appendix C to include upcoming events. Also, for sites that have upcoming deliverables/actions that are dated prior to this draft CIP, please provide an update if the work was completed.
Response: Concur. Appendix C has been updated to include current dates for the "Upcoming Deliverables/Actions" column.		

Project Title: Draft Community Involvement Plan
Joint Base Pearl Harbor-Hickam, Oahu, HI
Reviewer: John Chesnutt, United States Environmental Protection Agency
Date: June 20, 2025

Item	Section No.	Comment
12	Appendix B.2	Page B.2-5, Bullet #10, please delete duplicate "%".
Response: Concur. The revision has been applied.		

Appendix D.3: RAB Members

Project Title: Draft Community Involvement Plan

Reviewer: Cruz Vina Jr., RAB Member

Date: June 5, 2025

Item	Section No.	Comment
1	Section 3.1.2	On page 3-7 under "Community Background and Profile" Please add "Interested members from the "Neighborhood Boards" around JBPHH.
Response: The following sentence has been added to the end of the third paragraph in Section 3.1.2: "Numerous neighborhood boards operate in the communities surrounding JBPHH."		
2	Section 3.1.2	Also, on page 3-7 add under "libraries" - please "Pearl City Library".
Response: The Pearl City Library has been added to Section 3.1.2.		
