



**Draft
Environmental Assessment for
Homeporting Constellation-Class
Frigates at Naval Station
Everett, Washington**



January 2024

**DRAFT
ENVIRONMENTAL ASSESSMENT**

**For
HOMEPORTING CONSTELLATION-CLASS FRIGATES
At
NAVAL STATION EVERETT, WASHINGTON**

January 2024



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Abstract

Designation:	Environmental Assessment
Title of Proposed Action:	Homeporting Constellation-Class Frigates
Project Location:	Naval Station Everett, Washington
Lead Agency for the EA:	Department of the Navy
Affected Region:	Snohomish County, Washington
Action Proponent:	United States Fleet Forces Command
Point of Contact:	Constellation-Class Frigates Environmental Assessment Project Manager, Code EV21 Naval Facilities Engineering Systems Command, Atlantic 6506 Hampton Boulevard Norfolk, Virginia 23508
Date:	January 2024

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter, referred to as the Navy), has prepared this Environmental Assessment in accordance with the National Environmental Policy Act, as implemented by the Council on Environmental Quality regulations and Navy regulations. The Proposed Action would establish facilities and functions at Naval Station Everett, Washington to support homeporting Constellation-class frigates. Under the Proposed Action, the Navy would homeport up to 12 Constellation-class frigates; construct training and support facilities for ships, commands, and crews; and station approximately 2,900 military personnel, plus their family members. The Navy would phase in homeported ships over a 10-year time period, with personnel arriving and facilities established beginning no earlier than fiscal year 2026 and arrival of the first Constellation-class frigate no earlier than fiscal year 2028.

This Environmental Assessment evaluates the potential environmental impacts associated with two action alternatives, Alternatives 1 and 2, and the No Action Alternative to the following resource areas: air quality, water resources, noise, biological resources, cultural resources, American Indian traditional resources, land use, infrastructure, transportation, public health and safety, hazardous materials and wastes, socioeconomics, environmental justice, and cumulative impacts.



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Executive Summary

ES.1 Proposed Action

The Navy proposes to establish facilities and functions at Naval Station (NAVSTA) Everett, Washington to support homeporting Constellation-class guided-missile frigates (FFGs). Under the Proposed Action, the Navy would homeport up to 12 FFGs; construct training and support facilities for ships, commands, and crews; and station approximately 2,900 personnel, plus their family members. The Navy would phase in homeported ships over a 10-year time period, with personnel arriving and facilities established beginning no earlier than fiscal year 2026 and arrival of the first Constellation-class frigate no earlier than fiscal year 2028. Homeporting of FFGs and personnel would occur incrementally as existing homeported ships and personnel depart NAVSTA Everett.

ES.2 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to provide the Pacific Fleet with a next generation of multi-mission small surface combatants with the ability to operate independently or as part of a strike group.

The need for the Proposed Action is to provide capabilities for manning, training, and equipping combat-capable naval forces ready to deploy worldwide. In this regard, the Proposed Action furthers the Navy's execution of its congressionally mandated roles and responsibilities under 10 U.S. Code (U.S.C.) section 8062.

ES.3 Alternatives Considered

In developing the proposed range of alternatives, the Navy considered mission characteristics, geographic requirements, training and support facility requirements, and existing Navy infrastructure. Based on the evaluation of reasonable alternatives using screening factors, two action alternatives at NAVSTA Everett were identified as best meeting the purpose of and need for the Proposed Action and are analyzed within this Environmental Assessment (EA). The EA also evaluates the No Action Alternative under which the Navy would not homeport FFGs on the West Coast.

Alternative 1 and Alternative 2 (described below) both include homeporting up to 12 FFGs on the West Coast, stationing 2,900 personnel, and providing facilities for ships, commands, and crews at NAVSTA Everett that would be phased in over a period of approximately 10 years. Most facilities and support infrastructure would be similar for both alternatives with the difference being the size, location, and configuration of the proposed Administrative Support Facility, which would be constructed at several potential locations within the NAVSTA Everett Administrative District. Facilities construction under Alternative 1 or Alternative 2 would occur within existing NAVSTA Everett property boundaries from approximately fiscal year 2026 to fiscal year 2028 (approximately 2.5 years).

ES.3.1 Alternative 1

Facilities construction under Alternative 1 would include a new Administrative Support Facility consisting of a stand-alone building or an addition to an existing building that would be up to three stories and approximately 50,000 square feet. Construction would also include two 200-square foot shelter additions on the pier deck and an approximately 41,000-square foot addition would be added onto the Fleet Region Readiness Center, which would provide additional classroom and training space.

Other supporting facilities and infrastructure would include stormwater management facilities, electrical and mechanical utilities, and road and parking lot resurfacing.

ES.3.2 Alternative 2

Facilities construction under Alternative 2 would include a new Administrative Support Facility consisting of a combination of a new, approximately 20,000-square foot addition to an existing building and approximately 30,000 square feet of interior renovations of existing buildings on NAVSTA Everett. All other facilities would be similar to facilities described for Alternative 1.

ES.4 Summary of Environmental Resources Evaluated in the Environmental Assessment

The environmental resource areas analyzed in detail in this EA include: air quality, water resources, noise, biological resources, American Indian traditional resources, socioeconomics, and environmental justice.

Potential impacts to the following resource areas are considered to be negligible or non-existent so they were not analyzed in detail but are summarized at the beginning of Chapter 3.0, *Affected Environment and Environmental Consequences* of the EA: cultural resources, geological resources, land use, visual resources, infrastructure, public health and safety, transportation, and hazardous materials and wastes.

ES.5 Summary of Potential Environmental Consequences of the Action Alternatives and Major Mitigation Actions

Potential impacts to resources at NAVSTA Everett are summarized in Table ES-1. The analysis contained in this EA has determined the Proposed Action and alternatives would not result in significant environmental impacts. Therefore, no major mitigation actions are needed. Impact avoidance and minimization measures would be implemented and are summarized in Table 3.8-2 of this EA.

ES.6 Public Involvement

The Navy has prepared this Draft EA to inform the public of the Proposed Action and to allow the opportunity for public review and comment. Input from the public and from regulatory agencies is incorporated into the analysis of potential impacts, as appropriate.

A Notice of Availability of the Draft EA including information about where the Draft EA may be reviewed, the announcement of a 30-day public comment period, and dates and locations of two public open-house meetings was published in the *Seattle Times* and *Everett Herald* (See Appendix A). The Draft EA is available on the Navy's website, <https://www.nepa.navy.mil/FFGEverett> and at local libraries (Everett Public Library and Everett Public Library-Evergreen Branch).

The public is invited to submit comments on the Draft EA by any of the following methods:

- by completing a comment form at one of the public meetings
- electronically, via the project website <https://www.nepa.navy.mil/FFGEverett>
- in writing, by mail to: FFG EA Project Manager, Naval Facilities Engineering Systems Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, Virginia 23508

The Navy has initiated consultation with the U.S. Fish and Wildlife Service (USFWS) and Washington State Historic Preservation Officer (SHPO). The Navy has invited Indian Tribal Governments to initiate government-to-government consultation on the Proposed Action. A Coastal Consistency Determination was prepared in accordance with the Coastal Zone Management Act and submitted to Washington Department of Ecology (WDOE). Correspondence with agencies and Tribal Governments will be included in the Final EA.

Table ES-1 Summary of Potential Impacts to Resource Areas

<i>Resource Area</i>	<i>No Action Alternative</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Air Quality	No Impact.	Air emissions from new construction would be minor and temporary. Impacts from the arrival of FFG personnel would not exceed the established annual <i>de minimis</i> levels for any criteria pollutants. GHG emissions would also be minor in the context of the regional and larger global GHG emissions and would not have a discernable impact on climate change. No significant impacts.	Air emissions from construction building additions and renovations would be similar to, but slightly less than, impacts described for Alternative 1. GHG impacts would be the same as Alternative 1.
Water Resources	No Impact.	Impacts to water resources during construction activities and operations would not be significant with implementation of appropriate stormwater infrastructure, flood risk management measures, BMPs, and compliance with permit conditions.	Impacts would be the same as those described for Alternative 1.
Noise	No Impact.	Temporary construction noise during pile driving may be noticeable to residents, but it would last only a few weeks or months. Change in noise from typical pierside activities would be minimal. No significant noise impacts.	Impacts would be the same as those described for Alternative 1.
Biological Resources	No Impact.	Alternative 1 activities may affect, but are not likely to adversely affect, the threatened marbled murrelet. Consultation has been initiated with USFWS. No take of migratory birds, bald eagles, or marine mammals as defined by the MBTA, BGEPA, and MMPA, respectively. No take of marine mammals with implementation of monitoring. No significant impact to biological resources.	Impacts would be the same as those described for Alternative 1.
American Indian Traditional Resources	No Impact.	No construction-related disturbance to traditional aquatic resources. Tribal access to U&A fishing grounds and stations near NAVSTA Everett would be expected to remain similar to existing conditions. The Navy has invited Indian Tribal Governments to initiate government-to-government consultation on the Proposed Action (Appendix F).	Impacts would be the same as those described for Alternative 1.
Socioeconomics	No Impact.	Beneficial impacts to local economy during construction. No significant impacts to population, employment characteristics, schools and childcare, housing, economic activity, or tax revenue.	Impacts would be the same as those described for Alternative 1.

<i>Resource Area</i>	<i>No Action Alternative</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Environmental Justice	No disproportionately high and adverse human health effects to environmental justice communities.	Because construction would be temporary and operational changes would result in similar ship activities and a minor decrease in military personnel, implementation of Alternative 1 would not cause disproportionately high and adverse human health or environmental effects on minority or low-income communities.	Impacts would be the same as those described for Alternative 1.

Key: BMP = best management practice; BGEPA = Bald and Golden Eagle Protection Act; FFG = guided-missile frigate; GHG = greenhouse gas; MBTA = Migratory Bird Treaty Act; MMPA = Marine Mammal Protection Act; NAVSTA = Naval Station; U&A = usual and accustomed; USFWS = United States Fish and Wildlife Service.

Draft
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Homeporting Constellation-Class Frigates
at Naval Station Everett, Washington
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Abbreviations and Acronyms

Acronym	Definition	Acronym	Definition
ACAM	U.S. Air Force Air Conformity Applicability Model	MMPA	Marine Mammal Protection Act
APE	area of potential effects	MPR	Maintenance and Pile Replacement
AQCR	Air Quality Control Region	μPa	micropascals
BEA	Bureau of Economic Analysis	MOU	Memorandum of Understanding
BMP	best management practice	MS4	Municipal Separate Storm Sewer System
CAA	Clean Air Act	MSGP	Multi-Sector General Permit
CDC	child development center	NAAQS	National Ambient Air Quality Standards
CEQ	Council on Environmental Quality	NAVFAC NW	Naval Facilities Engineering Systems Command Northwest
CFR	Code of Federal Regulations	NAVSTA	Naval Station
CGP	Construction General Permit	NEPA	National Environmental Policy Act
CO	carbon monoxide	NMFS	National Marine Fisheries Service
CO ₂ e	carbon dioxide equivalent	NO ₂	nitrogen dioxide
CVN	nuclear-powered aircraft carrier	NO _x	nitrogen oxides
CWA	Clean Water Act	NPDES	National Pollutant Discharge Elimination System
dB	decibel	OPNAVINST	Office of the Chief of Naval Operations Instruction
dba	A-weighted noise level	OSHA	Occupational Safety and Health Administration
DoD	United States Department of Defense	PM ₁₀	particulate matter less than or equal to 10 microns in diameter
EA	Environmental Assessment	PM _{2.5}	particulate matter less than or equal to 2.5 microns in diameter
EIS	Environmental Impact Statement	PSD	Prevention of Significant Deterioration
EO	Executive Order	RMS	root mean square
ESA	Endangered Species Act	ROI	region of influence
FEMA	Federal Emergency Management Agency	SHPO	State Historic Preservation Officer
FFG	guided-missile frigate	SO ₂	sulfur dioxide
GHG	greenhouse gas	SOP	Standard Operating Procedure
HAP	hazardous air pollutant	SWPPP	stormwater pollution prevention plan
HWMP	Hazardous Waste Management Plan		
INRMP	Integrated Natural Resources Management Plan		
LID	Low Impact Development		
MBTA	Migratory Bird Treaty Act		

Acronym	Definition	Acronym	Definition
TMDL	Total Maximum Daily Load	USFWS	U.S. Fish and Wildlife Service
tpy	tons per year	VOC	volatile organic compound
U&A	usual and accustomed	WAC	Washington Administrative Code
UFC	United Facilities Criteria	WDOE	Washington Department of Ecology
U.S.	United States	WSDOT	Washington State Department of Transportation
U.S.C.	U.S. Code		
USCB	U.S. Census Bureau		
USEPA	U.S. Environmental Protection Agency		

1 Purpose of and Need for the Proposed Action

1.1 Introduction

United States (U.S.) Fleet Forces Command, a Command of the U.S. Navy (hereinafter referred to as the Navy) proposes to establish facilities and functions at Naval Station (NAVSTA) Everett, Washington to support homeporting Constellation-class guided-missile frigates (FFGs). Under the Proposed Action, the Navy would homeport up to 12 FFGs; construct training and support facilities for ships, commands, and crews; and station approximately 2,900 military personnel, plus their family members. The Navy would phase in homeported ships during a 10-year time period, with personnel arriving and facilities established beginning in fiscal year¹ 2026 and arrival of the first Constellation-class frigate, USS Constellation (FFG 62), in fiscal year 2028.

The FFG (shown in Figure 1.1-1) is a next generation of small surface combatants. It is a multi-mission capable ship that will provide fleet commanders multiple use options while supporting the National Defense Strategy across the full range of military operations.

Prior to the arrival of the FFGs into the Pacific Fleet, new facilities and associated infrastructure would be constructed at NAVSTA Everett to support the ships, commands, and crew members. In order to meet the requirements of the FFGs, military personnel will be stationed at NAVSTA Everett in a phased-in approach over approximately 10 years beginning no earlier than fiscal year 2026.



Figure 1.1-1 FFG Artist Rendering

¹ Fiscal year: October 1 to September 30.

The Navy has prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended by the Fiscal Responsibility Act of 2023, and as implemented by Council on Environmental Quality regulations and Navy regulations for implementing NEPA.

1.2 Background

NAVSTA Everett is the most modern shore installation in the United States, and one of only two Navy-owned deep-water ports on the West Coast of the continental United States. Located along Possession Sound in Everett, Washington, it is home to Navy surface ships and the command staffs of Commander, Carrier Strike Group 11 and Commander, Destroyer Squadron 9. It also supports U.S. Coast Guard vessels and Military Sealift Command supply vessels.

Ten Navy ships currently (2023) homeported at NAVSTA Everett and approximately 3,100 personnel will gradually depart through changes in homeport or changes in mission. Two U.S. Coast Guard vessels currently homeported at NAVSTA Everett will remain.

1.3 Location

NAVSTA Everett consists of approximately 138 developed acres, including more than 70 structures and piers (excluding Possession Sound waters) (Figure 1.3-1, General Location Map and Figure 1.3-2, Detail Map). NAVSTA Everett has two piers supporting Navy and U.S. Coast Guard vessels. The installation also supports 26 tenant commands. Its mission is to provide superior shore station support to U.S. Navy and Coast Guard forces, while ensuring quality of life for Sailors, civilians, and their families. NAVSTA Everett also provides logistical support for Military Sealift Command vessels. Thousands of active and reserve military personnel, as well as civil service personnel are assigned to NAVSTA Everett and its tenant commands. In fiscal year 2022, approximately 4,400 military and civilian personnel were stationed at NAVSTA Everett.



NAVSTA Everett is part of the Puget Sound Fleet Concentration Area, consisting of the Everett Waterfront Site and the Marysville Family Support Complex. Located in Snohomish County, Washington, approximately 25 miles north of Seattle, it is one of six major naval shore facilities in the Puget Sound region. NAVSTA Everett is located adjacent to the mouth of the Snohomish River.

The scope of the Proposed Action focuses on the NAVSTA Everett Waterfront Site (Figures 1.3-1 and 1.3-2).

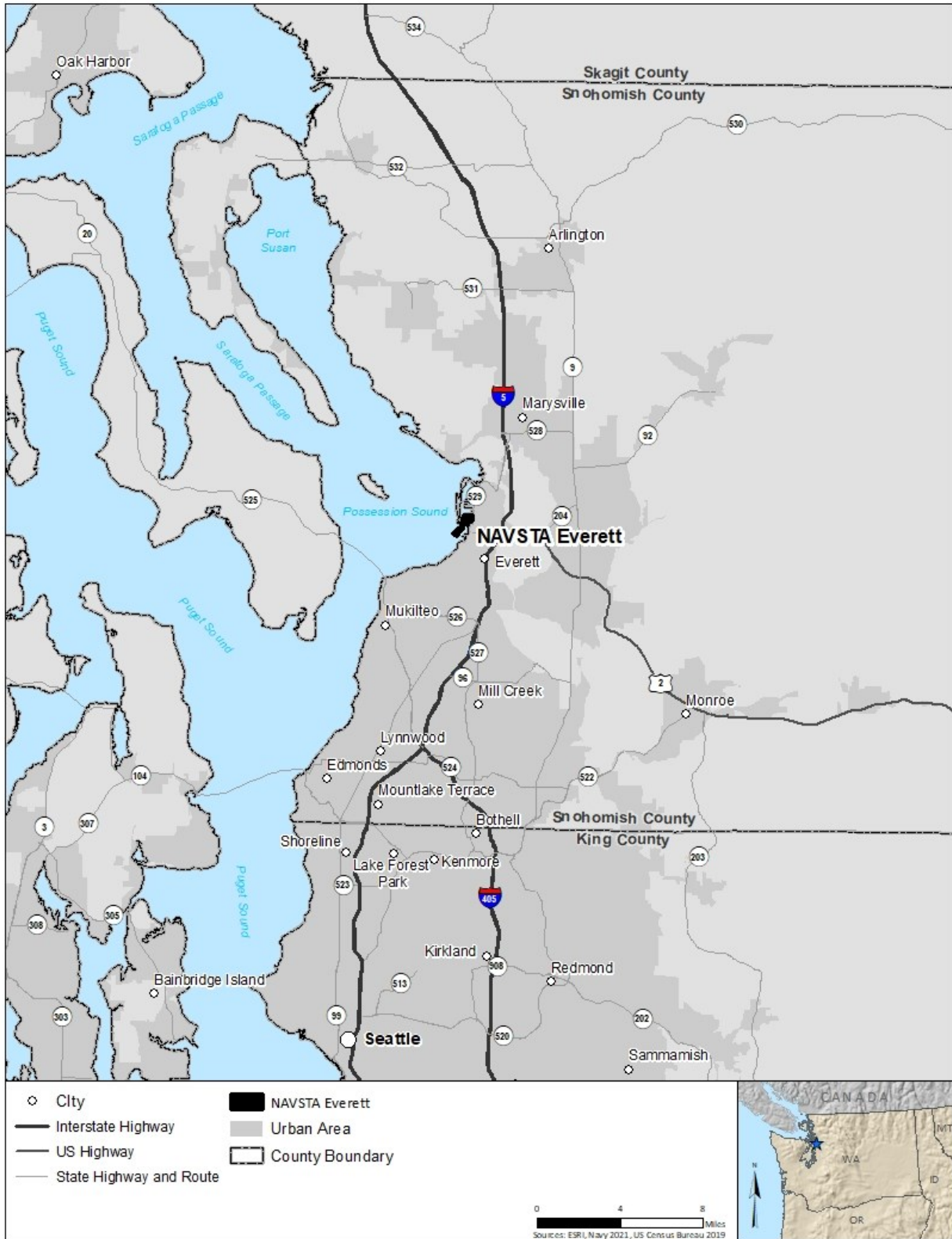


Figure 1.3-1 NAVSTA Everett General Location Map



Figure 1.3-2 NAVSTA Everett Detail Map

1.4 Purpose of and Need for the Proposed Action

The purpose of the Proposed Action is to provide the Pacific Fleet a next generation of multi-mission small surface combatants with the ability to operate independently or as part of a strike group.

The need for the Proposed Action is to provide capabilities for manning, training, and equipping combat-capable naval forces ready to deploy worldwide. In this regard, the Proposed Action furthers the Navy's execution of its congressionally mandated roles and responsibilities under 10 U.S. Code (U.S.C.) section 8062.²

1.5 Scope of Environmental Analysis

This EA includes an analysis of potential environmental impacts associated with the action alternatives and the No Action Alternative. The scope of the analysis focuses on potential impacts from construction of facilities and changes in personnel associated with homeporting FFGs at NAVSTA Everett. The scope of this EA also includes shore-based support and maintenance of FFGs and evaluation of potential changes to the frequency of openings of the installation port security barrier, which are required to allow ships to move in and out of the installation secure pier area. The scope of this EA does not include vessel movements through Possession Sound or Puget Sound. Vessel movements and other training or testing activities are evaluated in separate environmental analyses in the Environmental Impact Statement (EIS)/Overseas EIS for Northwest Training and Testing, as described in Section 1.6, *Key Documents*.

The environmental resource areas analyzed in detail in this EA include: air quality, water resources, noise, biological resources, American Indian traditional resources, socioeconomic, and environmental justice. The study area and level of analysis for each resource analyzed may differ due to how the Proposed Action interacts with or impacts the resource.

Potential impacts to the following resource areas are considered to be negligible or non-existent so they were not analyzed in detail but are summarized at the beginning of Chapter 3.0, *Affected Environment and Environmental Consequences* of the EA: cultural resources, geological resources, land use, visual resources, infrastructure, public health and safety, transportation, and hazardous materials and wastes.

1.6 Key Documents

Key documents are sources of information incorporated into this EA. Documents are considered to be key because of similar actions, analyses, or impacts that may apply to this Proposed Action. Council on Environmental Quality (CEQ) guidance encourages incorporating documents by reference. Documents incorporated by reference in part or in whole include:

² 10 U.S.C. section 8062: "The Navy shall be organized, trained, and equipped for the peacetime promotion of the national security interests and prosperity of the United States and for prompt and sustained combat incident to operations at sea. It is responsible for the preparation of naval forces necessary for the duties described in the preceding sentence except as otherwise assigned and, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Navy to meet the needs of war."

- **Final EIS for Carrier Battle Group Puget Sound Region Ship Homeporting** (June 1985, Record of Decision dated August 27, 1985). After completing the EIS, the Navy announced its decision to construct, homeport, and operate a Carrier Battle Group in the Puget Sound region. It was announced that NAVSTA Everett would be the homeport for up to 15 ships to include a nuclear-powered aircraft carrier (CVN). The Navy estimated that approximately 8,200 military personnel plus 7,500 military family members, and approximately 700 civilians plus 900 family members, would be stationed at NAVSTA Everett. Facility construction for the homeporting included berthing for 15 ships, plus yard craft, waterfront support facilities, administrative facilities, bachelor enlisted quarters, recreational facilities, and a shore intermediate maintenance activity (Navy, 1985).
- **Final EIS for Developing Home Port Facilities for Three NIMITZ-Class Aircraft Carriers in Support of the U.S. Pacific Fleet** (1999, Record of Decision dated January 28, 2000). In order to develop capacity to support the transition from conventionally powered aircraft carriers to CVNs, the Navy announced its decision to: (1) construct facilities and infrastructure required to homeport two additional CVNs at Naval Air Station North Island, Coronado, CA; (2) upgrade existing CVN support facilities at Puget Sound Naval Shipyard, Bremerton, Washington; and (3) retain NAVSTA Everett, Washington, as a CVN homeport (Navy, 2000).
- **Final EA for Marine Structure Maintenance and Pile Replacement Activities in Navy Region Northwest** (June 2019, with Finding of No Significant Impact signed June 25, 2019). The action includes maintenance and repairs to piers, wharfs, quay walls, and marine pile-supported structures, as well as repair and replacement of damaged components of these structures at multiple installations throughout Navy Region Northwest over a five-year period beginning in 2019. The action at NAVSTA Everett includes the removal and replacement of pier piles over five years between 2019 and 2024 (Navy, 2019).
- **Final Supplemental EIS/Overseas EIS for Northwest Training and Testing** (2020a, Record of Decision signed September 23, 2021). This Supplemental EIS/Overseas EIS evaluated the potential environmental impacts of continuing military readiness activities in the Northwest Training and Testing study area. The Supplemental EIS/Overseas EIS supported the issuance of marine mammal incidental take authorizations under the MMPA and incidental takes of threatened and endangered marine species under the Endangered Species Act (ESA). In addition to the at-sea range complexes, the study area also included vessel transit areas through Puget Sound and Navy pierside locations where sonar maintenance and testing occurs as part of overhaul, modernization, maintenance, and repair activities at Naval Base Kitsap – Bremerton; Naval Base Kitsap – Bangor; and NAVSTA Everett (Navy, 2020a).
- **Integrated Natural Resources Management Plan (INRMP) for NAVSTA Everett** (2022). The INRMP is a planning document designed to guide the management of natural resources in support of the installation’s mission while protecting and enhancing installation resources for multiple uses and biological integrity. The INRMP analyzes resources at NAVSTA Everett and the Marysville Family Support Complex located within the City of Marysville, Washington. The INRMP includes baseline information and a management plan for threatened and endangered species and other natural resources that may be found on NAVSTA Everett or in the marine waters of Port Gardner Bay and the Snohomish River adjacent to the facility (NAVSTA Everett, 2022).

1.7 Relevant Laws and Regulations

The Navy has prepared this EA based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the Proposed Action.

A description of the Proposed Action's consistency with these laws, policies and regulations, as well as the names of regulatory agencies responsible for their implementation, is presented in Chapter 5.0 (Table 5.1-1).

1.8 Public and Agency Participation and Intergovernmental Coordination

Federal law and CEQ regulations direct agencies to involve the public in preparing and implementing their NEPA procedures. The Navy is committed to being an environmentally responsible neighbor and maintaining a transparent and collaborative relationship with the community.

The Navy has prepared this Draft EA to inform the public of the Proposed Action and to allow the opportunity for public review and comment. Through the public involvement process, the Navy coordinates with relevant federal, state, and local agencies and notifies them and the public of the Proposed Action. Input from the public and from regulatory agencies is incorporated into the analysis of potential impacts, as appropriate.

A Notice of Availability of the Draft EA including information about where the Draft EA may be reviewed, the announcement of a 30-day public comment period, and dates and locations of two public open-house meetings was published in the *Seattle Times* and *Everett Herald* (See Appendix A). The Draft EA is available on the Navy's website, <https://www.nepa.navy.mil/FFGEverett> and at local libraries (Everett Public Library and Everett Public Library-Evergreen Branch).

The public is invited to submit comments on the Draft EA by any of the following methods:

- by completing a comment form at one of the public meetings
- electronically, via the project website <https://www.nepa.navy.mil/FFGEverett>
- in writing, by mail to: FFG EA Project Manager, Naval Facilities Engineering Systems Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, Virginia 23508

The Navy has initiated consultation with the U.S. Fish and Wildlife Service (USFWS) and Washington State Historic Preservation Officer (SHPO). The Navy has invited Indian Tribal Governments to initiate government-to-government consultation on the Proposed Action. A Coastal Consistency Determination was prepared in accordance with the Coastal Zone Management Act and submitted to Washington Department of Ecology (WDOE). Correspondence with agencies and Tribal Governments will be included in the Final EA.

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2 Proposed Action and Alternatives

2.1 Proposed Action

The Navy proposes to establish facilities and functions at Naval Station (NAVSTA) Everett, Washington to support homeporting Constellation-class guided-missile frigates (FFGs). Under the Proposed Action, the Navy would homeport up to 12 FFGs; construct training and support facilities for ships, commands, and crews; and station approximately 2,900 personnel, plus their family members. The homeporting ships and personnel would be phased in over a period of approximately 10 years. The timing of construction and delivery of ships to NAVSTA Everett may fluctuate. Based on the ship production and testing timeline, the first ship is expected to arrive at NAVSTA Everett no earlier than fiscal year 2028.

Prior to the arrival of the FFGs into the fleet, new facilities and associated infrastructure would be constructed at NAVSTA Everett to support FFG crew members. In order to meet the frigates' crew requirements, military personnel would be stationed at NAVSTA Everett in a phased-in approach over 10 years beginning no earlier than fiscal year 2026. Each ship's crew would consist of an estimated 200 personnel. Therefore, at end state, the crews for 12 FFGs would require a total of approximately 2,400 military personnel. Approximately 500 additional military and/or civilian personnel would be necessary to support homeporting the ships for a total of approximately 2,900 personnel.

Under the Proposed Action, Constellation-class frigates would be berthed at NAVSTA Everett's existing piers. The Proposed Action does not involve structural modification of piers or any in-water structural work, but does involve pier utility upgrades to include distribution lines and equipment for potable and non-potable water, sanitary sewer, compressed air, and electrical power.

Over an estimated eight-year period through 2032, the ships currently homeported at NAVSTA Everett will gradually be reduced to zero through changes in homeport or changes in mission. Over that period, approximately 3,100 personnel associated with the departing vessels would also depart NAVSTA Everett. The two Coast Guard vessels and associated personnel are expected to maintain a consistent presence at NAVSTA Everett for the foreseeable future. The total number of homeported vessels would fluctuate very little from the current 12 to an overall net increase of two vessels with an end state total of 14 homeported vessels at NAVSTA Everett when the Proposed Action is completed no earlier than fiscal year 2037.

Based on the anticipated deployment schedule and minor change in the total number of homeported ships at NAVSTA Everett, the frequency of ships moving in and out of port through the port security barrier at NAVSTA Everett is not expected to change substantially from the current condition during the next 10 years. With the overall increase from 12 to 14 ships, port security barrier openings may increase by two or three per month by fiscal year 2037 as the final FFGs arrive to be homeported at NAVSTA Everett. However, because the new FFGs are substantially more fuel efficient, the number of barrier openings for fuel barges would decrease compared with existing openings for fuel barges, which would be expected to partially offset any additions. Therefore, openings would be expected to remain similar to the current condition. NAVSTA Everett would continue to monitor the number of openings.

Pierside support activities, including maintenance of FFGs, would be similar to, and would replace, activities occurring for the existing homeported ships at NAVSTA Everett. The additional two ships that would be homeported by fiscal year 2037 may result in an increase in these activities; however, the increase would be expected to be offset by reduced maintenance needs of the new ships.

The Proposed Action would include a phased transition in personnel on NAVSTA Everett, during a period of approximately 10 years beginning no earlier than fiscal year 2026. Table 2.1-1 provides the projected change in total installation population with the Proposed Action at NAVSTA Everett over a 15-year period.

Table 2.1-1 Estimated Change in Installation Population with Proposed Action (Fiscal Years 2023 to 2037)

<i>Personnel</i>	<i>Existing Fiscal Year 2023</i>	<i>Proposed Action Changes to Population</i>	<i>Total Projected Population Fiscal Year 2037 with Proposed Action</i>
Military and Civilian Personnel	4,400	(200)	4,200

Sources: Navy, 2020b; NAVSTA Everett, 2021.

The net total personnel supporting ships based at NAVSTA Everett with FFG homeporting would decrease by approximately 200 (2,900 new FFG personnel less 3,100 departing personnel). Approximately 2,900 unaccompanied (single) and accompanied (with families) personnel would live in the community or on NAVSTA Everett in unaccompanied housing or family housing. Due to the net reduction in personnel, there would be no additional demand for housing.

The Proposed Action may involve renovation/remodeling of certain existing structures. Details of facility renovation/remodeling are described in Section 2.3, *Alternatives Carried Forward for Analysis*. Limited facility construction and/or renovation would be needed to meet specific mission and modernization requirements of the FFGs, commands, and crew. Facility requirements under the Proposed Action include construction of an Administrative Support Facility, additional space for a Fleet Region Readiness Center, and utility upgrades. All construction would follow NAVSTA Everett’s Base Exterior Architectural Plan (Navy Region Northwest, 2016). Temporary facilities for essential functions would be needed from approximately fiscal year 2026 to fiscal year 2027 before permanent facilities are completed. These would include the limited use of trailers, similar to those currently used at the pier area and parking areas. The support facilities would provide administrative (office) space for certain crew members when they are off the ship (i.e., off-ship crew), commands, and staff, and other support personnel.

2.2 Screening Factors

The National Environmental Policy Act’s (NEPA’s) implementing regulations provide guidance on the consideration of alternatives to a federally proposed action and require federal agencies to evaluate reasonable alternatives to the Proposed Action. Reasonable alternatives are a range of alternatives that are technically and economically feasible and meet the purpose of and need for the Proposed Action. In developing the proposed range of alternatives, the Navy considered mission characteristics, geographic requirements, training and support facility requirements, and existing Navy infrastructure. Based on this review, the following factors were considered when exploring alternatives to the Proposed Action:

- Alternatives must ensure uninterrupted maritime operations of small surface combatants to support execution of the National Defense Strategy. There can be no disruption to the execution of the Navy’s maritime mission. Therefore, ship berthing space at a deep-water port, and either existing facilities available for reuse or developable land available for new construction, must be available for use by approximately fiscal year 2026 and be ready to support the first FFG by approximately fiscal year 2028 to ensure uninterrupted execution of the Navy’s maritime mission.

- Alternatives must preserve and optimize operational readiness and efficiencies. The Navy considers a location within a designated Fleet Concentration Area (i.e., region where large numbers of Navy ships are concentrated), proximity to storage of ammunition/explosives with necessary capacity, and existing maintenance capabilities in proximity to ship berthing space to optimize operational readiness. Preserving and optimizing operational readiness and efficiencies also requires maximization of the use of existing organizations and manpower resources in maintenance, training, and support functions by geographical concentration of warfare communities. Relocating existing assets to make space available for FFG homeporting does not optimize operational readiness and efficiencies.
- Alternatives must make effective and efficient use of existing infrastructure. The Navy carefully analyzed facility requirements to optimize the use of the Navy's existing infrastructure footprint and increase readiness. It is imperative that the Navy only builds, maintains, and utilizes the minimum infrastructure necessary to efficiently and cost effectively meet mission requirements and operational plans. Moreover, any facility development needs to minimize demolition and disruption of existing operations.

2.3 Alternatives Carried Forward for Analysis

Based on the evaluation of reasonable alternatives using the screening factors, two action alternatives at NAVSTA Everett were identified as best meeting the purpose of and need for the Proposed Action and are analyzed within this Environmental Assessment (EA).

Alternative 1 and Alternative 2 (described below) both include homeporting up to 12 FFGs, stationing 2,900 personnel, and providing facilities for ships, commands, and crews at NAVSTA Everett that would be phased in over a period of approximately 10 years. Most facilities and support infrastructure would be similar for both alternatives with the difference being the size, location, and configuration of the proposed Administrative Support Facility.

2.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. The Navy would not homeport FFGs on the West Coast. The infrastructure upgrades necessary to accommodate the FFG West Coast homeporting would not occur, and the personnel associated with the FFG homeporting would not relocate to NAVSTA Everett. The No Action Alternative would not meet the purpose of and need for the Proposed Action; however, as required by NEPA, the No Action Alternative is carried forward for analysis in this EA. The No Action Alternative will be used to analyze the consequences of not undertaking the Proposed Action and will serve to establish a comparative baseline for analysis.

2.3.2 Alternative 1

Under Alternative 1, the Navy would homeport up to 12 FFGs at NAVSTA Everett; construct facilities for ships, commands, and crews; and station approximately 2,900 military personnel, plus their family members. The Navy would phase in homeported ships during a 10-year time period, with personnel arriving and facilities established beginning no earlier than fiscal year 2026 and arrival of the first FFG no earlier than fiscal year 2028.

Facilities construction under Alternative 1 would occur within existing NAVSTA Everett property boundaries from approximately fiscal year 2026 to approximately fiscal year 2028 (approximately 2.5 years) and is described in detail below.

New stand-alone facilities construction:

- Administrative Support Facility (up to three stories) – Approximately 50,000 square feet. The Administrative Support Facility may be a stand-alone structure or an addition to an existing building. The facility would be located within the “Administrative District” of NAVSTA Everett contained within the polygon outlined in red on Figure 2.3-1. Although the exact location of the facility is not known at this time, likely locations are shown with blue dots on Figure 2.3-1.

Note: Building square footage listed above is an estimate at this early stage in planning.

Building additions:

- Two shelter additions on the pier deck (one story) – total 400 square feet. Each would consist of a 200 square foot steel-framed, reinforced concrete addition.
- Fleet Region Readiness Center multistory addition – 41,000 square feet. Would provide classroom and training space.

Note: All building square footages listed above are estimates at this early stage in planning.

Renovations:

- No major interior renovations. Minor interior renovations of approximately 2,500 square feet may occur.

Other supporting facilities and infrastructure:

- Stormwater management facilities
- Electrical and mechanical utilities
- Road and parking lot resurfacing

Potential locations of construction and additions under Alternative 1 are shown in Figure 2.3-1. No in-water work is required. As facility planning remains in early stages, other possible construction activities on NAVSTA Everett are conservatively considered in this EA as part of the Proposed Action, including resurfacing of personnel parking (35 new spaces). All construction activities would include standard practices of site clearing, excavation, grading, site cleanup, removal and disposal of hazardous materials and/or contaminated soil.

Construction of the Administrative Support Facility and the Fleet Region Readiness Center addition would consist of steel-framed, reinforced concrete masonry with standing seam metal roof and pile foundation. Site improvements would include paving, pedestrian walkways, landscaping, stormwater management, and an emergency generator (500 kilowatt). Antiterrorism/Force Protection standards would be incorporated into the design, where applicable. All construction would follow NAVSTA Everett’s Base Exterior Architectural Plan. Facilities would be designed to incorporate features that provide the lowest practical life cycle cost solutions and maximum energy efficiency.

Special foundation features would consist of grade beam foundations with 16- to 24-inch diameter steel piles, driven by vibratory and impact hammers into fill soils, and concrete pile caps. Buildings would include features to protect against a 100-year flood, such as raised flooring above the high-water mark. Sustainable building design, special foundations for seismic conditions, pile-supported foundations due to fill soils, and Low Impact Development (LID) principles would be included in the design and construction of the Proposed Action, as appropriate.

Utilities would be upgraded throughout NAVSTA Everett, either within existing utility paths, or where existing capacity does not exist, along new alignments. Electrical upgrades would include:

- main substation upgrades: transformer bank and distribution equipment;
- transmission lines: second pole route;
- base distribution system: new electrical equipment and duct banks to support facilities and mechanical utilities;
- pier distribution system: new electrical equipment and connector upgrades; and
- site lighting, communications, and security.

Mechanical utilities would include:

- site potable water line upgrades: water distribution lines, water line rerouting due to construction, and water connections;
- sanitary sewer upgrades: upgrades to sanitary sewer lift stations system, sanitary sewer lines, sanitary sewer line reroute due to construction, and sanitary sewer connections;
- low-pressure compressed air system upgrades: larger capacity compressed air distribution lines and upgrades to the compressed air plant;
- fire protection pumping system upgrades; and
- natural gas line upgrades: reroute for construction, natural gas line extensions and connections.



Figure 2.3-1 Alternative 1 and Alternative 2 Potential Facility Site Locations

2.3.3 Alternative 2

Under Alternative 2, the Navy would homeport up to 12 FFGs at NAVSTA Everett; construct facilities for ships, commands, and crews; and station approximately 2,900 military personnel, plus their family members. The Navy would phase in homeported ships over a 10-year time period, with personnel arriving and facilities established beginning no earlier than fiscal year 2026 and arrival of the first Constellation-class frigate no earlier than fiscal year 2028.

Facilities construction under Alternative 2 would occur within existing NAVSTA Everett property boundaries from approximately fiscal year 2026 to approximately fiscal year 2028 (approximately 2.5 years) and is described in detail below.

New stand-alone facilities construction:

- None.

Building additions:

- Administrative Support Facility (up to three stories) – The Administrative Support Facility would be a combination of a new 20,000 square foot addition to an existing building and renovations of existing space (see renovations below). The facility would be located within the Administrative District of NAVSTA Everett contained within the polygon outlined in red on Figure 2.3-1. Although the exact location of the facility is not known at this time, likely locations are shown with blue dots on Figure 2.3-1.
- Two shelter additions along pier deck (one story) – total 400 square feet. Each consists of a 200 square foot steel-framed, reinforced concrete building addition.
- Fleet Region Readiness Center multistory addition – 41,000 square feet. Provides classroom and training space.

Note: All building square footages listed above are estimates at this early stage in planning.

Renovations:

- Administrative Support Facility – Approximately 30,000 square feet of interior renovations. Interior renovations of existing buildings on NAVSTA Everett would be made to accommodate shifts in tenants and allow for FFG-related administrative support space allocation. The interior renovations would be located within the Administrative District of NAVSTA Everett contained within the polygon outlined in red on Figure 2.3-1. Although the exact location of the interior renovations is not known at this time, likely locations are shown with yellow dots on Figure 2.3-1.

Other supporting facilities and infrastructure:

- Stormwater management facilities
- Electrical and mechanical utilities
- Road and parking lot resurfacing

Potential locations for construction and additions under Alternative 2 are shown in Figure 2.3-1. No in-water work is required. As facility planning remains in early stages, other possible construction activities on NAVSTA Everett are conservatively considered in this EA as part of Alternative 2, including resurfacing of personnel parking (35 new spaces). All construction activities would be similar to activities described for Alternative 1.

Special foundation features would be similar to those described for Alternative 1 except that fewer steel piles would be installed for the smaller addition for the Administrative Support Facility. Under Alternative 2, utilities would be upgraded throughout NAVSTA Everett and would be similar to those described for Alternative 1.

2.4 Alternatives Considered but not Carried Forward for Detailed Analysis

The following alternatives were considered, but not carried forward for detailed analysis in this EA as they did not meet the purpose of and need for the project and satisfy the reasonable alternative screening factors presented in Section 2.2.

2.4.1 Other West Coast and Pacific Homeports

The Navy considered homeporting FFGs at West Coast and Pacific Navy installations other than NAVSTA Everett. Given that the FFG needs to be homeported within a designated Fleet Concentration Area, the following five other Navy installations were assessed. After careful consideration of each installation, the Navy eliminated them as potential location options because they did not meet one or more of the screening factors:

- Naval Base San Diego – does not ensure uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy because it lacks suitable berthing infrastructure due to its limited shoreline. Moreover, there is no available shoreline to construct additional ship berthing to accommodate FFG homeporting. Homeporting FFGs at Naval Base San Diego would require the relocation of other assets currently homeported there, resulting in additional costs and disruption to existing operations. Accordingly, this alternative would not preserve and optimize operational readiness and efficiencies, nor would it make effective and efficient use of existing infrastructure.
- Naval Base Ventura County Port Hueneme – does not ensure uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy because it lacks berthing space to homeport all FFGs. Although it has existing facilities for collocation of FFG facilities, it lacks sufficient developable land for new construction. This alternative does not preserve and optimize operational readiness and efficiencies because the installation lacks existing maintenance capabilities in proximity to berthing space, and it lacks proximity to storage of ammunition/explosives with necessary capacity and would have to rely on Naval Weapons Station Seal Beach. It does not make effective and efficient use of existing infrastructure because existing ship berthing infrastructure would require significant investment and upgrades to homeport FFGs.
- Naval Base Kitsap-Bremerton – does not ensure uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy because it lacks berthing space to homeport all FFGs and its mission is to support the homeporting of other Navy vessels or aircraft carriers, not frigates. Naval Base Kitsap-Bremerton also lacks infrastructure available for reuse or renovation to support FFG homeporting. Homeporting FFGs at Naval Base Kitsap-Bremerton would require the relocation of other assets, resulting in additional costs and disruption to existing operations. Accordingly, this alternative would not preserve and optimize operational readiness and efficiencies, nor would it make effective and efficient use of existing infrastructure.
- Joint Base Pearl Harbor-Hickam – does not ensure uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy because it lacks berthing space

to homeport all FFGs, and it lacks infrastructure available for reuse or renovation to support FFG homeporting. Unlike other homeports considered, ongoing training exercises with a large number of ships create unique berthing challenges in configuring options for expanded berthing space. Joint Base Pearl Harbor-Hickam's historic significance creates lengthy cultural resource agency consultation for developing facilities on new sites. The Navy does not anticipate that necessary construction could be completed in time for the arrival of the FFGs. Accordingly, this alternative did not meet the screening factors of preserve and optimize operational readiness and efficiencies and make effective and efficient use of existing infrastructure.

- Naval Base Guam – does not ensure uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy because it lacks berthing space to homeport all FFGs. It does not preserve and optimize operational readiness and efficiencies because its existing maintenance capabilities and capacity for storage of ammunition/explosives do not fully support FFG homeporting. It does not make effective and efficient use of existing infrastructure because homeporting FFGs would require the development of additional facilities and infrastructure for maintenance and ammunition/explosive storage, as well as installation infrastructure upgrades to accommodate additional tenants. The Navy does not anticipate that necessary construction could be completed in time for the arrival of the FFGs.

2.4.2 Homeport FFGs at More than One Installation

The Navy considered homeporting FFGs at more than one West Coast installation. However, homeporting FFGs at more than one installation would require a duplication of manpower, ship berthing and maintenance, weapons storage, crew training, and operations spaces, consequently increasing annual recurring costs for manpower and supply, as well as one-time investments (i.e., construction of duplicate facilities and procurement of equipment). This duplication of facilities and functions at more than one installation does not make effective and efficient use of existing infrastructure because it would increase the Navy's footprint and would not optimize the use of the Navy's existing infrastructure. As a result, the Navy eliminated consideration of multiple-site/split-site alternatives.

2.4.3 Renovation/Modernization Only of Existing Spaces on NAVSTA Everett

The Navy considered renovation and/or modernization only of existing spaces on NAVSTA Everett. However, this alternative was not carried forward for detailed analysis because renovations alone would not support all the new mission requirements given insufficient space in existing facilities. As a result, the Navy eliminated consideration of renovating and/or modernization of only existing spaces on NAVSTA Everett. Partial renovation and modernization of existing spaces is included in the alternatives carried forward.

2.4.4 Use of Leased Space off NAVSTA Everett

The Navy considered the use of leased space outside of NAVSTA Everett boundaries to meet the homeporting facility requirements for administrative and classroom space for training. This alternative does not ensure the uninterrupted maritime operations of small surface combatants in support of the National Defense Strategy. Entering into a lease agreement is a costly and lengthy process to be followed by multi-year construction of new facilities, which would not be available and ready to support in time for the arrival of the FFGs. Although this alternative could preserve and optimize operational readiness and efficiencies with use of existing maintenance capabilities and ammunition/explosive storage at NAVSTA Everett, it would create additional infrastructure outside NAVSTA Everett versus

making effective and efficient use of existing infrastructure; therefore, it would not optimize the use of the Navy’s existing infrastructure. As a result, the Navy eliminated consideration of leased space off NAVSTA Everett.

2.5 Best Management Practices Included in Proposed Action

This section presents an overview of the best management practices (BMPs) that are incorporated into the Proposed Action in this document. BMPs are existing policies, practices, and measures that the Navy would adopt to reduce the environmental impacts of designated activities, functions, or processes. Although BMPs mitigate potential impacts by avoiding, minimizing or reducing/eliminating impacts, BMPs are distinguished from potential mitigation measures because BMPs are (1) existing requirements for the Proposed Action, (2) ongoing, regularly occurring practices, or (3) not unique to this Proposed Action. In other words, the BMPs identified in this document are inherently part of the Proposed Action and are not potential mitigation measures proposed as a function of the NEPA environmental review process for the Proposed Action. BMPs include actions required by federal or state law or regulation. Table 2.5-1 includes a list of BMPs. Impact avoidance and minimization measures are discussed individually by resource area in Chapter 3.0 and are summarized in Table 3.8-2.

Table 2.5-1 Best Management Practices

<i>BMP</i>	<i>Description</i>	<i>Impacts Reduced/Avoided</i>
General Construction Best Management Practices	These requirements are incorporated into the construction contract and include adherence to construction permit requirements, stormwater management, erosion control, maintenance of construction equipment, spill containment, spill response, and dust control.	Reduces potential water quality impacts.
Community Outreach	Open lines of communication with the surrounding community and stakeholders through noise complaint hotlines, public meetings, and newspaper advertisements.	Ensure continued partnership between the Navy and its surrounding communities and facilitate the flow of information between the Navy and the local community.
Low Impact Development, as appropriate	The term Low Impact Development refers to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat.	Provides flood protection, cleaner air and cleaner water. Low Impact Development practices aim to preserve, restore, and create green space using soils, vegetation, and rainwater harvest techniques.

3 Affected Environment and Environmental Consequences

This chapter presents a description of the environmental resources and baseline conditions that could be affected by implementing any of the alternatives and an analysis of the potential direct and indirect effects of each alternative.

All potentially relevant environmental resource areas were initially considered for analysis in this Environmental Assessment (EA). In compliance with the National Environmental Policy Act (NEPA), as amended by the Fiscal Responsibility Act of 2023; Council on Environmental Quality (CEQ) regulations codified at 40 Code of Federal Regulations (CFR) Part 1500 et seq.; and Department of Navy policies and responsibilities for implementing NEPA, the discussion of the affected environment (i.e., existing conditions) focuses only on those resource areas potentially subject to impacts. Additionally, the level of detail used in analyzing a resource area is commensurate with the level of potential environmental impact.

In accordance with 40 CFR section 1501.3, in considering whether effects are significant, agencies shall analyze the potentially affected environment and degree of the effects of the action. Significance varies with the setting of a proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the local area rather than in the world as a whole. Both short- and long-term effects are relevant.

This chapter includes an analysis of the affected environment and potential impacts to air quality, water resources, noise, biological resources, American Indian traditional resources, socioeconomics, and environmental justice.

The potential impacts to the following resource areas are considered to be negligible or non-existent so they were not analyzed in detail in this EA:

Cultural Resources. For this Proposed Action, the Navy determined that the area of potential effects (APE) includes approximately 138 acres and encompasses the entire Naval Station (NAVSTA) Everett facility footprint including the piers (excluding Possession Sound waters) (see Appendix E, *National Historic Preservation Act Section 106 Documentation*, for a map of the APE attached to the consultation letters). The APE was defined broadly to ensure it incorporated all potential construction footprints. There are no known archaeological historic properties within the APE, and there is a low probability of encountering intact archaeological deposits and features during ground-disturbing activities due to the amount of fill used to build the landform under NAVSTA Everett. In the unlikely event that previously unrecorded archaeological sites are encountered during the construction process, the Navy would stop work in the immediate area and follow the procedures set forth in the *Inadvertent Discovery Plan for NAVSTA Everett Installations* (Navy, 2020c). There are also no architectural resources that are listed or potentially eligible for listing in the National Register of Historic Places within the APE. New construction, additions, and renovations would have a similar military campus style to the existing setting at NAVSTA Everett and would not substantially change the viewshed of the general area.

The Navy has determined that there would be no historic properties affected by the Proposed Action or alternatives. The Navy sent a letter to the Washington State Historic Preservation Officer (SHPO) requesting agreement with the extent of the APE and seeking agreement with the Navy's finding of no historic properties affected (Appendix E, *National Historic Preservation Act Section 106 Documentation*). The Navy also sent letters to the following tribes during the National Historic Preservation Act Section 106 consultation process (Appendix E): the Stillaguamish Tribe of Indians, Suquamish Tribe, Swinomish

Indian Tribal Community, and Tulalip Tribes of Washington. Correspondence with Tribal Governments will be included in Appendix F of the Final EA. Therefore, implementation of either alternative under the Proposed Action would have no impact on cultural resources.

Geological Resources: NAVSTA Everett occurs in a seismically active area susceptible to impacts from geohazards such as regionally active volcanos, earthquakes, tsunamis/seiches, and ground liquefaction. The nearest major (capable of producing an earthquake greater than 7.0 magnitude) and active fault to NAVSTA Everett is located within the South Whidbey Fault Zone, approximately six miles southwest of NAVSTA Everett (PanGEO, Inc., 2020; Washington Department of Natural Resources, 2022). Because NAVSTA Everett is constructed on fill material (dredge spoils, wood debris, and other sediments) over lands reclaimed from the water (the original shoreline pre-1891 was located approximately along what is today West Marine View Drive on the east side of NAVSTA Everett), liquefaction potential is considered to be “high” (City of Everett, 2022a; PanGEO, Inc., 2020; Washington Department of Natural Resources, 2004). However, these conditions are well-known and documented, and have been incorporated into planning and construction design at NAVSTA Everett for decades. As noted in Section 2.3.2, *Alternative 1*, and as part of the proposed project, building design would incorporate special foundations for seismic conditions and pile-supported foundations due to fill soils. Additionally, all appropriate and applicable seismic building codes would be incorporated into facility design. During construction, worker safety procedures would be followed in the event of an earthquake, including the posting of evacuation routes and safety areas in the event of a tsunami threat. The proposed project would not change existing geological resources or geologic hazard conditions. Therefore, the Proposed Action or alternatives would have negligible impact on geological resources.

Land Use: The Proposed Action would occur entirely within NAVSTA Everett and would not change existing land use designations on the installation. Each component of the Proposed Action would occur within areas designated for their proposed uses (e.g., industrial). The proposed construction areas on NAVSTA Everett are primarily designated in the Installation Development Plan (Navy Region Northwest, 2016) as having high development potential; therefore, the Proposed Action would be consistent with NAVSTA Everett’s Installation Development Plan, and implementation of either alternative under the Proposed Action would have no impact to land use. A Coastal Consistency Determination was prepared in accordance with the Coastal Zone Management Act and submitted to Washington Department of Ecology (WDOE). The Coastal Consistency Determination and related correspondence will be included in the Final EA Appendix B, *Coastal Zone Management Act Documentation*.

Visual Resources: The analysis of visual resources considers the natural and built features of the landscape visible from public viewpoints that contribute to an area’s visual quality. Situated on the water in an overall industrial waterfront region, NAVSTA Everett presents a consistent visual environment, primarily due to its recent and architecturally coordinated campus-inspired construction. While construction activity and the resulting new infrastructure would be visible from nearby high-elevation residential areas, construction activities would be temporary and the resulting structures would be visually consistent with the existing NAVSTA Everett visual environment because the new structures would comply with the architectural requirements contained in the NAVSTA Everett Base Exterior Architecture Plan, thus ensuring consistency with the overall visual setting of NAVSTA Everett. Therefore, the Proposed Action or alternatives would result in negligible impacts to visual resources.

Infrastructure: Proposed construction activity could result in temporary interruptions of utilities and some services; however, through advanced planning, it is likely that any temporary and isolated disruptions would be minimized. The Proposed Action includes several upgrades to NAVSTA Everett

facilities and infrastructure, including electrical upgrades to increase electrical service capacity to support electrical loads and electrical upgrades to transmission and distribution lines. Mechanical utilities would be upgraded, including upgrades to the potable water distribution system, sanitary sewer system, low-pressure compressed air system, fire protection pumping system, and natural gas lines.

The net increase of two additional ships under the Proposed Action may result in an increase in utility demand, but this would be partially offset by the reduction in on-base personnel. With incorporation of the proposed utility upgrades, no capacity impacts are expected.

NAVSTA Everett's Pollution Prevention Plan includes a goal to recycle 50 percent of all solid waste annually, including construction and demolition waste. Waste generated during renovation of existing buildings and construction of new buildings or additions would result in negligible impacts to waste handling and landfill capacity.

Public Health and Safety: The Proposed Action would occur entirely within NAVSTA Everett property boundaries, where access is controlled by perimeter fencing and a port security barrier to limit access to authorized persons only. Furthermore, the waters of Port Gardner and the East Waterway surrounding NAVSTA Everett are within a naval restricted area, a designation that prohibits persons and vessels from entering without permission. There are no beaches or public access points into the water in the project vicinity.

Renovation of existing buildings and construction of new buildings or additions would be conducted in accordance with established Navy policies for ensuring the health and safety of the public. Contractors working on NAVSTA Everett must adhere to Occupational Safety and Health Administration (OSHA) requirements and the Army Corps of Engineers' Manual EM 385-1-1, Safety and Health Requirements. A project-specific Health and Safety Plan would be prepared prior to the start of activities. Under all alternatives, there would be no change to the availability of, or access to, emergency response services (i.e., police, fire, and paramedics) to the surrounding community. Vehicles used in construction and renovation activities and transport of construction materials would travel on public roadways to access NAVSTA Everett and would follow all applicable traffic laws and regulations to minimize risks to other drivers.

Construction of the two shelters along the pier deck would occur within existing explosive safety quantity distance arcs. Prior to starting construction, the Navy would obtain a Category B Site Approval and approval by the Naval Ordnance Safety and Security Activity, per Office of the Chief of Naval Operations Instruction (OPNAVINST) 8020.14B, United States Navy Explosives Safety Management Program Policy Manual. The approvals would identify safety requirements to be implemented during construction activities.

Applicable building safety requirements would be incorporated into new construction and renovation. Antiterrorism/Force Protection standards would be incorporated into facilities design where applicable. Use of ship separators would prevent safety risks potentially associated with double berthing. Consistent with existing operations, personnel associated with the new shelter additions along the pier deck would follow all safety guidelines for working within an explosive safety quantity distance arc. There would be no change to operating procedures for port security barrier openings, and therefore, no associated change to personnel safety.

Executive Order (EO) 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, directs that federal agencies shall "make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children and shall ensure that its policies, programs,

activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks.” Under the Proposed Action, standard jobsite safety measures would be implemented, which include securing equipment, materials, and vehicles; erecting fencing; and adhering to any other requirements in the project Health and Safety Plan. The Everett Child Development Center is located on Marine View Drive, approximately 400 feet from the nearest likely construction area. Construction noise would be temporary and intermittent and would be attenuated by the physical structure of the facility except while children are on the outdoor playground. If children were on the playground while the loudest construction equipment (i.e., an impact pile driver) is in use, noise levels would not exceed OSHA auditory health criteria established at 29 CFR 1910.95. Although workplace criteria are not directly applicable to children, they are designed to be protective of workers exposed to high noise levels for decades and provide a high degree of protection for persons exposed for only a few weeks (i.e., the expected duration of pile driving). Pile driving requires extensive preparation before hammering can begin, and the Federal Highway Administration recommends assuming that the hammering portion of pile driving is under way for 20 percent of a typical workday (Federal Highway Administration, 2006). Using calculation methods recommended by the Washington State Department of Transportation, impact pile driving noise levels are estimated to attenuate from 110 A-weighted decibels (dBA) at a distance of 50 feet to 92 dBA at 400 feet. OSHA regulations permit exposure at 92 dBA for up to six hours per day. Because it is extremely unlikely that any employee or child at the child development center (CDC) would be outdoors during a six-hour period during which pile driving is under way continuously, there is minimal risk that OSHA criteria would be exceeded. The Navy Hearing Conservation Program includes requirements to identify areas where average noise levels exceed 85 dB through assessment and/or measurement, as well as requirements to reduce noise exposure through various measures when thresholds are exceeded. Communication of the expected pile driving schedule to the CDC staff would facilitate planning of CDC outdoor activities to minimize noise exposure. Because children would not have access to the project area and no new land use activities that might potentially impact children would be introduced, there would be no environmental health or safety risks that may disproportionately affect children from implementation of the Proposed Action or alternatives.

Therefore, implementation of either alternative under the Proposed Action would result in negligible impacts to public health and safety.

Transportation: During construction, an average of approximately 60 construction vehicle trips would be added to the daily weekday commuter trips (30 to and 30 from NAVSTA Everett) during the 2.5-year construction period. The additional construction vehicle traffic would be temporary and minor compared with approximately 4,300 existing daily vehicle trips to/from NAVSTA Everett. After the construction period, as there would be a net decrease in personnel at NAVSTA Everett over time, daily commuter traffic to NAVSTA Everett would not be expected to change or would decrease. Therefore, implementation of either alternative under the Proposed Action would result in negligible impacts to transportation.

Hazardous Materials and Wastes: Proposed construction activity could result in temporary increases in the presence and use of hazardous materials onsite, such as petroleum, oils, and lubricants used in the operation of construction-related motors and vehicles. However, the use, storage, and disposal of hazardous materials and wastes during the construction period would be managed per applicable regulations, the NAVSTA Everett Hazardous Waste Management Plan (HWMP) (Naval Facilities Engineering Systems Command, Northwest [NAVFAC NW], 2021a), and the use of standard general construction best management practices (BMPs) (refer to Section 2.5, *Best Management Practices*). The

Proposed Action would not require construction within known existing hazardous materials or waste sites on NAVSTA Everett. Should hazardous materials and/or contaminated soil be encountered during construction, procedures of the HWMP would be followed and the material would be removed in accordance with federal and state regulations and Navy policies.

The Proposed Action post-construction activities would not change the types of, nor increase the amount of, hazardous materials used or hazardous wastes generated during routine pierside maintenance activities. The storage and use of hazardous materials, and the disposal of generated hazardous waste, would be in compliance with applicable regulations and the NAVSTA Everett HWMP. The Navy's HWMP provides comprehensive and consistent guidance to personnel at NAVSTA Everett for characterization, storage, disposal, and record-keeping of hazardous waste and would ensure that the Proposed Action does not result in adverse impacts to the public or the environment. Therefore, implementation of either alternative under the Proposed Action would have no impacts related to hazardous materials and wastes, and conditions and circumstances related to hazardous materials and wastes would remain effectively unchanged.

3.1 Air Quality

This discussion of air quality includes criteria pollutants, standards, sources, permitting, and greenhouse gases (GHGs). Air quality in a given location is defined by the concentration of various pollutants in the atmosphere. A region's air quality is influenced by many factors, including the type and amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions.

Most air pollutants originate from human-made sources, including mobile sources (e.g., cars, trucks, buses) and stationary sources (e.g., factories, refineries, power plants), as well as indoor sources (e.g., some building materials and cleaning solvents). Natural sources such as wildfires also release air pollutants.

3.1.1 Regulatory Setting

3.1.1.1 Criteria Pollutants and National Ambient Air Quality Standards

The principal pollutants defining the air quality, called "criteria pollutants," include carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), ozone, suspended particulate matter less than or equal to 10 microns in diameter (PM₁₀), particulate matter less than or equal to 2.5 microns in diameter (PM_{2.5}), and lead. CO, NO₂, SO₂, lead, and some particulates are emitted directly into the atmosphere from emissions sources. Ozone, some particulates, and most NO₂ are formed through atmospheric chemical reactions that are influenced by weather, ultraviolet light, and other atmospheric processes.

Under the Clean Air Act (CAA), the United States (U.S.) Environmental Protection Agency (USEPA) has established National Ambient Air Quality Standards (NAAQS) (40 CFR part 50) for these pollutants. NAAQS are classified as primary or secondary. Primary standards protect against adverse health effects; secondary standards protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings. Some pollutants have long-term and short-term standards. Short-term standards are designed to protect against acute, or short-term, health effects, while long-term standards were established to protect against chronic health effects.

Areas that are and have historically been in compliance with the NAAQS are designated as attainment areas. Areas that violate a federal air quality standard are designated as nonattainment areas. Areas that have transitioned from nonattainment to attainment are designated as maintenance areas and are required to adhere to maintenance plans to ensure continued attainment. Areas that have not been formally classified are unclassified or unclassifiable and are considered to be in attainment.

The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated nonattainment for a NAAQS. These plans, known as state implementation plans, are developed by state and local air quality management agencies and submitted to USEPA for approval.

3.1.1.2 Hazardous Air Pollutants

In addition to criteria pollutants, the CAA also gives USEPA authority to regulate hazardous air pollutants (HAPs). HAPs have the potential to cause cancer or other adverse health effects in humans. Examples of HAPs include hydrocarbons such as benzene, certain metals including lead and mercury, and mineral fibers such as asbestos. The National Emission Standards for HAPs regulate emissions from stationary sources (40 CFR part 63). USEPA regulates HAPs emitted from mobile sources by establishing engine exhaust and fuel standards. HAPs are analyzed qualitatively in relation to the prevalence of the sources emitting these pollutants. Mobile sources operating as a result of the Proposed Action (e.g., trucks, construction equipment, commuter vehicles) would be functioning intermittently over a relatively large area and would produce negligible ambient HAPs. For these reasons, HAPs are not further evaluated in the analysis.

3.1.1.3 General Conformity

The USEPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. The emissions thresholds that trigger requirements for a conformity analysis are called *de minimis* levels. *De minimis* levels (in tons per year [tpy]) vary by pollutant, and also depend on the severity of the nonattainment status for the air quality management area in question. USEPA classifies Snohomish County as being in attainment for all NAAQS (USEPA, 2022a); therefore, a General Conformity evaluation is not required. At the time of this applicability analysis, emissions generated by the homeporting of 12 Constellation-class guided-missile frigates (FFGs) at NAVSTA Everett would not occur within a Federal CAA designated nonattainment and/or maintenance area.

3.1.1.4 Permitting

New Source Review (Preconstruction Permit)

New major stationary sources and major modifications at existing major stationary sources are required by the CAA to obtain an air pollution permit before commencing construction. This permitting process for major stationary sources is called new source review and is required whether the major source or major modification is planned for nonattainment areas or attainment and unclassifiable areas. In general, permits for sources in attainment areas and for other pollutants regulated under the major source program are referred to as Prevention of Significant Deterioration (PSD) permits, while permits for major sources emitting nonattainment pollutants and located in nonattainment areas are referred to as nonattainment new source review permits. In addition, a proposed project may have to meet the

requirements of nonattainment new source review for the pollutants for which the area is designated as nonattainment and PSD for the pollutants for which the area is attainment. Additional PSD permitting thresholds apply to increases in stationary source GHG emissions. Navy installations shall comply with applicable permit requirements under the PSD program per 40 CFR section 51.166.

Title V (Operating Permit)

The Title V Operating Permit Program consolidates all CAA requirements applicable to the operation of a source, including requirements from the state implementation plan, preconstruction permits, and the air toxics program. It applies to stationary sources of air pollution that exceed the major stationary source emission thresholds, as well as other non-major sources specified in a particular regulation. The program includes a requirement for payment of permit fees to finance the operating permit program whether implemented by USEPA or a state or local regulator. Navy installations subject to Title V permitting shall comply with the requirements of the Title V Operating Permit Program, which are detailed in 40 CFR part 70 and all specific requirements contained in their individual permits. NAVSTA Everett has a naturally minor permit at this time because its potential-to-emit is below Title V thresholds. The Action Proponent will review all proposed new emission sources and apply for any applicable construction permits or operating permits and/or revise existing permits to ensure compliance.

3.1.1.5 Greenhouse Gases

GHGs are gas emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. Scientific evidence indicates a trend of increasing global temperature over the past century due to an increase in GHG emissions from human activities. The climate change associated with this global warming is predicted to produce negative economic and social consequences across the globe (U.S. Global Change Research Program, 2018).

Each GHG has a global warming potential, which is its ability to trap heat in the atmosphere. To account for global warming potential, GHG emissions are reported as a carbon dioxide equivalent (CO₂e). CO₂e emissions are commonly expressed in units of metric tons. One metric ton equals 1,000 kilograms or 1.1 short tons (2,205 pounds).

The Department of Defense (DoD) and the Navy have established various directives pertaining to climate change. DoD Directive 4715.21, Climate Change Adaptation and Resilience, from January 2016, integrates climate change considerations into all aspects of the Department. DoD components are charged with assessing and managing risks, as well as mitigating the effects of climate change on natural and cultural resource management, force structure, basing, and training and testing activities in the field environment. The Department of the Navy Climate Action 2030 (Navy, 2022) describes the Navy goals to meet the requirements of EO 14008, *Tackling the Climate Crisis at Home and Abroad*, and EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability* (Federal Register Vol. 86, No. 236, pp. 70935–70943, 2021). These goals include 65 percent reductions in scope 1 and 2 GHG emissions by 2030, acquiring 100 percent zero-emission light-duty vehicles by 2027, achieving a 50 percent reduction in GHG emissions from buildings by 2032, diverting at least 50 percent of nonhazardous solid waste from landfills by 2025, instituting nature-based resilience to reduce GHG emissions, and establishing energy resilience to ensure mission accomplishment.

The Navy takes proactive measures to reduce GHG emissions by decreasing the use of fossil fuels and increasing the use of alternative energy sources in accordance with the goals set by EOs, the Energy

Policy Act of 2005, and Navy and DoD policies. In addition, the DoD conducts research on potential impacts from climate change and develops measures for installations to adapt to these threats (DoD Strategic Environmental Research and Development Program, 2020). The Navy is committed to improving energy security and environmental stewardship by reducing reliance on fossil fuels. The Navy is actively developing and participating in energy, environmental, and climate change initiatives that will increase use of alternative energy and reduce emissions of GHGs. The Navy has adopted energy, environmental, and climate change goals. These goals include: (1) ensuring that the Navy’s forces, systems, and facilities can continue to operate effectively and achieve the mission in the face of changing climate conditions and worsening climate impacts and (2) reducing GHG emissions and drawing GHGs out of the atmosphere, stabilizing ecosystems, and achieving, as an enterprise, the nation’s commitment to net-zero emissions by 2050 (Navy, 2022).

Consistent with EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, CEQ submitted interim guidance entitled *National Environmental Policy Act Guidance on Consideration of Greenhouse Gas [GHG] Emissions and Climate Change* (January 9, 2023) (CEQ, 2023). This guidance is similar to previous iterations and suggests that agencies should calculate estimated GHG emissions in NEPA analyses to assess potential effects on climate change.

3.1.2 Affected Environment

NAVSTA Everett is in Snohomish County, which is within the Puget Sound Intrastate Air Quality Control Region (AQCR). The Puget Sound Clean Air Agency along with the WDOE is responsible for implementing and enforcing state and federal air quality regulations in Washington. The WDOE monitors criteria air pollutants through a network of air quality monitoring sites throughout the state, known as the Washington Air Quality Advisor. Based upon data collected from these monitoring sites, USEPA prepares annual summaries of local air quality that identify those areas that exceed NAAQS for one or more air pollutants.

Snohomish County generally has good air quality, as indicated by maintaining attainment status in the County since 1996. While Snohomish County was previously designated as a maintenance area for ozone and CO (since 1996), USEPA currently classifies Snohomish County as being in attainment for all NAAQS (USEPA, 2022a).

The most recent air emissions inventory data that are available for Snohomish County are presented in Table 3.1-1. Volatile organic compound (VOC) and nitrogen oxide emissions are used to represent ozone generation because they are precursors of ozone.

Table 3.1-1 Snohomish County and Puget Sound AQCR Air Emissions Inventory

<i>Location</i>	<i>CO (tpy)</i>	<i>NO_x (tpy)</i>	<i>PM₁₀ (tpy)</i>	<i>PM_{2.5} (tpy)</i>	<i>SO₂ (tpy)</i>	<i>VOC (tpy)</i>	<i>CO_{2e} (tpy)</i>
Snohomish County	98,938	13,141	7,070	3,444	269	44,334	4,005,640
Puget Sound AQCR Total	638,974	74,921	55,627	29,751	2,945	212,815	25,760,462

Key: AQCR = Air Quality Control Region; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; NO_x = nitrogen oxides; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; SO₂ = sulfur dioxide; tpy = tons per year; VOC = volatile organic compound.

Source: USEPA, 2022b.

3.1.3 Environmental Consequences

Effects on air quality are based on estimated direct and indirect emissions associated with the action alternatives. The region of influence (ROI) for assessing air quality impacts is the air basin in which the project is located, Snohomish County and the Puget Sound AQCR.

This analysis evaluated potential air quality impacts with respect to relevant environmental information, including regulations, guidelines, and scientific documentation. In the case of criteria pollutants for which the ROI is in attainment of a NAAQS, the analysis used the USEPA General Conformity *de minimis* levels for maintenance areas of the respective criteria pollutants as indicators of the significance of projected air quality impacts (USEPA, 2023a). Although the project area is in attainment (maintenance areas ended on October 11, 2016 for CO and November 25, 2016 for Ozone in the Seattle area), this criterion was used because it provides an indicator of the level below which emissions are not likely to exceed the NAAQS, and thus would not be considered significant.

Analysis Methodology

The Proposed Action would result in air quality impacts from construction and post-construction vehicle emissions. Pierside maintenance activities are not analyzed because with the departure of Navy ships currently homeported at NAVSTA Everett, they would be negligibly different than current maintenance activities that are managed under NAVSTA Everett Title V permits. The U.S. Air Force Air Conformity Applicability Model (ACAM) version 5.0.18a was used to estimate air emissions that would be generated by proposed construction and post-construction vehicle air emissions (Solutio Environmental, Inc., 2022). ACAM uses widely accepted air emission calculation methods combined with default data that can be used if site-specific information is not available. Activity data developed for each alternative were used as inputs for ACAM. Appendix C, *Air Quality Calculations*, includes reports that detail the calculations of criteria pollutant emissions and GHGs that would occur from each project alternative.

Construction

Air quality impacts associated with proposed construction would occur from (1) combusive air emissions generated by fossil fuel-powered equipment, trucks, and worker commuter vehicles and (2) fugitive dust emissions (PM₁₀/PM_{2.5}) from the operation of equipment on exposed soil. Construction parameters were based on the specifications provided in EA Section 2.3, *Alternatives Carried Forward for Analysis*. Proposed construction would occur over approximately 2.5 years from 2026 to 2028.

Personnel

Personnel requirements presented in EA Section 2.1, *Proposed Action*, were used to estimate the annual emissions generated by commuting activities of proposed personnel. It was conservatively assumed that all personnel would depart in the final year of the Proposed Action. Therefore, the 2037 annual emissions would represent full implementation of the Proposed Action. While in reality the decrease would likely occur more gradually over the course of the Proposed Action implementation, the end-state emissions would be the same. Because there are no adverse impacts to air quality even assuming the full complement of FFG personnel and existing personnel, there would be no adverse impacts if the annual emissions are actually lower than shown in earlier years due to the departure of a portion of the existing personnel.

3.1.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline air quality. Therefore, no impacts to air quality or air resources would occur with implementation of the No Action Alternative.

3.1.3.2 Alternative 1

Annual Air Emissions

Table 3.1-2 presents estimates of annual air emissions that would occur from construction of facilities and arrival of FFG personnel under Alternative 1. In Table 3.1-2, the 2037 and post-2037 data show decreased emissions of all criteria pollutants as compared to 2036. These decreases are the result of the analysis methodology assumption, noted above, that 3,100 existing personnel would depart NAVSTA Everett in the year 2037. Overall, these data show that annual air emissions would be below the *de minimis* levels for all pollutants. Although the *de minimis* levels are not applicable from a regulatory perspective because the area is in attainment, they serve as an indicator that air emissions below *de minimis* would not be likely to adversely impact air quality. Therefore, construction and operation under Alternative 1 would not result in significant air quality impacts.

Table 3.1-2 Alternative 1 Air Emissions

Calendar Year	CO (tpy)	NO _x (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)	SO ₂ (tpy)	VOC (tpy)	CO _{2e} (tpy)
2026	14.85	3.92	23.58	0.14	0.02	1.33	2,185
2027	19.60	4.35	21.65	0.15	0.02	1.64	2,590
2028	20.22	2.40	10.82	0.08	0.02	2.18	2,297
2029	26.26	1.58	0.05	0.05	0.02	2.51	2,640
2030	34.32	1.98	0.06	0.06	0.03	2.41	3,449
2031	42.38	2.39	0.08	0.07	0.03	2.98	4,257
2032	50.44	2.79	0.09	0.08	0.04	3.54	4,661
2033	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2034	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2035	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2036	54.47	2.99	0.09	0.08	0.04	3.82	5,470
2037 and post-2037	9.34	0.73	0.02	0.02	0.01	0.66	943
<i>De minimis</i> level ¹	100	100	100	100	100	100	N/A
<i>Exceed de minimis level?</i>	No	No	No	No	No	No	N/A
Snohomish County	98,938	13,141	7,070	3,444	269	44,334	4,005,640
Percentage of County Emissions ²	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.02%
Puget Sound AQCR Total	638,974	74,921	55,627	29,751	2,945	212,815	25,760,462
Percentage of AQCR Emissions ²	0.0015%	9.7xE ⁻⁴ %	3.6xE ⁻⁵ %	6.7xE ⁻⁵ %	3.4xE ⁻⁴ %	3.1xE ⁻⁴ %	0.003%

Key: % = percent; AQCR = Air Quality Control Region; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; N/A = not applicable; NO_x = nitrogen oxides; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; SO₂ = sulfur dioxide; tpy = tons per year; VOC = volatile organic compound.

Notes: ¹ Derived from *de minimis* annual emissions rates for maintenance areas for each criteria pollutant (40 CFR section 93.153(b)(2).

² Comparison is to Alternative 1 emissions for years 2037 and post-2037.

Greenhouse Gases

Implementation of Alternative 1 would emit GHGs from the combustion of fossil fuels. The maximum CO₂e generated from construction and personnel commuting activities during phased implementation of Alternative 1 would amount to approximately 5,470 tons (4,962 metric tons) and in the end state GHG emissions would be only 943 tons (855 metric tons) (Table 3.1-2), which would result in a negligible contribution to climate change. At end state, the annual GHG emissions would be roughly equivalent to the electricity use of 166 homes for one year (USEPA, 2023b). GHG emissions would be minor and largely temporary (lasting only the duration of the construction phase) and would not have a discernable impact on climate change. During planning and construction, the Navy would consider and implement, where appropriate, measures that would help to minimize air emissions and energy use in line with DoD and Navy policies discussed in Section 3.1.1.5, *Greenhouse Gases*. The Navy would consider facility designs, materials, and infrastructure that are energy efficient and resilient to climate change. The Navy would also consider expanding the use of natural infrastructure to build resilience, sequester carbon, and achieve local, landscape, and regional-scale climate solutions.

Social Cost of Greenhouse Gases

In accordance with the 2023 CEQ guidance, the social cost of GHG emissions was also calculated for the Proposed Action. The social cost of GHG emissions estimates provides an aggregated monetary measure (in U.S. dollars) of the stream of damages associated with an incremental metric ton of emissions and associated physical damages (e.g., temperature increase, sea level rise, infrastructure damage, human health effects) in a particular year. Table 3.1-3 provides the range of projected social cost of GHG emissions (in 2020 dollars) from 2020 to 2050 at the range of discount rates suggested by the Interagency Working Group on the Social Cost of Greenhouse Gases (IWG SC-GHG, 2021). Values are the average across models and socioeconomic emissions scenarios for each of three discount rates (2.5 percent, three percent, and five percent), plus a fourth value, selected as the 95th percentile of estimates based on a three-percent discount rate. The fourth value was included to represent higher-than-expected economic impacts from climate change. The social cost of emissions from the Proposed Action would range from approximately \$13 thousand to \$245 thousand by 2050.

Table 3.1-3 Social Cost of Greenhouse Gases Estimate for the Proposed Action

Emissions Year	Discount Rate and Statistic			
	5% Average	3% Average	2.50% Average	3% 95th Percentile
2020	13,202	48,093	71,668	143,336
2025	16,031	52,808	78,269	159,367
2030	17,917	58,466	83,927	176,341
2035	20,746	63,181	90,528	194,258
2040	23,575	68,839	97,129	212,175
2045	26,404	74,497	103,730	228,206
2050	30,176	80,155	109,388	245,180

3.1.3.3 Alternative 2

Annual Air Emissions

Table 3.1-4 presents estimates of annual air emissions that would occur from construction of facilities and arrival of FFG personnel under Alternative 2. Estimated air emissions would be very similar, but slightly less during construction, to those under Alternative 1. These data show that annual air emissions would be below the *de minimis* levels for all pollutants. Therefore, construction and operation under Alternative 2 would not result in significant air quality impacts.

Table 3.1-4 Alternative 2 Air Emissions

<i>Calendar Year</i>	<i>CO (tpy)</i>	<i>NO_x (tpy)</i>	<i>PM₁₀ (tpy)</i>	<i>PM_{2.5} (tpy)</i>	<i>SO₂ (tpy)</i>	<i>VOC (tpy)</i>	<i>CO_{2e} (tpy)</i>
2026	14.84	3.90	19.21	0.14	0.02	1.32	2,178
2027	19.59	4.34	21.65	0.15	0.02	1.64	2,584
2028	20.21	2.40	10.82	0.08	0.02	1.89	2,294
2029	26.26	1.58	0.05	0.05	0.02	2.22	2,640
2030	34.32	1.98	0.06	0.06	0.03	2.41	3,449
2031	42.38	2.39	0.08	0.07	0.03	2.98	4,257
2032	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2033	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2034	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2035	50.44	2.79	0.09	0.08	0.04	3.54	5,065
2036	54.47	2.99	0.09	0.08	0.04	3.82	5,470
2037 and post-2037	9.34	0.73	0.02	0.02	0.01	0.66	943
<i>De minimis level</i>	100	100	100	100	100	100	N/A
<i>Exceed de minimis level?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>N/A</i>
Snohomish County	98,938	13,141	7,070	3,444	269	44,334	4,005,640
Percentage of County Emissions ¹	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.02%
Puget Sound AQCR Total	638,974	74,921	55,627	29,751	2,945	212,815	25,760,462
Percentage of AQCR Emissions ¹	0.0015%	9.7xE ⁻⁴ %	3.6xE ⁻⁵ %	6.7xE ⁻⁵ %	3.4xE ⁻⁴ %	3.1xE ⁻⁴ %	0.003%

Key: % = percent; AQCR = Air Quality Control Region; CO = carbon monoxide; CO_{2e} = carbon dioxide equivalent; N/A = not applicable; NO_x = nitrogen oxides; PM₁₀ = particulate matter less than or equal to 10 microns in diameter; PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter; SO₂ = sulfur dioxide; tpy = tons per year; VOC = volatile organic compound.

Note: ¹ Comparison is to Alternative 2 emissions for years 2037 and post-2037.

Greenhouse Gases

Implementation of Alternative 2 would emit GHGs from the combustion of fossil fuels. The maximum CO_{2e} generated from construction and personnel commuting activities during phased implementation of Alternative 2 would amount to approximately 5,470 tons (4,962 metric tons) and in the end state, GHG emissions would be only 943 tons (855 metric tons) (see Table 3.1-2), which would result in a negligible contribution to future climate change. At end state, the annual GHG emissions would be roughly equivalent to the electricity use of 166 homes for one year (USEPA, 2023). GHG emissions would be minor and largely temporary (lasting only the duration of the construction phase) and would not have a discernable impact on climate change. During planning and construction, the Navy would consider and

implement, where appropriate, measures that would help to minimize emissions and energy use in line with DoD and Navy policies discussed in Section 3.1.1.5, *Greenhouse Gases*. The Navy would consider facility designs, materials, and infrastructure that are energy efficient and resilient to climate change. The Navy would also consider expanding the use of natural infrastructure to build resilience, sequester carbon, and achieve local, landscape, and regional-scale climate solutions.

Therefore, implementation of Alternative 2 would not result in significant impacts to air quality.

The social cost of GHGs under Alternative 2 would be the same as discussed above for Alternative 1.

3.2 Water Resources

This discussion of water resources includes groundwater, surface water, and floodplains. The study area for water resources consists of upland portions of NAVSTA Everett and the Snohomish River, which receives stormwater runoff discharges from NAVSTA Everett. This section does not discuss wetlands because none occur within the project area. Also, while the proposed project site is adjacent to Port Gardner Bay and Puget Sound, marine waters and shorelines are not addressed because the project would not involve any in-water or over-water construction activities, other than installation of two shelter additions on the pier deck and pier utility upgrades.

Groundwater is water that flows or seeps downward and saturates soil or rock, supplying springs and wells. Groundwater is used for water consumption, agricultural irrigation, and industrial applications. Groundwater properties are often described in terms of depth to aquifer, aquifer or well capacity, water quality, and surrounding geologic composition.

Surface water resources typically consist of wetlands, lakes, rivers, and streams. Surface water is important for its contributions to the economic, ecological, recreational, and human health of a community or locale. A Total Maximum Daily Load (TMDL) is the maximum amount of a substance that can be assimilated by a water body without causing impairment. A water body can be deemed impaired if water quality analyses conclude that exceedances of water quality standards occur. For the Proposed Action, none of these surface water features occur at the project site. Thus, surface water resources in this section refer to stormwater runoff from NAVSTA Everett to the Snohomish River.

Floodplains are areas of low-level ground present along rivers, stream channels, large wetlands, or coastal waters. Floodplain ecosystem functions include natural moderation of floods, flood storage and conveyance, groundwater recharge, and nutrient cycling. Floodplains also help to maintain water quality and are often home to a diverse array of plants and animals. In their natural vegetated state, floodplains slow the rate at which the incoming overland flow reaches the main water body. Floodplain boundaries are most often defined in terms of frequency of inundation, that is, the 100-year (an area that has a one percent chance of flooding in any one year) and 500-year floodplain (moderate flood hazard areas with a 0.2 percent annual chance of flooding). The Federal Emergency Management Agency (FEMA) produces floodplain delineation maps and provides a basis for comparing the locale of the Proposed Action to the floodplains.

3.2.1 Regulatory Setting

The Clean Water Act (CWA) establishes federal limits, through the National Pollutant Discharge Elimination System (NPDES) program, on the amounts of specific pollutants that can be discharged into waters of the United States to restore and maintain the chemical, physical, and biological integrity of the

water. The NPDES program regulates the discharge of point (i.e., end of pipe) and non-point sources (i.e., stormwater) of water pollution.

WDOE administers the NPDES program within the State of Washington and has general permitting authority. Federal facilities in the State of Washington are eligible for coverage under an individual NPDES permit or the multi-sector general permit. Construction activities that disturb one or more total acres of land at federal facilities are eligible for coverage under USEPA's construction general permit (CGP) (Navy, 2021a). Compliance with the CGP requires development of a construction site-specific stormwater pollution prevention plan (SWPPP) document.

Surface water quality standards contained in Washington Administrative Code (WAC) 173-210A provide the basis for protecting and regulating the quality of surface waters in the State of Washington. The standards implement portions of the CWA by specifying the designated and potential uses of waterbodies in the state and set water quality criteria to protect those uses and acknowledge limitations. The standards also contain policies to protect high-quality waters (anti-degradation) and specify how criteria are to be implemented.

Section 438 of the Energy Independence and Security Act establishes stormwater design requirements for development and redevelopment projects. Under these requirements, federal facility projects larger than 5,000 square feet must "maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow."

The criteria and design standards in United Facilities Criteria (UFC) 3-210-10 (DoD, 2023) are required for the planning, design, and construction of all permanent DoD projects in the United States that meet both of the following conditions:

- The project includes construction or expansion of one or more buildings as part of its primary scope (i.e., primary facilities versus supporting facilities).
- The "footprint" is greater than 5,000 gross square feet. Footprint consists of all new impervious surfaces associated with the building(s), including both building area and pavement area of associated supporting facilities (such as parking and sidewalks). Footprint does not include the existing building area to be renovated, existing pavement area to be resurfaced, or new pavement area other than supporting facilities associated with the building(s).

Requirements and policies regarding stormwater discharges for Navy facilities are set forth in the Department of the Navy's Environmental Readiness Program Manual, OPNAV M-5090.1 (Navy, 2021b). These requirements state that Navy facilities must comply with all substantive and procedural requirements applicable to point and non-point sources of pollution as required by EO 12088, *Federal Compliance with Pollution Control Standards*, and the CWA. Navy policy regarding point source stormwater discharges from Navy facilities is that these discharges must meet all applicable federal, state, and local permit requirements, including control requirements for toxic and non-conventional pollutants and best conventional technology limits for conventional pollutants. The Navy's policy on stormwater management and non-point source pollution control requires commands to ensure that all activities comply with stormwater management and pollution prevention requirements, as stipulated in permits under which the activity is covered.

EO 11988, *Floodplain Management*, requires federal agencies to avoid (to the extent possible) the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to

avoid direct and indirect support of floodplain development unless it is the only practicable alternative. Flood potential of a site is usually determined by the 100-year floodplain.

EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, amends EO 11988, *Floodplain Management*, and establishes the Federal Flood Risk Management Standard to improve the nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other threats.

3.2.2 Affected Environment

3.2.2.1 Groundwater

Depth to groundwater at NAVSTA Everett is tidally influenced and ranges from 8 to 14 feet below ground surface. Shallow groundwater flow is substantially influenced by the consistency of the fill materials used to construct the installation (NAVSTA Everett, 2022), but flows are generally toward Port Gardner Bay and the East Puget Sound Waterway (Naval Facilities Engineering Systems Command Northwest [NAVFAC NW], 2021b).

Groundwater at NAVSTA Everett is not a source of potable water, and there are no public supply wells within one mile of the installation. Drinking water at NAVSTA Everett is supplied by the City of Everett (NAVFAC NW, 2021b). In 1992, NAVSTA Everett was identified as a site (WDOE Site ID 4302) with confirmed or suspected contamination that could potentially harm people and the environment. Groundwaters are suspected of containing chemical contaminants, including halogenated and non-halogenated organics, other conventional organic contaminants, and priority pollutant metals (WDOE, 2022a, Cleanup Site ID 4302). A preliminary assessment was completed in 2021 (NAVFAC NW, 2021b), and the site is in the state cleanup process under the Model Toxics Control Act (WDOE, 2022a).

3.2.2.2 Surface Water

NAVSTA Everett is located in the Snohomish watershed. No surface water features, such as creeks, streams, or ponds, are present at NAVSTA Everett (NAVSTA Everett, 2022). Much of NAVSTA Everett is covered in low-permeability surfaces (extensive paved areas and low-permeability soil). Thus, the primary source of surface water is stormwater runoff that is routed to the installation-wide drainage system before discharging into the Snohomish River.

NAVSTA Everett is divided into four main drainage areas, each with its own runoff collection system, oil/water separator, and outfall. The oil/water separators are designed to intercept and contain oily waste in the event of a large spill, and provide a simple level of treatment for stormwater runoff by allowing suspended solids to settle out prior to discharge (Navy, 2021a). The drainage areas and associated impervious surface coverages are summarized in Table 3.2-1. Note that discharges from Outfalls C and D include runoff from areas outside of the installation property.

Table 3.2-1 NAVSTA Everett Drainage Area Summary

<i>Outfall</i>	<i>Receives Industrial Area Drainage</i>	<i>Receiving Water</i>	<i>Drainage Area (acres)</i>	<i>Percentage Impervious</i>
A	Yes	Port Gardner	20.7	97%
B	Yes	Port Gardner	12.6	95%
C	Yes	Snohomish River	45.8 ¹	95%
D	No	Snohomish River	40.8 ²	73%

Key: % = percent; NAVSTA = Naval Station.

Notes: ¹ Total area excludes offsite inflow from City of Everett, 21st Street overpass.

² Total area excludes offsite inflow from Port of Everett Marina Village.

Source: Navy, 2021a.

Stormwater discharges from NAVSTA Everett are covered under the 2021 Multi-Sector General Permit (MSGP) (USEPA, 2021a) as well as a Phase II Municipal Separate Storm Sewer System (MS4) permit (NPDES Permit No. WAS026620; USEPA 2021b). Although MSGP and MS4 permit coverage of certain areas and activities may overlap, the programs are managed separately. The MS4 permit requires the Navy to minimize the discharge of pollutants from its storm sewer systems to the maximum extent practical and to develop and implement a stormwater management program. A SWPPP is required to meet the requirements of the MSGP.

Per the MSGP, stormwater discharges are not subject to any effluent limitation guidelines. Therefore, monitoring of discharges from NAVSTA Everett is not required (Navy, 2021a). However, discharges from NAVSTA Everett must be controlled as necessary to meet applicable water quality standards. If it is determined that a discharge from the facility does not meet applicable water quality standards, the Navy must take corrective action(s) and document them as required in Section 9 of the SWPPP (Navy, 2021a).

NAVSTA Everett is adjacent to the mouth of the Snohomish River channel in a historically industrialized area with highly modified shorelines and dredged waterways that form a protected harbor within Port Gardner Bay. The lower Snohomish River channel is part of the Port of Everett’s active deep-water port facility served by a federal navigation channel which runs six miles upstream from the river mouth. The East Waterway was transformed into a deep-water port by dredging and filling in the early part of the last century, and it has provided shipping and processing facilities for timber, pulp, and alumina. In addition to the commercial activity of the Port of Everett and the presence of the Navy, the East Waterway is used for mooring barges, log rafts, and small commercial vessels (City of Everett, 2016).

WAC 173-201A-612 established designated uses for Everett Harbor as follows: aquatic life uses (good); recreation (primary contact); and harvesting (shellfish excluded); along with wildlife habitat, commerce/navigation, boating, and aesthetics (miscellaneous uses). The 2016 Washington State Water Quality Assessment (WDOE, 2016) listed Port Gardner and Inner Everett Harbor as a Category 5 Impaired Water for multiple water quality (ammonia, dissolved oxygen, temperature, and bacteria) and sediment (bioassay, metals, polycyclic aromatic hydrocarbons, and other semi-volatile organic contaminants) parameters. While these sections of impaired water are adjacent to NAVSTA Everett, the installation discharges stormwater to the mouth of the Snohomish River, which is not classified as impaired. Consequently, there are currently no TMDLs established for the NAVSTA Everett receiving waters (Navy, 2021a).

An East Waterway site (WDOE, 2022b) has been identified as moderate-high risk in the state cleanup process under the Model Toxics Control Act (WDOE, 2017). Historic sediment data reflect the presence of a variety of contaminants such as polycyclic aromatic hydrocarbons and other semi-volatile organic compounds including phenols, polychlorinated biphenyls, dioxin/furans, and some metals. A Remedial Investigation/Feasibility Study overseen by WDOE is underway.

3.2.2.3 Floodplains

The 100-year and 500-year floodplains at NAVSTA Everett correspond to elevations, referenced to the North American Vertical Datum of 1988, of 11.7 feet and 12.4 feet, respectively. Based on FEMA flood hazard mapping data, most of the project area at NAVSTA Everett is within designated areas of increased flood risk (FEMA, 2018). The Industrial Area at NAVSTA Everett is partially within the 100-year and 500-year floodplains (FEMA, 2018).

3.2.3 Environmental Consequences

The analysis of environmental consequences to water resources addresses the potential impacts on groundwater, surface water, and floodplains. Groundwater analysis focuses on the potential for impacts to the quality, quantity, and beneficial uses of the water. The analysis of surface water considers the potential for changes, including both improvements and degradation, to beneficial uses of water. The analysis of floodplains considers whether any new construction is proposed within a floodplain and, if so, would it impede the functions of floodplains in conveying floodwaters. The study area for the analysis of effects to water resources includes NAVSTA Everett and the mouth of the Snohomish River.

3.2.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to baseline groundwater or surface water resources or flood risk. Therefore, no impacts to water resources would occur with implementation of the No Action Alternative.

3.2.3.2 Alternative 1

Groundwater

Construction and operation of Alternative 1 would not affect groundwater resources at NAVSTA Everett because the project would not extract groundwater, interfere with groundwater supply, or alter existing groundwater quality. Further, groundwater is not used onsite as a source of potable water or for industrial purposes. Consequently, Alternative 1 would not affect beneficial uses of groundwater.

Surface Water

As noted in Table 3.2-1, three of the drainage areas at NAVSTA Everett (Areas A, B, and C) currently have 95 percent or greater coverage with impervious surfaces, while Area D has 73 percent coverage with impervious surfaces (Navy, 2021a). Impervious surfaces prevent or inhibit stormwater from soaking into the ground, thereby increasing runoff volumes. Because the structures associated with Alternative 1 would be constructed in areas that are largely already covered by impervious surfaces, this alternative would not appreciably change the areal coverage of impervious surfaces. However, as shown in Figure 2.3-1, some of the potential locations for new structures are currently unpaved. If these locations were selected, then the project would result in an increased areal coverage by impervious surfaces. Regardless, per Section 438 of the Energy Independence and Security Act and Navy requirements and

policies regarding stormwater discharges, the project must maintain the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. Consequently, the project would have a negligible effect on current stormwater runoff volumes and would not increase risks of localized flooding or ponding. Furthermore, Alternative 1 would include construction of upgrades to the stormwater facilities for improving runoff management effectiveness. These facilities are discussed below.

During renovation of existing buildings and construction of new buildings or additions, some portion of the existing impervious surfaces likely would be removed temporarily. During this period, underlying soils would be exposed and susceptible to erosion and transport by wind and/or stormwater runoff. Prior to the start of construction of Alternative 1, the Navy would apply for coverage under the CGP that includes measures for managing stormwater runoff and preventing erosion and offsite transport of soils. The permit would require the Navy to prepare a SWPPP that specifies control measures for minimizing the potential for soil erosion.

Alternative 1 would include construction of new stormwater management facilities. In accordance with the Navy's established or adopted building standards (Navy, 2007), new and redeveloped military facilities must incorporate sustainable designs (refer to Section 3.2.1, *Regulatory Setting*).

Table 2.5-1 identifies Low Impact Development (LID) as a BMP that would be incorporated into the project design. The specific LID features that would be included for the Proposed Action have not been identified. In general, LID features fall into the following general categories (DoD, 2023):

- 1) Engineered Natural Treatment: features that provide depression storage, infiltration, and evapotranspiration, such as bioretention, vegetated swales, rain gardens, and vegetated filter strips.
- 2) Engineered Subsurface Treatment: features may include permeable pavements and infiltration trenches that provide infiltration and prevent concentrated flow.
- 3) Non-potable Rainwater Harvesting Systems: features that may include LID features like cisterns and rain barrels to store rainwater for non-potable uses, such as irrigation.
- 4) Green (Vegetative) Roofs: these features do not promote infiltration of water into the ground at the source.

LID features that result in infiltration of runoff into soils would not be appropriate at NAVSTA Everett due to the presence of soil contaminants. However, infiltration features can be designed to manage stormwater and prevent the mobilization of subsurface contamination, such as incorporating an impermeable liner with subdrains that discharge to the surface or away from subsurface plumes (USEPA, 2009).

Construction activities for the new stormwater management facilities at NAVSTA Everett would be conducted under the CGP and project-specific SWPPP that would minimize potentials for exposing site soils to stormwater runoff. Construction activities may require collection and disposal of dewatering effluent. If needed, the design and implementation of a dewatering system would comply with UFC 3-220-04, Dewatering and Groundwater Control (DoD, 2004). Disposal options for dewatering effluent would depend on the presence and extent of contamination. If appropriate, a wastewater discharge permit may be required before the dewatering effluent could be discharged to the sanitary sewage. Additional measures to prevent or minimize risks associated with encountering contaminated soils or groundwaters during installation of the new stormwater management facilities are discussed in the beginning of Section 3 under *Hazardous Materials and Wastes*. Once the construction of the new

facilities is complete, the added LID features would be expected to reduce pollutant loadings to the Snohomish River associated with stormwater discharges from the site.

Consequently, potential impacts to water resources associated with stormwater runoff would not be significant.

No surface water features, such as creeks or streams, exist within NAVSTA Everett. Therefore, construction of Alternative 1 would not affect water quality for onsite surface waters. Without appropriate controls, construction stormwater runoff discharges from NAVSTA Everett could affect surface water quality in the Snohomish River. However, the CGP requires implementation of best available technology and best conventional pollutant control technology to reduce or eliminate pollutants in stormwater runoff, as well as additional requirements necessary to implement applicable water quality standards.

The CGP does not authorize discharges that will cause or have the reasonable potential to cause or contribute to, an exceedance above the applicable state surface water quality standards (Chapter 173-201A WAC), groundwater standards (Chapter 173-200 WAC), sediment quality standards (Chapter 173-204 WAC), standards in USEPA's revision of certain federal water quality criteria applicable to Washington (40 CFR section 131.45), and other appropriate requirements of state law (USEPA, 2021b). The CGP states that if the permittee complies with all terms and conditions of the permit, it is presumed that the permittee is not causing or contributing to an exceedance above the State of Washington's water quality standards. All CGP terms and conditions would be adhered to under Alternative 1.

Alternative 1 would not substantially change the character or amount of industrial pollutants generated on site that could be exposed to stormwater runoff. Instead, the primary source of potential pollutants likely would be vehicle use that could contribute pollutants such as copper, zinc, and/or polycyclic aromatic hydrocarbons associated with brake dust and/or motor oil deposits. Given that the Proposed Action would result in a net decrease in the general NAVSTA Everett population, pollutant loadings from vehicles may be lower than current loadings due to decreased vehicle traffic. Additionally, as noted above, Alternative 1 would incorporate LID features that would be expected to reduce pollutant loadings due to improved stormwater facilities design and pollutant retention efficiencies.

After construction of the new facilities is completed, stormwater discharges would be regulated by the MS4 permit, which would be modified as appropriate to reflect post-construction changes to the stormwater runoff facilities and characteristics of the runoff. The current industrial discharge permit covers three of the four outfalls at NAVSTA Everett, and it may need to be modified to cover the North Wharf outfall based on the post-construction changes. Additionally, the Navy would update the existing SWPPP to include the area and activities associated with the Proposed Action. Compliance with the permit would ensure that operational stormwater discharges do not degrade water quality or adversely affect beneficial uses of the Snohomish River. Therefore, impacts to surface water quality and beneficial uses due to Alternative 1 operations would be minimal and not significant.

In general, construction and operations activities associated with Alternative 1 would not generate point source waste streams other than stormwater runoff discharges and potentially dewatering effluent. Stormwater discharges and, if needed, dewatering effluent discharges are expected to comply with all applicable permit-specified limitations and, consequently, would not result in any violations of water quality standards.

Alternative 1 would not involve any in-water or over-water construction with the potential for affecting surface water quality in the Snohomish River. Alternative 1 would include two additions to shelters on

the pier deck along with pier utility upgrades. However, these additions and upgrades would be installed without generating any construction-related debris or other wastes that could be discharged unintentionally into the river. Therefore, impacts to surface waters would be minimal and not significant.

Floodplains

As discussed in Section 3.2.2, *Affected Environment*, portions of the project site are within designated areas of increased flood risk. Development within a 100-year floodplain is restricted through EO 11988, *Floodplain Management*, which requires federal agencies to avoid the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Section 3(b) of EO 11988 states “If, after compliance with the requirements of this Order, new construction of structures or facilities are to be located in a floodplain, accepted floodproofing and other flood protection measures shall be applied to new construction or rehabilitation. To achieve flood protection, agencies shall, wherever practicable, elevate structures above the base flood level rather than filling in land.”

UFC 3-201-01 (DoD, 2022) specifies that when mission needs require siting a building within or partially within a flood hazard area, the designer of record should obtain or prepare the project-specific Basis for Flood Risk Design to determine the appropriate design flood elevation. The appropriate building elevations would also account for site-specific sea-level rise scenarios. The design of flood protection systems providing protection to the one percent annual chance flood event would use 44 CFR section 65.10, and the flood protection system would be certified by the designer of record.

For Alternative 1, the Administrative Support Facility would need to be located within the 100-year floodplain due to limitations on available space on site. Therefore, to comply with the UFC specifications, the Navy would implement appropriate measures to alleviate flood risks for the Administrative Support Facility such as raised flooring above the high-water mark, sustainable building design, pile-supported foundations, and LID measures (refer to Section 2.3.2, *Alternative 1*). The measures and design considerations would also need to ensure that the building would not obstruct runoff from upgradient areas that could contribute to flood risks on site or in adjacent properties.

By complying with UFC specifications and other applicable guidance, Alternative 1 would not have a significant impact to flood risk.

With implementation of appropriate upgrades to stormwater infrastructure, flood risk management measures, and BMPs, implementation of Alternative 1 would not result in significant impacts to water resources.

3.2.3.3 Alternative 2

Under Alternative 2, similar types of facilities would be constructed, but with more reliance on building additions and renovations (refer to Section 2.3.3, *Alternative 2* for details) than on new stand-alone facilities as compared to Alternative 1. Similar to Alternative 1, Alternative 2 would include stormwater management facilities, including LID features, design considerations for flood protection, and would not require any in-water construction activities. Thus, Alternative 2 would have the same effects to water resources related to changes in groundwater, surface water, and floodplains as those discussed above for Alternative 1. Impacts to water resources would not be significant.

3.3 Noise

This discussion focuses on potential noise effects on the human environment in general. Specific discussion of noise in relation to biological resources is discussed in Section 3.4, *Biological Resources*. Noise in relation to public health and safety is included at the beginning of Chapter 3.0, *Affected Environment and Environmental Consequences*, and discussion of noise in relation to environmental justice is included in Section 3.7, *Environmental Justice*. Basic information on noise and methods used in the analysis for modeling noise effects is provided in Appendix G.

3.3.1 Regulatory Setting

The Noise Control Act of 1972 (42 United States Code [U.S.C.] section 4901 et seq.) directs federal agencies to comply with applicable federal, state, and local noise requirements with respect to the control and abatement of environmental noise unless the activity is specifically exempted. WAC Chapter 173-60 and Everett Municipal Code Chapter 20.08 set maximum permissible noise levels for several categories of noise source and land use zones. However, Everett Municipal Code Chapter 20.08 exempts noises created on federal military facilities. WAC Chapter 173-60, as implemented by the WDOE, gives precedence to local noise ordinances where they exist and are being actively enforced (WDOE, 2023). The City of Everett has an actively enforced noise ordinance (City of Everett, 2024). Therefore, noise created by activities on NAVSTA Everett are exempt from noise limits established by state and local regulations.

Under the Noise Control Act of 1972, the Occupational Safety and Health Administration established workplace standards for noise. The minimum requirement states that noise exposure must not exceed a time-weighted average of 90 dBA over an eight-hour period. The highest allowable noise level to which workers can be constantly exposed is 115 dBA and exposure to this level must not exceed 15 minutes within an eight-hour period. The standards limit exposure to impulsive or impact noise to 140 dB. If noise levels exceed these standards, employers are required to provide hearing protection equipment that will reduce noise levels to acceptable limits.

3.3.2 Affected Environment

A baseline noise assessment study was conducted in 2010 at NAVSTA Everett (ManTech, 2010). Time-weighted community noise metrics were collected at 17 locations in Everett. Noise levels measured at NAVSTA Everett indicate that day-to-day activities at this location are not significant contributors to the surrounding noise environment. The loudest continuous noise source (an exhaust fan on a ship) measured 72 dBA at 125 feet from the source (ManTech, 2010). Other notable noise sources on the installation included assorted support activities (e.g., cranes, ground vehicles, etc.). In 2010, noise levels on NAVSTA Everett were measured at between 56 and 59 dBA day-night average noise level (Mantech, 2010). The representative ambient noise level for the installation is approximately 55 dBA (ManTech, 2010). The absence of an aircraft carrier and closure of the adjacent Kimberly-Clark plant may have resulted in current noise levels on some portions of NAVSTA Everett being slightly lower than measurements taken in 2010. However, the general types of noise-generating activities conducted on the installation remain similar to those conducted in 2010, and noise levels are not expected to have changed dramatically. Automotive traffic on West Marine View Drive and rail traffic on the collocated rail corridor contribute the highest noise level to the acoustic environment. Noise levels measured in 2010 along the transportation corridor but not immediately adjacent to the Kimberly-Clark plant ranged from 50 to 67 dBA five-minute equivalent noise level (Mantech, 2010). Pile replacement is conducted on NAVSTA Everett on an occasional basis as part of marine structure maintenance. Pile driving and other

maintenance activities result in temporarily elevated noise levels on and near NAVSTA Everett while the projects are in progress (Navy, 2019).

The closest noise sensitive locations to NAVSTA Everett include the Port of Everett Marina, which is located immediately north of the installation, and several residences, which are located east of the installation on the opposite side of West Marine View Drive. Moored vessels in the Port of Everett Marina are located approximately 600 feet from the closest construction proposed to occur under the action alternatives. The closest residences are located approximately 1,200 feet from a proposed construction site. Residences are often occupied (and therefore considered to be noise sensitive) throughout the day during workdays and weekends. The Port of Everett Marina does not permit living aboard a moored vessel (Port of Everett, 2022a). The marina is expected to be most active during weekends and on weekdays after normal working hours. Other noise-sensitive locations are located at greater distances from proposed construction sites. For example, the recently completed Waterfront Place mixed-use development is located approximately 2,200 feet from the closest proposed construction site.

3.3.3 Environmental Consequences

3.3.3.1 No Action Alternative

Under the No Action Alternative, the proposed homeporting action would not occur and there would be no change to baseline noise levels. Therefore, no impacts due to the noise environment would occur with implementation of the No Action Alternative.

3.3.3.2 Alternative 1

The study area for noise under Alternative 1 includes NAVSTA Everett and surrounding areas in which activities on NAVSTA Everett are audible. Noise impacts are described for proposed construction activities (which include renovation and new construction) as well as for conditions at NAVSTA Everett after the homeporting action is complete.

Construction Activity Noise. Construction activities would be conducted at the locations shown on Figure 2.3-1. Noise levels generated by several equipment types commonly used during construction are listed in Table 3.3-1 at a reference distance of 50 feet, at 600 feet, and at 1,200 feet from construction activities. As noted in Section 3.3.2, *Affected Environment*, 600 feet is the distance between construction sites and the Port of Everett Marina while 1,200 feet is the distance between construction sites and the closest residences. Locations farther from construction activities would experience lower noise levels.

Table 3.3-1 Construction Equipment Noise Levels

Equipment Type	Maximum Noise Level (L_{max}) in dBA at Specified Distance		
	Reference distance (50 feet)	Port of Everett Marina (600 feet)	Closest Residences (1,200 feet)
Impact Pile Driver	110	88	82
Vibratory Pile Driver	105	83	77
Concrete Saw	85	63	57
Scraper	92	70	64
Backhoe	84	62	56
Crane	79	57	51
Pumps	74	52	46

Equipment Type	Maximum Noise Level (L_{max}) in dBA at Specified Distance		
	Reference distance (50 feet)	Port of Everett Marina (600 feet)	Closest Residences (1,200 feet)
Generator	68	46	40
Front End Loader	81	59	53
Air Compressor	68	46	40
Dump Truck	73	51	45

Key: dBA = A-weighted noise level; L_{max} = maximum noise level.

Sources: Navy, 2015a; Washington State Department of Transportation (WSDOT), 2023.

Construction noise is similar in nature to industrial noise generated on NAVSTA Everett under baseline conditions. As noted in Section 3.3.2, *Affected Environment*, noise levels measured along West Marine View Drive ranged from 50 to 67 dBA five-minute equivalent noise level (Mantech, 2010). Much of the construction activity (e.g., operation of a backhoe) would generate maximum noise levels that are below ambient levels in many areas, as indicated by the five-minute time-averaged measured levels (see Appendix G, *Noise Metrics and Methodology*, for more information on various noise metrics). In the context of other ongoing activities (e.g., vehicle traffic and industrial waterfront activities on NAVSTA Everett), these relatively quiet construction activities may not be noticeable at the closest noise sensitive locations. At times when several pieces of construction equipment operate simultaneously, or when background noise levels are low, construction noise is more likely to be noticed. Pile driving during building construction would generate a noise signature similar to noise levels experienced under baseline conditions during pile driving conducted as part of marine structure maintenance.

Construction noise impacts would be limited to annoyance and activity interference (e.g., speech interference) for people who are near the construction sites while construction is under way. Sleep disturbance is not anticipated to be of concern to most people because the majority of construction activities would occur during daytime hours. Average noise levels on and off the installation would remain below workplace hearing protection criteria. People indoors with windows closed would not be expected to experience speech interference except during pile driving. Pile driving would occur only during the foundation phase of the proposed construction projects and would last for only a fraction of the expected 2.5-year overall construction timeline – a few weeks to a few months.

People residing and working along haul routes may notice temporary increases in traffic noise levels while certain phases of construction are in progress (e.g., removal of construction debris). As noted in Table 3.3-1, dump trucks generate approximately 73 dBA maximum noise level at a distance of 50 feet. Based on information listed in Appendix C, *Air Quality Calculations*, there would be an average of three heavy truck round trips per workday while the proposed projects are in progress. Haul routes would be main roads, which are currently used by a wide variety of vehicles including heavy trucks.

As noted in Section 3.3.1, *Regulatory Setting*, noise generated on federal facilities, such as NAVSTA Everett, are exempt from noise level maximums established by the State of Washington and City of Everett. Impacts associated with construction noise would be limited to annoyance and activity interference, and would be temporary, with the highest noise levels being experienced only during pile driving. Based on the nature of these impacts, no significant noise impacts would occur as a result of construction activities under Alternative 1.

Operational Noise. The proposed homeporting of FFGs would result in an additional two ships in port by fiscal year 2037 and an associated increased tempo of typical pierside noise-generating activities on NAVSTA Everett. Noise levels generated by the ships themselves (e.g., engines and exhaust fans) and

pierside support (e.g., loading and unloading using cranes) would be similar to noise occurring under baseline conditions although the net increase in the number of ships in port at any given time may increase the tempo of these operations. However, the increase in pierside support would be expected to be offset by reduced maintenance needs of the new ships for many years. Noise generated by the FFGs and ship support activities would be localized along the waterfront in areas that have been exposed to industrial noise for decades and which are not noise sensitive. Aircraft operations would not be conducted from FFGs while in port. During noise monitoring conducted in 2010 (Mantech, 2010), it was noted that port operations were not a major contributor to off-installation noise levels, and this would be expected to also be the case under Alternative 1.

Road traffic on and near NAVSTA Everett may decrease marginally under Alternative 1, potentially resulting in minimal decreases in roadway noise levels. There would be a net decrease of approximately 200 personnel on NAVSTA Everett resulting in a decrease in the average number of commuter trips per day. Commuters and other ground vehicles would be expected to access NAVSTA Everett primarily by way of West Marine View Drive. This road is a major thoroughfare carrying substantial traffic. Any decreases in traffic noise would be minimal in this context.

In summary, typical pierside activities under Alternative 1 would result in incremental increases in the tempo of certain noise-generating activities that currently occur at NAVSTA Everett, some of which would be expected to be offset by reduced maintenance needs of the new ships for many years. Road traffic may decrease slightly resulting in minor roadway noise level reductions. Although the upticks in certain activities and noise level under Alternative 1 may be noticed, noise impacts would be minimal and would not be significant.

3.3.3.3 Alternative 2

Construction Activity Noise. The study area for noise under Alternative 2 is the same as the study area for Alternative 1. Alternative 2 would involve similar types of construction on NAVSTA Everett using similar equipment types as under Alternative 1 (see Figure 2.3-1). Noise levels experienced at nearby sensitive locations would be approximately the same while construction is in progress. Therefore, no significant noise impacts would occur as a result of construction activities under Alternative 2.

Operational Noise. Operational noise under Alternative 2 would be the same as described for Alternative 1. No significant noise impacts would occur as a result of operational noise under Alternative 2.

3.4 Biological Resources

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to generally as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal.

Within this EA, biological resources are divided into three major categories: (1) terrestrial vegetation, (2) terrestrial wildlife, and (3) marine wildlife. Threatened, endangered, and other special-status species are discussed in their respective categories.

3.4.1 Regulatory Setting

Special-status species, for the purposes of this assessment, are those species listed as threatened or endangered under the Endangered Species Act (ESA) and species afforded federal protection under the Marine Mammal Protection Act (MMPA), the Migratory Bird Treaty Act (MBTA), or the Bald and Golden Eagle Protection Act.

The purpose of the ESA is to conserve the ecosystems upon which threatened and endangered species depend and to conserve and recover listed species. Section 7 of the ESA requires action proponents to consult with the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat. Critical habitat cannot be designated on any areas owned, controlled, or designated for use by the DoD where an Integrated Natural Resources Management Plan (INRMP) has been developed that, as determined by the Secretary of the Interior or Secretary of Commerce, provides a benefit to the species subject to critical habitat designation.

All marine mammals are protected under the provisions of the MMPA. The MMPA prohibits any person or vessel from “taking” marine mammals in the United States or on the high seas without authorization. The MMPA defines “take” to mean “to harass, hunt, capture, or kill or attempt to harass, hunt, capture, or kill any marine mammal.”

Both migratory birds and most native-resident bird species are protected under the MBTA, and their conservation by federal agencies is mandated by EO 13186, *Migratory Bird Conservation*. Under the MBTA it is unlawful by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, [or] possess migratory birds or their nests or eggs at any time, unless permitted by regulation. The 2003 National Defense Authorization Act gave the Secretary of the Interior authority to prescribe regulations to exempt the Armed Forces from the incidental taking of migratory birds during authorized military readiness activities. The final rule authorizing the DoD to take migratory birds in such cases includes a requirement that the Armed Forces must confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the Proposed Action if the action will have a significant negative effect on the sustainability of a population of a migratory bird species.

Bald and golden eagles are protected by the Bald and Golden Eagle Protection Act. This act prohibits anyone, including the federal government, from taking bald eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs without first obtaining a permit issued by the Secretary of the Interior. The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”

3.4.2 Affected Environment

The following discussions provide a description of the existing conditions for terrestrial vegetation, terrestrial wildlife, and marine wildlife at NAVSTA Everett. Threatened and endangered species are discussed in each respective section below.

3.4.2.1 Terrestrial Vegetation

Vegetation includes terrestrial plants as well as freshwater aquatic communities and constituent plant species. NAVSTA Everett is located within an industrial area of Everett that is primarily composed of buildings, large impervious parking lots, and equipment lay down and maintenance areas. Vegetation

present is mainly landscaped grass areas and ornamental trees (NAVSTA Everett, 2022). No federally threatened or endangered plants are known or suspected to occur on NAVSTA Everett (NAVSTA Everett, 2022).

3.4.2.2 Terrestrial Wildlife

Mammals

Due to its industrial and landscaped nature, NAVSTA Everett does not offer much habitat for terrestrial mammals. Species that have been observed at the installation include coyote (*Canis latrans*), long-tailed weasel (*Mustela frenata*), raccoon (*Procyon lotor*), European rabbit (*Oryctolagus cuniculus*), and Eastern gray squirrel (*Sciurus carolinensis*). Other species that may occur include river otter (*Lontra canadensis*), deer mouse (*Peromyscus maniculatus*), shrew (Soricidae species), and Norway rat (*Rattus norvegicus*) (NAVSTA Everett, 2022). There are no bat species known or suspected to occur and no federally threatened or endangered terrestrial mammals on NAVSTA Everett.

Birds

There are approximately 350 bird species that occur within the Snohomish River Estuary (Snohomish County, 1999) and at least 58 species observed within the vicinity of NAVSTA Everett during annual Christmas Counts in 2021 (Pilchuck Audubon Society, 2021). Jetty Island, located approximately 1,700 feet west of NAVSTA Everett, serves as both seasonal and year-round habitat for nesting, resting, and foraging gulls, waterfowl, shorebirds, bald eagles, and peregrine falcons (*Falco peregrinus*). Wintering waterfowl alone can occur in the thousands on Jetty Island (Washington Department of Fish and Wildlife, 2022). Due to the proximity of Jetty Island to the project area, many of these species frequent the NAVSTA Everett waterfront. Bird species observed in the project area during past surveys and that are likely to be present in the future include, but are not limited to, belted kingfisher (*Megaceryle alcyon*), Barrow's goldeneye (*Bucephala islandica*), pigeon guillemot (*Cepphus columba*), double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), and mallard (*Anas platyrhynchos*) (NAVSTA Everett, 2022). Bald eagles occur on Jetty Island and sub-adults utilize the area surrounding Jetty Island and along the NAVSTA Everett waterfront for foraging from March through July (Port of Everett, 2006).

Within the upland portions of NAVSTA Everett, the most common species observed include, but are not limited to, glaucous-winged gull (*Larus glaucescens*), Caspian tern (*Hydroprogne caspia*), American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), Canada goose (*Branta canadensis*), rock pigeon (*Columba livia*), and European starling (*Sturnus vulgaris*). Osprey (*Pandion haliaetus*) and bald eagles are observed roosting on various structures at NAVSTA Everett (NAVSTA Everett, 2022).

The USFWS identifies species considered to be Birds of Conservation Concern, which are migratory nongame birds that are likely to become candidates for listing under the ESA if additional conservation actions do not occur (USFWS, 2021). A total of 18 Birds of Conservation Concern have the potential to occur at NAVSTA Everett. Five of the 18 species have been documented at NAVSTA Everett (western grebe [*Aechmophorus occidentalis*], rock sandpiper [*Calidris ptilocnemis*], western gull [*Larus occidentalis*], California gull [*Larus californicus*], and Brandt's cormorant [*Phalacrocorax penicillatus*]) (NAVSTA Everett, 2022).

High abundance of bird populations on the installation can pose hazards. Nuisance birds that are the most damaging to facilities, particularly during the nesting season, are Canada goose, American crow, and glaucous-winged gull. The Navy has significantly reduced nesting activity on buildings through

implementation of preventative measures (e.g., mesh under eaves to prohibit roosting/nesting, spikes on roofs peaks and edges to prevent perching) that are designed to reduce activity without harming the birds (NAVSTA Everett, 2022).

ESA-Listed Marbled Murrelet

The marbled murrelet (*Brachyramphus marmoratus*) is the only ESA-listed species that occurs at or in the vicinity of NAVSTA Everett and has potential to be affected by the upland construction associated with the Proposed Action. The marbled murrelet was federally listed as threatened in 1992 by USFWS (57 Federal Register 45328). Marbled murrelets are seabirds that spend most of their lives in the marine environment and nest in mature and old-growth forests (USFWS, 1997). Murrelets use the marine environment for courtship, loafing, and foraging (USFWS, 2010). In this region, their nesting season occurs between April 1 and September 23. During the breeding season, murrelets tend to forage in well-defined areas along the shoreline in relatively shallow marine waters. Throughout their range, marbled murrelets are opportunistic feeders and utilize prey of diverse sizes and species. They prey primarily on forage fish such as Pacific herring (*Clupea harengus pallasii*), northern anchovy (*Engraulis mordax*), surf smelt (*Hypomesus pretiosus*), juvenile rockfish (*Sebastes* species), and juvenile salmon (*Oncorhynchus* species) with fish comprising 60 to 100 percent of their diet and remainder on larger zooplankton such as krill (Ralph et al., 1995). Murrelets typically forage in pairs during the summer, with singles and flocks of three or more birds occurring less often (Merizon et al., 1997; Strachan et al., 1995). While actively foraging they dive repeatedly into waters of various depths. During the pre-basic (post-breeding season) molt, murrelets are essentially flightless and must select foraging sites that provide adequate prey resources within swimming distance (Carter, 1984; Carter and Stein, 1995). During the non-breeding season, murrelets typically disperse and are found farther from shore (Strachan et al., 1995).

Marbled murrelets have been regularly observed in Possession Sound, foraging in the offshore waters west of NAVSTA Everett in the fall and winter, and during the breeding season (Lance and Pearson, 2021; Pearson and Lance, 2013, 2014, 2015, 2016, 2017). Surveys have also documented marbled murrelets approximately 75 feet from the Navy's port security barrier and one murrelet was observed within the port security barrier after normal work hours (NAVSTA Everett, 2022).

Critical habitat for nesting was designated for the marbled murrelet in 1996 (61 Federal Register 26256) and revised in 2011 (76 Federal Register 61599). The closest designated critical habitat is 13 miles away from the project area.

3.4.2.3 Marine Species

Marine species include marine vegetation, marine mammals, sea turtles, fish, coral, and benthic invertebrates. The Proposed Action does not involve any structural modification to existing piers or in-water structural work at the piers. The only marine species potentially affected by the Proposed Action are marine mammals, specifically pinnipeds (seals and sea lions) that regularly haul-out on docks and floating structures at NAVSTA Everett. NMFS maintains jurisdiction over seals and sea lions. Only the Pacific harbor seal (*Phoca vitulina richardii*) and California sea lion (*Zalophus californianus*) are frequently recorded at NAVSTA Everett and have the potential to be affected by the Proposed Action.

California Sea Lion

California sea lions are protected under the MMPA but are not listed under the ESA. California sea lions are present year-round in Washington inland waters, but numbers are lowest during summer months when most individuals return to rookeries in California for breeding. California sea lions regularly haul-

out on in-water structures at NAVSTA Everett, as documented during weekly shore-based surveys conducted between 2012 and 2022 (Navy Region Northwest, 2023). Peak abundance of California sea lions in Washington and at NAVSTA Everett occurs between October and May, with over 300 individuals observed hauled-out on the port security barrier (see Figure 3.4-1) at NAVSTA Everett in a single survey in 2019 (Jeffries et al., 2000; NAVSTA Everett, 2022; NMFS, 1997). California sea lions likely have become habituated to the elevated noise and activity level on the NAVSTA Everett waterfront. California sea lions forage within the area, feeding on local prey that may include Pacific hake (*Merluccius productus*), Pacific herring, North Pacific spiny dogfish (*Squalus suckleyi*), salmonid species, Pacific cod (*Gadus macrocephalus*), and walleye pollock (*Gadus chalcogrammus*) (Calambokidis and Baird, 1994; Everitt et al., 1981).

Harbor Seal

Harbor seals are protected under the MMPA but are not listed under the ESA. Harbor seals have mostly been observed hauled-out on floats near the smaller piers, marina docks, debris barrier near the marina, port security barrier, and at various locations along the shoreline and within the “notch” area across the East Waterway (Figure 3.4-1). Harbor seals occupy the waters and haulouts near NAVSTA Everett year-round. Navy surveys conducted regularly from 2012 to 2022 at NAVSTA Everett have documented the highest counts of harbor seals between July and October, with a maximum of over 700 harbor seals recorded and an average summer count of 261 animals recorded. Winter counts (October to March) are lower with a maximum of 687 harbor seals and an average of 64 animals recorded in January (Navy Region Northwest, 2023). Harbor seals likely have become habituated to the elevated noise and activity level on the NAVSTA Everett waterfront. Dunlap Towing, a local commercial log handling service, has for many years kept log rafts in the East Waterway that were a common haulout for harbor seals. Dunlap Towing removed these log rafts in the spring of 2022, and it is expected there will be a reduction of harbor seal counts moving forward, due to the removal of this haulout (Navy Region Northwest, 2023).

NAVSTA Everett is a significant pupping location for harbor seals in Puget Sound. After birth, pups with umbilical cords attached, and mother-pup pairs, have been recorded every summer since 2018. A peak count of 96 pups was recorded in August 2021 (Navy Region Northwest, 2023).

3.4.3 Environmental Consequences

This analysis focuses on wildlife or vegetation types that are important to the function of the ecosystem or are protected under federal or state law or statute.

3.4.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to biological resources. Therefore, no additional impacts to biological resources would occur with implementation of the No Action Alternative.

3.4.3.2 Alternative 1

The study area for the analysis of effects to biological resources associated with Alternative 1 includes NAVSTA Everett and surrounding habitats that may be exposed to increased noise, military activity, and human presence.



Figure 3.4-1 California Sea Lion and Harbor Seal Haulouts at NAVSTA Everett

Terrestrial Vegetation

All upland construction and renovation activities would occur within paved, previously landscaped areas and no natural terrestrial habitats would be impacted. Therefore, implementation of Alternative 1 would not result in significant impacts to terrestrial vegetation.

Terrestrial Wildlife

Proposed construction and renovation activities have the potential to impact terrestrial wildlife. Upland construction would temporarily increase human activity levels, which could potentially result in visual disturbance. Use of construction equipment would temporarily increase ambient noise levels. Following completion of construction and homeporting FFGs, there would be minimal increases in activity and noise at NAVSTA Everett (refer to Section 3.3, *Noise*). Impacts to terrestrial wildlife focus on construction activities.

Mammals

Mammal species, such as smaller terrestrial mammals (rabbits and squirrels), are expected to be present within the vicinity of proposed project activities. Mammals typically respond to increased noise and human activities through either habitat avoidance or modifying calls/communication to adapt to increased noise environments (Duquette et al., 2021).

Due to the lack of natural terrestrial habitats at NAVSTA Everett and the current industrial nature of the installation, construction and associated increases in human activity would not be expected to have a measurable impact on terrestrial mammals that may occur in the study area.

Birds

Bald eagles that forage along the marine shoreline, as well as other bird species protected under the MBTA that occur in the region, are likely habituated to the industrial nature of NAVSTA Everett and adjacent Port of Everett (Caltrans, 2016; Duquette et al., 2021).

Installation of 16- or 24-inch diameter steel pipe support piles during proposed upland building foundation construction would produce the loudest airborne noise levels. This activity would intermittently increase the noise environment above ambient conditions for a few weeks to a few months. Sound does not easily propagate from air into water due to the large impedance differences between air and water (SAIC, 2011), and impacts of airborne noise to birds underwater is not considered. Further, recent studies have suggested that marine birds have heavily modified hearing compared to terrestrial birds in that birds that engage in underwater pursuit and deep diving may have higher hearing sensitivity underwater than in-air (Zeyl et al., 2022). Airborne noise levels from proposed construction activities are not expected to be injurious to birds because the source levels for airborne noise from impact pile driving (110 dBA at 15 meters) are well below those known to cause injury to birds in laboratory situations (Caltrans, 2016; Dooling and Popper, 2007). In addition, recent laboratory data show that birds are much more resistant to hearing loss, auditory damage, and decline in vocal quality from noise than mammals (Dooling et al., 2019). However, increased noise environments for the duration of construction activities may disrupt foraging location and selection, behavior, and acoustic communication with mates or to locate predators/prey (Caltrans, 2016). The increased noise environment is expected to be short-term, with the loudest activities (impact pile driving) lasting only for a few weeks to a few months.

Because bald eagles and other migratory birds would be expected to be habituated to the existing industrial environment of the study area, temporary foraging disruptions would not be expected to be substantial or result in take. Therefore, the Navy has determined that construction associated with Alternative 1 would not result in take of bald or golden eagles under the Bald and Golden Eagle Protection Act or seabirds, shorebirds, or other birds protected under the MBTA.

ESA-Listed Marbled Murrelet

Impacts on the threatened marbled murrelet that would result from elevated noise levels during pile driving were evaluated in the context of criteria established in past USFWS Biological Opinions and research publications that analyzed masking effects on foraging marbled murrelets resulting from elevated airborne noise during impact pile driving (SAIC, 2011, 2012; USFWS, 2013, 2023). No criteria have been established for determining impacts of elevated noise levels on other marine bird species, some of which forage like the marbled murrelet. However, extensive scientific research has studied hearing abilities of terrestrial birds as compared to amphibious hearing of other marine birds (Larsen et al., 2020; Mooney et al., 2019; Zeyl et al., 2022).

Airborne noise produced during impact pile driving may behaviorally affect foraging marbled murrelets, based on the findings of the Marbled Murrelet Hydroacoustic Science Panel regarding non-injurious thresholds for pile driving noise (SAIC, 2012). Marbled murrelets typically perform foraging dives in pairs and are highly vocal when they are above the surface (Strachan et al., 1995). On the water's surface, birds typically stay within 100 feet of their partners during foraging bouts. This behavior is thought to play a role in foraging efficiency, and therefore airborne noise that masks their vocalizations has the potential to affect foraging success (Carter and Sealy, 1990; Strachan et al., 1995). Unlike other noise effects criteria established for injury (underwater), the distance from a pile driving source within which communications would be masked is dependent upon ambient airborne noise levels and therefore is site-specific. Masking effects cease immediately when the masking noise stops.

Piles would be installed primarily using a vibratory pile driver with impact pile driving used intermittently for proofing. Based on noise produced by intermittent impact pile driving of steel pipe piles up to 24 inches in diameter, communication between foraging murrelets would be compromised by pile driving noise within 138 feet of the murrelets (USFWS, 2013, 2023). The nearest to the shoreline that impact pile driving would occur is 288 feet for the proposed Fleet Region Readiness Center building addition and even farther away from the shoreline for the proposed new Administrative Support Facility (1,500 feet). These distances far exceed the 138 feet threshold to create any masking impacts to marbled murrelets.

Noise levels from impact pile driving are expected to attenuate down to ambient conditions of 55 decibels (dBA) over the water at a distance of 5.25 miles from the pile location, as calculated using the USFWS acoustic effects calculator (USFWS, 2023). It is expected that under existing conditions, ambient noise conditions vary (likely exceeding 55 dBA) from high commercial shipping traffic to and from the adjacent Port of Everett as well as recreational boating activity. The industrial nature of the area near NAVSTA Everett is likely affecting the noise environment in which marbled murrelets forage. Although marbled murrelets have been regularly observed foraging in the offshore waters of Possession Sound near NAVSTA Everett in the fall and winter, and during the breeding season (Lance and Pearson 2021; Pearson and Lance, 2013, 2014, 2015, 2016, 2017), densities reported during non-breeding and breeding seasons are low (McIver et al., 2019; Pearson and Lance 2021).

Considering the occurrence of intermittent impact pile driving activity over a few weeks to a few months at a distance exceeding the range for masking impacts and year-round low densities of marbled murrelets, the likelihood of marbled murrelets being exposed to masking effects during construction activities under the Proposed Action is discountable.

During construction at NAVSTA Everett, the presence of construction equipment and personnel in the waterfront area could create visual disturbance for foraging and resting marbled murrelets. Marine birds have variable levels of tolerance for disturbance; birds that depart during construction activities may return to the area following a decrease in activity, such as evening or early morning hours before work commences and when activities are completed. In addition, NAVSTA Everett is an active military industrial area that currently experiences high rates of human presence. As previously discussed, year-round densities of marbled murrelets are expected to be low (Pearson and Lance, 2021; McIver et al., 2020). Adverse effects to marbled murrelets due to visual disturbance during construction and from increased personnel would be temporary, localized, and generally within baseline activity levels for operations at NAVSTA Everett. Therefore, behavioral effects to marbled murrelets from visual disturbance under the Alternative 1 would be discountable.

The Navy has determined that implementing Alternative 1 may affect, but is not likely to adversely affect, the marbled murrelet. Therefore, as required by section 7 of the ESA, the Navy has initiated informal consultation with the USFWS requesting concurrence with this determination for the marbled murrelet. ESA documentation will be included in the Final EA, Appendix D.

In summary, implementation of Alternative 1 would have no significant impacts on terrestrial wildlife.

Marine Species

California sea lions and harbor seals that are known to haul-out at NAVSTA Everett may be exposed to airborne noise associated with Alternative 1. Other potential impacts would be from an increase in the opening and closing of the port security barrier.

Impact pile driving would create the highest noise activity during construction. Airborne noise from impact pile driving could potentially result in disturbance to pinnipeds that are hauled out at NAVSTA Everett. The airborne noise threshold for behavioral harassment for sea lions is 100 dB root mean square (RMS) re 20 micropascals (μPa) (unweighted) and for harbor seals is 90 dB RMS re 20 μPa (unweighted) (Southall et al., 2007 In NMFS, 2023). Construction noise behaves as point-source and thus propagates in a spherical manner with a 6 dB decrease in sound pressure level over water (“hard-site” condition) per doubling of distance (WSDOT, 2023). A spherical spreading loss model, assuming average atmospheric conditions, was used to estimate the distance to the 100 dB and 90 dB RMS re 20 μPa (unweighted) airborne thresholds. Using a sound level of 110 dB (at 50 feet) for impact pile driving, the distances to behavioral harassment of California sea lions and harbor seals is estimated at 157 feet and 492 feet, respectively, from the pile.

The nearest upland pile driving location to California sea lion and harbor seal haulouts is estimated at 2,800 feet and 450 feet, respectively (Figure 3.4-2). Pile driving for the proposed Fleet Region Readiness Center building addition would be within 450 feet of a float used as a harbor seal haulout, located southeast of the site. Seals could be hauled-out within the zone above the 90 dB behavioral harassment threshold (492 feet from a pile). All other known harbor seal haulouts are beyond the 492-foot distance. No California sea lion haulouts are located within the 100 dB airborne noise threshold distance (157 feet), therefore, no in-air noise above the behavioral harassment threshold would occur at the California sea lion haulout.



Figure 3.4-2 Distance to Potential Behavioral Harassment at California Sea Lion and Harbor Seal Haulouts at NAVSTA Everett

Unlike NMFS criteria for take of marine mammals from underwater sound (NMFS, 2018), where an animal is considered taken when it is inside the behavioral harassment zone regardless of whether it shows a response, pinnipeds that are hauled-out within the behavioral harassment zone for airborne noise are not considered taken unless they exhibit a behavioral response to the sound such as moving at least two body lengths, a change of direction of over 90 degrees if already moving, or flushing into the water. Pinnipeds in the water that surface within the behavioral harassment zone for airborne noise are also not considered taken due to the brief duration of exposure. Therefore, the only potential for take of harbor seals would be at the haulout located within the 492-foot behavioral harassment zone (Figure 3.4-2).

To ensure the noise from impact pile driving does not result in take of harbor seals by behavioral harassment, an observer positioned on the pier would visually monitor the floats within the 492-foot behavioral harassment zone. The observer would notify the construction supervisor of any harbor seals hauled-out within the specified zone and impact pile driving would cease. Impact pile driving would not resume until the observer notifies the construction supervisor that the harbor seal is no longer hauled-out.

Alternative 1 may result in approximately two or three additional port security barrier openings per month compared to existing conditions. However, the additional openings would be expected to be partially offset by a reduction in openings for fuel barges, and openings would be expected to remain similar to the existing number of openings (refer to Section 2.1, *Proposed Action*). California sea lions that currently haul-out on the port security barrier are likely habituated to the periodic openings, and the minimal change in the frequency of openings would not result in behavioral impacts.

The Navy has determined that with implementation of monitoring, an incidental take authorization under the MMPA is not required for California sea lion or harbor seal. Implementation of Alternative 1 would not result in significant impacts to marine mammals.

In summary, there would be no significant impacts to terrestrial vegetation, terrestrial wildlife, or marine species; therefore, implementation of Alternative 1 would not result in significant impacts to biological resources.

3.4.3.3 Alternative 2

Under Alternative 2, similar types of facilities would be constructed, with the difference being construction of a building addition and renovations of an existing building for the Administrative Support Facility, as compared with construction of a new and larger, stand-alone facility under Alternative 1. Construction equipment, methods, and locations used for Alternative 2 would be similar to those used for Alternative 1. Under Alternative 2, impacts to terrestrial vegetation, terrestrial wildlife (including marbled murrelets, bald eagles, and migratory birds), and marine mammals from temporary increases in human activity and airborne noise during construction would be the same as described for Alternative 1 and would not be significant. Impact minimization and mitigation measures for Alternative 2 would be the same as described for Alternative 1.

Therefore, the Navy has determined that construction associated with Alternative 2 would not result in take of bald or golden eagles under the Bald and Golden Eagle Protection Act or seabirds, shorebirds, or other birds protected under the MBTA.

The Navy has determined that implementing Alternative 2 may affect, but is not likely to adversely affect, the marbled murrelet and has initiated informal consultation with the USFWS. ESA documentation will be included in the Final EA, Appendix D.

3.5 American Indian Traditional Resources

This analysis addresses potential impacts from the Proposed Action and alternatives on federally-recognized American Indian protected tribal resources. Protected tribal resources, as defined in DoD Instruction 4710.02, *DoD Interactions with Federally Recognized Tribes* (DoD, 2018), are “those natural resources and properties of traditional or customary religious or cultural importance, either on or off Indian lands, retained by or reserved by or for Indian tribes through treaties, statutes, judicial decisions, or EOs, including tribal trust resources.” These resources may include plants, animals, and locations associated with hunting, fishing, and gathering activities. For the purposes of this section, the term “traditional resources” will be used to encompass protected tribal resources.

3.5.1 Regulatory Setting

3.5.1.1 The Department of Defense and Navy Policies

Department of Defense (DoD) policy for interactions with federally-recognized tribes is detailed in DoD Instruction 4710.02, which requires organizational entities within the DoD (i.e., DoD Components) to consult with tribes whenever proposing an action that may have the potential to significantly affect protected tribal resources, tribal rights, or Indian lands. The Navy policy for consultation with federally recognized American Indian tribes is outlined in the Secretary of the Navy Instruction 11010.14B, *Department of the Navy Policy for Consultation with Federally Recognized Indian Tribes, Alaska Native Tribal Entities, and Native Hawaiian Organizations*. Commander, Navy Region Northwest Instruction 11010.14A, *Policy for Consultation with Federally-Recognized American Indian and Alaska Native Tribes* sets forth policy, procedures, and responsibilities for consultations with federally recognized American Indian and Alaska Native tribes in the Navy Region Northwest area of responsibility. Installations meet with tribes in their area, including tribes historically or culturally affiliated with the lands managed by the installation, regardless of whether they have treaty rights or not.

3.5.1.2 Laws, Executive Orders, and Memoranda Mandating Consultation

Other federal laws, EOs, and memoranda include policies requiring consultation with American Indian tribes. These include the following: National Historic Preservation Act; American Indian Religious Freedom Act; Native American Graves Protection and Repatriation Act; EO 13175, *Consultation and Coordination with Indian Tribal Governments*; the Presidential Memorandum dated November 5, 2009, emphasizing agency needs to comply with EO 13175; EO 13007, *Indian Sacred Sites*; and the presidential memorandum dated April 29, 1994, *Government-to-Government Relations with Native American Governments*.

In 2021, the Advisory Council on Historic Preservation, the White House Council on Environmental Quality, the U.S. Environmental Protection Agency, the U.S. Office of Personnel Management, and thirteen federal departments, including DoD, entered into a *Memorandum of Understanding (MOU) Regarding Interagency Coordination and Collaboration for the Protection of Tribal Treaty Rights and Reserved Rights*. In the MOU, the signatories commit to protect tribal treaty rights, reserved rights, and similar tribal rights to natural and cultural resources.

3.5.1.3 Government-to-Government Consultation

The federal government engages in government-to-government consultation with federally recognized American Indian tribes regarding traditional resources, tribal rights, and other concerns, in recognition of tribal sovereignty. In accordance with DoD and Navy policy, the Navy sent letters to tribal government representatives from the following tribes to invite them to initiate government-to-government consultation on the Proposed Action (Appendix F): the Stillaguamish Tribe of Indians, Suquamish Tribe, Swinomish Indian Tribal Community, and Tulalip Tribes of Washington. Correspondence with Tribal Governments will be included in Appendix F of the Final EA.

3.5.2 Affected Environment

Three federally-recognized tribes have reserved off-reservation fishing rights at their Usual and Accustomed (U&A) fishing grounds and stations located in the vicinity of NAVSTA Everett based on negotiated treaties with the U.S. government: Suquamish Tribe, Swinomish Indian Tribal Community, and Tulalip Tribes of Washington. The Navy and the Tulalip Tribes signed a Memorandum of Agreement in 1987 that provided for cooperation in fish and water quality protection and support of tribal resource enhancement efforts. The Suquamish Tribe and the Swinomish Indian Tribal Community have access to off-reservation U&A fishing grounds and stations at the mouth of the Snohomish River which flows to the west of NAVSTA Everett.

Harvesting traditional resources from U&A fishing grounds and stations can be for ceremonial and subsistence uses as well as for commercial enterprises. Ceremonial and subsistence procurement of shellfish, which have a central role in tribal gatherings (e.g., weddings, funerals, etc.) and daily nutrition, are utilized for tribal use only (Navy, 2015b). Shellfish harvested for commercial uses are sold directly to licensed shellfish buyers who either sell shellfish directly to the public or to other commercial entities (Navy, 2015b). Procurement of traditional resources is based on applicable geographical area (e.g., U&A fishing grounds and stations), fishing methods, season, and species limits per day or per size. Tribal fisheries are place oriented, limited to the adjudicated U&A fishing grounds and stations. This results in immobile fisheries that cannot move to a new location if the resources or habitats are depleted.

NAVSTA Everett is located in Tribal Fishing Area 26A-E. Consistent with their reserved off-reservation fishing rights, tribal fishers from the Suquamish Tribe and the Tulalip Tribes of Washington conduct crabbing and fin fishing within the vicinity of NAVSTA Everett. Harvesting some traditional resources near NAVSTA Everett, such as setting crab pots, is limited to certain seasons, which can change from year to year.

The presence of crab pots can impede the opening and closing of the port security barrier as well as the movement of Navy vessels entering and exiting the restricted area. NAVSTA Everett follows Standard Operating Procedures (SOPs) (NAVSTA Everett, 2019) for all vessel movements and port security barrier operations that may affect tribal fishers operating in U&A fishing areas. The SOPs include notification procedures in the event a Navy operation, such as opening or closing the port security barrier, coincides with tribal fishing activities (e.g., presence of tribal crab pots near the barrier during commercial crab season). These notifications provide the Tribal Fisheries Managers with as much time as possible, depending on port operations requirements and crab season notifications, to move or relocate tribal crab pots. If the tribal crab pots are not moved in time, then Navy personnel recover the pots and move them to a designated collection area for later retrieval. The Navy notifies the appropriate Tribal Fisheries Manager of the recovered pots based on an identification system defined in the SOPs.

3.5.3 Environmental Consequences

The evaluation of impacts on traditional resources considers whether the resource itself is affected or if there is a change in access to the resource. Consultation with potentially affected tribal governments of federally-recognized American Indian tribes is required whenever proposing an action that may have the potential to significantly affect protected tribal resources, tribal rights, or Indian lands, per DoD Instruction 4710.02.

3.5.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to traditional resources near NAVSTA Everett nor would there be a change in access to such resources. Therefore, no impacts to American Indian traditional resources would occur with implementation of the No Action Alternative.

3.5.3.2 Alternative 1

Under Alternative 1, there would be no impacts on marine waters and associated marine habitats because the project would not involve any in-water construction. As such, there would be no construction-related increases in water turbidity levels or increases in suspended marine sediments that could affect marine habitats, including those associated with traditional aquatic resources. As described further in Section 3.4, *Biological Resources*, the only marine species potentially affected by construction are seals and sea lions that regularly haul-out on docks and floating structures at NAVSTA Everett because they may be exposed to airborne noise. Construction would not affect localized crab and fish stocks.

Based on the addition of up to 12 FFGs and the reduction of existing homeported ships, the Proposed Action may result in approximately two or three additional port security barrier openings per month compared to existing conditions. However, the potential additional openings would be expected to be partially offset by a reduction in openings for fuel barges, and openings would be expected to remain similar to the existing number of openings (refer to Section 2.1, Proposed Action). NAVSTA Everett would continue to monitor the number of openings of the port security barrier and would follow the notification procedures set in the SOPs to minimize impacts on tribal access to U&A fishing grounds and stations near NAVSTA Everett.

The Navy would continue to carefully consider and evaluate the extent of any impacts to traditional resources or access to those resources based on further input from tribal governments.

3.5.3.3 Alternative 2

Under Alternative 2, impacts on traditional resources or access to those resources would be identical to Alternative 1. The Navy would continue to carefully consider and evaluate the extent of any impacts to traditional resources or access to those resources based on further input from tribal governments.

3.6 Socioeconomics

This section discusses population, employment characteristics, schools and childcare, housing, economic activity, and tax revenue.

3.6.1 Regulatory Setting

Socioeconomic data are presented at the U.S. Census Bureau (USCB) city, county, state, and national levels to characterize baseline socioeconomic conditions in the context of regional, state, and national trends. Data have been collected from previously published documents issued by federal, state, and local agencies and from state and national databases (e.g., the USCB; the U.S. Bureau of Economic Analysis [BEA]).

3.6.2 Affected Environment

NAVSTA Everett is located in the City of Everett in Snohomish County, Washington approximately 25 miles north of Seattle. Snohomish County represents the study area for this socioeconomic analysis with emphasis on the City of Everett.

3.6.2.1 Population

As of the most recent decennial census (2020), the population in the City of Everett was 110,629 and in Snohomish County was 827,957 (Table 3.6-1). Between the 2010 Census and the 2020 Census, the average annual growth rate in Everett was 0.7 percent. This is lower than in Snohomish County at 1.5 percent and the State of Washington at 1.4 percent, but similar to the nation at 0.7 percent. As of July 1, 2022, the population in Everett was estimated at 111,337 and in the county at 840,079 (USCB, 2023). The Office of Financial Management prepares population growth estimates for Snohomish County for planning under the Growth Management Act based on potential low, middle, and high growth rates. The most recent projections of the total resident population for Snohomish County in 2026 are 836,206 (low), 891,954 (middle), and 966,034 (high) (Washington Office of Financial Management, 2022). Current population projections for 2037 in the county range from 921,305 to 1,121,968 with a middle estimate of 1,008,593 people (Washington Office of Financial Management, 2022).

Table 3.6-1 Population in the Study Area

<i>Area</i>	<i>2010 Census</i>	<i>2020 Census</i>	<i>Average Annual Percent Growth (2010 Census-2020 Census)</i>	<i>2022 Estimate¹</i>	<i>Average Annual Percent Growth (2020 Census-2022 Estimate)</i>	<i>2026 Projected²</i>	<i>2037 Projected²</i>
City of Everett	103,019	110,629	0.7%	111,337	0.32%	NA	NA
Snohomish County	713,335	827,957	1.5%	840,079	0.73%	891,954	1,008,593
Washington	6,724,540	7,705,281	1.4%	7,785,786	0.52%	8,182,098	9,031,726
United States	308,745,538	331,449,281	0.7%	333,287,557	0.28%	NA	NA

Key: % = percent; NA = Not Available.

Notes: ¹ Population estimates as of July 1, 2022.

² Middle population projections from the Washington Office of Financial Management.

Sources: USCB, 2023; Washington Office of Financial Management, 2022.

As previously identified in Section 2.1, *Proposed* Action, there are a total of 3,100 personnel supporting the departing ships at NAVSTA Everett. Using the most recent demographic statistics from the DoD 2021 Demographics Profile of the Military Community, it is assumed that 3,100 personnel are accompanied by 3,300 dependents for a total of 6,400 personnel and dependents associated with existing ships (DoD, 2021a).

3.6.2.2 Employment Characteristics

Total full-time and part-time employment (number of jobs) in Snohomish County increased from 331,225 jobs in 2010 to 403,849 jobs in 2019 (BEA, 2022). Between 2019 and 2020, the workforce in the county, along with the nation, was affected by the COVID-19 pandemic-driven recession. The county experienced a reduction in approximately 14,600 jobs during this time. Between 2020 and 2021, overall employment began to rebound but not to 2019 employment levels. The largest increase in the number of jobs by industry included the manufacturing industry, followed by the retail industry, and the government and government-enterprises industry (BEA, 2022). The construction industry also experienced a decline in the number of jobs between 2019 and 2020, but in 2021 employment levels grew to 33,964, exceeding the 2019 level of 33,130. The construction industry continues to comprise approximately eight to nine percent of total employment each year between 2019 and 2021 (BEA, 2022).

Table 3.6-2 provides selected economic data from the most recent American Community Survey five-year estimates for the City of Everett, Snohomish County, and the State of Washington. Median household income and per capita income in Snohomish County were higher than the City of Everett and the State of Washington. The county also had a lower unemployment rate compared to the City of Everett and the state.

**Table 3.6-2 Selected Economic Characteristics in the Study Area
(2021 Estimates)¹**

<i>Area</i>	<i>Median Household Income</i>	<i>Per Capita Income</i>	<i>Annual Average Unemployment Rate</i>
Everett City	\$71,357	\$35,628	5.0%
Snohomish County	\$95,618	\$44,338	4.4%
Washington	\$82,400	\$43,817	5.1%

Key: % = percent.

Note: ¹ American Community Five-Year Estimates, 2017–2021

Source: USCB, 2021a.

3.6.2.3 Schools and Childcare

There are 15 school districts within Snohomish County with a total enrollment of 132,567 students during the 2022–2023 school year (Washington Office of Superintendent of Public Instruction, 2023). The general education average class size of full-time equivalent students per teacher in the State of Washington defined by the Washington State Legislature varies by grade. The facility standard for grades kindergarten to 3rd grade is 17.0 students per classroom; 4th to 6th grade is 27.0 students per classroom; 7th to 8th grade is 28.53 students per classroom; and 9th to 12th grade is 28.74 students per classroom (Revised Code of Washington 28A.150.260). Table 3.6-3 shows total enrollment, number of classroom teachers, average class size, and student-to-teacher ratio for each school district in Snohomish County. There are also 14 private schools throughout the county (Snohomish County, 2022a).

Table 3.6-3 Public School Districts in Snohomish County

<i>District</i>	<i>Total Enrollment (2022–2023 School Year)</i>	<i>Number of Classroom Teachers (2021–2022)</i>	<i>Average Class Size (2021–2022)</i>	<i>Student-to- Teacher Ratio (2021–2022)</i>
Arlington	5,611	340	16.0	16.0 to 1
Darrington	449	33	11.0	12.6 to 1
Edmonds	20,371	1,417	19.0	14.2 to 1
Everett	20,932	1,259	17.0	15.6 to 1
Granite Falls	2,301	142	13.0	15.1 to 1
Index Elementary School District 63	21	4	3.0	6.0 to 1
Lake Stevens	9,726	585	20.0	16.3 to 1
Lakewood	2,648	157	16.0	16.8 to 1
Marysville	10,187	673	17.0	14.7 to 1
Monroe	5,710	342	18.0	16.5 to 1
Mukilteo	15,150	1,059	16.0	14.1 to 1
Northshore	23,105	1,432	17.0	15.9 to 1
Snohomish	9,456	556	18.0	16.8 to 1
Stanwood-Camano	4,812	296	17.0	15.7 to 1
Sultan	2,088	122	19.0	15.9 to 1

Source: Washington Office of Superintendent of Public Instruction, 2023.

Effects from COVID-19 restrictions have lingered and exacerbated the high cost and lack of availability of childcare in the vicinity of NAVSTA Everett. Childcare Aware of Washington, a childcare advocacy and support organization, reported that since the pandemic, the number of childcare providers in Snohomish County decreased by 150 providers and around 1,500 slots (Childcare Aware of Washington, 2022). The fee for childcare in the community varies and depends on age. Childcare fees for community-based programs range from a median of \$1,620 per month to upwards of \$2,400 per month for licensed center-based infant care in the county (Robins, 2022). Specific details on the maximum group size and ratio of center staff members to children, including children related to staff or the licensee, are outlined in WAC 110-300-0356.

There is one child development center located on NAVSTA Everett. The child development center provides care for children ages six weeks to five years of age. The child development center is currently at maximum capacity and has a waitlist (Steele, 2022). There are currently no specific plans to expand capacity at NAVSTA Everett (Steele, 2022). The cost of Navy childcare on base ranges between \$252 to \$940 per child per month depending on total family income (Steele, 2022).

3.6.2.4 Housing

As shown in Table 3.6-4, in 2021 there were an estimated 2,654 vacant housing units in the City of Everett and an estimated 15,634 vacant housing units in Snohomish County (USCB, 2021b). The median housing value in the City of Everett was lower than the county and the state. The overall homeowner vacancy rate (i.e., the proportion of the homeowner inventory which is vacant for sale) was 0.3 percent in the City of Everett and 0.6 percent in Snohomish County. The rental vacancy rate (i.e., the proportion of the rental inventory vacant for rent) in the city was 5.7 percent and in the county was 4.3 percent. Both the city and the county had lower homeowner vacancy rates but higher rental vacancy rates than the state (USCB, 2020a).

Table 3.6-4 Housing Characteristics in the Study Area (2021 Estimates)¹

<i>Area</i>	<i>Total Housing Units</i>	<i>Vacant Housing Units</i>	<i>Homeowner Vacancy Rate</i>	<i>Rental Vacancy Rate</i>	<i>Median Value of Owner-Occupied Housing Unit</i>
Everett City	46,310	2,654	0.3	5.7	394,900
Snohomish County	318,604	15,634	0.6	4.3	483,000
Washington	3,170,695	238,854	0.8	3.9	397,600

Note: ¹ American Community Survey Five-Year estimates for 2017–2021.

Source: USCB, 2021b.

3.6.2.5 Economic Activity

NAVSTA Everett is a major economic contributor to Snohomish County. The Economic Alliance Snohomish County Military Affairs Committee reported that NAVSTA Everett has an annual total economic impact of \$340 million to the regional economy (Economic Alliance Snohomish County, 2023). The total annual payroll at NAVSTA Everett has increased substantially since fiscal year 2017 with the arrival of three destroyers, including the USS SASON, USS RALPH JOHNSON, and the USS KIDD (NAVSTA Everett, 2018). In fiscal year 2021, Snohomish County was ranked fourth in top defense contract spending locations in the State of Washington with \$297.3 million (DoD, 2021b).

The NAVSTA Everett main waterfront site is directly adjacent to the Port of Everett (NAVSTA Everett, 2018). The Port of Everett is also an important contributor to the local and regional economies. The Port operates three lines of business including Seaport, Marina, and Real Estate. The total economic value of the Port to Snohomish County and the State of Washington is estimated at \$7.9 billion (Martin Associates, 2020). This does not include the \$173 million for capital projects implemented from 2014 to 2019, which generated additional jobs, personal income, and state and local taxes, and supported nearly 1,300 temporary construction jobs (Martin Associates, 2020). In 2022, the Port of Everett adopted a \$67 million 2023 operating and capital budget with plans to invest more than twice that amount over the next 10 years (Port of Everett, 2022b).

3.6.2.6 Tax Revenue

Revenue in the State of Washington relies on sales, business, occupational, and property taxes. The State of Washington does not have a personal or corporate net income tax. Property taxes provide funding for operating costs of schools, city, county, and taxing districts such as hospitals, fire, and sewer (Snohomish County, 2023). Washington has one of the highest average property tax rates in the country with a median property tax of \$2,631 per year (based on a median home value of \$287,000). Counties in the state collect an average of 0.92 percent of a property’s assessed fair market value as property tax each year (Tax-Rates.org, 2024a). The median property tax in Snohomish County is \$3,009 per year (based on a median home value of \$338,600). On average, the county collects 0.89 percent of a property’s assessed fair market value as property tax which amounts to approximately 3.72 percent of a resident’s yearly income (Tax-Rates.Org, 2024b). In 2022, total property taxes in Snohomish County totaled over \$1.5 billion (Snohomish County, 2022b).

3.6.3 Environmental Consequences

Analysis of impacts to socioeconomics is focused on the effects of the alternatives on population, employee characteristics, schools and childcare, housing, economic activity, and tax revenue.

3.6.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur and there would be no change to the socioeconomics of the local area or region. Therefore, no change would occur to existing conditions and no significant impacts would occur under the No Action Alternative.

3.6.3.2 Alternative 1

Population

Under Alternative 1, total personnel at NAVSTA Everett would decrease by approximately 200. Table 3.6-5 details a breakdown of the population change associated with the Proposed Action based on recent military demographics (DoD, 2021a). As shown in Table 3.6-5, there could be an estimated 216 dependents associated with the 200 personnel leaving the installation for a total out-migration of 416 people from Snohomish County. This total population change would represent less than 0.05 percent of the middle-projected population of 998,296 people in Snohomish County during the year 2037. The potential impacts to population would not be significant because the change in population associated with this alternative would occur over 10 years and, all else being equal, would remain within the Washington Office of Financial Management range of population projections (as described in this section under *Population*). This decrease, therefore, would be consistent with state and local plans.

Table 3.6-5 NAVSTA Everett Population Change Under the Proposed Action

<i>Description</i>	<i>Incoming FFG Personnel and Dependents</i>	<i>Departing Personnel and Dependents</i>	<i>Net Change (Fiscal Year 2037 Compared to Existing)</i>
Personnel	2,900	3,100	(200)
Percent of Active-Duty (Navy) with spouses and/or dependents	47.1%	47.1%	47.1%
Total Accompanied Military Personnel ¹	1,366	1,460	(94)
Total Dependents ²	3,142	3,358	(216)
Spouses ³	1,210	1,293	(83)
Children ³	1,923	2,055	(132)
Adult Dependents ³	9	10	(<1)
Total Personnel Plus Dependents	6,042	6,458	(416)

Key: % = percent; < = less than; FFG = guided-missile frigate.

Notes: ¹ Based on 47.1 percent of Active-Duty (Navy) with spouses and/or dependents.

² Based on average of 2.3 dependents per Active-Duty member (DoD, 2021a).

³ Based on Table 5.04, *Number and Percentage of Active-Duty Family Members by Relationship to Member and Service Branch* which identifies 38.5 percent spouses of Navy service members, 61.2 percent for children of Navy service members, and 0.3 percent for adult dependents of Navy service members (DoD, 2021a).

Source: DoD, 2021a.

Employment Characteristics

New construction and modifications to facilities and infrastructure would result in direct, indirect, and induced economic impacts in terms of employment and income in the study area. Cost details regarding the facilities and infrastructure were not available during the preparation of this analysis. However, it would be anticipated that construction of facilities and infrastructure would result in near-term economic benefits to the study area driven by an increase in construction spending. Construction-

related impacts would last for the duration of the activities which are planned between approximately fiscal year 2026 and fiscal year 2028. Because construction-related employment would be temporary, there would be no permanent in-migration of population related to construction activities anticipated as the existing local construction workforce would be expected to meet the labor demand.

A net future decrease of 200 direct jobs associated with the net change in personnel would represent less than 0.05 percent of the 419,759 people employed in Snohomish County. The net future reduction of 200 direct workers would be accompanied by a loss in secondary jobs which would represent an adverse, but not significant, impact.

Schools and Childcare

Based on the population change under the Proposed Action, there could be 1,923 children incoming related to FFG personnel and 2,055 departing for a net decrease of approximately 132 children. Furthermore, an estimated 49.6 percent of dependent children are of school age (6 to 18 years old). Using these assumptions, the net decrease of 132 children could result in an overall out-migration of an estimated 65 school-aged children living in the study area and enrolled in public schools by 2037. This would represent less than 0.05 percent of the current total enrollment of 132,567 students throughout the school districts in Snohomish County. No significant impacts to schools would be anticipated under this alternative because the incoming students associated with FFG personnel would be offset by the departing students associated with existing ship personnel which would place less demand on school resources. The changes would be staggered over a 10-year period beginning in approximately fiscal year 2026. School age children would be of varying ages and would likely be attending or leaving a school within one of the 15 school districts throughout the study area based on where the family chooses to live or find residency.

Current demand for childcare services exceeds capacity on NAVSTA Everett. Any dependents associated with the Proposed Action that would require childcare services at NAVSTA Everett may be put on a wait list and may be required to seek childcare services in the community and possibly outside their desired location or price range. The number of childcare providers in Snohomish County has decreased as a result of the COVID-19 pandemic containment efforts, but it would be expected that some would eventually re-open or new services would become available by the year 2037. Based on the net decrease in the number of children expected to require childcare services and the number of years personnel would be arriving (i.e., over a 10-year period), it would be expected that an overall reduction in the enrollment demand for childcare resources due to an overall decrease in personnel at NAVSTA Everett would be a beneficial effect. Therefore, impacts to childcare services from Alternative 1 would not be significant.

Housing

As noted under *Employment Characteristics*, construction-related employment would be temporary, and there would be no permanent in-migration of population related to construction activities anticipated because the construction industry in Snohomish County and the surrounding areas would be sufficient to supply the necessary workforce for these activities. However, any temporary in-migration of workers during construction activities planned for approximately fiscal year 2026 to fiscal year 2028 could result in additional demands on housing in the region.

Overall impacts to housing would not be significant because the change in population associated with this alternative would occur over 10 years and would result in an overall net reduction in the Snohomish County population. The majority of accompanied personnel live in the local community because of the

limited supply of Public Private Venture housing at NAVSTA Everett. Accordingly, the overall net reduction in personnel would likely result in a modest reduction in demand for housing in the community.

Economic Activity

NAVSTA Everett is a major economic contributor and a top employer in Snohomish County. This would continue under Alternative 1. A net future decrease of 200 personnel would represent less than 0.05 percent of the 419,759 people employed in Snohomish County. The net future reduction of 200 direct workers would be accompanied by a loss in secondary jobs which would represent an adverse, but not significant, impact.

Tax Revenue

Under this alternative, and the assumption that the net change of 200 personnel living in the community would migrate out of Snohomish County, there could be a minor loss in tax revenue. However, there are many factors that affect tax revenues, and a net change of 200 residents out of a middle projected population of over one million people in the county would not be expected to have a significant impact on tax revenues for the county.

Summary

Based on the above analysis, implementation of Alternative 1 would not result in significant impacts to population, employment characteristics, schools and childcare, housing, economic activity, or tax revenue in Snohomish County. Incoming personnel and dependents would be staggered over a 10-year period and would be offset by the decrease in the number of personnel and dependents associated with the departure of the existing ships. The phased-in approach of homeporting ships and associated personnel would enable the Navy to comply with current policies and assess on- and off-installation housing and childcare demand and availability to determine whether additional Navy-controlled housing or childcare would be required.

3.6.3.3 Alternative 2

Alternative 2 would involve similar construction activities on NAVSTA Everett minus any new stand-alone facilities and would result in the same net change in military personnel and dependents. Potential impacts to socioeconomic resources under Alternative 2 would be the same as those described under Alternative 1. Therefore, no significant impacts to socioeconomics would occur with implementation of Alternative 2.

3.7 Environmental Justice

USEPA defines environmental justice as the just treatment and meaningful involvement of all people regardless of income, race, color, national origin, tribal affiliation, or disability with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

3.7.1 Regulatory Setting

Consistent with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, the Navy's policy is to identify and address any disproportionately adverse human health or environmental effects of its actions on minority and low-income populations.

EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, supplements EO 12898 to address environmental justice. EO 14096 establishes a policy to pursue a whole-of-government approach to environmental justice. With respect to environmental reviews under NEPA, EO 14096 directs federal agencies to: (1) analyze direct, indirect, and cumulative effects of federal actions on communities with environmental justice concerns; (2) consider best available science and information on any disparate health effects (including risks) arising from exposure to pollution and other environmental hazards, such as information related to the race, national origin, socioeconomic status, age, disability, and sex of the individuals exposed; and (3) provide opportunities for early and meaningful involvement in the environmental review process by communities with environmental justice concerns potentially affected by a proposed action.

The Navy followed the steps outlined in USEPA's 2016 report, *Promising Practices for EJ Methodologies in NEPA Reviews* (USEPA, 2016), to determine disproportionately adverse impacts to minority and low-income populations. These steps are summarized as follows:

- **Define the Affected Environment.** The environment of the area(s) to be affected or created by the alternatives under consideration was described.
- **Identify the presence or absence of minority and low-income populations.** The presence of minority and low-income populations under baseline conditions was determined if the percentage residing within the selected geographic units of analysis (block groups) was equal to or greater than the percentage of individuals residing within the reference community (e.g., city, county, state). The low-income analysis used the Census Bureau data showing the poverty status of individuals in the past 12 months. The Census Bureau uses income thresholds that vary by family size and composition to determine who is in poverty.
- **Perform impact analysis.** The potential direct, indirect, and cumulative impacts on minority populations and low-income populations were compared to the non-minority populations and non-low-income populations in the affected environment. This included both human health and environmental impacts from the agency's programs, policies, or activities.
- **Determine if there would be disproportionately adverse effects on minority and low-income populations.** Impacts to resource areas from the Proposed Action were analyzed to determine whether there would be any disproportionately high and adverse effects to minority and low-income populations when compared to non-minority and non-low-income populations in the affected environment.

3.7.2 Affected Environment

This section identifies concentrations of minority and low-income populations (environmental justice communities) that have the potential to be disproportionately impacted due to their proximity to project activities and includes those populations located near the transportation network serving NAVSTA Everett. These communities would potentially be affected by construction and operations at NAVSTA Everett as well as changes to the population serving at NAVSTA Everett. Impacts may include construction noise, changes in traffic, air emissions, and traffic noise. Therefore, the affected environment study area selected for analysis comprises the census tract block groups that are within the local transportation network, as determined by a recent traffic study (NAVFAC NW, 2021c). Census tract block groups are the smallest geographical units for which the USCB publishes data.

The reference community selected to determine the presence of minority or low-income populations (environmental justice populations) within the larger community is the City of Everett. The City of Everett was chosen because it represents the smallest geographic unit that wholly incorporates the affected population while encompassing a much larger population that is representative of the entire area’s socioeconomic and demographic status.

Census tract block groups that have a minority population or have individuals with low income (in this case, individuals with incomes below the poverty level) at a higher percentage than the reference community (City of Everett) are shown in Table 3.7-1 and Figure 3.7-1. These census tract block groups are environmental justice communities, as defined by CEQ (CEQ, 1997a). These environmental justice communities were compared to non-environmental justice community census block groups within the study area for impact analysis purposes.

Table 3.7-1 Environmental Justice Communities

Area	Within the Entire City/Metropolitan Statistical Area/State/Census Tract Block Group					
	Total Population	Minority Population		Low-Income Population		
		Number	Percent	Population for Whom Poverty is Calculated ¹	Number	Percentage of Individuals Whose Income in the Past 12 Months is Below the Poverty Level
Reference Community						
City of Everett	110,629	45,838	41.4%	106,991	13,025	12.2%
Census Tract Block Groups Within the Affected Environment						
Block Group 1, Census Tract 401	1,216	166	13.7%	1,024	23	2.3%
Block Group 2, Census Tract 401*	1,840	474	25.8%	1,541	141	9.2%
Block Group 3, Census Tract 401	1,239	138	11.1%	1,460	37	2.5%
Block Group 4, Census Tract 401 ^{2*}	792	475	60.0% ³	0	0	0%
Block Group 1, Census Tract 402*	1,109	596	53.7% ³	915	277	30.3% ³
Block Group 2, Census Tract 402*	1,230	385	31.3%	1,964	548	27.9% ³
Block Group 3, Census Tract 402	1,549	377	24.3%	1,878	140	7.5%
Block Group 4, Census Tract 402	1,377	283	20.6%	1,066	156	14.6% ³
Block Group 5, Census Tract 402	793	176	22.2%	601	305	50.8% ³
Block Group 1, Census Tract 403	1,344	196	14.6%	1,183	121	10.2%
Block Group 2, Census Tract 403	1,682	169	10.0%	1,819	275	15.1% ³
Block Group 1, Census Tract 404	1,202	214	17.8%	1,434	292	20.4% ³
Block Group 2, Census Tract 404	1,413	378	26.8%	1,221	243	19.9% ³

Area	Within the Entire City/Metropolitan Statistical Area/State/Census Tract Block Group					
	Total Population	Minority Population		Low-Income Population		
		Number	Percent	Population for Whom Poverty is Calculated ¹	Number	Percentage of Individuals Whose Income in the Past 12 Months is Below the Poverty Level
Block Group 3, Census Tract 404 ^{2*}	2,203	411	18.7%	1,397	76	5.4%
Block Group 1, Census Tract 405	1,258	201	16.0%	1,205	114	9.5%
Block Group 2, Census Tract 405	1,066	209	19.6%	1,132	96	8.5%
Block Group 1, Census Tract 407*	1,309	376	28.7%	254	183	72.1% ³
Block Group 2, Census Tract 407*	1,037	275	26.5%	1,020	411	40.3% ³
Block Group 3, Census Tract 407*	1,132	409	36.1%	1,165	176	15.1% ³
Block Group 4, Census Tract 407*	1,493	434	29.1%	1,233	360	29.2% ³
Block Group 1, Census Tract 408*	1,031	195	18.9%	930	95	10.2%
Block Group 2, Census Tract 408*	705	149	21.1%	631	107	17.0% ³
Block Group 3, Census Tract 408 ^{2*}	1,401	178	12.7%	1,099	107	9.7%

Key: % = percent.

Notes: ¹ "Population for Whom Poverty is Calculated" is from the U.S. Census Bureau American Community Survey five-year estimate and does not take into consideration institutionalized persons, persons in military group quarters and in college dormitories, and unrelated individuals under 15 years old, and therefore, may differ from the total population.

² These census block groups contain portions of Naval Station Everett. Census Tract 401 Block Group 4 does not contain any Residential Land Use and is zoned Industrial and Commercial Mixed-Use by the City of Everett.

³ Red text = Environmental justice community (i.e., census tract block groups that have a higher percentage of minority population or low-income population compared to the City of Everett).

*Contains 2021 Traffic Impact Assessment Intersection.

Sources: City of Everett, 2023; USCB, 2020b, 2020c.

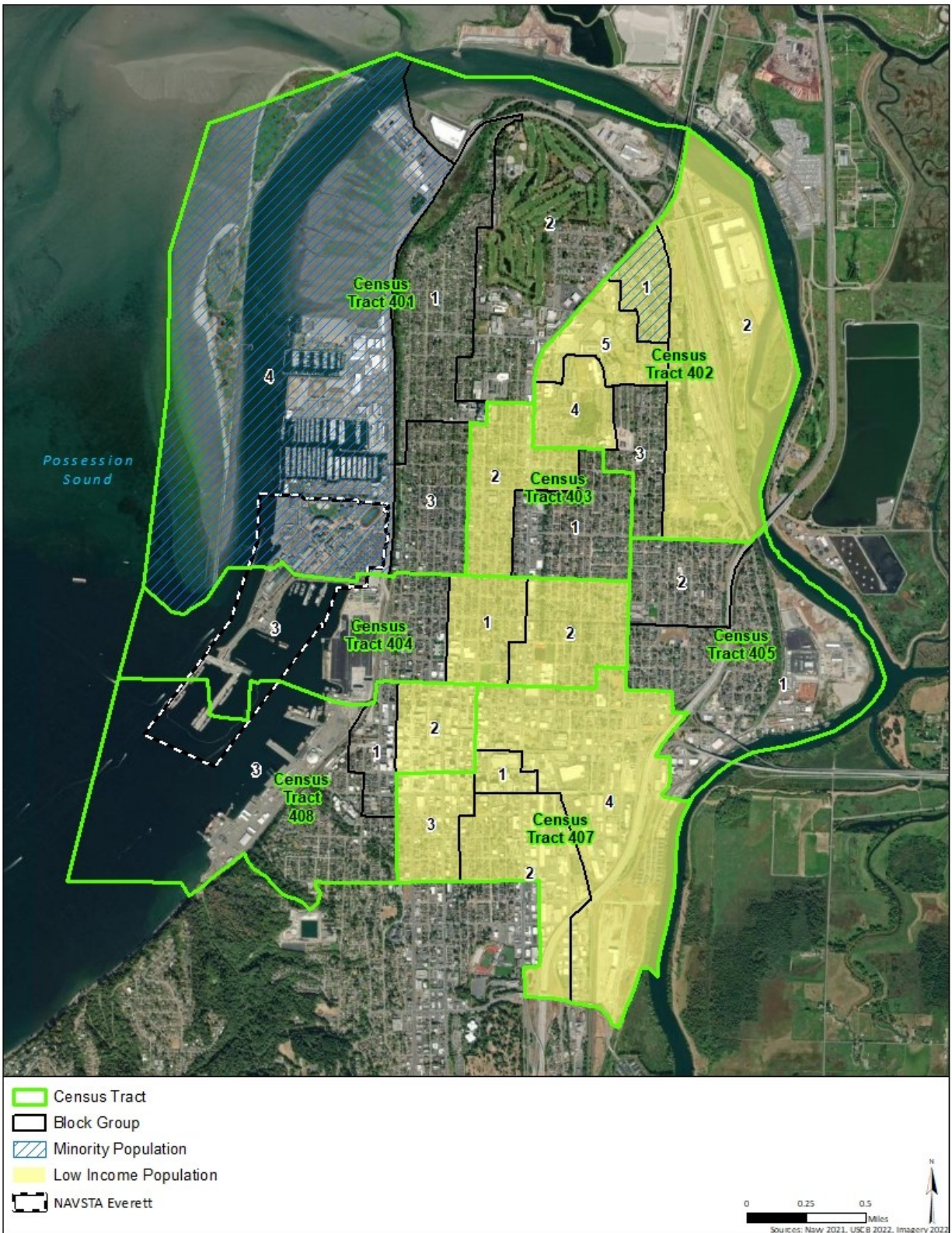


Figure 3.7-1 Environmental Justice Communities

Two block groups show the presence of a higher percentage minority population when compared to the City of Everett. Twelve block groups indicate the presence of a low-income population that is by percentage higher than the City of Everett (Table 3.7-1), one of which also shows the presence of a higher percentage minority population (Block Group 1 of Census Tract 402). Note that Census Tract 401 Block Group 4, Census Tract 404 Block Group 3, and Census Tract 308 block Group 3 encompass portions of NAVSTA Everett. In particular, only Census Tract 401 Block Group 4, which has the highest percentage minority population of all the block groups, contains an area of NAVSTA Everett where Sailors would be quartered. Because the land use in this block group is not residential and is categorized as industrial, NAVSTA Everett Sailors likely comprise the majority of the overall population in this block group.

In summary, of the 23 census block groups within the existing affected area, there are 13 environmental justice community census block groups (total population: 15,274) and 10 non-environmental justice community census block groups (total population: 14,147).

USEPA's *EJScreen* tool was used to determine if there would be the potential for intensifying environmental justice burdens (USEPA, 2023c). The tool identifies the extent to which selected areas are currently impacted by various environmental pollutants and contaminants or the extent to which selected areas are at risk of environmental impacts or have demographic populations that could be at greater risk of impacts relative to other areas statewide or nationally. *EJScreen* uses 13 environmental indicators to provide a screening-level view of environmental factors that census block groups may be exposed to and compares them to the state population as a whole. Table 3.7-2 details the identified environmental justice and non-environmental justice census block groups in the study area and the *EJScreen* environmental indicators where exposure is greater than 80 percent when compared to the rest of the State of Washington (USEPA identifies the 80th percentile as a starting point for analysis). Note that all 13 (100 percent) of the identified environmental justice community census block groups have at least one environmental indicator that exceeds the 80th percentile compared to three (30 percent) of the non-environmental justice census block groups (average of 5.2 environmental indicators exceeding the 80th percentile for environmental justice census block groups versus 0.3 for non-environmental justice per census block groups). This suggests that the environmental justice census block groups could experience an amplification of environmental or health effects when compared to non-environmental justice census block groups in the study area. Many of the indicators deal with exposure to air pollutants and proximity to air pollutant sources. However, it is important to remember that overall air quality in the area is good, as detailed in Section 3.1, *Air Quality*, and that *EJScreen* results are potential for exposure as compared to the rest of the state.

Table 3.7-2 EJScren Environmental Indicators Exceeding the 80th Percentile for Washington State

Census Tract Block Group	Particulate Matter 2.5	Diesel Particulate Matter	Air Toxics Cancer Risk	Air Toxics Respiratory Hazard Index	Air Toxics Releases to Air	Traffic Proximity	Lead Paint	Risk Management Plan Facility Proximity	Hazardous Waste Proximity	Underground Storage Tanks	Wastewater Discharge
	Air Quality Pollutant Exposure Indicators						Lead Exposure Indicator	Mixed Waste/Air/Water Pollutant Exposure Indicators			Water Pollutant Exposure Indicator
Block Group 2, Census Tract 401							83				
Block Group 4, Census Tract 401^{1*}	84								80		
Block Group 1, Census Tract 402^{1*}	91	94	87			91	89			88	83
Block Group 2, Census Tract 402^{1*}	91	93	86		93	90	81			89	84
Block Group 3, Census Tract 402							81				
Block Group 4, Census Tract 402¹	87	89	81							87	
Block Group 5, Census Tract 402¹	95	97	92	83	82	82	94		85	95	87
Block Group 1, Census Tract 403							82				
Block Group 2, Census Tract 403¹							81				
Block Group 1, Census Tract 404¹	89	86	83			80	94			85	
Block Group 2, Census Tract 404¹	82						87				
Block Group 1, Census Tract 407^{1*}	97	98	95	86	87	99	96	88	85	99	87

Census Tract Block Group	Particulate Matter 2.5	Diesel Particulate Matter	Air Toxics Cancer Risk	Air Toxics Respiratory Hazard Index	Air Toxics Releases to Air	Traffic Proximity	Lead Paint	Risk Management Plan Facility Proximity	Hazardous Waste Proximity	Underground Storage Tanks	Wastewater Discharge
	Air Quality Pollutant Exposure Indicators						Lead Exposure Indicator	Mixed Waste/Air/Water Pollutant Exposure Indicators			Water Pollutant Exposure Indicator
Block Group 2, Census Tract 407 ^{1*}	90	88	83			91	89			92	
Block Group 3, Census Tract 407 ^{1*}	83					83				82	
Block Group 4, Census Tract 407 ^{1*}	84	82				86	88			86	
Block Group 2, Census Tract 408 ^{1*}										81	

Notes: ¹ **Bold/Shaded** = Environmental Justice community.
 Only Environmental Protection Agency *EIScreen* environmental indicators exceeding the 80th percentile are included.
 *Contains 2021 Traffic Impact Analysis Intersection.
 Source: USEPA, 2023c.

3.7.3 Environmental Consequences

This analysis focuses on the potential for a disproportionate and adverse exposure of specific off-base population groups to the projected adverse consequences discussed in the previous sections of this chapter.

3.7.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. The general population in the study area would increase per annual growth projections as detailed in Section 3.6, *Socioeconomics*. This would result in a corresponding increase in area traffic and associated air emissions. Traffic modeling performed for the No Action Alternative indicated that the level of service at the studied intersections would essentially remain the same through 2027 (NAVFAC NW, 2021c). However, there would still be an increase in vehicles, and those that are powered by fossil fuels would emit air pollutants, contributing to localized air pollution. As detailed in Table 3.7-2, environmental justice census block groups in the study area are disproportionately exposed to primarily air quality-related environmental indicators when compared to non-environmental justice census block groups. It is reasonable to assume that any increase in population and resulting increases in traffic might add to these disparities. However, there would be increases in population and traffic in the non-environmental justice census block groups too, increasing exposures for both populations. Overall, the area has good air quality due, in part, to recently enacted state programs to reduce emissions from private vehicles (e.g., the Clean Vehicles Program, which requires 100 percent zero emissions for new car sales by 2035 as well as cleaner heavy-duty vehicles). This could potentially reduce vehicle emissions in the future. Under the No Action Alternative, there would be no disproportionately high and adverse human health effects to environmental justice communities.

3.7.3.2 Alternative 1

Table 3.7-3 summarizes findings from each resource area and makes a determination if the Proposed Action would have disproportionately high and adverse human health or environmental effects on environmental justice communities identified in Table 3.7-2 and if there could be amplification of the effects because of exposure to other environmental burdens. The table describes construction- and operations-related impacts. Because impacts to the following resources would be confined to the installation or otherwise do not have the potential to adversely affect identified environmental justice communities, these resource areas were not analyzed: water resources, biological resources, and American Indian Traditional Resources.

Table 3.7-3 Alternative 1 Impacts on Environmental Justice Communities

<i>Resource</i>	<i>Impact</i>
Construction-Related Impacts	
Air Quality	<p>Air quality impacts associated with proposed construction would occur from emissions generated by fossil fuel-powered equipment, trucks, and worker commuter vehicles and fugitive dust emissions from the operation of equipment on exposed soil. Increases in emissions from construction traffic would occur in environmental justice communities. However, non-environmental justice communities are directly adjacent to NAVSTA Everett and would be exposed to construction traffic emissions as well as greater concentrations of construction emissions, including fugitive dust, than the majority of environmental justice communities. These temporary increases in emissions would not affect ambient air quality or the area's attainment status and would only occur intermittently during the 2.5-year construction period. Therefore, there would not be disproportionately high and adverse human health effects to environmental justice communities under Alternative 1. Residential census block groups adjacent to areas proposed for construction do not exceed the 80th percentile for any air-related <i>EJScreen</i> environmental indicators except for construction worker commuter vehicles that would transit through census block groups. With current air quality in attainment with NAAQS and the temporary nature of construction, vehicle traffic associated with construction would not likely result in amplification of environmental or health effects.</p>
Construction Noise	<p>Construction activities would occur in Census Tract 401 Block Group 4, which is denoted as a minority environmental justice community. However, as the majority of NAVSTA Everett is located in this block group and because the block group does not have a population for which poverty can be calculated, it can be surmised that the population in this block group is Navy and resides on NAVSTA Everett. Construction noise impacts would be limited to annoyance and activity interference (e.g., speech interference) for people that are located near the construction sites while construction is under way. Pile driving would occur only during the foundation phase of the proposed construction projects. It would last for only a small portion of the 2.5-year construction period and would not be expected to affect environmental justice communities outside of NAVSTA Everett because they are over 2,500 feet away from the proposed construction sites. People residing and working along NAVSTA Everett access routes may notice temporary increases in truck traffic noise levels during certain phases of construction. Construction truck routes would be main roads, which are currently used by a wide variety of vehicles including heavy trucks. It is notable that 18 intersections included in the 2021 Traffic Impact Assessment are located within or directly adjacent to environmental justice census block groups compared to seven non-environmental justice communities census block groups. However, because of the relatively few construction vehicles compared to the overall volume of traffic, construction traffic noise would not likely be discernable from regular traffic vehicle noise. Therefore, there would not be disproportionately high and adverse and human health effects to environmental justice communities from construction noise under Alternative 1. USEPA's <i>EJScreen</i> tool identified traffic proximity ranked at or above the 80th percentile for multiple block groups, which could also contribute to noise impacts. Although construction noise associated with traffic under Alternative 1 and current traffic noise could pose cumulative burdens, with the relatively few construction vehicles compared to the overall volume of traffic, construction traffic noise would not likely be discernable from regular traffic vehicle noise.</p>
Socioeconomics	<p>Socioeconomic impacts would be largely beneficial to the local economy and local communities from increased employment opportunities and local construction spending. Overall, socioeconomic impacts to environmental justice communities would be slightly beneficial. Therefore, there would not be disproportionately high and adverse and human health effects to environmental justice communities under Alternative 1.</p>

<i>Resource</i>	<i>Impact</i>
<i>Operations-Related Impacts</i>	
Air Quality	Because there would be a net decrease in personnel commuting to NAVSTA Everett by fiscal year 2037 under Alternative 1, there would be a corresponding negligible decrease in air emissions. Air emissions under Alternative 1 operations would be similar to the No Action Alternative. Therefore, there would not be disproportionately high and adverse and human health effects to environmental justice communities from air emissions.
Operational Noise	Noise generated by the FFGs and ship support activities would be similar to what is currently generated and would be localized along the waterfront in areas that have been exposed to industrial noise for decades and which are not noise sensitive. The nearest census block group to NAVSTA Everett’s piers is not an environmental justice community (Census Tract 408, Block Group 3). In addition, road traffic and resulting traffic generated noise on and near NAVSTA Everett would not increase as a result of Alternative 1. Therefore, there would not be disproportionately high and adverse human health effects to environmental justice communities from operational noise under Alternative 1.
Socioeconomics	Alternative 1 would result in a minor net decrease in personnel stationed at NAVSTA Everett and a corresponding minor decrease in Navy families requiring housing and/or childcare services in the region by fiscal year 2037. Because Alternative 1 would not reduce housing and childcare availability, there would not be disproportionately high and adverse human health or environmental effects on minority or low-income populations.

Key: FFG = guided-missile frigate; NAAQS = National Ambient Air Quality Standards; NAVSTA = Naval Station.

Based on the analysis presented in Table 3.7-3, implementation of Alternative 1 would not result in disproportionately high and adverse human health or environmental effects on minority or low-income communities.

3.7.3.3 Alternative 2

Alternative 2 would involve similar construction and the same operational activities on NAVSTA Everett and would result in the same net change in military personnel and dependents. Potential impacts to environmental justice communities under Alternative 2 would be the same as those described under Alternative 1. Therefore, implementation of Alternative 2 would not result in disproportionately high and adverse human health or environmental effects on minority or low-income communities.

3.8 Summary of Potential Impacts to Resources and Impact Avoidance and Minimization

A summary of the potential impacts associated with each of the action alternatives and the No Action Alternative is presented in Tables 3.8-1. The analysis contained in this EA has determined that the Proposed Action and alternatives would not result in significant environmental impacts. Therefore, no major mitigation actions are needed. Table 3.8-2 provides a list of all impact avoidance and minimization measures that would be implemented for the Proposed Action and alternatives.

Table 3.8-1 Summary of Potential Impacts to Resource Areas

<i>Resource Area</i>	<i>No Action Alternative</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Air Quality	No impact.	Air emissions from new construction would be minor and temporary. Impacts from the arrival of FFG personnel would not exceed the established annual <i>de minimis</i> levels for any criteria pollutants. GHG emissions would also be minor in the context of the regional and larger global GHG emissions and would not have a discernable impact on climate change. No significant impacts.	Air emissions from construction building additions and renovations would be similar to, but slightly less than, impacts described for Alternative 1. GHG impacts would be the same as Alternative 1.
Water Resources	No impact.	Impacts to water resources during construction activities and operations would not be significant with implementation of appropriate stormwater infrastructure, flood risk management measures, BMPs, and compliance with permit conditions.	Impacts would be the same as those described for Alternative 1.
Noise	No impact.	Temporary construction noise during pile driving may be noticeable to residents but would last only a few weeks or months. Change in noise from typical pierside activities would be minimal. No significant noise impacts.	Impacts would be the same as those described for Alternative 1.
Biological Resources	No impact.	Alternative 1 activities may affect, but are not likely to adversely affect, the threatened marbled murrelet. Consultation has been initiated with USFWS. No take of migratory birds, bald eagles, or marine mammals as defined by the MBTA, BGEPA, and MMPA, respectively. No take of marine mammals with implementation of monitoring. No significant impact to biological resources.	Impacts would be the same as those described for Alternative 1.
American Indian Traditional Resources	No impact.	No construction-related disturbance to traditional aquatic resources. Tribal access to U&A fishing grounds and stations near NAVSTA Everett would be expected to remain similar to existing conditions. The Navy has invited Indian Tribal Governments to initiate government-to-government consultation on the Proposed Action (Appendix F).	Impacts would be the same as those described for Alternative 1.
Socioeconomics	No impact.	Beneficial impacts to local economy during construction. No significant impacts to population, employment characteristics, schools and childcare, housing, economic activity, or tax revenue.	Impacts would be the same as those described for Alternative 1.

<i>Resource Area</i>	<i>No Action Alternative</i>	<i>Alternative 1</i>	<i>Alternative 2</i>
Environmental Justice	No disproportionately high and adverse human health effects to environmental justice communities.	Because construction would be temporary and operational changes would result in similar ship activities and a minor decrease in military personnel, implementation of Alternative 1 would not cause disproportionately high and adverse human health or environmental effects on minority or low-income communities.	Impacts would be the same as those described for Alternative 1.

Key: BMP = best management practice; BGEPA = Bald and Golden Eagle Protection Act; FFG = guided-missile frigate; GHG = greenhouse gas; MBTA = Migratory Bird Treaty Act; MMPA = Marine Mammal Protection Act; NAVSTA = Naval Station; U&A = usual and accustomed; USFWS = U.S. Fish and Wildlife Service.

Table 3.8-2 Impact Avoidance and Minimization Measures

<i>Measure</i>	<i>Anticipated Benefit / Evaluating Effectiveness</i>	<i>Implementing and Monitoring</i>	<i>Responsibility</i>	<i>Estimated Completion Date</i>
Alternative 1 or Alternative 2				
Minimize air emissions and energy use that generate GHGs that contribute to climate change.	Comply with DoD and Navy policies for reducing air emissions and energy use.	Consider measures during planning and construction.	NAVSTA Everett	Design and construction phase.
Expand the use of natural infrastructure to build resilience, sequester carbon, and achieve local, landscape, and regional-scale climate solutions.	Comply with DoD and Navy policies for reducing air emissions and energy use.	Consider measures during planning and construction.	NAVSTA Everett	Design and construction phase.
Incorporate raised flooring above the high-water mark, sustainable building design, pile-supported foundations, and LID measures.	Alleviate flood risks.	Consider measures during planning and construction.	NAVSTA Everett	Design and construction phase.
Implement worker safety procedures to follow in the event of an earthquake, including the posting of evacuation routes and safety areas in the event of a tsunami threat.	Reduce safety risks.	Consider measures during planning and construction.	NAVSTA Everett	Design and construction phase.
Stormwater Pollution Prevention Plan as part of the Construction General Permit.	Minimize potential for soil erosion and water quality impacts.	Consider measures during planning and construction.	NAVSTA Everett	Design and construction phase.
Marine mammal monitoring during impact pile driving at Fleet Readiness Center building addition and shut down procedures.	Avoid all incidental take of harbor seals by behavioral harassment.	An observer positioned on the pier would visually monitor the floats within the 492-foot behavioral harassment zone. The observer would notify the construction supervisor of any harbor seals hauled-out within the specified zone, and impact pile driving would cease and not resume until the observer notifies the construction supervisor that the harbor seal is no longer hauled-out.	Construction contractor with compliance verification by NAVSTA Everett.	Construction phase.

<i>Measure</i>	<i>Anticipated Benefit / Evaluating Effectiveness</i>	<i>Implementing and Monitoring</i>	<i>Responsibility</i>	<i>Estimated Completion Date</i>
If unrecorded intact archaeological sites are encountered, stop work in the immediate area and follow the procedures set forth in the Inadvertent Discovery Plan for NAVSTA Everett Installations.	Avoid impact to archaeological resources.	Stipulate in construction specifications.	Construction contractor with compliance verification by NAVSTA Everett.	Construction phase.
Follow Tribal Fisheries Manager notification procedures set in the SOPs for all port security barrier operations and continue to monitor the number of openings.	Avoid disruption to tribal fishers operating near the port security barrier during tribal fisheries events (e.g., commercial crab season).	Maintain existing procedures.	NAVSTA Everett	Operations phase.

Key: DoD = Department of Defense; GHG = greenhouse gas; LID = Low Impact Development; NAVFAC NW = Naval Facilities Engineering Systems Command Northwest; NAVSTA = Naval Station; NPDES = National Pollutant Discharge Elimination System; SOP = Standard Operating Procedure.

4 Cumulative Impacts

This section (1) defines cumulative impacts, (2) describes past, present, and reasonably foreseeable future actions relevant to cumulative impacts, (3) analyzes the incremental interaction the Proposed Action may have with other actions, and (4) evaluates cumulative impacts potentially resulting from these interactions.

4.1 Definition of Cumulative Impacts

The approach taken in the analysis of cumulative impacts follows the objectives of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and CEQ guidance. Cumulative impacts are defined in 40 Code of Federal Regulations (CFR) section 1508.1(g) as “the effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.”

To determine the scope of environmental impact analyses, agencies shall consider cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact analysis document.

In addition, CEQ and the United States (U.S.) Environmental Protection Agency (USEPA) have published guidance addressing implementation of cumulative impact analyses—Guidance on the Consideration of Past Actions in Cumulative Effects Analysis (CEQ, 2005) and Consideration of Cumulative Impacts in EPA Review of NEPA Documents (USEPA, 1999). CEQ guidance entitled Considering Cumulative Impacts Under NEPA (1997b) states that cumulative impact analyses should:

“...determine the magnitude and significance of the environmental consequences of the Proposed Action in the context of the cumulative impacts of other past, present, and future actions...identify significant cumulative impacts...[and]...focus on truly meaningful impacts.”

Cumulative impacts are most likely to arise when a relationship or synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in close proximity to the Proposed Action would be expected to have more potential for a relationship than those more geographically separated. Similarly, relatively concurrent actions would tend to offer a higher potential for cumulative impacts. To identify cumulative impacts, the analysis needs to address the following three fundamental questions.

- Does a relationship exist such that affected resource areas of the Proposed Action might interact with the affected resource areas of past, present, or reasonably foreseeable actions?
- If one or more of the affected resource areas of the Proposed Action and another action could be expected to interact, would the Proposed Action affect or be affected by impacts of the other action?
- If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the Proposed Action is considered alone?

4.2 Scope of Cumulative Impacts Analysis

The scope of the cumulative impacts analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur. For this Environmental Assessment (EA), the

study area delimits the geographic extent of the cumulative impacts analysis. In general, the study area will include those areas previously identified in Chapter 3.0 for the respective resource areas. The time frame for cumulative impacts centers on the timing of the Proposed Action.

Another factor influencing the scope of cumulative impacts analysis involves identifying other actions to consider. Beyond determining that the geographic scope and time frame for the actions interrelated to the Proposed Action, the analysis employs the measure of “reasonably foreseeable” to include or exclude other actions. For the purposes of this analysis, public documents prepared by federal, state, and local government agencies form the primary sources of information regarding reasonably foreseeable actions. Documents used to identify other actions include notices of intent for Environmental Impact Statements (EISs) and EAs, management plans, land use plans, and other planning related studies.

4.3 Past, Present, and Reasonably Foreseeable Actions

This section will focus on past, present, and reasonably foreseeable future projects at and near the Proposed Action locale. In determining which projects to include in the cumulative impacts analysis, a preliminary determination was made regarding the past, present, or reasonably foreseeable action. Specifically, using the first fundamental question included in Section 4.1, a past, present, or reasonably foreseeable project was included in the cumulative impacts analysis if it was determined that a relationship exists such that the affected resource areas of the Proposed Action (included in this EA) might interact with the affected resource areas of that project. If no such potential relationship exists, the project was not carried forward into the cumulative impacts analysis. In accordance with CEQ guidance (CEQ, 2005), these actions considered but excluded from further cumulative effects analysis are not catalogued here as the intent is to focus the analysis on the meaningful actions relevant to informed decision-making. Projects included in this cumulative impacts analysis are listed in Table 4.3-1 and briefly described in the following subsections.

Table 4.3-1 Cumulative Action Evaluation

<i>Action</i>	<i>Level of NEPA Analysis Completed</i>
<i>Past Actions</i>	
Kimberly-Clark Contaminated Soil Removal (2012–2021)	NA
Port of Everett Waterfront Place Central Development	NA
Port of Everett Mills to Maritime Norton Terminal	NA
Port of Everett Modernizing Seaport Facilities	NA
<i>Present and Reasonably Foreseeable Future Actions</i>	
Marine Structures Maintenance and Pile Replacement	EA/Finding of No Significant Impact
Programmatic Marine Structures Maintenance and Pile Replacement Activities	To be determined
Security, Maintenance, and Spill Response Pier	To be determined
Navy Housing at Smokey Point Public Private Venture III	To be determined
Berthing Barge	Categorical Exclusion
Replace Boilers	Environmental Checklist
Backup Generators	Environmental Checklist
Colby Tower Condominiums, Everett, Washington (2024)	NA
Port of Everett Waterfront Projects (2023–2026)	NA
City of Everett Projects (2023–2032)	NA

Key: EA = Environmental Assessment; NA = not applicable.

4.3.1 Past Actions

The following past actions are relevant to the cumulative impact analysis in the vicinity of Naval Station (NAVSTA) Everett associated with the Proposed Action.

4.3.1.1 Kimberly-Clark, 2600 Federal Avenue, Contaminated Soil Removal

A series of cleanup action projects carried out by Washington Department of Ecology (WDOE) and the Port of Everett to remove contaminated soil under the Model Toxics Control Act and removal of crushed material from the former Kimberly-Clark Worldwide Site Upland Area. The cleanup actions occurred on the site between 2012 and 2021 under three separate interim actions (WDOE, 2023). Areas of impact from the project included improvements associated with hazardous waste contamination and water quality.

4.3.1.2 Port of Everett Waterfront Place Central Redevelopment Project, Fisherman’s Harbor

Fisherman’s Harbor is a 12-acre development located on West Marine View Drive, and was the first phase of the Port’s larger Waterfront Place strategic initiative that aims to provide jobs and access to the waterfront, along with a large-scale (65 acres total) mixed-use real estate development. Construction was completed in 2019 (Port of Everett, 2021). Areas of potential impact from the project include air quality and socioeconomics.

4.3.1.3 Port of Everett Mills to Maritime Norton Terminal at Former Kimberly-Clark Mill Site

The Mills to Maritime initiative sets out to transform the former Kimberly-Clark mill site into a new maritime hub at the heart of Everett’s working waterfront, between the Port of Everett’s international seaport and NAVSTA Everett. The Norton Terminal Development and Model Toxics Control Act 3rd Interim Action is the next phase in this effort. The Port installed a site-wide environmental pavement cap to double as a marine terminal and provide permanent environmental control and stormwater treatment. The project was completed in December 2022 and is expected to support 950 jobs (Port of Everett, 2023). Areas of potential impact from the project include air quality and socioeconomics.

4.3.1.4 Port of Everett Modernizing Seaport Facilities

The recently completed project included strengthening and expanding docks to meet the needs of larger vessels at the South Terminal, wharf strengthening to support modern cargo operations, and improvements to the Marine Terminal Rail system (Port of Everett, 2023). Areas of potential impact from the project include air quality and socioeconomics.

4.3.2 Present and Reasonably Foreseeable Future Actions

The following present and reasonably foreseeable future actions are relevant to the cumulative impacts analysis in the vicinity of NAVSTA Everett associated with the Proposed Action.

4.3.2.1 Marine Structures Maintenance and Pile Replacement

This action proposed marine structures maintenance and pile replacement (MPR) activities over a five-year period at six Navy locations in Puget Sound. The proposed locations include Naval Base Kitsap – Bangor, Naval Base Kitsap – Bremerton, Naval Base Kitsap – Keyport, Naval Base Kitsap – Manchester, Zelatched Point, and NAVSTA Everett. The project includes maintenance and repair to piers, wharfs, quay walls, and marine pile-supported structures, and repair and replacement of damaged components

of these structures. The project at NAVSTA Everett included the removal of 1 steel, 2 concrete, and 75 timber piles and replacement/installation of 1 steel and 77 concrete and/or timber piles over five years between approximately 2019 and 2024. Area tribes expressed no objections to the proposed MPR activities at NAVSTA Everett. The National Marine Fisheries Service (NMFS) issued regulations for the issuance of Letters of Authorization (from May 17, 2019, through May 17, 2024) for the taking of marine mammals associated with the MPR activities (Navy, 2019). The Navy has applied for two additional one-year Incidental Harassment Authorizations to cover the construction years 2024 to 2025 and 2025 to 2026. Informal ESA consultation was completed on December 15, 2017, with U.S. Fish and Wildlife Service (USFWS) for the marbled murrelet and bull trout (01EWF00-2016-I-1229) and a Biological Opinion was issued by NMFS on April 5, 2019 (WCRO-2016-00018). The EA concluded that implementation of the Proposed Action would have no significant impact to the quality of the human environment. A Finding of No Significant Impact was signed in June 2019, and the project is in progress and expected to be completed in approximately 2026. Areas of potential impact from the project include air quality, water resources, noise, and biological resources.

4.3.2.2 Programmatic Marine Structures Maintenance and Pile Replacement Activities

The Programmatic Marine Structures MPR would continue the marine maintenance and pile replacement program at Navy Region Northwest installations, including Naval Base Kitsap – Bangor, Naval Base Kitsap – Bremerton, Naval Base Kitsap – Keyport, Naval Base Kitsap – Manchester, Zelatched Point, and NAVSTA Everett. The project includes maintenance and repair to piers, wharves, quay walls, and marine pile-supported structures. Areas of potential impact from the project include air quality, water resources, noise, and biological resources.

4.3.2.3 Security, Maintenance, and Spill Response Pier

The project includes the construction of a security, maintenance, and spill response pier, a pier access trestle, and utility upgrades at NAVSTA Everett to provide space for routine operations and berthing for small boats utilized in support of port operations. The new pier would replace two small boat piers. Potential areas of impact from the project include endangered species/sensitive habitat. The project site has known contaminated soil and would require remediation. Mitigation is expected for the removal of creosote and asbestos-containing materials and for nearshore/estuary habitat loss and/or disruption. Construction of the pier and pier access trestle would take approximately three years, beginning in approximately January 2025. Areas of potential impact from the project include improvements associated with hazardous waste contamination, water quality, biological resources, and noise.

4.3.2.4 Navy Housing at Smokey Point Public Private Venture III

A reasonably foreseeable future action is the construction of additional housing at the Marysville Family Support Complex in Marysville, Washington. The construction would likely occur between approximately 2025 and 2031. The area of potential impact from the project includes air quality.

4.3.2.5 Berthing Barge

A Berthing Barge is expected to arrive at NAVSTA Everett in approximately 2025. The Berthing Barge will house an estimated 600 existing Sailors and maintenance crew currently based at NAVSTA Everett for five to seven years. The Berthing Barge would use shore utilities and would not require construction or infrastructure in the water. A Categorical Exclusion will be prepared. Areas of potential impact from the

project include air quality, noise, and socioeconomics. Environmental impacts are expected to be negligible.

4.3.2.6 Replace Boilers

NAVSTA Everett will replace boilers in five buildings with new 10 million British thermal unit natural gas boilers. The project is tentatively programmed for approximately 2027. The new boilers are expected to be more energy efficient and have lower air emissions. The area of potential impact from the project includes air quality.

4.3.2.7 Backup Generators Project

NAVSTA Everett plans to install three 2-megawatt diesel generators to support base and ship operations. Backup generation would meet firefighting requirements and provide additional base-wide resilience. The area of potential impact from the project includes air quality.

4.3.2.8 Colby Tower Apartment/Condominium Construction in the City of Everett

Colby Tower is a planned high-rise at 2600 Colby Avenue in downtown Everett. The proposed condominium project would include 32 units, parking for residents, and 8,000 square feet of street-level retail and office space. Colby Tower is expected to be ready for occupancy in 2024 (Podsada, 2022). Areas of potential impact from the project include air quality and socioeconomics.

4.3.2.9 Port of Everett Waterfront Projects

The Port of Everett's Waterfront Place at Fisherman's Harbor and Millwright District includes continued development of a new 1.5 million square feet mixed-used development located on 65 acres at the waterfront in Everett. Development plans include 63,000 square feet of retail and restaurant space, 447,500 square feet of office space, two hotels, 20,000 square feet of marine retail space, and up to 660 waterfront homes including apartments, condominiums, and/or town homes/lofts. When fully realized, Waterfront Place is expected to support 2,075 family-wage jobs. Port activities support more than 40,000 jobs for the surrounding community. Development is expected to occur through 2026 (Port of Everett, 2021). Areas of potential impact from the project include air quality and socioeconomics.

4.3.2.10 City of Everett Projects

- Evergreen Pump Station Modification Project – The Evergreen Pump Station Modification project is for the construction of several improvements to the existing pump station that shares a site with Reservoir 3, located at 6107 Evergreen Way. The project also involves replacement of outdated electrical equipment. The newer equipment is safer, more reliable, and more energy efficient. The new electrical equipment has been designed to allow for connection of both portable and permanent generators to the pump station. The project will further improve the resiliency of this critical facility by incorporating seismic upgrades to the existing pump station building (City of Everett, 2022b).
- Grand Avenue Utilities Replacement – This project will replace aging cast iron watermain having higher than normal break frequency between 19th Street and Hewitt Avenue, replace 100-year-old and undersized sanitary sewer between 19th Street and Everett Avenue, install new storm drain pipe to remove stormwater from the sanitary sewer system between 19th Street and Everett Avenue and replace existing street with new curbs, gutters and asphalt pavement (City of Everett, 2022b).

- Port Gardner Storage Facility – Redevelopment of the former Kimberly-Clark industrial wastewater treatment plant to provide temporary detention and control of urban stormwater and combined sewer overflows. The City of Everett acquired the former Kimberly-Clark industrial wastewater treatment plant with the intent that the site be repurposed to provide detention of urban stormwater and combined sewer flows to bring Puget Sound Outfalls 4 through 7 into regulatory compliance. The existing wastewater treatment plant will be integrated into the City’s wastewater system by converting the site infrastructure into a combined sewage storage facility and constructing new sewers to convey wastewater to and from the facility. The new facility, named the Port Gardner Storage Facility, will be used to temporarily store combined sewer flows until the collection system has the available capacity to convey flows to the Everett Water Pollution Control Facility (City of Everett, 2022b).
- Reservoir 2 Replacement – Replacing a more than 100-year-old, seismically vulnerable in-ground water reservoir with two 2.5-million-gallon cylindrical reservoirs. Replacing this reservoir is key to Everett Water Utilities’ seismic resiliency. The existing Reservoir 2 is past its useful life and structurally deficient. A vulnerability assessment of the City’s water system identified Reservoir 2 as susceptible to failure during a major earthquake because of soil instability along its southern side. The new Reservoir 2 is designed as an earthquake-resistant reservoir (City of Everett, 2022b).
- Southend Interceptor to Snohomish River Interceptor Intertie Project – The Southend Interceptor to Snohomish River Interceptor Intertie and Snohomish River Outfall 8 Rehabilitation are in the vicinity of 36th Street and Riverfront Boulevard. The intertie will be a new section of sewer mainline installed to enable better operability of the City’s sewer system. The outfall rehabilitation will slipline the existing outfall pipe built in 1914 to prevent its further deterioration (City of Everett, 2022b).
- Water Main W Replacement Project – This project replaces aging cast iron water mains that are prone to breaks. Services will be replaced to the meter/within the right-of-way. Restoration will be pavement patch and replacement of sidewalks and curbs where pavement was removed for installation of the water main and services. Project work will include sites on Hoyt Avenue and Wilmington Avenue (City of Everett, 2022b).

4.4 Cumulative Impact Analysis

Where feasible, the cumulative impacts were assessed using quantifiable data; however, for many of the resources included for analysis, quantifiable data is not available, and a qualitative analysis was undertaken. In addition, where an analysis of potential environmental effects for future actions has not been completed, assumptions were made regarding cumulative impacts related to this EA where possible. The analytical methodology presented in Chapter 3, which was used to determine potential impacts to the various resources analyzed in this document, was also used to determine cumulative impacts. Cumulative impacts were evaluated for resources that would be affected by the Proposed Action and were analyzed in detail in Chapter 3.0, Sections 3.1 through 3.7.

4.4.1 Air Quality

4.4.1.1 Description of Geographic Study Area

Air quality impacts are assessed based on the defined air basin. In this case, Snohomish County defines the localized air basin surrounding NAVSTA Everett, and the Puget Sound Air Quality Control Region

(AQCR) (consisting of Snohomish, King, Kitsap, and Pierce counties) defines the larger more regional region of influence (ROI).

The potential effects of proposed greenhouse gas (GHG) emissions are by nature cumulative impacts because global sources of GHGs contribute to global climate change. Therefore, the ROI for the cumulative analysis of proposed GHG emissions is worldwide. These global impacts would be manifested as impacts to resources and ecosystems at NAVSTA Everett and surrounding regions.

4.4.1.2 Relevant Past, Present, and Future Actions

Snohomish County currently attains all National Ambient Air Quality Standards (NAAQS). These conditions define how past and present actions currently affect air quality within the ROI and provide the context for the cumulative impacts analysis. Nearly all of the reasonably foreseeable future actions discussed in Section 4.3 would have the potential to affect air quality within the ROI. Future development could contribute to an increase in cumulative emissions in the region compared to existing conditions.

Scientific evidence indicates a correlation between the worldwide proliferation of GHG emissions by humankind and increasing global temperatures over the past century. Scientific organizations predict that future global climate change will produce negative environmental and social consequences across the globe.

4.4.1.3 Cumulative Impact Analysis

Air quality impacts are based on the net increase in emissions that would occur from a Proposed Action alternative relative to the No Action Alternative, in combination with emissions from relevant past, present, or proposed future actions. The following qualitative analysis considered the cumulative effects of these emissions with their potential to (1) contribute to an exceedance of a NAAQS on local and regional levels, and (2) affect climate change.

The Proposed Action would generate a net increase in emissions that would be well below *de minimis* levels. Emissions from onsite construction mainly would occur from mobile equipment and area sources such as fugitive dust. Construction emissions from within NAVSTA Everett would quickly disperse offsite to low ambient pollutant levels. Intermittent emissions from the operation of personnel vehicles that access the site would not substantially add to these offsite impacts. In addition, emissions from vehicles generated by each action alternative would result in low ambient air pollutant levels adjacent to roadways within the region.

Offsite cumulative project impacts would be limited by the geographical separation of the projects. Overlapping cumulative impacts could occur from some of the larger projects identified in Table 4.3-1 (such as the Security, Maintenance, and Spill Response Pier). Transport of these emissions to the locality of project impacts would result in insignificant ambient pollutant impacts, due to their distance from these locations and as demonstrated by the attainment of all NAAQS within the ROI. Therefore, emissions from the Proposed Action, in combination with emissions from other relevant past, present, or proposed future projects, would not result in an exceedance of a NAAQS in proximity to NAVSTA Everett or within the regional airshed.

Both alternatives would generate GHG emissions on an annual basis, and, in combination with past and future emissions from all other sources, contribute incrementally to the global warming that produces the adverse effects of climate change.

Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, directs the Federal Government, in a whole-of-government approach, to set a target to achieve net-zero emissions economy-wide by 2050 (Navy, 2022). To comply with the EO, the Navy is working towards the following targets, including but not limited to:

- achieve a 65 percent reduction in GHG direct emissions from controlled sources and indirect emissions from generation or purchase by 2030.
- achieve 100 percent carbon pollution-free electricity by 2030, at least half of which will be locally supplied clean energy to meet demand.
- acquire 100 percent zero-emission vehicles by 2035, including 100 percent zero-emission light-duty vehicle acquisitions by 2027.
- achieve a 50 percent reduction in emissions from buildings by 2032.

As described in Section 3.1, *Air Quality*, while GHG emissions generated from the Proposed Action under Alternatives 1 or 2 alone would not have a discernable impact on climate change, in combination with past and future emissions from all other sources, they would contribute incrementally to climate change. Considering overall emission reduction goals and resiliency planning as part of military construction efforts, implementation of Alternatives 1 or 2 combined with the past, present, and reasonably foreseeable future projects would not result in significant cumulative effects within the ROI.

4.4.2 Water Resources

4.4.2.1 Description of Geographic Study Area

The ROI for water resources includes the surface water and groundwater features that could be subject to direct or indirect effects from implementation of the Proposed Action alternatives. As discussed in Section 3.2, *Water Resources*, there are no surface water features within the project site. However, stormwater runoff from NAVSTA Everett, which would be affected by the Proposed Action alternatives, is discharged to the Snohomish River. Therefore, portions of the Snohomish River are included in the ROI. The ROI for groundwater resources consists of the portion of the groundwater basin immediately beneath the project site.

4.4.2.2 Relevant Past, Present, and Future Actions

Relevant past, present, and reasonably foreseeable future actions that might interact with the Proposed Action alternatives to cumulatively affect water resources are those with the potential to alter the quality, quantity, and accessibility of groundwater or surface water quality, or impede the functions of floodplains in conveying floodwaters.

Of the past, present, and reasonably foreseeable future actions listed in Table 4.3-1, only those located within one or more of the four main drainage areas at NAVSTA Everett would potentially contribute to cumulative impacts related to flood hazards. These cumulative actions include the Marine Structures MPR; Programmatic Marine Structures MPR; Security, Maintenance, and Spill Response Pier; and Backup Generators. The Berthing Barge project would also occur within the NAVSTA Everett drainage areas, but it would largely consist of mooring a floating in-water structure that would not require any new construction and would not affect flood hazards.

Numerous past, present, and future developments, including NAVSTA Everett, Port of Everett, and City of Everett Projects, will have requirements for managing stormwater runoff. However, given that the

general area is heavily urbanized, these development projects are unlikely to alter the volumes or characteristics of the stormwater discharges sufficiently to cumulatively affect flood risks. Further, some of these projects could result in upgrades to the existing stormwater collection infrastructure that could improve current stormwater management systems.

Past, present, and future actions that require in-water construction, dredging, soil or sediment remediation, or discharges of stormwater runoff to adjacent waterways, including the Snohomish River, East Waterway, and Port Gardner Bay, could potentially contribute to cumulative impacts related to surface water quality. Additionally, projects involving construction or renovation along the Port Gardner shoreline could also affect surface water quality. These actions include: Marine Structures MPR; Programmatic Marine Structures MPR; Security, Maintenance, and Spill Response Pier; Port of Everett Waterways projects; and City of Everett utilities upgrade projects (e.g., Port Gardner Storage Facility).

Groundwater associated with NAVSTA Everett has no designated beneficial uses. Thus, it is unlikely that any of the present and future actions would include requirements for extracting or discharge to groundwater with the potential for affecting supplies or altering beneficial uses.

4.4.2.3 Cumulative Impact Analysis

Flood Hazards

The analysis presented in Section 3.2, *Water Resources*, concluded that with implementation of project-specific flood risk management measures, the Proposed Action would not result in significant impacts from flooding.

The Security, Maintenance, and Spill Response Pier project at NAVSTA Everett would include special design features to address construction within the 100-year floodplain, including stormwater management facilities with Low Impact Development (LID). The Proposed Action would not contribute directly to cumulative impacts associated with the project, but it would benefit from the flood hazard management features.

Stormwater discharges for the Proposed Action, along with the identified present and future actions, would comply with permit conditions governing stormwater discharges. Compliance with permit conditions, together with implementation and maintenance of best management practices (BMPs), would ensure that stormwater flows are appropriately managed.

Consequently, the Proposed Action in combination with the other past, present, and reasonably foreseeable future actions would not contribute to cumulative changes in runoff or surface flows in a manner that would increase risks of flooding or inundation.

Surface Water Quality

The Proposed Action would not directly affect the quality or beneficial uses of surface water at the project site. Several of the past, present, and reasonably foreseeable future actions involve in-water activities in the East Waterway that could disturb contaminated sediments with the potential for temporarily degrading water quality. The Security, Maintenance, and Spill Response Pier; Marine Structures MPR; and Programmatic MPR projects would remove old, creosote-treated pilings, which would contribute to improved water quality conditions. These projects will require Clean Water Act (CWA) Section 401 certification, Section 404 permits, and River and Harbors Act Section 10 permits through the Joint Aquatic Resources Permit Application process. Issuance of a certification means that the Washington Department of Ecology (WDOE) anticipates that the project will comply with state

water quality standards and other aquatic resource protection requirements. Remediation of the East Waterway (Cleanup Site ID 4297) would likely result in short-term impacts to water quality but would also result in long-term benefits associated with reducing pollution and restoring habitat and shorelines in Puget Sound (WDOE, 2017). The Port of Everett's Norton Terminal at the Former Kimberly-Clark Mill Site would also contribute to improved water quality in Port Gardner Bay by minimizing the potential for future contaminant leaching from the site.

Reasonably foreseeable future actions requiring construction could result in accidental releases of materials, such as construction debris, eroded soils, or stormwater runoff, which could affect surface water quality in Port Gardner Bay, East Waterway, and the Snohomish River. However, all projects would be required to obtain a construction permit that specifies requirements for managing stormwater runoff and implementing BMPs intended to prevent or minimize the potentials for construction activities to degrade surface water quality. Therefore, compliance with permit conditions would ensure that construction activities would not adversely affect surface water quality in Port Gardner Bay, East Waterway, and the Snohomish River.

Consequently, the Proposed Action, in combination with the other past, present, and reasonably foreseeable future actions, would not contribute to cumulative impacts in surface water quality.

Groundwater

Implementation of the Proposed Action would not substantially change the amount of impervious surfaces at NAVSTA Everett. Further, groundwater at this location is not potable, and there are no plans to extract groundwater for onsite consumption. Similarly, it is unlikely that other present and future actions within or adjacent to NAVSTA Everett would include plans for extracting groundwater for onsite use, other than minor volumes associated with site dewatering during construction. Consequently, the Proposed Action in combination with other past, present, and reasonably foreseeable future actions would not contribute to cumulative reductions in groundwater supply or alter beneficial uses of groundwater.

4.4.3 Biological Resources

4.4.3.1 Description of Geographic Study Area

The ROI for cumulative impacts to biological resources includes NAVSTA Everett and surrounding areas used as habitat by terrestrial species such as birds, marine mammals that include seals and sea lions, and Endangered Species Act (ESA)-listed marbled murrelets.

4.4.3.2 Relevant Past, Present, and Future Actions

Projects that have the potential to impact biological resources in the ROI include all projects listed in Table 4.3-1.

4.4.3.3 Cumulative Impact Analysis

As described in Section 3.4, *Biological Resources*, the Proposed Action is located in an industrial area of NAVSTA Everett and vegetation present is mainly landscaped grass areas and ornamental trees. The Proposed Action would not result in impacts to terrestrial vegetation individually and, therefore, would not contribute cumulatively to potential impacts in the ROI caused by other actions.

Construction associated with the Proposed Action would not result in significant impacts to terrestrial wildlife or marine mammals from temporary airborne noise and human activity, as they are likely habituated to the industrial nature of NAVSTA Everett and the adjacent Port of Everett. The present and future projects in the area would have a similar effect, with temporary increases to the noise environment during construction activities. Therefore, cumulative project effects due to noise and human activity levels would be insignificant.

Under the ESA, the Navy has determined that the Proposed Action may affect, but is not likely to adversely affect ESA-listed marbled murrelets and has initiated informal consultation with the USFWS requesting concurrence with this determination. The Proposed Action would not result in take of migratory birds, as defined by the Migratory Bird Treaty Act, or bald eagles, as defined by the Bald and Golden Eagle Protection Act. Under the Marine Mammal Protection Act, the Proposed Action would not result in incidental take of marine mammals. Therefore, the Proposed Action would not contribute cumulatively to take of migratory birds, bald eagle, or marine mammals.

Therefore, implementation of the Proposed Action combined with the past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts to biological resources within the ROI.

4.4.4 American Indian Traditional Resources

4.4.4.1 Description of Geographic Study Area

The ROI for evaluating cumulative impacts on American Indian traditional resources includes Possession Sound and the waterfront of NAVSTA Everett.

4.4.4.2 Relevant Past, Present, and Future Actions

Relevant past, present, and reasonably foreseeable future actions related to the Proposed Action are described in Table 4.3-1. Future Navy or non-Navy actions that involve impacts to water or sediment quality, marine vegetation, and benthic communities in Possession Sound, either positive or negative, or affect the port security barrier operations at NAVSTA Everett have some potential to impact American Indian traditional resources, including fish and shellfish, and access to those resources.

4.4.4.3 Cumulative Impact Analysis

Past, present, and future activities have the potential to impact protected traditional resources in Possession Sound and the waterfront of NAVSTA Everett. Some projects identified in Table 4.3-1 could have short-term impacts on traditional aquatic resources due to increased turbidity or other construction-related disturbance to marine habitats and local fisheries (e.g., Marine Structures MPR; Programmatic Marine Structures MPR Activities; Security, Maintenance, and Spill Response Pier). The Proposed Action would have no in-water construction-related effects that could affect traditional aquatic resources, as discussed in Section 3.5, *American Indian Traditional Resources*. The Proposed Action would have the potential to impact access to traditional resources within usual and accustomed (U&A) fishing grounds and stations near the NAVSTA Everett port security barrier at levels similar to existing conditions. NAVSTA Everett would continue to monitor the number of openings of the port security barrier and would follow the notification procedures set in the Standard Operating Procedures to minimize impacts on tribal access to U&A fishing grounds and stations near NAVSTA Everett.

Continued consultations between the Navy and potentially affected American Indian tribes will aid in the ongoing identification of impacts to, and preservation of, traditional resources.

4.4.5 Noise

4.4.5.1 Description of Geographic Study Area

The ROI for noise cumulative impacts includes areas in which both the action being considered for cumulative impacts and the Proposed Action for this EA are or would be audible.

4.4.5.2 Relevant Past, Present, and Future Actions

Now that construction is complete at the former Kimberly-Clark site (now Norton Terminal), the Port of Everett Seaport, and Fisherman's Harbor, noise levels at these sites are consistent with the current land uses (i.e., seaport operations or mixed-use development). Present and reasonably foreseeable future actions that involve construction on or near NAVSTA Everett (e.g., Marine Structures MPR and Programmatic Marine Structures MPR) would also generate temporary increases in noise levels while construction is in progress. Day-to-day operations of the Berthing Barge would result in minor long-term increases in noise levels. Actions that involve pile driving, such as the Marine Structures MPR project and Programmatic Marine Structures MPR Activities, could result in noise that may be noticeable in residential areas (Navy, 2019).

4.4.5.3 Cumulative Impact Analysis

Cumulative noise impacts from past, present, and future actions within the ROI would not be significant because they would be temporary (e.g., construction activities) and/or would result from incremental increases in ongoing activities (e.g., increased vehicle traffic). These impacts would not be significant if they occurred within the same area and in the same time frame as the Proposed Action. Because pile driving occurs in relatively short time periods, it is unlikely that pile driving associated with the Proposed Action of this EA would occur at the same time as pile driving associated with Marine Structures MPR project and Programmatic Marine Structures MPR Activities. If multiple projects were to occur simultaneously, cumulative noise impacts would be limited to temporary annoyance and activity interference. Therefore, implementation of the Proposed Action combined with the past, present, and reasonably foreseeable future projects, would not result in significant noise impacts within the ROI.

4.4.6 Socioeconomics

4.4.6.1 Description of Geographic Study Area

NAVSTA Everett is located in the City of Everett in Snohomish County, Washington. Past, present, and future actions of NAVSTA Everett include construction, demolition, renovation, and maintenance typical of an active naval station. In addition, large and small personnel changes are also typical of an active military installation that supports the local and regional economy.

4.4.6.2 Relevant Past, Present, and Future Actions

Relevant past, present, and future actions include those that would result in long-term changes in population and employment in the ROI; these include the Port of Everett waterfront redevelopment projects and the housing projects.

4.4.6.3 Cumulative Impact Analysis

Port of Everett waterfront redevelopment projects would increase the population living and working in the ROI. The housing projects would increase the population within the ROI. Impacts to socioeconomics from population increases would consist of increases in the demand for schools, childcare, and other public services. However, because the Proposed Action would result in a net decrease in Navy personnel amidst an overall projected population increase in the ROI by 2037 (see Table 3.6-1), implementation of the Proposed Action combined with the past, present, and reasonably foreseeable future projects would not result in cumulative socioeconomic impacts.

4.4.7 Environmental Justice

4.4.7.1 Description of Geographic Study Area

The ROI for environmental justice includes the City of Everett in Snohomish County.

4.4.7.2 Relevant Past, Present, and Future Actions

Relevant past, present, and reasonably foreseeable future actions include construction and maintenance projects at NAVSTA Everett, Port of Everett Waterfront Projects, City of Everett Projects, and housing developments.

4.4.7.3 Cumulative Impact Analysis

Construction projects occurring at the same time as Proposed Action construction may result in temporary cumulative air, noise, and transportation impacts. Many of the identified projects are located on NAVSTA Everett or the adjacent waterfront properties. Vehicle access to these projects would likely include the same routes as the Proposed Action. Intersections analyzed in the 2021 Traffic Impact Assessment include the most likely access routes to NAVSTA Everett and the waterfront. Eighteen of the intersections included in the traffic assessment are located within or directly adjacent to environmental justice census block groups compared to seven for the non-environmental justice census block groups. However, increases in emissions from construction equipment and construction traffic would not be anticipated to affect regional ambient air quality or the area's attainment status and would only occur during the combined construction period. If projects were constructed at the same time, cumulative construction noise impacts would be limited to temporary annoyance and activity interference. Additional noise from combined construction traffic would likely be indistinguishable from existing traffic noise. Similarly, if projects were constructed at the same time, traffic would increase only temporarily during the combined construction period.

Because of the net decrease in personnel and relatively small changes in homeported ships, Proposed Action pierside activities would not result in cumulative impacts.

Therefore, implementation of the Proposed Action combined with the past, present, and reasonably foreseeable future projects, would not result in disproportionately high and adverse effects to environmental justice communities within the ROI.

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5 Other Considerations Required by NEPA

5.1 Consistency with Other Federal, State, and Local Laws, Plans, Policies, and Regulations

In accordance with 40 Code of Federal Regulations (CFR) section 1502.16(a)(5), analysis of environmental consequences shall include discussion of possible conflicts between the Proposed Action and the objectives of federal, regional, state and local land use plans, policies, and controls. Table 5.1-1 identifies the principal federal and state laws and regulations that are applicable to the Proposed Action, and describes briefly how compliance with these laws and regulations would be accomplished.

Table 5.1-1 Principal Federal and State Laws Applicable to the Proposed Action

<i>Federal, State, Local, and Regional Land Use Plans, Policies, and Controls</i>	<i>Status of Compliance</i>
National Environmental Policy Act (NEPA), as amended by the Fiscal Responsibility Act of 2023; Council on Environmental Quality (CEQ) NEPA implementing regulations; Navy procedures for implementing NEPA	This Environmental Assessment (EA) has been prepared in accordance with the CEQ regulations implementing NEPA, and Navy NEPA procedures. Appropriate public participation and review are being conducted in compliance with NEPA.
Clean Air Act	The applicable regulatory setting and impact analysis is discussed in Section 3.1, <i>Air Quality</i> . Annual air emissions would be below <i>de minimis</i> levels for all pollutants.
Clean Water Act	The applicable regulatory setting and impact analysis is discussed in Section 3.2, <i>Water Resources</i> .
Coastal Zone Management Act	The Navy has determined that implementing the Proposed Action would be consistent to the maximum extent practicable with the enforceable policies of the Washington State Coastal Zone Management Program. A Federal Consistency Determination and correspondence with the Washington Department of Ecology will be included in Appendix B of the Final EA.
National Historic Preservation Act	The Navy has determined that there would be no historic properties affected by the Proposed Action or alternatives. Washington State Historic Preservation Office (SHPO) consultation documents will be provided in Appendix E of the Final EA.
Endangered Species Act	The applicable regulatory setting and impact analysis is discussed in Section 3.4, <i>Biological Resources</i> . The Navy determined that the Proposed Action may affect, but is not likely to adversely affect, the marbled murrelet and would have no effect on other federally listed species. Endangered Species Act documentation will be provided in Appendix D of the Final EA.
Magnuson-Stevens Fishery Conservation and Management Reauthorization Act	The Proposed Action would have no effect on Essential Fish Habitat.
Marine Mammal Protection Act	The applicable regulatory setting and impact analysis is discussed in Section 3.4, <i>Biological Resources</i> . The Navy has determined that implementing the Proposed Action would not result in incidental take of marine mammals.

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	Status of Compliance
Migratory Bird Treaty Act	The applicable regulatory setting and impact analysis is discussed in Section 3.4, <i>Biological Resources</i> . Impacts to Migratory Bird Treaty Act-protected species and their active nests would be avoided during construction. The Proposed Action would not result in take of migratory birds.
Bald and Golden Eagle Protection Act	The applicable regulatory setting and impact analysis is discussed in Section 3.4, <i>Biological Resources</i> . The Proposed Action would not result in take of bald or golden eagles.
Comprehensive Environmental Response and Liability Act	The Proposed Action would have no effect on Environmental Restoration Program sites. Construction would be conducted in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act and other federal, state, and local environmental laws, regulations, and Navy instructions.
Emergency Planning and Community Right-to-Know Act	The Proposed Action would not introduce new waste streams or require new Emergency Planning and Community Right-to-Know Act reporting requirements.
Resource Conservation and Recovery Act	The Proposed Action would not result in significant hazardous materials related impacts. Management protocols for hazardous substances related to homeporting FFGs would follow existing regulations and procedures for like materials.
Toxic Substances Control Act	Management of any listed chemicals would be conducted in accordance with the Toxic Substances Control Act.
Executive Order (EO) 11988, <i>Floodplain Management</i> and EO 13690, <i>Establishing a Federal Flood Risk Management Standard</i>	The applicable regulatory setting and impact analysis is discussed in Section 3.2, <i>Water Resources</i> . The Proposed Action is located within the 100-year flood zone, and flood protection features would be incorporated into the design of the proposed facilities, as deemed appropriate. Therefore, the Proposed Action would be in compliance with the regulations of EO 11988 and EO 13690.
EO 12088, <i>Federal Compliance with Pollution Control Standards</i>	The applicable regulatory setting and impact analysis is discussed in Section 3.1, <i>Air Quality</i> and Appendix C. The Proposed Action would not exceed National Ambient Air Quality Standards established by the U.S. Environmental Protection Agency under the Clean Air Act. Therefore, the Proposed Action would comply with EO 12088.
EO 12898, <i>Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations</i>	The Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations or low-income populations.
EO 13045, <i>Protection of Children from Environmental Health Risks and Safety Risks</i>	The applicable regulatory setting and impact analysis is discussed at the beginning of Chapter 3.0, <i>Affected Environment and Environmental Consequences</i> . The Navy concludes the Proposed Action would not result in environmental health risks or safety risks that may disproportionately affect children.
EO 13175, <i>Consultation and Coordination with Indian Tribal Governments</i>	The applicable regulatory setting and impact analysis is discussed in Section 3.5, <i>American Indian Traditional Resources</i> . The Navy has invited Indian Tribal Governments to initiate government-to-government consultation on the Proposed Action (Appendix F).

Federal, State, Local, and Regional Land Use Plans, Policies, and Controls	Status of Compliance
EO 13990, <i>Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis</i>	The applicable regulatory setting and impact analysis is discussed in Section 3.1, <i>Air Quality</i> . Greenhouse gas (GHG) emissions resulting from the Proposed Action would be minor in the context of the regional and larger global GHG emissions and would not have a discernable impact on climate change.
EO 14008, <i>Tackling the Climate Crisis at Home and Abroad</i>	The applicable regulatory setting and impact analysis is discussed in Section 3.1, <i>Air Quality</i> . GHG emissions resulting from the Proposed Action would be minor in the context of the regional and larger global GHG emissions and would not have a discernable impact on climate change.
EO 14057, <i>Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability</i>	Section 2.3, <i>Alternatives Carried Forward for Analysis</i> , and Section 3.1.1.5, <i>Greenhouse Gases</i> , discuss that facilities would be designed to incorporate features that provide maximum energy efficiency and climate pollution reduction.
EO 14096, <i>Revitalizing Our Nation’s Commitment to Environmental Justice for All</i>	The Proposed Action would not result in disproportionately high and adverse human health or environmental effects on minority populations or low-income populations.
State of Washington Administrative Code (WAC) 173 210A, Protecting and regulating the quality of surface waters in the State of Washington	The applicable regulatory setting and impact analysis is discussed in Section 3.2, <i>Water Resources</i> . The Proposed Action would not exceed applicable state surface water quality standards.
State of Washington Administrative Code Chapter 173-60 and City of Everett Municipal Code Chapter 20.08, Maximum permissible noise levels	The applicable regulatory setting and impact analysis is discussed in Section 3.3, <i>Noise</i> . Everett Municipal Code Chapter 20.08 exempts noises created on federal military facilities. Washington Administrative Code Chapter 173-60 gives precedence to local noise ordinances where they exist and are actively enforced, as is the case in the City of Everett. Because construction would occur entirely on a federal facility (i.e., Naval Station Everett), it is exempt from State of Washington and City of Everett maximum permissible noise levels.

5.2 Irreversible or Irrecoverable Commitments of Resources

Resources that are irreversibly or irretrievably committed to a project are those that are used on a long-term or permanent basis. This includes the use of non-renewable resources such as metal and fuel, and natural or cultural resources. These resources are irretrievable in that they would be used for this project when they could have been used for other purposes. Human labor is also considered an irretrievable resource. Another impact that falls under this category is the unavoidable destruction of natural resources that could limit the range of potential uses of that particular environment.

Implementation of the Proposed Action would involve human labor and the consumption of fuel, oil, and lubricants for construction vehicles. Implementing the Proposed Action would not result in significant irreversible or irretrievable commitment of resources.

5.3 Unavoidable Adverse Impacts

This Environmental Assessment (EA) has determined that the alternatives considered would not result in any significant impacts. Implementing the alternatives would result in the following unavoidable environmental impacts: air emissions, stormwater discharge, and construction noise.

5.4 Relationship between Short-Term Use of the Environment and Long-Term Productivity

The National Environmental Policy Act (NEPA) requires an analysis of the relationship between a project's short-term impacts on the environment and the effects that these impacts may have on the maintenance and enhancement of the long-term productivity of the affected environment. Impacts that narrow the range of beneficial uses of the environment are of particular concern. This refers to the possibility that choosing one development site reduces future flexibility in pursuing other options, or that using a parcel of land or other resources often eliminates the possibility of other uses at that site.

In the short term, effects to the human environment with implementation of the Proposed Action would primarily relate to the construction activity itself. Air quality and noise would be impacted in the short term. The construction of the facility and operation would not significantly impact the long-term natural resource productivity of the area. The Proposed Action would not result in any impacts that would significantly reduce environmental productivity or permanently narrow the range of beneficial uses of the environment.

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Alicia Higgs, Natural Resources
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