CHAPTER 5

OTHER CONSIDERATIONS REQUIRED BY NEPA

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5.0 OTHER CONSIDERATIONS REQUIRED BY NEPA

5.1. LAND-WATER INTERFACE

5.1.1. Unavoidable Adverse Impacts

The analysis of the LWI project presented in this EIS has identified the potential for adverse environmental impacts. Mitigation measures that would be implemented to either avoid or minimize these impacts have been identified. The adverse impacts that remain after implementing mitigation measures are considered to be unavoidable. These impacts include increased noise during construction and its effect on fish, wildlife, and humans; loss of marine habitat including eelgrass due to the placement of new in-water structures within the NAVBASE Kitsap Bangor WRA; and the loss of upland vegetation for roads and buildings (permanent) and for staging areas and utility work (temporary).

The Proposed Action would cause short-term unavoidable impacts during construction, particularly with regard to pile-driving activities. Pile driving would generate high levels of underwater noise and vibration, as well as airborne noise. These high sound levels would adversely impact fish, marine mammals, and other wildlife and would be unavoidable. Pile-driving noise during construction would adversely impact residential areas and recreation on the western side of Hood Canal. Pile driving also would increase turbidity on a localized basis.

The new in-water structures would create a partial barrier to juvenile salmon migration, as well as shading and nighttime lighting. These changes would unavoidably impact the distribution of aquatic vegetation (e.g., eelgrass) and the type, abundance, and/or behavior of some species in the vicinity of the in-water structures.

Forest and shrub vegetation would be temporarily lost for various construction actions, and would revert to pre-construction conditions following completion of construction and revegetation. A portion of the shellfish areas, some of which are important tribal resources, would be impacted. The potential for impacts on tribal salmon fishery resources would be minimal. There would be an unavoidable increase in the use of utilities and energy to support the project, as well as increased demand on the NAVBASE Kitsap Bangor road system, including increased peak hours delays at base gates. There would be modest delays of traffic on SR-104 due to openings of the Hood Canal Bridge.

5.1.2. Relationship Between Short-Term Uses of the Human Environment and the Enhancement of Long-Term Productivity

Pursuant to NEPA regulations (40 CFR 1502.16), an EIS must consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. Construction and operation of the LWI under the Proposed Action would cause temporary and long-term impacts and use of natural resources. Construction impacts would include increased noise, air pollutant emissions, traffic, disturbance to fish and wildlife, and lost marine and upland vegetation, and soft-bottom habitat, as well as some project benefits such as increased employment and income. Ongoing impacts from operations would vary by alternative but would include loss or alteration of marine habitat, increases in nighttime lighting, shading of marine vegetation, partial barriers to fish migration, impacts on tribal fishery resources

(minimal), energy use, and traffic. However, the Proposed Action would also provide some benefits, such as increased employment.

The Proposed Action would somewhat reduce long-term productivity of resources in the project area. For example, the LWI would cause loss, alteration, and/or shading of marine habitats for the life of the facility, which would reduce the primary productivity of marine vegetation, fish, plankton, and benthic organisms. The Proposed Action would result in some loss of tribal shellfish habitat and would potentially interfere with migration of juvenile salmon, reducing the productivity of tribal resources. It would remove several areas of upland vegetation and reduce the available wildlife habitat in the area. The proposed Mitigation Action Plan (Appendix C) would be implemented to compensate for the impacts of the selected LWI alternative on marine habitats and species such that the Proposed Action would have no net contribution to cumulative impacts.

5.1.3. Irreversible and Irretrievable Commitments of Resources

Section 102(c)(v) of NEPA requires that an EIS identify "any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented." Implementation of this action would involve commitment of a range of natural, physical, human, and fiscal resources.

Raw construction materials, such as cement, aggregate, wood, steel, water, and fossil fuel, and labor would be expended in constructing the LWI. Natural resources and labor would also be used to fabricate material and equipment that would be used in the facility. These materials and labor, as well as the expenditure of funds, would be irreversibly committed to the project. However, these types of construction materials and labor are not in short supply and their continued use would not adversely impact the availability of these resources.

Resources would continue to be consumed during operation. The project would require expenditure of capital, energy, and natural resources. These resources once consumed are lost permanently.

5.1.4. Energy Requirements and Conservation Potential

Construction and operation of the LWI would result in an increase in energy demand over current conditions. Although the required energy demands would be met by the existing utility infrastructure on NAVBASE Kitsap Bangor, energy requirements would be subject to any established energy conservation practices. The use of energy sources would be minimized wherever possible without compromising the safety or efficiency of operations.

5.1.5. Natural or Depletable Resource Requirements and Conservation Potential

Electricity is the only resource that would be permanently and continually consumed by the project. To the extent practicable, pollution prevention considerations are included in the Proposed Action. In addition, sustainable management practices are in place that protect and conserve natural and cultural resources.

5.1.6. Regulatory Compliance

Implementation of the Navy's Proposed Action for the LWI would not conflict with the objectives or requirements of federal, state, or local plans, policies, or legal requirements (Table 5–1). The Navy is consulting with regulatory agencies as appropriate during the NEPA process and prior to implementation of the Proposed Action to ensure requirements are met. The consultations described below are for the preferred alternative.

Table 5–1. Summary of Regulatory Compliance for the LWI

Law or Regulation	Responsible Agency	Compliance
National Environmental Policy Act	Navy	This EIS has been prepared in accordance with NEPA, CEQ regulations, and Navy NEPA regulations and procedures. Public participation and review is being conducted in compliance with NEPA.
Federal Water Pollution Control Act (Clean Water Act)	USACE, USEPA, and WDOE	Through the JARPA process, the Navy applied to USACE for a Section 404 permit for placement of fill material below the MHHW tidal level and a Section 401 Water Quality Certification from WDOE. The Navy will also apply for a Construction Stormwater Permit from the USEPA, Region 10.
Rivers and Harbors Act	USACE	A Rivers and Harbors Act Section 10 permit from the USACE is required for placement of new structures in navigable waters. The Navy applied for a Section 10 permit through the JARPA process.
Endangered Species Act	NMFS and USFWS	The EIS analyzes potential effects on species listed under the ESA, and the Navy has submitted a biological assessment to NMFS and USFWS. In accordance with ESA requirements, the Navy completed consultation for the preferred alternative under Section 7 of the ESA with the NMFS, who issued a Letter of Concurrence with the Navy's effect determinations of may affect not likely to adversely affect, listed species. USFWS issued a concurrence letter stating that LWI project impacts to bull trout are not measurable and therefore insignificant, and impacts to marbled murrelets are discountable.
Marine Mammal Protection Act	NMFS	In accordance with the MMPA, the Navy has consulted with NMFS and determined that an IHA application is not required for the preferred alternative of the LWI project.
Magnuson-Stevens Fishery Conservation and Management Act	NMFS	The Navy submitted an EFH Assessment to NMFS and completed consultation with NMFS under the MSA.
Migratory Bird Treaty Act	USFWS	The Navy has determined that the Proposed Action would not adversely affect migratory birds under the MBTA.
Bald and Golden Eagle Protection Act	USFWS	The Navy has determined that the Proposed Action would not result in incidental takes of bald or golden eagles under the Bald and Golden Eagle Protection Act.
Coastal Zone Management Act	NOAA and WDOE	The Navy submitted a CCD to WDOE in compliance with the CZMA, stating that federal actions that have reasonably foreseeable effects on coastal uses or resources must be consistent to the maximum extent practicable with the enforceable policies of approval for state coastal management programs.

Table 5–1. Summary of Regulatory Compliance for the LWI (continued)

Law or Regulation	Responsible Agency	Compliance
Clean Air Act	USEPA	This Proposed Action has been analyzed in accordance with the federal CAA and will comply with the criteria in Section 176(c) regarding General Conformity. Kitsap County is in attainment for all NAAQS and no conformity determination is required.
National Historic Preservation Act	SHPO	The Navy concluded consultation with the SHPO under Section 106 of the NHPA. SHPO concurred with the Navy's definition of the APE and finding of no adverse effect.
Executive Order 13175, Government-to-Government Consultation	Navy	The Navy invited government-to-government consultation with potentially affected American Indian tribes concerning potential effects of the Proposed Action on protected tribal resources and treaty rights. A Memorandum of Agreement between the Navy and the Skokomish Indian Tribe was signed om March 3, 2016. Government-to-government consultation with the Port Gamble S'Klallam Tribe, Jamestown S'Klallam Tribe, and Lower Elwha Klallam Tribe is in progress.
Native American Graves Protection and Repatriation Act	Navy and SHPO	If the Navy were to encounter human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined by NAGPRA, the Navy would comply with NAGPRA and Navy instructions and consult with the SHPO, affected American Indian tribes, USACE, and other interested parties.
Energy Independence and Security Act, Section 438	Navy	The Proposed Action would maintain site hydrology to the maximum extent feasible and would consider the USEPA technical guidance for compliance with Section 438 of the EISA.
Executive Order 12898, Environmental Justice	Navy	Implementation of the Proposed Action would not result in any disproportionately high and adverse human health or environmental effects on minority or low income populations.
Executive Order 13045, Children's Health and Safety	Navy	Implementation of the Proposed Action would not result in disproportionate environmental health or safety risks to children.
Executive Order 13653, Preparing the United States for the Impact of Climate Change	Navy	In response to concerns over climate change, the Navy has initiated broad programs to reduce energy consumption and shift energy demand to renewable and alternative fuels to an extent consistent with its national security mission, thereby reducing emissions of carbon dioxide and other greenhouse gases (GHGs). A number of shore installation and fleet programs have substantially reduced the generation of GHGs, primarily through the conservation of fossil fuels and electricity.

Law or Regulation	Responsible Agency	Compliance
Executive Order 13693, Planning for Federal Sustainability in the Next Decade	Navy	The Navy complies with EO 13693 throughout its planning, design, construction, remediation, and environmental management programs. Navy projects are planned and developed in compliance with the Department of Defense Strategic Sustainability Performance Plan, which provides guidelines for installations, ships, aircraft, and tactical vehicles focusing on sustainable buildings, renewable energy, water use efficiency and management, fleet management, sustainable procurement, pollution prevention and waste reduction, electronic stewardship and data centers, performance contracting, and climate change adaptation. These guidelines have informed the planning and design of the LWI Proposed Action.

CAA = Clean Air Act
CCD = Coastal Consistency Determination
CEQ = Council on Environmental Quality
CZMA = Coastal Zone Management Act
EFH = Essential Fish Habitat
EISA = Energy Independence and Security Act
ESA = Endangered Species Act
GHG = greenhouse gas
IHA = Incidental Harassment Authorization
JARPA = Joint Aquatic Resources Permit Application
MBTA = Migratory Bird Treaty Act
MHHW = mean higher high water
MMPA = Marine Mammal Protection Act
MSA = Magnuson-Stevens Fishery Conservation and Management Act
NAAQS = National Ambient Air Quality Standards
NAGPRA = Native American Graves Protection and Repatriation Act
NEPA = National Environmental Policy Act
NHPA = National Historic Preservation Act
NMFS = National Marine Fisheries Service
NOAA = National Oceanic and Atmospheric Administration
SHPO = State Historic Preservation Officer
USACE = U.S. Army Corps of Engineers
USEPA = U.S. Environmental Protection Agency
USFWS = U.S. Fish and Wildlife Service
WDOE = Washington Department of Ecology

5.2. SERVICE PIER EXTENSION

5.2.1. Unavoidable Adverse Impacts

The analysis of the SPE project presented in this EIS has identified the potential for adverse environmental impacts. Mitigation measures that would be implemented to either avoid or minimize these impacts have been identified. The adverse impacts that remain after implementing mitigation measures are considered to be unavoidable. These impacts include increased noise during construction and its effect on fish, wildlife, and humans; loss of marine habitat due to the placement of new in-water structures within the NAVBASE Kitsap Bangor WRA; and the loss of upland vegetation for roads and buildings (permanent) and for staging areas and utility work (temporary).

The SPE Proposed Action would cause short-term unavoidable impacts during construction, particularly with regard to pile-driving activities. Pile driving would generate high levels of underwater noise and vibration, as well as airborne noise. These high sound levels would adversely impact fish, marine mammals, and other wildlife and would be unavoidable. Pile-driving noise during construction would adversely impact residential areas and recreation on the western side of Hood Canal. Pile driving would increase turbidity on a localized basis. There

would also be adverse impacts on travelers on SR-104 due to delays caused by openings of the Hood Canal to accommodate construction vessel traffic.

The new in-water structures would create shade and nighttime lighting, which would cause minor changes in habitat conditions for fish, marine mammals, and other aquatic organisms. These changes would unavoidably impact the type, abundance, and/or behavior of some species in the vicinity of the in-water structures. The in-water structures could alter the behavior of returning adult salmon, but are not expected to affect juvenile salmon migration in the long term. The potential for impacts on tribal salmon fishery resources would be minimal. New structures would displace approximately 7 acres (2.8 hectares) of forest habitat.

There would be an unavoidable increase in noise in the use of utilities and energy to support the project, as well as increased traffic. In the long term, this impact would be negligible.

5.2.2. Relationship Between Short-Term Uses of the Human Environment and the Enhancement of Long-Term Productivity

Pursuant to NEPA regulations (40 CFR 1502.16), an EIS must consider the relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity. Construction and operation of the SPE under the Proposed Action would cause temporary and long-term impacts and use of natural resources. Construction impacts would include increased noise, air pollutant emissions, traffic, disturbance to fish and wildlife, and lost upland vegetation and soft-bottom habitat, as well as some project benefits such as increased employment and income. Ongoing impacts from operations would vary by alternative but would include loss of marine habitat, increases in nighttime lighting, energy use, and traffic. However, the Proposed Action would also provide some benefits, such as increased employment.

The Proposed Action would somewhat reduce long-term productivity of resources in the project area. For example, the SPE would cause loss and/or shading of marine habitats for the life of the facility. It would remove upland vegetation and reduce the available wildlife habitat in the area. The proposed Mitigation Action Plan (Appendix C) would be implemented to compensate for the impacts of the selected SPE alternative on marine habitats and species such that the Proposed Action would have no net contribution to cumulative impacts.

5.2.3. Irreversible and Irretrievable Commitments of Resources

Section 102(c)(v) of NEPA requires that an EIS identify "any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented." Implementation of this action would involve commitment of a range of natural, physical, human, and fiscal resources.

Raw construction materials, such as cement, aggregate, wood, steel, water, and fossil fuel, and labor would be expended in constructing the SPE. Natural resources and labor would also be used to fabricate material and equipment that would be used in the facility. These materials and labor, as well as the expenditure of funds, would be irreversibly committed to the project. However, these types of construction materials and labor are not in short supply and their continued use would not adversely impact the availability of these resources.

Resources would continue to be consumed during operation. The project would require expenditure of capital, energy, and natural resources, such as water. These resources once consumed are lost permanently.

5.2.4. Energy Requirements and Conservation Potential

Construction and operation of the SPE would result in an increase in energy demand over current conditions. Although the required energy demands would be met by the existing utility infrastructure on NAVBASE Kitsap Bangor, energy requirements would be subject to any established energy conservation practices. The use of energy sources would be minimized wherever possible without compromising the safety or efficiency of operations.

5.2.5. Natural or Depletable Resource Requirements and Conservation Potential

Resources that would be permanently and continually consumed by the project include water, electricity, natural gas, and fossil fuels. To the extent practicable, pollution prevention considerations are included. In addition, sustainable management practices are in place that protect and conserve natural and cultural resources.

5.2.6. Regulatory Compliance

Implementation of the Navy's Proposed Action for the SPE would not conflict with the objectives or requirements of federal, state, or local plans, policies, or legal requirements (Table 5–2). The Navy is consulting with regulatory agencies as appropriate during the NEPA process and prior to implementation of the Proposed Action to ensure requirements are met. The consultations described below are for the preferred alternative.

Table 5–2. Summary of Regulatory Compliance for the SPE

Law or Regulation	Responsible Agency	Compliance
National Environmental Policy Act	Navy	This EIS has been prepared in accordance with NEPA, CEQ regulations, and Navy NEPA regulations and procedures. Public participation and review is being conducted in compliance with NEPA.
Federal Water Pollution Control Act (Clean Water Act)	USACE, USEPA, and WDOE	Through the JARPA process, the Navy will apply to USACE for a Section 401 Water Quality Certification from WDOE. The Navy will also apply for a Construction Stormwater Permit from the USEPA, Region 10. Operational stormwater discharges will be covered by the NAVBASE Kitsap Bangor Multi-Sector General Permit (MSGP) from the USEPA, Region 10.
Rivers and Harbors Act	USACE	A Rivers and Harbors Act Section 10 permit from the USACE is required for placement of new structures in navigable waters. The Navy will apply for a Section 10 permit through the JARPA process.
Endangered Species Act	NMFS and USFWS	The EIS analyzes potential effects on species listed under the ESA, and the Navy has submitted a biological assessment to NMFS and USFWS. NMFS has indicated formal ESA consultation will be required. USFWS issued a concurrence letter stating that SPE project impacts to bull trout are not measurable and therefore insignificant, and impacts to marbled murrelets are discountable.
Marine Mammal Protection Act	NMFS	The Navy submitted an application for an IHA to NMFS and is in consultation with NMFS in accordance with the MMPA.
Magnuson-Stevens Fishery Conservation and Management Act	NMFS	The Navy submitted an EFH Assessment to NMFS and is in consultation with NMFS under the MSA.
Migratory Bird Treaty Act	USFWS	The Navy has determined that the Proposed Action would not adversely affect migratory birds under the MBTA.
Bald and Golden Eagle Protection Act	USFWS	The Navy has determined that the Proposed Action would not result in incidental takes of bald or golden eagles under the Bald and Golden Eagle Protection Act.
Coastal Zone Management Act	NOAA and WDOE	The Navy is preparing a CCD in compliance with the CZMA, stating that federal actions that have reasonably foreseeable effects on coastal uses or resources must be consistent to the maximum extent practicable with the enforceable policies of approval for state coastal management programs. The CCD will be submitted to WDOE, who makes the federal consistency determination.
Clean Air Act	USEPA	This Proposed Action has been analyzed in accordance with the federal CAA and will comply with the criteria in Section 176(c) regarding General Conformity. Kitsap County is in attainment for all NAAQS and no conformity determination is required.
National Historic Preservation Act	SHPO	The Navy concluded consultation with the SHPO under Section 106 of the NHPA. SHPO concurred with the Navy's definition of the APE and finding of no adverse effect.

Table 5–2. Summary of Regulatory Compliance for the SPE (continued)

Law or Regulation	Responsible Agency	Compliance
Executive Order 13175, Government-to-Government Consultation	Navy	The Navy invited government -to-government consultation with potentially affected American Indian tribes concerning potential effects of the Proposed Action on protected tribal resources and treaty rights. A Memorandum of Agreement between the Navy and the Skokomish Indian Tribe was signed om March 3, 2016. Government-to-government consultation with the Port Gamble S'Klallam Tribe, Jamestown S'Klallam Tribe, and Lower Elwha Klallam Tribe is in progress.
Native American Graves Protection and Repatriation Act	Navy and SHPO	If the Navy were to encounter human remains, funerary objects, sacred objects, or objects of cultural patrimony as defined by NAGPRA, the Navy would comply with NAGPRA and Navy instructions and consult with the SHPO, affected American Indian tribes, USACE, and other interested parties.
Energy Independence and Security Act, Section 438	Navy	The Proposed Action would maintain site hydrology to the maximum extent feasible and would consider the USEPA technical guidance for compliance with Section 438 of the EISA.
Executive Order 12898, Environmental Justice	Navy	Implementation of the Proposed Action would not result in any disproportionately high and adverse human health or environmental effects on minority or low income populations.
Executive Order 13045, Children's Health and Safety	Navy	Implementation of the Proposed Action would not result in disproportionate environmental health or safety risks to children.
Executive Order 13653, Preparing the United States for the Impacts of Climate Change	Navy	In response to concerns over climate change, the Navy has initiated broad programs to reduce energy consumption and shift energy demand to renewable and alternative fuels to an extent consistent with its national security mission, thereby reducing emissions of carbon dioxide and other greenhouse gases (GHGs). A number of shore installation and fleet programs have substantially reduced the generation of GHGs, primarily through the conservation of fossil fuels and electricity.
Executive Order 13693, Planning for Federal Sustainability in the Next Decade	Navy	The Navy complies with EO 13693 throughout its planning, design, construction, remediation, and environmental management programs. Navy projects are planned and developed in compliance with the Department of Defense Strategic Sustainability Performance Plan, which provides guidelines for installations, ships, aircraft, and tactical vehicles focusing on sustainable buildings, renewable energy, water use efficiency and management, fleet management, sustainable procurement, pollution prevention and waste reduction, electronic stewardship and data centers, performance contracting, and climate change adaptation. These guidelines have informed the planning and design of the SPE Proposed Action. For example, the proposed Waterfront Ship Support Building would be designed and constructed to be eligible to receive at minimum a LEED certification of Silver (Section 2.2.1.3.2).

Table 5–2. Summary of Regulatory Compliance for the SPE (continued)

CAA = Clean Air Act
CCD = Coastal Consistency Determination
CEQ = Council on Environmental Quality
CZMA = Coastal Zone Management Act
EFH = Essential Fish Habitat
EISA = Energy Independence and Security Act
ESA = Endangered Species Act
GHG = greenhouse gas
IHA = Incidental Harassment Authorization
JARPA = Joint Aquatic Resources Permit Application
MBTA = Migratory Bird Treaty Act
MHHW = mean higher high water
MMPA = Marine Mammal Protection Act
MSA = Magnuson-Stevens Fishery Conservation and Management Act
MSGP = Multi-Sector General Permit
NAAQS = National Ambient Air Quality Standards
NAGPRA = Native American Graves Protection and Repatriation Act
NEPA = National Environmental Policy Act
NHPA = National Historic Preservation Act
NMFS = National Marine Fisheries Service
NOAA = National Oceanic and Atmospheric Administration
SHPO = State Historic Preservation Officer
USACE = U.S. Army Corps of Engineers
USEPA = U.S. Environmental Protection Agency
USFWS = U.S. Fish and Wildlife Service
WDOE = Washington Department of Ecology