

3.13. CULTURAL RESOURCES

3.13.1. Affected Environment

A cultural resource is any definite location or object of past human activity, occupation, or use identifiable through inventory, historical documentation, or oral evidence. Cultural resources may include archaeological, architectural, and traditional resources, as well as historic districts, sites, or objects. Traditional resources are those that are associated “with cultural practices or beliefs of a living community that (a) are rooted in that community’s history and (b) are important in maintaining and continuing cultural identity of the community” (National Park Service 1998). Cultural resources that are eligible for listing in the National Register of Historic Places (NRHP) are called historic properties. Some cultural resources that are important to American Indians may not be eligible for the NRHP but are still protected under the Native American Graves Protection and Repatriation Act (NAGPRA), the American Indian Religious Freedom Act (AIRFA), and other federal laws, regulations, and executive orders (EOs): National Historic Preservation Act (NHPA), Archaeological Resources Protection Act, EO 12898 *Environmental Justice*, EO 13007 *Indian Sacred Sites*, EO 13175 *Consultation and Coordination with Indian Tribal Governments*, *Presidential Memorandum dated November 5, 2009*, emphasizing agencies’ need to comply with EO 13175, and the *Presidential Memorandum dated April 29, 1994, Government-to-Government Relations with Native American Governments*. American Indian treaty rights and traditional resources are addressed in Section 3.14.

3.13.1.1. EXISTING CONDITIONS

Cultural resources identified and inventoried within the boundaries of NAVBASE Kitsap Bangor include archaeological, architectural, and traditional resources. Although there are no NRHP-listed historic properties on or within approximately 5 miles (8 kilometers) of the NAVBASE Kitsap Bangor project area, several NRHP-eligible cultural resources have been recorded on NAVBASE Kitsap Bangor. Three of the NRHP-eligible architectural resources are within the combined project APEs. The portion of both LWI and SPE project areas on NAVBASE Kitsap Bangor with the highest probability for undiscovered archaeological resources and items subject to NAGPRA is the shoreline (refer to Section 3.13.1.1.2, under Potential for Previously Unidentified Resources).

3.13.1.1.1. CULTURAL RESOURCES IN THE NORTHWEST COASTAL REGION

The area near NAVBASE Kitsap Bangor was likely first inhabited 14,000 to 12,000 years ago by big game hunters known as Paleoindians, who arrived sometime between 14,000 to 8,000 years before present. Spaniards were the first Europeans to visit the Washington coast in the 18th century. In 1792, Captain George Vancouver made first contact with the tribes that would come to be known as the Skokomish, S’Klallam (Klallam, Clallam), and the Suquamish. These tribes were living in permanent villages and occupying seasonal hunting and fishing camps along Hood Canal (Suttles and Lane 1990). Ethnographers recorded geographic features of spiritual importance to tribes in the area, including locations within or near both project APEs, including Hood Canal, Devil’s Hole, and the Kitsap/Bangor Dock Spit (Lewarch et al. 1993). However, to date no Traditional Cultural Properties (TCPs) (National Park Service 1998) or Properties of Traditional

Religious and Cultural Importance to an Indian Tribe (PTRCIT) (NHPA 54 USC Section 302706 and 36 CFR 800.4) have been identified in the APE for either the proposed LWI or SPE.

The American territorial government signed three treaties with local tribes that covered the lands surrounding Puget Sound (Marino 1990; Governor's Office of Indian Affairs 2010; and Historylink.org 2015): Treaty of Medicine Creek (1854, signed with the Nisqually, Puyallup, Steilacoom, Squawskin, S'Homamish, Stehchass, T'Peek-sin, Squi-aitl, and Sa-heh-wamish), Treaty of Point Elliot (1855, signed with the Dwamish, Suquamish, Sk-kahl-mish, Sam-ahmish, Smalh-kamish, Skope-ahmish, St-kah-mish, Snoqualmoo, Skai-wha-mish, N'Quentl-ma-mish, Sk-tah-le-jum, Stoluck-wha-mish, Sno-ho-mish, Skagit, Kik-i-allus, Swin-a-mish, Squin-ah-mish, Sah-ku-mehu, Noo-wha-ha, Nook-wa-chah-mish, Mee-see-qua-guilch, and Cho-bah-ah-bish), and Treaty of Point No Point (1855, signed with the S'Klallams, the Sko-ko-mish, To-an-hooch, and Chem-a-kum tribes). These treaties reserved a number of resource harvesting rights to the signatory tribes, particularly related to salmon and shellfish harvesting (Marino 1990; Governor's Office of Indian Affairs 2010).

The Navy facility at NAVBASE Kitsap Bangor, Naval Ammunition Depot Bangor, was built between 1944 and 1945 and was used as a site for shipping ammunition to locations in the Pacific during World War II and the subsequent Korean and Vietnam conflicts. In 1973, the Navy selected NAVBASE Kitsap Bangor as the homeport for the first squadron of TRIDENT submarines. Officially activated in 1977 as Naval Submarine Base (SUBASE) Bangor, the base merged with Naval Station Bremerton and Naval Undersea Warfare Center Keyport in 2004 to form the new command known as Naval Base Kitsap (Navy 2007).

3.13.1.1.2. CULTURAL RESOURCES AT SPECIFIC STUDY AREA SITES

The Washington SHPO concurs with the Navy's definition of the APE for the proposed LWI action (State of Washington Department of Archaeology & Historic Preservation [DAHP] January 13, 2014) and SPE action (DAHP August 12, 2015). As defined in 36 CFR 800.16(d), the APE is "the geographic area or areas within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." For the purposes of describing the affected environment of cultural resources for the Proposed Actions, the APE for direct effects consists of those areas where there would be ground disturbance, or visual or audible effects out of character with the resource. These areas include the following: construction along the shoreline and adjacent bluff; other construction locations including the Waterfront Ship Support Building, new parking lot, and open storage area and utility pad; road improvements and utility upgrades; and any associated areas that may include temporary staging areas, equipment laydown, or other ground-disturbing activities. Indirect effects usually occur at some removal from the direct action, whether removed in time or space, and may be related to population increase at an installation or future change in use that affect the NRHP eligibility of the resource.

PREVIOUS RESEARCH

Although NAVBASE Kitsap Bangor has no properties listed in the NRHP, there are NRHP-eligible properties within the installation boundaries. The Navy has conducted numerous

archaeological and architectural surveys and inventories on NAVBASE Kitsap Bangor between 1990 and 2013. Investigations in 1992 surveyed NAVBASE Kitsap Bangor for archaeological resources (Lewarch et al. 1993); in addition to recording numerous sites, this project developed a sensitivity model for the presence of archaeological sites associated with American Indians and Euro-American settlers. A number of project-specific archaeological investigations have surveyed the Lower Base, recording additional archaeological sites (HRA 2013; Stell Environmental Enterprises and Cardno TEC 2013). Recent architectural surveys evaluated the NRHP eligibility of buildings in the Upper and Lower Base (Sackett 2010; Cardno TEC 2013; HRA 2013).

The Navy determined NRHP eligibility of sites recorded on NAVBASE Kitsap Bangor and continues to consult with the SHPO for concurrence (e.g., Stell Environmental Enterprises and Cardno TEC 2013; HRA 2013). In addition, any resource that might be encountered during future investigations would be treated as eligible for the NRHP until such time as it could be evaluated for NRHP eligibility, in accordance with Section 106 of the NHPA¹ (36 CFR 800.13.2(c)).

ARCHAEOLOGICAL RESOURCES

Two archaeological sites associated with the activities of indigenous populations are located in the immediate vicinity of the project APEs. Only one is eligible for listing in the NRHP (Lewarch et al. 1997). This site, American Indian site 45KP108, is a shell midden (location where shells and other food debris have accumulated over time, often representing locations of past aboriginal use) known as the Carlson Spit Shell Midden, and is located on the south side of Carlson Spit. The other site, 45KP212, is a multi-component site in a highly disturbed midden deposit. The site includes moderate amounts of fire-cracked rock and scattered clam shell, along with more scattered historic-period to modern materials such as brick, metal, and concrete fragments, in a loosely compacted sandy loam. The SHPO concurred with the Navy determination that this site is not eligible for listing in the NRHP.

The historic period is represented by a number of archaeological sites, primarily associated with logging and subsistence farming activities in the area of NAVBASE Kitsap Bangor. These sites include farmsteads, a dump site, collapsed historic structures, tree stumps with saw and axe marks, foundations of buildings relocated or razed during World War II, historic land use complexes, orchard complexes, scattered fruit trees and ornamental plants, debris scatters, a marked historic grave (Lewarch et al. 1993), and a small collapsing cabin (Grant et al. 2010). Historic Navy activity is represented by a section of World War II-era railroad and emergency derail run-out, a multi-component site in a disturbed context, and a berm that was probably associated with Korean War-era magazines, which were removed. The SHPO has determined that these historic-era sites are not eligible for listing on the NRHP.

¹ The NHPA was recodified in December 2014 as part of a larger effort to better organize statutes related to the National Park Service. The code covering NHPA Section 106 is now located in Section 306108 of Title 54 USC.

ARCHAEOLOGICAL RESOURCES AT THE LWI PROJECT SITES

Recent surveys of the LWI project areas considered all areas above the water line, including the beach and equipment laydown areas (Grant 2011; HRA 2011, 2013; Stell Environmental Enterprises and Cardno TEC 2013). All areas were surveyed with the exception of an existing staging area near the intersection of Archerfish and Seawolf Roads. This area has previously experienced high levels of disturbance, and no additional subsurface disturbance is planned for the Proposed Action. Site 45KP212 lies within the south LWI APE. This site is not eligible for listing in the NRHP.

ARCHAEOLOGICAL RESOURCES AT THE SPE PROJECT SITE

A recent, intensive archaeological survey of the SPE APE included subsurface testing. Located in project areas where ground-disturbing actions are planned (a total of 9 acres [3.6 hectares]) for the proposed parking lot and other structures, this effort recorded three archaeological sites and ten archeological isolates dating to the historic era (Stell Environmental Enterprises and Cardno TEC 2013). The Navy is seeking concurrence from the SHPO that none of these resources are eligible for listing in the NRHP.

ARCHITECTURAL RESOURCES

Architectural resources representing three eras are located on NAVBASE Kitsap Bangor. The first set of resources includes the period of logging, subsistence farming, and recreation that preceded Navy ownership of the study area in the mid-1940s. These resources include cabins, concrete structures, and a well house that were recorded during the 1992 archaeological survey (Lewarch et al. 1993). The report titled *Early Settlement and Historic Context Study in Support of Environmental Requirements for Subdevron Five Homeporting Pier Extension and Waterfront Support Facility* was prepared by Cardno TEC in 2013. The report covers the historic context of early settlement at Bangor from 1840 to 1944 and evaluates the associated property types in order to identify and assess NRHP eligibility requirements and potential for early settlement properties within NBK Bangor. The report concluded that there are not any Early Settlement NRHP-eligible properties or sites located on NBK Bangor, at this time, which meet the NRHP-eligibility criteria due to a loss of integrity and a lack of significance. Because this study only inventoried property types and probability, no survey or inventory was completed.

The second and third sets of architectural resources relate to the Navy's use of the installation during World War II and the Cold War and include areas inside and outside the APE: Marginal Wharf, Delta Pier, EHW-1, and Shelton-Bangor Railroad, as well as other structures such as the Devil's Hole Causeway.

Marginal Wharf was built in 1944 and later was used to load munitions bound for the Vietnam conflict. It is not eligible for the NRHP. Delta Pier and EHW-1 had prominent roles during the Cold War, providing support for the TRIDENT Nuclear Submarine fleet (Sackett 2010). Both Delta Pier and EHW-1 are eligible for listing in the NRHP under Criterion A (association with "events that have made a significant contribution to the broad patterns of our history") and Criterion C ("embody distinctive characteristics of a type, period or method of construction") for their association with the United States Triad Strategic Nuclear Deterrent System during the Cold War era and their unique engineering, each representing a specific element that defines Strategic

Weapons Facility, Pacific (Sackett 2010; 36 CFR 60.4). The Shelton-Bangor Railroad, a World War II-era railroad that is eligible for listing in the NRHP (but outside the APE), is represented by an emergency derail run-out and a remaining section of the mainline that has direct association with Hood Canal, where the mainline terminated on the Marginal Wharf. The Devil's Hole Causeway, built soon after the end of World War II and later improved, is not considered eligible for listing (HRA 2013).

ARCHITECTURAL RESOURCES AT THE LWI PROJECT SITES

All architectural resources within the APE of the LWI project have been inventoried, and only two NRHP-eligible structures are within the APE. The determination of eligibility for Delta Pier and EHW-1 was concurred with by SHPO in a previous Section 106 consultation (letter dated July 20, 2011). Although Delta Pier and EHW-1 are in the APE, neither would experience physical or structural changes. The Proposed Action does occur within the viewshed of Delta Pier and EHW-1. However, the SHPO concurred with the Navy's finding of No Historic Properties Affected for the two structures. The Devil's Hole Causeway is also in the APE, although it is not considered eligible for listing in the NRHP.

ARCHITECTURAL RESOURCES AT THE SPE PROJECT SITE

Through the Section 106 process, the architectural inventory of the APE for the proposed SPE project recorded 14 built resources. The Navy considers none to be eligible for listing in the NRHP (Cardno TEC 2013) but SHPO has not yet concurred with these determinations. The viewsheds of Delta Pier and EHW-1 do not include the SPE project site.

TRADITIONAL CULTURAL PROPERTIES: LWI AND SPE APES

Cultural resources may also include TCPs (National Park Service 1998) and PTRCITs (NHPA USC 54 Section 302706 and 36 CFR 800.4). TCPs are eligible for listing in the NRHP owing to their "association with cultural practices or beliefs of a living community that (a) are rooted in that community's history and (b) are important in maintaining and continuing cultural identity of the community." TCPs may be identified by American Indians or other living communities. PTRCITs may be eligible for the NRHP if they meet NRHP criteria (36 CFR 800.16(1)(1)); even if not eligible for the NRHP, this resource type may be afforded protection by other laws, regulations, or executive orders (NHPA, Archaeological Resources Protection Act, EO 12898 *Environmental Justice*, EO 13007 *Indian Sacred Sites*, EO 13175 *Consultation and Coordination with Indian Tribal Governments*, *Presidential Memorandum dated November 5, 2009*, emphasizing agencies' need to comply with EO 13175, and the *Presidential Memorandum dated April 29, 1994, Government-to-Government Relations with Native American Governments*). For any cultural resource to be NRHP eligible, it must be a property (i.e., a physical place) in addition to meeting other eligibility criteria (including: having integrity of location, design, setting, materials, workmanship, feeling and association, and meeting one or more of the following criteria: Criterion A, be associated with significant events; Criterion B, be associated with the lives of significant persons; Criterion C, embody distinctive characteristics; Criterion D, yield or be likely to yield information important in prehistory or history [36 CFR 60.4]). To date no TCPs or PTRCITs have been identified in the APE for either the proposed LWI or SPE.

American Indian traditional resources, including shellfish harvested for subsistence needs, are discussed in Section 3.14.

SUBMERGED CULTURAL RESOURCES

The NHPA also applies to submerged or marine cultural resources, and the Navy is responsible for identifying cultural resources and effects on those resources within its jurisdiction and within the APE of a Navy NHPA Section 106 undertaking. Consultation procedures parallel the NHPA Section 106 procedures with added emphasis on the protection of submerged resources through avoidance.

NOAA nautical charts show no submerged ships, shipwrecks, or other noted obstructions in the vicinity of NAVBASE Kitsap Bangor (NOAA 2010a,b). A search of recorded archaeological sites on the Washington Information System for Architectural and Archaeological Records Data (WISAARD) showed no submerged resources within a 1-mile (1.6-kilometer) search radius of the shoreline (HRA 2013). Due to the amount of development along the Bangor shoreline, it is unlikely that there are undocumented historic-period resources present. There is a low likelihood that intact prehistoric archaeological deposits or features are present along the submerged shoreline due to Holocene sea level changes and their associated erosion of the Hood Canal coastline. During past Navy surveys for environmental and planning purposes, divers or remote sensors identified no visible historic properties such as shipwrecks, submerged aircraft, or prehistoric or historic-period features extending above the seafloor (e.g., SAIC 2009).

SUBMERGED CULTURAL RESOURCES AT THE LWI PROJECT SITES

There was no in-water historic properties survey of the underwater portion of the APE, but examination of NOAA charts, WISAARD, and diver surveys for other environmental and planning surveys of the nearshore identified no shipwrecks, submerged aircraft, or features that would be visible above the seabed. The probability for intact Paleo-Indian or Archaic archaeological deposits under the seabed is low owing to the destructive effects of sea level rise on the readily erodible local glacial deposits.

SUBMERGED CULTURAL RESOURCES AT THE SPE PROJECT SITE

As with the LWI in-water APE, there was no in-water historic properties survey of the underwater portion of the APE, although examination of NOAA charts, WISAARD, and diver surveys for other environmental and planning surveys of the nearshore identified no shipwrecks, submerged aircraft, or features that would be visible above the seabed. As with the LWI APE, the probability for intact Paleo-Indian or Archaic archaeological deposits under the seabed is low because historic sea level rise has had a destructive effect on the readily erodible local glacial deposits.

POTENTIAL FOR PREVIOUSLY UNIDENTIFIED RESOURCES

Analysis of the data collected in the 1992 survey and inventory (Lewarch et al. 1993) and regional literature resulted in the development of a probability model identifying areas of high, medium, and low sensitivity for the presence of cultural resources on NAVBASE Kitsap Bangor (Table 3.13–1). The model predicts that areas along saltwater shores have the highest probability for both pre- and post-contact cultural resources. A search of recorded archaeological sites on

WISAARD showed no submerged resources within a 1-mile search radius of the shoreline (HRA 2013). Due to the amount of development along the Bangor shoreline, it is unlikely that there are undocumented historic-period resources present. There is a low likelihood that intact prehistoric archaeological deposits or features are present along the submerged shoreline, due to Holocene sea level changes and their associated erosion of the Hood Canal coastline. Upland flat areas including meadows have a medium probability, and areas with a closed canopy forest are considered to have a low probability for the presence of surviving cultural resources (Lewarch et al. 1993). A survey in 2009 (Grant et al. 2010) tested the sensitivity assessments and found them still valid, within the limits of the investigation.

Historic land use complexes located inland from the combined project APEs illustrate the historic use of the project vicinity. These complexes, including the orchard trees near the SPE APE (proposed parking lot), have been evaluated for NRHP eligibility per the pre-Navy Early Settlement and Historic Context Study and Orchard Evaluation reports developed for the Navy (Cardno TEC 2013; Leidos et al. 2014).

Table 3.13–1. Probability Model for the Presence of Archaeological Resources on NAVBASE Kitsap Bangor

Probability	Environmental Characteristics
Prehistoric Period Sites	
High	Saltwater shores; near mouths of drainage; relatively flat areas inland from shorelines and blufflines; marshes, other unique habitats such as marshes
Medium	Upland flat areas overlooking drainages, meadows
Low	Closed canopy, climax forest; offshore
Historic Period Sites	
High	Saltwater shores; drainage mouths; relatively flat areas inland from shorelines and blufflines
Medium	Upland flat areas, meadows; marshes, other unique habitats
Low	Closed canopy, climax forest; offshore

Source: Lewarch et al. 1993

POTENTIAL FOR PREVIOUSLY UNIDENTIFIED RESOURCES AT THE LWI PROJECT SITES

The shoreline that includes the LWI project was originally surveyed for archaeological resources in 1992 (Lewarch et al. 1993) and again in support of the Proposed Action (HRA 2013). Although the shoreline where project activities would occur could be considered sensitive for the presence of cultural resources, pre-Navy logging and settlement, World War II development, and construction of current facilities (Delta Pier to the south and EHW-1 to the north) have all reduced the likelihood for the presence of intact archaeological resources. Disturbance and lack of intact resources was confirmed by the record search and analysis conducted for the recent archaeological survey (HRA 2013).

Subsurface sampling of the shoreline near the north LWI project areas in 2011 and 2013 also found evidence of extensive disturbance in the northern portion of the APE, in the form of areas of fill and bulldozed cuts (HRA 2011, 2013).

POTENTIAL FOR PREVIOUSLY UNIDENTIFIED RESOURCES AT THE SPE PROJECT SITE

As with the LWI project locations, the SPE project areas would generally be considered sensitive for the presence of cultural resources because of their proximity to the shoreline. However, extensive disturbance from historic activity has greatly reduced the probability that intact archaeological historic properties would be located anywhere within the APE for SPE projects. Extensive testing verified the level of disturbance, and found only historic-era archaeological sites. These sites do not contain significant information nor are any of them eligible for listing in the NRHP (SHPO has not yet concurred with these eligibility evaluations).

3.13.1.2. CURRENT REQUIREMENTS AND PRACTICES

Section 106 of the NHPA of 1966, as amended (16 USC 470, recodified in December 2014 in 54 USC 306108) requires federal agencies to identify historic properties within the proposed project APE, determine potential effects the proposed project may have on identified historic properties, and consult with the SHPO on determinations of eligibility and findings of effects. If the proposed project adversely affects an identified historic property, further consultation with the SHPO and the Advisory Council on Historic Preservation (ACHP), if they choose to participate in the event of adverse effects, is required to avoid, minimize, or mitigate the adverse effect. Federal regulations define historic properties to include prehistoric and historic sites, buildings, structures, districts, or objects listed in or eligible for inclusion in the NRHP, as well as artifacts, records, and remains related to such properties (NHPA, as amended [54 USC 300101 et seq.]). To be considered eligible for inclusion in the NRHP, cultural resources must be determined to be significant by meeting one or more of the criteria outlined in 36 CFR 60.4 (NRHP, Criteria for Evaluation). A historic property must also possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property must be 50 years old or older to be considered eligible for inclusion in the NRHP or must have achieved exceptional importance within the last 50 years. For example, more recent historic resources on a military installation may be considered significant if they are of exceptional importance in understanding the Cold War.

Secretary of the Navy Instruction (SECNAVINST) 5090.8a, *Policy for Environmental Protection, Natural Resources and Cultural Resources Programs*, and Chief of Naval Operations Instruction (OPNAVINST) 5090.D (January 2014), Chapter 27, “Cultural Resources Management,” require the Navy to consider the effects of its undertakings on cultural resources in its planning and program efforts. SECNAVINST 4000.35a, Department of the Navy Cultural Resources Program, establishes policy and assigns responsibilities within the Department of the Navy for fulfilling the requirements of cultural resources laws such as the NHPA.

The Navy concluded consultation with the SHPO regarding the potential effect of the LWI structure on the visual context and aesthetic environment of EHW-1 and Delta Pier, both of which are identified as historic properties within the APE. The Navy has determined there is no adverse effect on the NRHP eligibility of either historic property. For the SPE project, the Navy determined there were no NRHP-eligible buildings or structures within the SPE APE and that the project would have no effect on historic properties. The SHPO has concurred with the Navy’s determinations of no effect for both the LWI and SPE projects (letters dated July 30, 2015, and October 7, 2015, respectively). The Navy is in consultation with Skokomish Indian Tribe, Port Gamble S’Klallam Tribe, Jamestown S’Klallam Tribe, Lower Elwha Klallam Tribe, and

Suquamish Tribe as required by the implementing regulations of Section 106 of the NHPA (36 CFR 800.4(a)(4)).

3.13.2. Environmental Consequences

Under federal law, a project may lead to effects on cultural resources (whether the resources are archaeological, architectural, or traditional) if the resources are listed in or are eligible for listing in the NRHP or are important to traditional cultural groups, such as American Indians. An NRHP-listed or eligible resource is known as a historic property. An action results in adverse effects on a historic property when it alters any of the resource's characteristics that make the historic property eligible for the NRHP, including relevant features of its environment or use.

3.13.2.1. APPROACH TO ANALYSIS

Analysis of impacts on cultural resources considers both direct and indirect impacts. Direct impacts may occur by physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource's importance; introducing visual or audible elements that are out of character with the property or alter its setting; or neglecting the resource to the extent that it deteriorates or is destroyed. Direct impacts can be assessed by identifying the types and locations of activities and determining the exact location of cultural resources that could be impacted. For example, introducing traffic to a previously quiet location could be considered an impact. Indirect impacts could result from project-related features that lead to effects that are removed in time or space from the action. For example, project-induced population increases could result in inadvertent impacts on cultural resources, including trampling and erosion or an increase in the potential for vandalism.

In all cases, the Navy would comply with Section 106 of the NHPA (Section 3.13.1.2), which requires the completion of consultation with the Washington SHPO and appropriate tribes.

3.13.2.2. LWI PROJECT ALTERNATIVES

3.13.2.2.1. LWI ALTERNATIVE 1: NO ACTION

Under the No Action Alternative, the LWI would not be constructed, overall operations would not change from current levels, and there would be no effect on historic properties. The Navy would continue to manage its cultural resources in accordance with Navy regulations and the NHPA.

3.13.2.2.2. LWI ALTERNATIVE 2: PILE-SUPPORTED PIER

CONSTRUCTION

All shoreline and upland areas with the potential for ground-disturbing activities have been surveyed (HRA 2013; Stell Environmental Enterprises and Cardno TEC 2013). The staging area for the LWI construction would be a 5.4-acre (2.2-hectare) site near the intersection of Archerfish and Seawolf Roads (Figure 2-1). This highly disturbed site has been used for staging other construction projects and was not surveyed for this project because the project would not result in further ground disturbance of the site.

Although the saltwater shoreline is generally sensitive for the presence of cultural resources, this particular shoreline is considered to have a low probability for the presence of unrecorded, significant archaeological resources due to the extent of prior disturbance. This was substantiated by the results of the archaeological survey and testing (Grant et al. 2010; Grant 2011; HRA 2013). One archaeological site, 45KP212, is located within the direct APE at the south LWI project area, and extends inland. Site 45KP212 is located in an extremely disturbed context, lacks integrity, and is not eligible for listing in the NRHP. Site 45KP108 is outside the APE.

No shipwrecks or submerged aircraft have been located in the APE. Although it is possible that isolated artifacts associated with fishing or marine mammal hunting may exist offshore in the submerged portion of the APE, there is low probability for the presence of intact inundated Paleo-Indian or early Holocene archaeological sites or features owing to destructive processes associated with sea level rise. Any evidence of pre-contact and early historic-period occupation and resource harvesting activities that may have existed likely would have succumbed to heavy disturbance of the shoreline caused by development of the shoreline for NAVBASE Kitsap Bangor facilities, such as the existing Delta Pier and EHW-1, construction of the causeway over Devil's Hole, and other shoreline activity (HRA 2011). During construction of the LWI south abutment, a portion of the existing anti-submarine/anti-torpedo wooden baulks at the north end of the Devil's Hole Causeway would be demolished. This would not be a significant impact because this architectural resource is not eligible for listing in the NRHP.

Two NRHP-eligible buildings or structures are located within the APE for visual effects: EHW-1 and Delta Pier (Table 3.13–2). Although neither would be modified or demolished as part of this alternative, the LWI would be a visible project element from both of these resources. The Navy determined that construction of the LWI would not adversely affect either the immediate setting of historic properties or association with their historic landscapes. The SHPO concurred with the Navy's determination on July 30, 2015.

Table 3.13–2. NRHP-Eligible Buildings/Structures Located in the Area of Potential Effect for Direct and Indirect Effects

Facility	Facility Number	Date Built	NRHP Status	Effect*
Delta (Refit) Pier	7400	1978	Eligible	No Adverse Effect
Explosives Handling Wharf-1	7501	1978	Eligible	No Adverse Effect

Based on a viewshed analysis (Sackett 2010) completed for a similarly located project, the viewshed of both Delta Pier and EHW-1 would be impacted by this alternative. Although the south LWI would lie between Delta Pier and areas to the south, the fence and towers would not block the view of Delta Pier enough to constitute an adverse effect. Similarly, the view from Delta Pier towards the south would not be adversely affected by the presence of the fence and towers, as the construction would be consistent with the scale and function of the nearby facilities. At the north LWI project site, the pier structure would not be prominently visible from the shore side of EHW-1, but it might be apparent from EHW-1 itself. However, the view toward the shore through the LWI would not be significantly blocked by the pier, fence, and towers. In accordance with Section 106 of the NHPA, the Navy consulted with the SHPO, seeking concurrence with the

determination of no adverse effect on EHW-1 and Delta (or Refit) Pier. The SHPO concurred with the Navy's determination on July 30, 2015. No other known or identified historic properties are within the project viewshed.

Construction-related noise and traffic associated with the Proposed Action would not affect historic properties because it would be consistent with ongoing operation and maintenance of the existing facilities. The two NRHP-eligible buildings, Delta Pier and EHW-1, should not be affected by vibrations associated with the construction. Additional personnel associated with construction of this alternative would not constitute a significant source of indirect impacts. The Navy would ensure that construction crews are aware that any cultural resources discovered during any construction activity should not be disturbed, and crews would be instructed in procedures for reporting any such finds.

Although no TCPs or PTRCITs have been located within the LWI APE, a traditional shellfish harvesting area is located within the south LWI project site (see Section 3.14). Earth disturbing activities in the south LWI project area would be monitored by a professional archaeologist and a tribal cultural observer if requested by the affected tribes. In the unlikely event that items subject to NAGPRA are encountered, the Navy would implement a NAGPRA Plan of Action specifically developed for the south LWI project area or an installation-wide NAGPRA Comprehensive Agreement if one is in place at the time of construction. In the extremely unlikely event of encountering undisturbed archaeological resources that have the potential to yield information important in prehistory or history (e.g., an intact, datable feature surviving within 45KP212), the Navy would consult with the Washington SHPO and affected tribes and address the find in accordance with the post-review discovery clause of Section 106 of the NHPA (36 CFR Part 800.13(b)(3)).

OPERATION/LONG-TERM IMPACTS

Impacts on EHW-1 and Delta Pier related to the operation and maintenance of the LWI would be a continuation of the impacts from construction because the effect is primarily to setting. The presence of the north and south LWI would continue to affect the view from EHW-1 and Delta Pier, respectively, as well as the view to both of these historic properties from both the shore and from Hood Canal, but this would not be an adverse effect because the new structures would fit in with the current level of shoreline construction and would be consistent with the existing facilities. No other historic properties would be affected. Since there would be no additional ground disturbance, it is extremely unlikely that any previously undiscovered archaeological resources that might be present would be impacted through operations. Maintenance, as distinct from operation, associated with this alternative would have no impact on any historic property, since routine inspections, repair, and replacement of LWI, as required, would occur within the footprint of the existing structures.

3.13.2.2.3. LWI ALTERNATIVE 3: PSB MODIFICATIONS (PREFERRED)

CONSTRUCTION

Project areas with the potential for ground-disturbing activities are the same for LWI Alternative 3 as for LWI Alternative 2, and have been surveyed (HRA 2013; Stell Environmental Enterprises and Cardno TEC 2013). Sensitivity for the presence of previously unknown cultural

resources is also the same, so that although the saltwater shoreline is generally sensitive for the presence of cultural resources, this particular shoreline is considered to have a low probability for the presence of unrecorded, significant archaeological resources due to the extent of prior disturbance, as substantiated by the results of the archaeological survey (HRA 2013; Stell Environmental Enterprises and Cardno TEC 2013). The archaeological resource that has been located along the shoreline and extends inland within the project APE (site 45KP212) is located in an extremely disturbed context, lacks integrity, and is not eligible for listing in the NRHP. No shipwrecks or submerged aircraft have been located in the APE. Demolition of a portion of the existing anti-submarine/anti-torpedo wooden baulks at the north end of the not-eligible Devil's Hole Causeway would not be a significant impact.

As with LWI Alternative 2, two NRHP-eligible buildings or structures are located within the APE for visual effects: EHW-1 and Delta Pier (Table 3.13–2). Neither would be modified or demolished as part of this alternative, although the LWI would be a visible project element from both of these buildings or structures. The Navy consulted with the SHPO, seeking concurrence on their determination that construction of the LWI would not adversely affect either the immediate setting of historic properties or association with their historic landscapes. The SHPO concurred with the Navy's determination on July 30, 2015.

As with LWI Alternative 2, the impact on the viewshed of both Delta Pier and EHW-1 would not constitute an adverse effect, nor would the view from Delta Pier toward the south be adversely affected by the presence of the PSBs or shoreline abutment, as the construction would be consistent with the scale and function of the nearby facilities. This finding of effect is based on a viewshed analysis (Sackett 2010) completed for a similarly located project. The situation at the north LWI project site is the same as for LWI Alternative 2, where the PSBs and shoreline abutment would not be prominently visible from the shore side of EHW-1, but might be apparent from EHW-1 itself. However, the view toward the shore through the LWI would not be significantly blocked by the PSB. In accordance with Section 106 of the NHPA, the Navy consulted with the SHPO, seeking concurrence with the determination of no adverse effect on EHW-1 and Delta (or Refit) Pier. The SHPO concurred with the Navy's determination on July 30, 2015. No other known or identified historic properties are within the project viewshed.

As with LWI Alternative 2, construction-related noise and traffic associated with the Proposed Action would not affect historic properties because it would be consistent with ongoing operation and maintenance of the existing facilities, and the two NRHP-eligible buildings, Delta Pier and EHW-1, should not be affected by vibrations associated with the construction. Additional personnel associated with construction of this alternative would not constitute a significant source of indirect impacts. Earth disturbing activities in the south LWI project area would be monitored by a professional archaeologist and a tribal cultural observer if requested by the affected tribes. In the unlikely event that items subject to NAGPRA are encountered, the Navy would implement a NAGPRA Plan of Action specifically developed for the south LWI project area or an installation-wide NAGPRA Comprehensive Agreement if one is in place at the time of construction. In the extremely unlikely event of encountering undisturbed archaeological resources that have the potential to yield information important in prehistory or history (e.g., an intact, datable feature surviving within 45KP212), the Navy would consult with the Washington SHPO and affected tribes and address the find in accordance with the post-review discovery clause of Section 106 of the NHPA (36 CFR Part 800.13(b)(3)).

OPERATION/LONG-TERM IMPACTS

Impacts on EHW-1 and Delta Pier related to the operation and maintenance of LWI Alternative 3 would be the same as for LWI Alternative 2: a continuation of the impacts from construction because the effect is primarily on setting. The presence of the north and south LWI structures would continue to affect the view from EHW-1 and Delta Pier, respectively, as well as the view to both of these historic properties from both the shore and from Hood Canal, but this would not be an adverse effect because the new structures would fit in with the current level of shoreline construction and would be consistent with the existing facilities. No other historic properties would be affected. Since there would be no additional ground disturbance, it is extremely unlikely that any previously undiscovered archaeological resources that might be present would be impacted through operations. Maintenance, as distinct from operation, associated with this alternative would have no impact on any historic property, since routine inspections, repair, and replacement of LWI, as required, would occur within the footprint of the existing structures.

3.13.2.2.4. SUMMARY OF LWI IMPACTS

Impacts on cultural resources associated with the construction and operation phases of the LWI project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.13–3.

Table 3.13–3. Summary of LWI Impacts on Cultural Resources

Alternative	Environmental Impacts on Cultural Resources
LWI Alternative 1: No Action	No impact.
LWI Alternative 2: Pile-Supported Pier	<i>Construction:</i> No adverse effect on Delta Pier and EHW-1. Low potential for encountering undisturbed archaeological deposits and NAGPRA items in site 45KP212. <i>Operation/Long-term Impacts:</i> No adverse effect on Delta Pier and EHW-1.
LWI Alternative 3: PSB Modifications (Preferred)	<i>Construction:</i> No adverse effect on Delta Pier and EHW-1. Low potential for encountering undisturbed archaeological deposits and NAGPRA items in site 45KP212. <i>Operation/Long-term Impacts:</i> No adverse effect on Delta Pier and EHW-1.
Mitigation: Current practices to avoid, minimize, or mitigate adverse impacts on historic properties are described in Section 3.13.1.2. In the event of the discovery of archaeological resources with the potential to yield important information, the Navy would develop and implement mitigation measures in consultation with the SHPO and affected American Indian tribes, and possibly the ACHP. In the event of inadvertent discovery of American Indian remains, funerary items, sacred objects, or items of cultural patrimony, the Navy would implement project-specific NAGPRA Plan of Action or Comprehensive Agreement to repatriate the items subject to NAGPRA.	
Consultation and Permit Status The Navy concluded Section 106 consultation with the SHPO for historic resources. Consultation with American Indian tribes is ongoing. The Navy will consult with SHPO and affected American Indian tribes, and possibly the ACHP, in the event of the discovery of archaeological resources with the potential to yield important information. In the event NAGPRA items are discovered they will be subject to a project-specific Plan of Action or installation Comprehensive Agreement, if one is in place at the time of the discovery. No permits are required.	

ACHP = Advisory Council on Historic Preservation; NAGPRA = Native American Graves Protection and Repatriation Act; SHPO = State Historic Preservation Officer

3.13.2.3. SPE PROJECT ALTERNATIVES

3.13.2.3.1. SPE ALTERNATIVE 1: NO ACTION

Under the No-Action Alternative, the Service Pier would not be extended, overall operations would not change from current levels, and there would be no effect on historic properties. The Navy would continue to manage its cultural resources in accordance with Navy regulations and the NHPA.

3.13.2.3.2. SPE ALTERNATIVE 2: SHORT PIER (PREFERRED)

CONSTRUCTION

Project elements include in- or over-water features and shoreline or inland features. In- and over-water features include the pier extension, pier crane, and Pier Services and Compressor Building location on the Service Pier. The latter two facilities would be built on the pier, requiring no additional disturbance. A search of recorded archaeological sites on the WISAARD showed no submerged resources within a 1-mile search radius of the shoreline (HRA 2013). Due to the amount of development along the Bangor shoreline, it is unlikely that there are undocumented historic-period resources present. There is a low likelihood that intact prehistoric archaeological deposits or features are present along the submerged shoreline, due to Holocene sea level changes and their associated erosion of the Hood Canal coastline.

Shoreline or in-land features include the Waterfront Ship Support Building to be located on an existing parking lot, a new parking lot, a shoreside emergency generator facility on a new concrete pad, road improvements, and a laydown area to be located on the existing parking lot where the Waterfront Ship Support Building would be built. The SPE upland APE has been surveyed for archaeological and architectural resources. None were located that meet the criteria for NRHP eligibility. Because of its location in a small cove, the SPE would not be visible from any historic properties, including Delta Pier and EHW-1, so there would be no impact on the viewshed of any NRHP-eligible resources. The SHPO concurred with the Navy's determination on October 7, 2015.

Because of the lack of NRHP-eligible resources within the APE, construction of SPE Alternative 2 would have no effect on historic properties. No TCPs or PTRCITs have been identified to date within the APE. The SHPO concurred with the Navy's determination on October 7, 2015.

Earth disturbing activities in the SPE project area would be monitored by a professional archaeologist and a tribal cultural observer if requested by the affected tribes. In the unlikely event that items subject to NAGPRA are encountered, the Navy would implement a NAGPRA Plan of Action specifically developed for the SPE project area or an installation-wide NAGPRA Comprehensive Agreement if one is in place at the time of construction. In the extremely unlikely event of encountering undisturbed archaeological resources that have the potential to yield information important in prehistory or history, the Navy would consult with the Washington SHPO and affected tribes and address the find in accordance with the post-review discovery clause of Section 106 of the NHPA (36 CFR Part 800.13(b)(3)).

OPERATION/LONG-TERM IMPACTS

Because there are no NRHP-eligible resources within the SPE APE, there would be no impacts on historic properties from operation and maintenance of the SPE Alternative 2 facility.

3.13.2.3.3. SPE ALTERNATIVE 3: LONG PIER

CONSTRUCTION

The difference between SPE Alternative 3 and the SPE Alternative 2 would only be the length of the pier. Since there are no NRHP-eligible resources within the SPE APE, the long pier would also have no effect on historic properties. Notwithstanding, the approach described above for Alternative 2 for unexpected discoveries would also be used for Alternative 3.

OPERATION/LONG-TERM IMPACTS

Similar to SPE Alternative 2, there would be no impacts on historic properties from operation and maintenance of the SPE Alternative 3 facility.

3.13.2.3.4. SUMMARY OF SPE IMPACTS

Impacts on cultural resources associated with the construction and operation phases of the SPE project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.13–4.

Table 3.13–4. Summary of SPE Impacts on Cultural Resources

Alternative	Environmental Impacts on Cultural Resources
SPE Alternative 1: No Action	No impact.
SPE Alternative 2: Short Pier (Preferred)	Construction: Low potential for encountering undisturbed archaeological deposits and NAGPRA items. Operation/Long Term Impacts: No impact.
SPE Alternative 3: Long Pier	Construction: Low potential for encountering undisturbed archaeological deposits and NAGPRA items. Operation/Long Term Impacts: No impact.
<p>Mitigation: Current practices to avoid, minimize, or mitigate adverse impacts on historic properties are described in Section 3.13.1.2. In the event of the discovery of archaeological resources with the potential to yield important information, the Navy would develop and implement mitigation measures in consultation with the SHPO and affected American Indian tribes, and possibly the ACHP. In the event of inadvertent discovery of American Indian remains, funerary items, sacred objects, or items of cultural patrimony, the Navy would implement project-specific NAGPRA Plan of Action or Comprehensive Agreement to repatriate the items subject to NAGPRA.</p>	
<p>Consultation and Permit Status</p> <p>The Navy concluded Section 106 consultation with the SHPO for historic resources. Consultation with American Indian tribes is ongoing. The Navy will consult with SHPO and affected American Indian tribes, and possibly the ACHP, in the event of the discovery of archaeological resources with the potential to yield important information. In the event NAGPRA items are discovered they will be subject to a project-specific Plan of Action or installation Comprehensive Agreement, if one is in place at the time of the discovery.</p> <p>No permits are required.</p>	

ACHP = Advisory Council on Historic Preservation; NAGPRA = Native American Graves Protection and Repatriation Act; SHPO = State Historic Preservation Officer

3.13.2.4. COMBINED IMPACTS OF LWI AND SPE PROJECTS

Continued construction projects and modifications to Navy facilities have the potential to adversely affect historic properties. While unlikely to result in adverse impacts, construction-related clearing and excavation operations associated with the proposed LWI and SPE actions could inadvertently disturb unknown archaeological resources. The LWI project would have an impact, but not an adverse impact, on two historic properties: the Delta Pier and EHW-1. These NRHP-eligible historic properties are both significant based on their Cold War-era associations. The SPE project would have no impact on historic properties, with the result that the two projects together would have no combined adverse impact on historic properties.