

3.8. LAND USE AND RECREATION

3.8.1. Affected Environment

Land use is the classification of either natural or human-modified activities occurring at a given location. Natural land uses include undeveloped coastlines, forested areas, or other natural open space. Human-modified land uses include developed land (such as residential, commercial, industrial, recreational, or other developed areas). Land uses are often regulated by management plans, policies, regulations, and ordinances (e.g., zoning) that determine the type and extent of land use allowable in specific areas and protect specially designated or environmentally sensitive areas.

3.8.1.1. EXISTING CONDITIONS

Land use surrounding NAVBASE Kitsap Bangor is mostly rural residential with some small pockets of more dense residential development and forest. Land use on NAVBASE Kitsap Bangor is a mix of natural areas and open space, residential and transient housing, industrial facilities, administration offices, and military uses related to support and operations of submarines. The waterfront area consists of wharves, piers, and laydown areas for temporary equipment and construction, in addition to docking facilities. A military security buffer zone (closed to public access) is located across Hood Canal on Toandos Peninsula (Figure 3.8–1). Recreational uses on NAVBASE Kitsap Bangor include pedestrian and bicycle trails and indoor and outdoor facilities (such as gyms, hardcourts, and playfields). Water-based recreation opportunities exist off base and include sea kayaking, fishing, boating, shellfish harvesting, and sightseeing. The Final Kitsap County Comprehensive Plan and Development Regulation Amendments has designated NAVBASE Kitsap Bangor as military land use (Kitsap County 2012a).

3.8.1.1.1. LAND USES

Comprising 7,149 acres, NAVBASE Kitsap Bangor is located approximately 20 miles (32 kilometers) west of Seattle and 3 miles (5 kilometers) northwest of Silverdale, Washington, in Kitsap County (Figure 3.8–1). Land uses surrounding NAVBASE Kitsap Bangor are generally semi-rural with pockets of residential development. Land uses adjacent to the base have been zoned by Kitsap County as Rural Residential (one development unit per 5 acres [2 hectares]), Rural Commercial, Public Facility, and Urban Industrial (Kitsap County 2012b, 2012c). Small unincorporated communities close to NAVBASE Kitsap Bangor include Vinland (located on the northern boundary of NAVBASE Kitsap Bangor) and Olympic View (located southeast of the base and along the coastal area bordering the western base boundary) (Figure 3.8–1). The closest incorporated city near NAVBASE Kitsap Bangor is Poulsbo, about 3 miles (4.8 kilometers) east of the base. Silverdale, which is unincorporated, lies a similar distance south of the base.



Figure 3.8-1. Communities and Public Use Areas in the Vicinity of NAVBASE Kitsap Bangor

NAVBASE Kitsap Bangor is entirely owned by the federal government and is divided into two major land-use sectors: Lower Base and Upper Base (Figure 3.8–1). The Lower Base contains most of the industrial facilities, the waterfront area, and maintenance and production facilities. The waterfront area at the Lower Base consists of wharves and docking facilities distributed along a 4-mile (6.4-kilometer) section of shoreline. These facilities include the EHW-1, Delta Pier, Marginal Wharf, Carderock Pier, Service Pier, KB Dock, and MSF. Base residential areas are located on Upper Base approximately 4 miles (6.4 kilometers) south of the proposed LWI and SPE structures.

West of the LWI and SPE sites, the Navy owns a 768-acre (311-hectare) buffer strip on the Toandos Peninsula that is closed to public access (Navy 2001) (Figure 3.8–1). The Toandos Peninsula is rural in character, and Jefferson County has designated this buffer zone as Military Reservation. Land use designations surrounding the buffer area are Rural Forest, Commercial Forest, and Rural Residential (one development unit per 5 acres [2 hectares] and one development unit per 20 acres [8 hectares]) (Jefferson County 2005). Washington State Parks manages 10,000 feet (3,048 meters) of shoreline at the southern tip of this peninsula for shellfish harvesting. The shellfish harvesting site is accessed by boat only; there is no upland access.

LAND USES NEAR THE LWI PROJECT SITES

The LWI sites are located along the eastern bank of Hood Canal within the Bangor waterfront (Figure 3.8–1). Hood Canal averages 1.5 miles (2.4 kilometers) in width adjacent to the LWI sites. Several large facilities in the direct vicinity of the LWI project sites are primarily industrial uses, such as the EHW-1, Delta Pier, and Marginal Wharf.

The north LWI project site lies within the north end of the main Bangor industrial waterfront. It is within Naval Restricted Area 1 (Chapter 1, Section 1.1), about 1.3 miles (2.1 kilometers) south of the northern installation boundary.

The south LWI project site lies within the Bangor industrial waterfront and is within Naval Restricted Area 1 about 2.7 miles (4.3 kilometers) south of the northern installation boundary. The south LWI project site is just north of a beach that has been designated for tribal shellfish harvesting. See Section 3.14 for information related to tribal shellfish harvesting.

The planned emphasis for the Lower Base is to directly support TRIDENT mission activities and other industrial-type uses. The existing land uses at the proposed LWI sites are consistent with the land use planning emphasis for this area of the installation (TRIDENT Joint Venture 1975).

LAND USES NEAR THE SPE PROJECT SITE

The SPE project site is located along the eastern bank of Hood Canal within the Bangor waterfront (Figure 3.8–1), approximately 0.6 mile (1 kilometer) north of the southern boundary of the base and 3.3 miles (5.4 kilometers) south of the northern boundary of the base. Areas south of the base are rural residential including the community of Olympic View. The western bank of Hood Canal, directly across from the SPE project site, is designated Rural Forest, Commercial Forest, and Rural Residential land uses (Jefferson County 2005); and the Navy-owned buffer strip on the Toandos Peninsula in Jefferson County (Navy 2001). The SPE project

site lies within the Bangor industrial waterfront and Naval Restricted Area 1. Nearby facilities include the Carderock Pier and KB Dock.

3.8.1.1.2. RECREATION

Recreation opportunities have decreased on NAVBASE Kitsap Bangor since 2001 as a result of access restrictions developed for base security. NAVBASE Kitsap Bangor continues to provide some outdoor activities to military personnel, their families, and federal employees associated with the base; however, recreational activities are prohibited at the Lower Base. No hunting is allowed anywhere on base and no public shellfish harvesting is allowed along the Bangor waterfront. NAVBASE Kitsap Bangor is restricted from general public access.

Outside of NAVBASE Kitsap Bangor boundaries, Hood Canal provides water-based activities (such as fishing, sightseeing, shellfish harvesting, and other recreational activities). Sea kayaking and some scuba diving are also increasingly common ways for visitors to enjoy the scenic resources of the coastline. The closest sea kayak trail begins/ends at Kitsap Memorial State Park 5 miles (8 kilometers) north of NAVBASE Kitsap Bangor (Figure 3.8–1), runs north and around Kitsap Peninsula and ends/begins at Poulsbo (North Kitsap Trails Association 2012).

Public recreation areas in the vicinity of NAVBASE Kitsap Bangor include Kitsap Memorial State Park, Scenic Beach State Park (about 8 miles [13 kilometers] south of the base), and Salsbury Point County Park (about 7.4 miles [12 kilometers] north of the base). Currently, Washington State Parks has closed the sport clam and oyster fishing season at Kitsap Memorial and Scenic Beach State Parks until further notice due to the decline of shellfish populations (Washington State Parks 2012a, 2012b). The closest public water access site on the eastern shore of Hood Canal is Anderson Landing, about 3.5 miles (6 kilometers) south of the base (Figure 3.8–1). The closest boat launch is at Salsbury Point County Park, on Kitsap Peninsula just north of Hood Canal Bridge (Kitsap County Parks and Recreation 2011).

A floating security barrier prevents recreational and commercial boater access to the waterfront area of the base. Boaters must remain outside the security fencing and the Naval Restricted Areas (Chapter 1, Section 1.1).

RECREATION NEAR THE LWI PROJECT SITES

The LWI project sites are restricted from general public use as they are within the existing Naval Restricted Area 1. Therefore, there are currently no recreation uses on land near the LWI project sites. Recreational activities on the waters of Hood Canal are discussed above.

RECREATION NEAR THE SPE PROJECT SITE

The SPE project site is currently restricted from general public use as it is within the existing Naval Restricted Area 1. Therefore, there are currently no recreation uses on land near the SPE project site. Recreational activities on the waters of Hood Canal are discussed above.

3.8.1.2. CURRENT REQUIREMENTS AND PRACTICES

Under the doctrine of federal supremacy, the federal government is not subject to local or state land use or zoning regulations unless specifically consented to by Congress. The federal government takes state and local land use plans, guidelines, and ordinances into consideration and cooperates with agencies to avoid conflicts when possible. The applicable federal regulation for land use along the Bangor waterfront is the CZMA. However, the CZMA excludes federally owned and managed areas within the coastal zone, specifically military reservations and installations.

The Navy incorporates sustainable planning practices into facility planning, construction, and operations as required under various environmental laws and EOs. Specifically, Naval Facilities Instruction 11010.45, Regional Planning Instruction — Sustainable Planning, addresses general principles and guidance for sustaining compatible conditions through coordination with neighboring communities. Sustainable planning instructions include various strategies to meet goals embodied in federal laws and EOs and ensure long-term flexibility for supporting mission needs. To the extent practicable, NAVBASE Kitsap Bangor attempts to follow local policies (e.g., the Kitsap County Shoreline Management Master Program) by minimizing adverse impacts on water quality, sediment quality, shellfish, finfish, wildlife, boating, recreational and commercial fishing, public access, scenic vistas, and wetlands.

The Navy *Waterfront Functional Plan, 2009 Update* (Navy 2009c) focuses on waterfront activities and infrastructure in Navy Region Northwest. The plan develops a long-range improvement strategy that addresses operational shortfalls caused by facility inadequacies and reduces infrastructure by identifying excess assets. The LWI and SPE are appropriate infrastructure as described in the Navy *Waterfront Functional Plan*.

In 1975, the Navy prepared a *TRIDENT Support Site Master Plan* (TRIDENT Joint Venture 1975) for NAVBASE Kitsap Bangor “to identify the capital improvement projects necessary to meet mission requirements, and to recommend locations for future development which promote both optimum land utilization and the accomplishment of assigned missions.” The plan was guided by objectives for the mission, traffic and circulation, community involvement, physical form, and environmental quality. The proposed plan addresses both the Lower and Upper Base, where a mixture of industrial, administrative, community, and residential uses were occurring, and identifies alternative layouts for arranging functional areas. The proposed plan for the Lower Base is in compliance with the Naval Ordnance Safety and Security Activity and DoD Explosives Safety Board requirements. The plan also contains recommendations and goals for organizing future development and siting new projects on the base. The plan identifies visual integration, provision of desirable buffers between various land uses, recreational amenities, and circulation as needing further consideration.

Pursuant to the Sikes Act, the Navy prepared an INRMP that provides policy goals for land use on NAVBASE Kitsap Bangor (Navy 2001). Land use goals include:

- Maintaining the grounds in an environmentally safe and sensitive manner that complements the military mission,
- Ensuring that multiple land uses are compatible,

- Applying land management practices consistent with the ecosystem management approach, and
- Making land available for non-military productive uses.

The INRMP also directs that future land development should occur in the following order of priority: (1) reconstruction, renovation, and rehabilitation of obsolete facilities; (2) development on previously disturbed grounds and military use areas where intensive development already exists; (3) undisturbed areas contiguous to developed areas; and (4) natural areas.

Aside from the plans and guidelines discussed above, no consultations or permits are required for land use and recreation resources. Noise regulations applicable to the Proposed Actions are discussed in Section 3.9.2.3.

3.8.2. Environmental Consequences

3.8.2.1. APPROACH TO ANALYSIS

The evaluation of impacts on land use considers a proposed action's compatibility with existing land use, adopted land use, and shoreline plans and policies.

The relative importance of land use impacts is based on the level of land use sensitivity in areas affected by the proposed action. In general, land use impacts would be adverse if they would: (1) be inconsistent or noncompliant with applicable land use plans and policies, (2) preclude the viability or use of the existing land, or (3) be incompatible with adjacent or vicinity land use to the extent that public health and safety is threatened.

3.8.2.2. LWI PROJECT ALTERNATIVES

3.8.2.2.1. LWI ALTERNATIVE 1: NO ACTION

Under the No Action Alternative, the LWI project would not be built and overall operations would not change from current levels. Therefore, there would be no impacts on land use and recreation.

3.8.2.2.2. LWI ALTERNATIVE 2: PILE-SUPPORTED PIER

Alternative 2 would be consistent with the NAVBASE Kitsap Bangor *TRIDENT Support Site Master Plan* and would not have a direct impact on adjacent land uses or recreation in the community of Vinland, the closest off-base residential area to the Proposed Action. Recreational users in the project vicinity would be affected by construction noise, especially pile driving noise. Noise impacts on residential areas are addressed in Section 3.9.

CONSTRUCTION

LAND USE

Under Alternative 2, construction would have no direct impact on land use. Proposed construction would not displace any adjacent land uses and is compatible with base plans. The

commitment of land/water resources is consistent with the *TRIDENT Support Site Master Plan* (TRIDENT Joint Venture 1975) and the *Waterfront Functional Plan* update (Navy 2009c). This project would be consistent with the *TRIDENT Support Site Master Plan* goal of meeting the TRIDENT mission requirements. The staging area for both LWI construction sites would be a 5.4-acre (2.2-hectare) area near the intersection of Archerfish and Seawolf Roads (Figure 2–1), which is not near the LWI project sites. This area has been previously disturbed during earlier construction projects for staging and its use for the LWI project would be consistent with existing land use.

An indirect impact on land use would be noise from pile driving and other construction activities. The land uses with greatest noise impact have a direct line of sight to the impact pile driver and would receive noise levels above local background, including waterfront residences along Thorndyke Bay. However, at no time would vibratory pile driving noise exceed 60 dBA (the maximum daytime allowable noise level specified in WAC 173-3 60-040) at any off-base location. Implementing the mitigation to restrict the duration of construction activities from 10:00 p.m. to 7:00 a.m. would prevent any noise impacts on residential land uses at night.

RECREATION

No public recreational uses occur at either of the LWI project sites and construction would be conducted within Naval Restricted Area 1, which currently restricts public access; therefore, construction of Alternative 2 would have no direct impact on recreational uses or access in the community of Vinland and those that use Hood Canal for recreational activities.

Noise during construction, specifically from pile driving, would diminish qualities of tranquility and solitude that many persons seek while recreating in areas near the base. The noise levels on the western shore of Hood Canal would not exceed WAC-permissible exposure levels for residential areas and, therefore, would not have an adverse noise impact on recreation in this area. In addition, temporary construction noise between 7:00 a.m. and 10:00 p.m. are exempt from noise standards. Pile driving would not occur outside these hours. Those engaging in activities such as boating, scuba diving, kayaking, and fishing on Hood Canal adjacent to the base may be affected by pile driving noise, but the floating security barriers around Restricted Area 1 would prevent recreational users from getting too close to areas with potentially harmful noise levels. Pile driving would occur during the in-water work window starting July 15, during daylight hours, and would take up to 80 working days.

Waterfront construction and military activities are ongoing at NAVBASE Kitsap Bangor. While intermittent elevated noise can be expected during construction, the highest intensity noise would be limited to the immediate vicinity of the construction activities. Recreational divers would not use waters in the project area because of access restrictions associated with the WRA. Divers in waters farther away from the construction areas may experience temporarily elevated noise conditions, but levels are not expected to differ appreciably from the range of noise typically generated in the heavily used waters of Hood Canal.

The base is off limits to the general public, which provides separation between construction noise sources and the recreating public on land. Construction noise would have a localized, direct, and short-term adverse impact on the quality of recreational activities such as fishing,

hiking, kayaking, walking along the beach, camping, and bird watching that benefit from quiet settings.

OPERATION/LONG-TERM IMPACTS

Alternative 2 would not change ongoing land uses nor displace any current uses, including recreational uses as the project sites are within an area that currently precludes public access. Indirect impacts such as noise generated by maintenance would be similar to current conditions and thus have no impact on recreation. Because there would be no change in operations, there would be no operational/long-term impacts on land use or recreation from the LWI project. Permanent structures would be consistent with existing structures and surrounding land uses.

3.8.2.2.3. LWI ALTERNATIVE 3: PSB MODIFICATIONS (PREFERRED)

Similar to LWI Alternative 2, Alternative 3 would also be consistent with the NAVBASE Kitsap Bangor *TRIDENT Support Site Master Plan* and would not have a direct impact on adjacent land uses or recreation in the community of Vinland, the closest off-base residential area to the Proposed Action.

CONSTRUCTION

LAND USE

Land use impacts from construction would be similar to those for LWI Alternative 2, except noise impacts would be less for Alternative 3 because of the shorter duration of pile driving (30 days versus 80 days). There would not be adverse noise impacts on residential areas (Section 3.9.3.2). The upland towers, observation posts, shoreline abutments, and upland staging area would be consistent with existing structures and surrounding land uses.

The abutments are the same as for LWI Alternative 2 and therefore would still be constructed and would use the same proposed staging area as for Alternative 2.

RECREATION

Recreational users in the project vicinity would be affected by construction noise, especially pile driving noise. LWI Alternative 3 differs from Alternative 2 in that there would be fewer piles, reduced duration of construction activities, and no in-water pile driving or impacts to scuba divers; therefore, the construction noise impact on recreation would be less than for Alternative 2. Noise impacts on residential areas are addressed in Section 3.9.3.

OPERATION/LONG-TERM IMPACTS

Because there would be no change in operations, there would be no operational/long-term impacts on land use or recreation from the LWI project. Permanent structures would be consistent with existing structures and surrounding land uses.

3.8.2.2.4. SUMMARY OF IMPACTS FOR LWI PROJECT ALTERNATIVES

Impacts on land use and recreation associated with the construction and operation phases of the LWI project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.8–1.

Table 3.8–1. Summary of LWI Impacts on Land Use and Recreation

Alternative	Environmental Impacts on Land Use and Recreation
LWI Alternative 1: No Action	No impact.
LWI Alternative 2: Pile-Supported Pier	<i>Construction:</i> Compatible with Navy <i>Waterfront Functional Plan</i> and <i>TRIDENT Support Site Master Plan</i> ; temporary adverse localized noise impacts on recreational areas from pile driving. <i>Operation/Long-term Impacts:</i> No impact.
LWI Alternative 3: PSB Modifications (Preferred)	<i>Construction:</i> Compatible with Navy <i>Waterfront Functional Plan</i> and <i>TRIDENT Support Site Master Plan</i> ; temporary adverse localized noise impacts as pile driving would occur (decrease in noise compared to Alternative 2 with a shorter construction duration and fewer piles, and no underwater noise impacts to scuba divers). <i>Operation/Long-term Impacts:</i> No impact.
Mitigation: The Navy would notify the public about upcoming construction activities and noise at the beginning of construction activities. Construction activities would not be conducted during the hours of 10:00 p.m. to 7:00 a.m.; in addition, pile driving would occur only during daylight hours. The Navy would request that the U.S. Coast Guard issue a Notice to Mariners to establish uniform procedures to facilitate the safe transit of vessels operating in the project vicinity. Please see Appendix C (Mitigation Action Plan) for more detailed mitigation measures.	
Consultation and Permit Status: No consultations or permits are required.	

3.8.2.3. SPE PROJECT ALTERNATIVES

3.8.2.3.1. SPE ALTERNATIVE 1: NO ACTION

Under the No Action Alternative, the SPE would not be built and overall operations would not change from current levels. Therefore, there would be no impacts on land use and recreation.

3.8.2.3.2. SPE ALTERNATIVE 2: SHORT PIER (PREFERRED)

Alternative 2 would be consistent with the NAVBASE Kitsap Bangor *TRIDENT Support Site Master Plan* and would not have a direct impact on adjacent land uses or recreation in the community of Olympic View, the closest off-base residential area to the Proposed Action. Recreational users in the project vicinity would be affected by construction noise, especially pile driving noise. Noise impacts are addressed in Section 3.9.

CONSTRUCTION

LAND USE

Under SPE Alternative 2, construction would have no direct impact on land use. Noise during construction, specifically from pile driving, would not exceed WAC-permissible exposure levels for nearby residential areas. In addition, temporary construction noise between the hours of 7:00 a.m. and 10:00 p.m. is exempt from the WAC limitations, and construction would not occur outside those hours. Nevertheless, pile driving noise would be audible in the community of

Olympic View, which would result in a temporary adverse effect on those distant residential areas. Noise levels in residential areas on the western shore of Hood Canal would be substantially lower than levels in Olympic View but would still be audible at times. The duration of pile driving would be no more than 161 days. Noise would be buffered through distance as well as by intervening mature forest and vegetation.

Proposed construction would not displace any adjacent land uses and is compatible with base plans. The commitment of land/water resources is consistent with the *TRIDENT Support Site Master Plan* (TRIDENT Joint Venture 1975) and the *Waterfront Functional Plan* update (Navy 2009c).

An indirect impact on land use would be noise from pile driving and other construction activities. The land uses with greatest noise impact include residential properties on the western shore of Hood Canal with a direct line of sight to the impact pile driver and would receive noise levels above local background. However, at no time would vibratory pile driving noise exceed 60 dBA (the maximum daytime allowable noise level specified in WAC 173-3 60-040). This would also be true when pile driving is occurring simultaneously at both the SPE and LWI project sites. Implementing the mitigation to restrict the duration of construction activities from 10:00 p.m. to 7:00 a.m. would prevent any noise impacts on residential land uses at night.

The potential staging area for construction would be located within the existing parking lot and at the site of the future Waterfront Ship Support Building, both of which are in the existing industrial area on the base.

RECREATION

There are currently no public recreational uses at or near the SPE project site; therefore, construction of SPE Alternative 2 would have no direct impact on recreational uses at or near the site, or on recreational access in the community of Olympic View.

The noise levels on the western shore of Hood Canal would not exceed WAC-permissible exposure levels for residential areas and, therefore, would not have an adverse noise impact on recreation in this area. Those engaging in activities such as boating, scuba diving, kayaking, and fishing on Hood Canal adjacent to the base may be affected by pile driving noise, but the floating security barriers around Naval Restricted Area 1 would prevent recreational users from entering the construction area. Pile driving would occur in daylight hours during two in-water work windows (July 15 to January 15), and would take no more than 161 days.

As described above for LWI Alternative 3, recreational divers are would not use waters in the immediate area because of access restrictions associated with the WRA. Divers in waters farther away from the construction areas may experience temporarily elevated noise conditions, but levels are not expected to differ appreciably from the range of noise typically generated in the heavily used waters of Hood Canal.

The base is off limits to the general public, which provides separation between construction noise sources and the recreating public. Construction noise would have a localized, direct, and short-term adverse impact on the quality of recreational activities such as fishing, hiking, kayaking, walking along the beach, camping, and bird watching that benefit from quiet settings.

OPERATION/LONG-TERM IMPACTS

SPE Alternative 2 would not change ongoing land uses or displace any current uses, including recreational uses. Indirect impacts, such as noise generated by maintenance, would be similar to current conditions and thus have no impact on recreation. The increase in operational activity would not impact land use or recreation in the long term, except that operational noise would be more constant, but not louder, than at present, and typical of general noise levels at this industrial waterfront. See Section 3.10 for a discussion of the impacts of light seen from the community of Olympic View.

3.8.2.3.3. SPE ALTERNATIVE 3: LONG PIER

SPE Alternative 3 differs from Alternative 2 in that the pier extension would be greater to accommodate two submarines berthed in an in-line configuration and the location extends more southwesterly than Alternative 2. Noise impacts on residential areas are addressed in Section 3.9.

CONSTRUCTION

LAND USE

Noise from construction of SPE Alternative 3 would have similar effects on residential areas as Alternative 2, but over a longer period (maximum of 205 days of pile driving as compared to 161 days for Alternative 2) during two in-water construction periods. Proposed construction would not displace any adjacent land uses and would be compatible with base plans.

RECREATION

SPE Alternative 3 would have no impact on access to recreation as the location of Alternative 3 is within an area that currently restricts public access. Recreational users in the project vicinity would be affected by both airborne and underwater construction noise, especially pile driving noise. The noise impacts on persons on the west bank of Hood Canal and on Hood Canal would be the same as Alternative 2, except pile driving would occur over a longer period of time, as the total number of piles would be greater than for Alternative 2. Noise during construction, specifically from pile driving, would diminish qualities of tranquility and solitude that many persons seek while recreating in areas of Hood Canal near the base.

OPERATION/LONG-TERM IMPACTS

Operational impacts would be the same as described above for SPE Alternative 2.

3.8.2.3.4. SUMMARY OF IMPACTS FOR SPE PROJECT ALTERNATIVES

Impacts on land use and recreation associated with the construction and operation phases of the SPE project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.8-2.

Table 3.8–2. Summary of SPE Impacts on Land Use and Recreation

Alternative	Environmental Impacts on Land Use and Recreation
SPE Alternative 1: No Action	No impact
SPE Alternative 2: Short Pier (Preferred)	<i>Construction:</i> Compatible with Navy <i>Waterfront Functional Plan</i> and <i>TRIDENT Support Site Master Plan</i> ; temporary adverse localized noise impacts on residential and recreational areas from pile driving (total maximum of 161 days). <i>Operation/Long-term Impacts:</i> No impact.
SPE Alternative 3: Long Pier	<i>Construction:</i> Compatible with Navy <i>Waterfront Functional Plan</i> and <i>TRIDENT Support Site Master Plan</i> ; temporary adverse localized noise impacts on residential and recreational areas from pile driving. Noise from pile driving would last longer than Alternative 2 (total maximum of 205 days). <i>Operation/Long-term Impacts:</i> No impact.
Mitigation: The Navy would notify the public about upcoming construction activities and noise at the beginning of construction activities. Construction activities would not be conducted during the hours of 10:00 p.m. to 7:00 a.m.; in addition, pile driving would occur only during daylight hours. The Navy would request that the U.S. Coast Guard issue a Notice to Mariners to establish uniform procedures to facilitate the safe transit of vessels operating in the project vicinity. Please see Appendix C (Mitigation Action Plan) for more detailed mitigation measures.	
Consultation and Permit Status: No consultations or permits are required.	

3.8.2.4. COMBINED IMPACTS OF LWI AND SPE PROJECTS

The LWI and SPE projects are localized and would follow the existing designated land use of the area, therefore having no combined impact on the existing land use. In addition, the LWI and SPE projects would minimally add to the density of the existing industrial development of the waterfront area.

Construction schedules for the LWI and SPE projects would not overlap and so would not have additive noise impacts. However, impacts from the two projects combined would extend over a period of up to four years, including up to 285 days of pile driving, compared to two years for each project alone. Each project could result in noise impacts to nearby residential and recreational areas. The most impacted community, Olympic View, would be affected by construction noise from the SPE project only: up to 205 days of pile driving over two years. Noise levels in both residential and recreational areas would not be sufficient to cause injury but could result in disturbance.