



PROPOSED ACTION AND ALTERNATIVES

TRIDENT SUPPORT FACILITIES EXPLOSIVES HANDLING WHARF (EHW-2)

Naval Base Kitsap-Bangor is located on Hood Canal approximately 20 miles west of Seattle, Washington. The base provides berthing and support services to U.S. Navy submarines, including the TRIDENT Fleet Ballistic Missile program, which plays a critical role in the Navy's sea-based strategic deterrence mission and national defense.

Naval Base Kitsap-Bangor is the only naval base on the West Coast with the specialized infrastructure to support the TRIDENT program. Specialized infrastructure includes buildings, utilities and systems used to support missile production shops, missile maintenance, missile component storage and missile handling cranes, in addition to providing security and operational port facilities. These facilities support every aspect of the TRIDENT program operations, services and systems.

PROPOSED ACTION

The Navy proposes to construct and operate a second Explosives Handling Wharf adjacent to, but separate from, the existing Explosives Handling Wharf at the Naval Base Kitsap-Bangor waterfront in support of TRIDENT program requirements. The proposed action consists of in-water and land-based construction and operations in support of the existing number of TRIDENT submarines at Naval Base Kitsap-Bangor.

The proposed second Explosives Handling Wharf would lie approximately 600 feet offshore at water depths of 60 to 100 feet, and would consist of a main wharf, a warping wharf and six lightning protection towers. It would include a slip (docking area) for submarines surrounded on three sides by the operational wharf area. Trestles would connect the wharf to shore.



The project would also include construction of an upland road, a pile-supported abutment where the trestles connect to the shore, a five-acre upland construction staging area, and new utility facilities and modifications. Approximately 20 existing facilities and/or structures in proximity to the proposed Explosives Handling Wharf would be modified or demolished to comply with Department of Defense and Navy safety requirements.

The addition of a second Explosives Handling Wharf is needed for the Navy to continue efficient support of TRIDENT program requirements. The existing Explosives Handling Wharf alone will not be able to support the TRIDENT program because of availability and changing operational and weapons system requirements.



Existing Explosives Handling Wharf



PURPOSE AND NEED

The purpose of the Navy's proposed action is to support future TRIDENT program requirements for eight TRIDENT submarines currently homeported at Naval Base Kitsap-Bangor and the TRIDENT II (D5 missiles) Strategic Weapons System. A second Explosives Handling Wharf is needed because the existing Explosives Handling Wharf alone would not be able to support the TRIDENT program due to wharf availability and changing operational and weapons system requirements.

Availability of the existing Explosives Handling Wharf. The existing Explosives Handling Wharf alone does not provide enough operational days to support the TRIDENT mission for the foreseeable future.

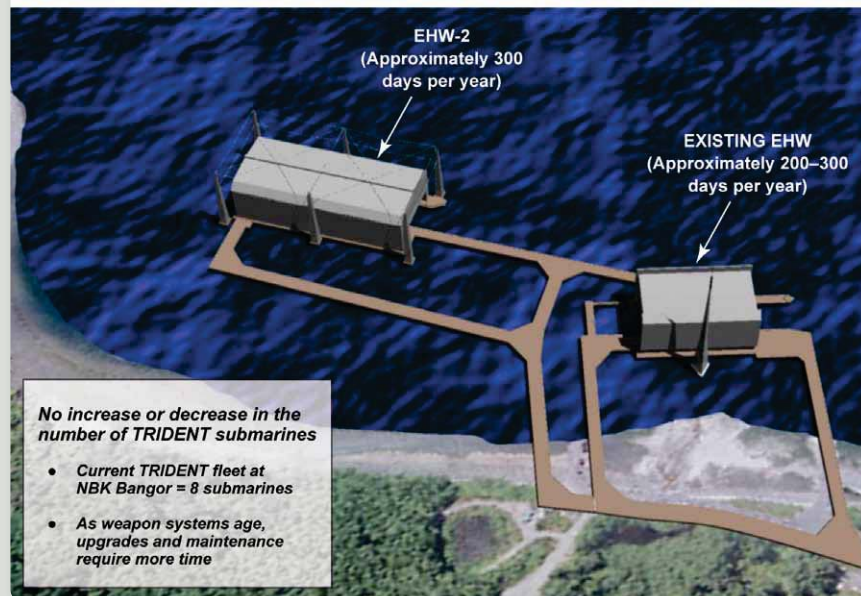
The existing Explosives Handling Wharf will require maintenance and upgrades and will be unavailable during maintenance work. The TRIDENT mission requires an Explosives Handling Wharf to be available approximately 400 operational days per year, and the existing Explosives Handling Wharf can only provide 200-300 operational days per year. The proposed Explosives Handling Wharf would provide approximately 300 operational days per year.

Change in operational and weapons system requirements. Built in the 1970s, the existing Explosives Handling Wharf was designed to handle the C4 missile. This missile was replaced by the D5 missile, which is larger, more complex and requires more time to handle and maintain.

Construction of an Explosives Handling Wharf at Naval Submarine Base Kings Bay, Georgia.



Approximately 400 days per year are needed to support the TRIDENT Fleet
Existing EHW + EHW-2 = Approximately 500-600 days per year



The TRIDENT mission requires an Explosives Handling Wharf to be available approximately 400 operational days per year. The existing Explosives Handling Wharf can only provide 200-300 operational days per year.

EVALUATING THE ALTERNATIVES

Five action alternatives and a No-Action Alternative are analyzed in the Draft Environmental Impact Statement (EIS). The five action alternatives are based on the following six criteria:

- Capability for meeting TRIDENT mission requirements
- Ability to avoid or minimize environmental impacts
- Siting requirements, including proximity to existing infrastructure
- Availability of waterfront property
- Constructability of essential project features
- Explosives safety restrictions



Preferred Alternative:
The Navy's preferred alternative is **Alternative 1: Combined Trestle, Large Pile Wharf** because it has:

- Fewer nearshore habitat impacts
- Less overwater coverage
- Fewer piles than other pile-supported alternatives
- Less upfront and life-cycle costs

Combined Trestles and Separate Trestles. Combined trestles would result in fewer piles and less area over shallow water than separate trestles, thereby reducing impacts on shallow-water habitat and resources.

Large Pile Wharf and Conventional Pile Wharf. The large pile wharf alternatives would use fewer piles and pile driving would take less time than the conventional pile wharf alternatives.

Floating Wharf and Pile Wharf. The floating wharf alternative would use fewer piles than the other alternatives but would be larger than the pile-supported wharf alternatives.

The five action alternatives consist of combinations of two access trestle layouts (separate or combined, supported by piles) and three wharf support configurations (conventional-sized piles, large piles or floating pontoons). All piles would be made of hollow steel.

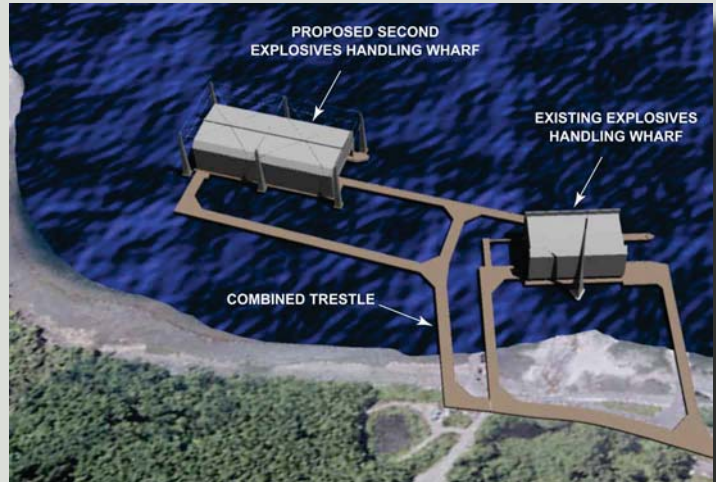


Figure 1: Combined Trestles, Alternatives 1 and 2

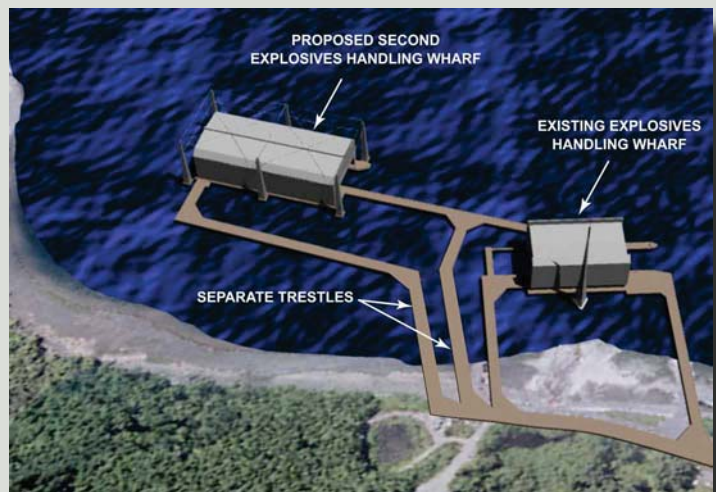


Figure 2: Separate Trestles, Alternatives 3 and 4



Figure 3: Combined Trestle, Floating Wharf, Alternative 5

COMPARING ACTION ALTERNATIVES

Alternative	Trestle Type	Wharf Support	In-Water Pilings	Overwater Coverage	Construction Period
Alternative 1 (Preferred Alternative)	Combined Trestle: Access trestles combined over shallow water, supported by piles	Large Piles: Wharf supported primarily on 48-inch diameter piles along with smaller 24-inch to 36-inch diameter piles	Up to 1,250	6.3 acres, including 0.41 nearshore acre	42-48 months
Alternative 2	Combined Trestle	Conventional Piles: Wharf supported on greater number of smaller piles – 24-inch to 36-inch	Up to 1,450	6.3 acres, including 0.41 nearshore acre	54-64 months
Alternative 3	Separate Trestles: Access trestles completely separate, supported by piles	Large Piles	Up to 1,290	6.6 acres, including 0.75 nearshore acre	42-49 months
Alternative 4	Separate Trestles	Conventional Piles	Up to 1,500	6.6 acres, including 0.75 nearshore acre	54-64 months
Alternative 5	Combined Trestle	Floating: Wharf supported on large concrete pontoons and connected to pile-supported mooring dolphins	Up to 440	8.5 acres, including 0.78 nearshore acre	42-44 months

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD FOR DETAILED ANALYSIS

The Navy considered alternatives that were not carried forward for detailed analysis in the Draft EIS because they did not meet one or more of the six criteria. Alternatives considered include:

- Alternative trestle layouts – Would present greater environmental impacts.
- Terminal concept – Would have greater environmental impacts and would not meet explosives safety restrictions.
- Options for meeting TRIDENT mission requirements – Options included expediting repairs on the existing Explosives Handling Wharf, performing operations on the East Coast, modifying and using other existing facilities at Naval Base Kitsap-Bangor, and increasing operations at the existing Explosives Handling Wharf. Would not meet TRIDENT mission requirements.
- Locating the Explosives Handling Wharf at a different site – Would not meet siting requirements, including proximity to existing infrastructure.
- Locating the second Explosives Handling Wharf west and parallel to the existing Explosives Handling Wharf – Would not meet explosives safety restrictions.
- Combining trestles with the existing Explosives Handling Wharf – Not feasible because two wharves could not support concurrent independent operation if the same trestle served both wharves.
- Demolishing the existing Explosives Handling Wharf after completion of the second Explosives Handling Wharf – Would not provide sufficient capacity to support TRIDENT program requirements.

