Appendix A: Comments Received on the Public Notice and Responses by the Navy and Corps

1. **Federal Agencies.**

a. Environmental Protection Agency (EPA). The EPA provided written comments dated 27 February 2012. The EPA referenced letters they sent to the Navy on the DEIS dated 17 May 2011 and 21 November 2011. They provided copies of these letters for the Corps' consideration in making a permit decision.

(1) EPA comment: EPA requested additional information be provided to more fully assess impacts and to document how the Navy screened potential compensatory mitigation sites to select the Shine Tidelands and Dabob Bay sites. EPA requested this information be addressed in the Final EIS and provided prior to issuance of a public notice. The EPA did not receive a copy of the JARPA or supporting information, draft compensatory mitigation plans, or any supplemental information prior to the Corps' issuance of a Public Notice for the project.

Navy's response: The Navy provided a copy of the JARPA package to EPA via email on February 29, 2012 and a copy of the supplemental information on February 28, 2012.

District Engineer's response: The Navy provided the requested information to EPA. No further action is required from the Navy or the Corps.

(2) EPA comment: Based on the available information, EPA commented that there is insufficient information to adequately characterize the scope and extent of impacts to marine aquatic resources and waters of the U.S. The additional information needed includes: a) how deep marine water processes would be affected by changes to bottom habitat resulting from the footprint of the piling, b) effects of piling on wave pattern and sediment transport and deposition between the pilings, c) changes to marine aquatic resources, natural ecological processes, structures and functions and species and effects of overwater structure on "deep water", d) impacts to benthic organisms and geoduck beds need to be more completely evaluated and accurately quantified, and e) losses of nearshore and shoreline habitats and processes that need to be replaced or compensated.

Navy's response: HEA APPROACH. Section 6.0 of Final EIS Appendix F includes a detailed assessment of project impacts as a result of EHW-2 using a modified Habitat Equivalency Assessment (HEA) approach. The HEA method is a generally accepted scientific approach for quantifying the effects of a project or event on nearshore functions and corresponding compensatory mitigation requirements. In addition, the Navy's proposed mitigation is based upon functional loss analysis of the habitat, not loss of individual organisms.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including impacts to marine and nearshore processes, sediment transport and deposition, and benthic habitat. This analysis is presented in Sections V and VI of the ROD.

(3) EPA comment: A summary should be provided on the mitigation review/screening and site selection process the Navy used to identify their permittee-responsible mitigation sites. It should include a table of all sites reviewed, what the proposed mitigation opportunity at the site would be, and the factors or criteria used to eliminate and select sites.

Navy's response: MITIGATION SELECTION PROCESS. The Navy conducted an extensive review and evaluation of mitigation options and candidate sites for the EHW-2 project. The process included project identification, project screening, and detailed evaluation of key candidate sites including hydrodynamic modeling and ecological assessments. After screening mitigation candidate sites, the Navy performed detailed analysis of the functions and values at the impact site and mitigation site to determine the amount of mitigation required by the project and the amount of mitigation provided by the mitigation site. The development of the mitigation action plan and mitigation candidate site was conducted in accordance with CEQ guidance on the development of mitigation measures, which encourages stakeholder participation. Throughout the process, the Navy coordinated with agencies, tribes, and stakeholders to solicit mitigation candidate sites, concepts for inclusion in the mitigation action plan, and feedback on the proposed mitigation. Additional information has been to the Final EIS, in Section 6.0 of Appendix F to explain the Navy's eight phase mitigation selection process.

District Engineer's response: The Navy provided documentation of the mitigation site selection process. The Corps' evaluation of this information is presented in Section IX of the ROD.

(4) EPA comment: More detailed is needed on the Shine Tidelands and Dabob Bay sites in the form of a Compensatory Mitigation Plan. The plan should include the required elements outlined in the 2008 Federal Compensatory Mitigation Rule.

Navy's response: The Navy provided a copy of the supplemental information about Shine Tidelands on February 28, 2012. Further information is also provided in the Final EIS, chapter 6.0. Additional information regarding Dabob Bay preservation was forwarded to EPA on March 22, 2012.

District Engineer's response: The Navy provided the requested information to EPA. No further action is required from the Navy or the Corps.

(5) EPA comment: The information they currently have is not sufficient to conclude that the project impacts will be adequately mitigated by the proposed compensatory mitigation as described in the public notice. Their concerns include: a) Shine Tidelands work is not likely to be self-sustaining due to the presence of the Hood Canal Bridge which inhibits nearshore sediment transport and beach nourishment processes at the site, b) the proposed preservation at Dabob Bay may not meet the 2008 Rule requirements for preservation. The area must be at risk and able to be protected in perpetuity. Additional information is needed about the baseline conditions of the site and what activities are ongoing and what would be allowed/restricted under the mitigation, and c) the two sites would not adequately compensate for the impacts of the project in terms of acreage, ecological processes, and functions.

Navy's response: See HEA APPROACH and MITIGATION SELECTION PROCESS responses.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation. The Navy will purchase credits from the HCCC ILF program to provide compensatory mitigation for impacts to aquatic resources.

(6) EPA comment: EPA supports the use of the HCCC ILF provided there are credits available that would adequately compensate for the impacts incurred. However, the program is not available for use. The ILF interim tool requires compensatory mitigation to be closer to the impact site, which is not what is proposed in the public notice.

Navy's response: Comment noted.

District Engineer's response: The HCCC ILF program is available. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(7) EPA comment: EPA recommends the Corps not issue a permit until all agency and tribal concerns are fully addressed. They request to review all available information and discuss it with the Corps.

Navy's response: The Navy's Final EIS responds to agency and tribal comments received during public review of the Draft EIS and Supplement to the Draft EIS. The Navy's Record of Decision will address any comments not addressed in the Final EIS.

District Engineer's response: The Corps has responded to the agency and Tribal concerns in this Appendix. The Corps has determined that issuance of a DA permit is not contrary to the public interest.

b. U.S. Fish and Wildlife Service (USFWS). No comments were received from the USFWS in response to the public notice.

c. National Marine Fisheries Service (NMFS). No comments were received from the NMFS in response to the public notice.

2. State and Local Agencies.

a. Washington Department of Natural Resources (WDNR). WDNR provided written comments dated 23 February 2012. They referenced the written comments on the DEIS they provided to the Navy in letters dated 17 July 2009, 3 May 2011, and 21 November 2011. They have the following concerns that are carried over from these comment letters and a comprehensive literature review of the information available to date on the project:

(1) WDNR comment: "DNR requests the U.S. Navy work with the State to resolve impacts to the shellfish community." WDNR recommends the Navy conduct a geoduck survey using Washington Department of Fish and Wildlife (WDFW) protocols to determine existing populations and potential losses due to temporary and permanent construction and operation of EHW-2. They request compensation for the lost commercial value of geoducks located on state-owned aquatic lands that will be killed or injured due to the project.

Navy's response: The Explosives Handling Wharf (EHW-2) will be partially constructed on bedlands that are under the jurisdiction of the Washington Department of Natural Resources. In the Final Environmental Impact Statement for the Trident Support Facilities Explosives Handling Wharf (EHW-2), the Navy identified navigational servitude as the legal basis for use of the bedlands for EHW-2. (FEIS, Pg. 1-3, Section 1.1). Under the Submerged Lands Act, 43 USC 1301 et. seq. the United States retains all of its navigational servitude and rights in and powers of regulation and control of said lands and navigable waters for the constitutional purposes of inter alia navigation and national defense. Such rights are paramount to rights of ownership and development of the lands and natural resources which are specifically vested in the respective states. As a dominant interest, use of the lands does not require compensation under the Fifth Amendment. The Navy is discussing this issue with the Washington Department of Natural Resources.

District Engineer's response: The Navy and WDNR are still in discussions on this issue. However, the Navy has identified navigational servitude as the legal basis for use of the bedlands for EHW-2

(2) WDNR comment: "DNR requests information on how potential impacts to the benthic habitat and/or shellfish community will be or are being addressed through ESA/MSA consultation." In the DEIS Mitigation Plan, the Navy stated it would address benthic communities and shellfish under consultation with the Services. To date no information has been provided on baseline surveys within the project footprint, temporary and permanent impacts to these resources, and proposed mitigation measures or reimbursement for removal of these resources owned by the State or Tribes. They request the Corps consider this lack of information prior to making a permit decision.

Navy's response: The ESA/MSA consultations addressed surveys and analysis of impacts to listed species and finfish species. Section 3.7 of the Final EIS discusses that the proposed action would impact benthic organisms within pile footprints, and overwater shading may slightly affect sessile benthic organism productivity. The Navy's proposed mitigation is based upon functional loss analysis of the habitat, not loss of individual organisms.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including benthic habitat and shellfish communities. This analysis is presented in Section VI of the ROD. The FEIS addresses mitigation for potential impacts to tribal treaty resources. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. Though the Jamestown S'Klallam, Lower Elwha

Klallam and Port Gamble S'Klallam Tribes have only secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns.

(3) WDNR comment: "DNR supports WDFW's November 21, 2011 comment on the use of consistent impact calculations for aquatic resources." There are inconsistencies between the DEIS, JARPA, and PN regarding the impacts to aquatic resources. They support the carry-over of information from one document to the next with explanations for updates. Impacts to benthic communities and shellfish were discussed in the DEIS but have not been carried forward since that document.

Navy's response: The JARPA addresses impacts to aquatic resources regulated under the Clean Water Act and Rivers and Harbors Act, and addresses mitigation specific to those resources. The Final EIS includes analysis of potential impacts to all environmental resources, and includes avoidance, minimization, and monitoring measures.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including benthic communities and shellfish. This analysis is presented in Section VI of the ROD.

(4) WDNR comment: "DNR requests the U.S. Navy work with the State to address property management." They request the Navy establish a Memorandum of Understanding regarding use of state-owned aquatic lands at Naval Base Kitsap-Bangor prior to construction of EHW-2.

Navy's response: Independent of the EHW-2 project, the Navy has met with DNR to discuss establishing a Memorandum of Understanding regarding the Navy's use of state-owned aquatic lands.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including benthic habitat and shellfish communities. This analysis is presented in Section VI of the ROD. The FEIS addresses mitigation for potential impacts to tribal treaty resources. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. Though the Jamestown S'Klallam, Lower Elwha Klallam and Port Gamble S'Klallam Tribes have only secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns.

b. Washington Department of Fish and Wildlife (WDFW). WDFW provided written comments dated 24 February 2012. They referenced the written comments on the SDEIS they provided to the Navy in a letter dated 11 November 2011.

(1) WDFW comment: The Navy has not provided data in report form such as the test pile results and biological consultation conditions. WDFW may have additional comments after review of these background materials for consideration in the final EIS.

Navy's response: None provided.

District Engineer's response: The Navy has included information obtained from the test pile program in Chapters 3 and 4 of the FEIS.

(2) WDFW comment: "Mitigation." See comments (a) through (e) below.

(a) WDFW comment: WDFW supports the ILF program, which would provide more successful mitigation options within the Hood Canal watershed.

Navy's response: Comment noted.

District Engineer's response: Comment noted.

(b) WDFW comment: If PRM is necessary, the concepts from the ILF discussions should apply such as keeping the mitigation close to the project impacts. The SDEIS did not contain information about the Navy's criteria for PRM site selection. The impacts identified in the DEIS need to be used to calculate mitigation requirements.

Navy's response: See MITIGATION SELECTION PROCESS response.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(c) WDFW comment: WDFW does not consider the proposed PRM actions or locations to be adequate, appropriate, or acceptable mitigation for the EHW-2 impacts. They cannot evaluate the mitigation without a complete impact table and mitigation project details.

Navy's response: Table 4-1 of the Supplement to the DEIS (Table 2-3 in the Final EIS) identifies impacts to aquatic resources that must be mitigated under the Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (USACE and USEPA 2008), including direct impacts to habitat caused by piling placement and shading effects of the facility. See HEA APPROACH response.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project. This analysis is presented in Sections V, VI, and VII of the ROD. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(d) WDFW comment: Dabob Bay - WDFW would prefer to see rehabilitation and restoration over preservation and conservation and they recommend prioritization of parcels with restoration potential. They have concerns about incompatible uses such as aquaculture.

Navy's response: None provided.

District Engineer's response: The 2008 Compensatory Mitigation Final Rule identifies a preference for rehabilitation and restoration over preservation and conservation. The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(e) WDFW comment: Shine Tidelands - WDFW has concerns about the long term success of the project due to its proximity to the Hood Canal Bridge. The project could require future maintenance, fish use is unlikely, it does not provide eelgrass mitigation, and any impacts to previous WDFW seeding efforts at the site would also have to be mitigated.

Navy's response: Section 6.0 of Final EIS Appendix F includes a detailed assessment of project impacts and anticipated mitigation benefits of the Shine Tidelands mitigation action. Appendix N of the Final EIS provides a response to the fish use issue. *Please see response to letter S-2, comment 5.* Mitigation for EHW-2 impacts to eelgrass would occur at Dabob Bay, not at Shine Tidelands.

Response to letter S-2, comment 5: The Navy believes that the Shine Tidelands and Dabob Bay mitigation options can be implemented to compensate for the impacts to aquatic resources resulting from the project, according to the Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (USACE and USEPA 2008). The permitting agencies will ensure that this is the case if the permittee-responsible approach is taken. Additional details on the mitigations, including management of the Dabob Bay mitigation site, are included in the JARPA Compensatory Mitigation Plan. Restoration at the Shine Tidelands site will include: reconnection of the existing wetland to match historic conditions lost during fill and development; removal of armor and fill at the beach to allow natural geomorphic processes to reestablish a stable beach ecosystem and improve habitat for migrating fish and marine species; and native riparian plantings along the existing wetlands and supratidal areas to expand the existing riparian buffers area. The Navy is proposing preservation at Dabob Bay to compensate for the loss of eelgrass and associated functions and values. The density of eelgrass at the preservation site and surrounding areas is higher in Dabob Bay than at the impact site and the preservation effort is part of a larger, landscape-scale conservation effort by WDNR, which would provide higher protection and success rates for the aquatic resources. The Adaptive Management Plan and Contingency Measures, including site monitoring, are included to ensure the continued benefit of the mitigation actions. Due to the large size of the existing aquatic vegetation north of the bridge at Shine Tidelands, it is likely that these habitats are currently utilized in some form by forage fish and/or salmonids. The plans to reconnect the isolated wetland and restore tidal inundation of the wetland will restore lost habitat connectivity and improve the function of existing nearshore habitat, potentially promoting forage fish spawning in the vicinity of the state park. The Dosewallips restoration alternative has been removed from future consideration.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation at Shine Tidelands. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(6) WDFW comment: "Inwater work window." WDFW recommends additional work window restrictions based on the best available science and research they have conducted in the project vicinity.

Navy's response: IN-WATER WORK WINDOW. The Navy will observe the work windows formally approved by the federal resource agencies in the NMFS Biological Opinion date September 29, 2011 and the USFWS Biological Opinion dated November 16, 2011.

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy has the responsibility of implementing and abiding by the work window specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(7) WDFW comment: Beaches in the vicinity of EHW-2 are documented sand lance spawning beaches and potential habitat for surf smelt spawning. Forage fish egg sampling occurred in October during the test pile program and at the beginning of the forage fish spawning season. A negative test for eggs in October during nearshore activities is not a good indication that forage fish are not present. Nearshore activities conducted between September 1 and April 30 will likely have a negative effect on spawning forage fish. Work should be staggered to avoid the nearshore area during the most likely time that forage fish would be spawning.

Navy's response: To avoid the need to extend the construction period into an additional in-water work window, the Navy does not propose to cease impact pile driving if forage fish eggs are detected.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including forage fish. This analysis is presented in Section VI.A of the ROD. The Corps has determined there would be impacts to forage fish due to construction of the EHW-2. These impacts must be mitigated for under the 2008 Compensatory Mitigation Final Rule. As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy has the responsibility of implementing and abiding by the work window specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(8) WDFW comment: WDFW may comment at a later date on operational impacts and impacts to fisheries.

Navy's response: Comment noted.

District Engineer's response: No additional comments were received from WDFW.

c. Kitsap County Board of Commissioners. Kitsap County provided written comments dated 22 February 2012. Their comments incorporate by reference earlier letters on the DEIS and SDEIS.

(1) Kitsap County comment: Kitsap County has invested substantial time and resources to the Navy's mitigation planning effort. They are disappointed that a Kitsap County mitigation option was not included in the public notice since the project impacts take place entirely within Kitsap County.

Navy's response: See responses for MITIGATION SELECTION PROCESS and HEA APPROACH. PORT GAMBLE BAY. The Navy conducted an extensive review and evaluation of mitigation options and candidate sites for the EHW-2 project. The Port Gamble Bay is not a suitable site for compensatory mitigation. The Navy discussed this site with the Washington Department of Ecology and USACE, and these agencies do not support including this area as a compensatory mitigation candidate site until the cleanup issues have been resolved. The Navy evaluated Port Gamble Bay as a compensatory mitigation candidate site at the request of Kitsap County and other stakeholders. However, there is an active cleanup action which does not have a signed consent decree or Natural Resources Damages Assessment resolution. The extent of the cleanup and required actions are unknown and represent substantial liability and uncertainty to the success of any potential mitigation action.

District Engineer's response: The Navy is using the HCCC ILF program to provide compensatory mitigation for impacts to aquatic resources. The program will construct mitigation projects within the service area of the impact to the maximum extent practicable.

(2) Kitsap County comment: Kitsap County has previously provided comments on the DEIS and SDEIS regarding the lack of consideration given to mitigation options at Port Gamble Bay. They do not agree that the proposed PRM at Shine Tidelands and Dabob Bay is appropriate or adequate mitigation to offset the impacts from EHW-2 and recommend that the Corps require more development and execution of other PRM options. Kitsap County has been a cooperating member of the HCCC ILF program and encourages support of this option ahead of the PRM sites.

Navy's response: Further details about mitigation at both Shine Tidelands and Dabob Bay are included in the Final EIS, Appendix F, Section 6.0.

District Engineer's response: While the Corps supports the idea of restoring the nearshore at Port Gamble Bay, we do not consider cleanup sites to be appropriate mitigation sites. The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(3) Kitsap County comment: Kitsap County understands that as a local government their comments on the federal Clean Water Act permit are formally processed through the CZM consistency determination made by Ecology.

Navy's response: None provided.

District Engineer's response: Comment noted.

3. Indian Tribes.

a. Squaxin Island Tribe: The Tribe provided written comments dated 23 February 2012.

(1) Squaxin comment: The Tribe recommends the Navy's rail line which passes through their reservation be included in the environmental evaluation of the project. The rail line is not maintained by the Navy in a way that protects treaty fishing rights. Poor maintenance results in blockages to fish migration. All potentially dangerous or hazardous materials being transported by the Navy across Tribal lands should be disclosed and an emergency response plan put in place for any potential accident affecting the reservation.

Navy's response: During construction of EHW-2, the Navy would not use the existing rail lines to ship materials to build the facility. During operation of EHW-2, there would be no change to the rail line or materials shipped as a result of the second wharf. Therefore, the railroad is not included as part of the proposed action.

District Engineer's response: As no change in use is proposed for the rail line during construction of the project or future operations of EHW-2, the Tribe's concerns are outside of the scope of this evaluation.

b. Point No Point Treaty Council (PNPTC): The PNPTC provided written comments dated 24 February 2012.

(1) PNPTC comment: Tribal treaty rights have not been adequately addressed or described, particularly with regards to the Jamestown and Port Gamble S'Klallam Tribes. The Tribes Usual and Accustomed (U&A) grounds and stations would be directly affected by the EHW-2 project. They referenced their 21 November 2011 letter to the Navy and their forthcoming comments on the public notice. They will defer to the Port Gamble S'Klallam Tribe regarding cultural resources.

Navy's response: As a result of tribal comments and further discussions during government to government consultations, the Final EIS includes updated text describing tribal treaty rights and potential impacts. The Navy has revised the text throughout Section 3.19 and section 4.3.18.

District Engineer's response: Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, could directly impact Tribal resources. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. Though the Jamestown S'Klallam, Lower Elwha Klallam and Port Gamble S'Klallam Tribes have only secondary or invitational right to fish in the area in question, the Navy has also entered into a

Memorandum of Agreement on 27 April 2012 to address their concerns. The FEIS addresses mitigation for impacts to tribal treaty resources. By letter date 6 August 2012 to the Corps, the PNPTC withdrew its objections with respect to the EHW-2 project.

(2) PNPTC comment: The PNPTC encourages the Corps to review the comments in their 21 November 2011 letter to the Navy and the comments from the Port Gamble S'Klallam Tribe on the SDEIS as they are applicable to the JARPA. Since the draft FEIS has not been distributed, they are unsure whether these comments have been adequately addressed in the FEIS.

Navy's response: Responses to comments on the Supplement to the Draft EIS are included in the Final EIS.

District Engineer's response: The Corps has reviewed the comments in the PNPTC's and Port Gamble S'Klallam's 21 November 2011 letters to the Navy on the SDEIS and the Navy's response to those comments. On 6 June 2012, the PNPTC provided a letter to the Corps stating the PNPTC withdraws its pending objections to the permit action. The PNPTC and the Navy entered into a Memorandum of Agreement (MOA) on 27 April 2012. In the Navy's ROD signed on 4 May 2012, the Navy committed to implementing the mitigation measures as described in the MOA. By letter date 6 August 2012 to the Corps, the PNPTC withdrew its objections with respect to the EHW-2 project.

(3) PNPTC comment: There is not sufficient detail in the JARPA or DEIS describing how mitigation projects would be selected and eliminated. They recommend a spreadsheet showing requirements for potential projects and the process for project selection to allow for more transparency of information.

Navy's response: See MITIGATION SELECTION PROCESS response.

District Engineer's response: The Navy provided documentation of the mitigation site selection process. The Corps' evaluation of this information is presented in Section IX of the ROD. The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(4) PNPTC comment: The projects in the PRM plan do not seem to be the preferred options of the HCCC ILF IRT. The PNPTC supports inclusion of two projects in Port Gamble Bay: the conservation of lands around the Bay and restoration of the nearshore. The PRM plan needs to include more detail about the sites and the proposed projects, including feasibility analyses, site plans, forage fish spawning areas, long-term monitoring, public access, and construction sequencing. For Dabob Bay requested information includes a list and map of specific parcels, habitat characteristics of the parcels, allowable activities, and compatibility with Navy operations in the area.

Navy's response: See PORT GAMBLE BAY response. Further details about mitigation at both Shine Tidelands and Dabob Bay are included in the Final EIS, Appendix F, Section 6.0

District Engineer's response: While the Corps supports the idea of restoring the nearshore at Port Gamble Bay, we do not consider cleanup sites to be appropriate mitigation sites. The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(5) PNPTC comment: While PNPTC supports the HCCC ILF program, they are concerned the program may not be available in time for this project. PNPTC sent a letter on the HCCC ILF to the Corps dated 6 January 2012.

Navy's response: Comment noted.

District Engineer's response: The HCCC ILF program is available.

(6) PNPTC comment: Indirect effects and cumulative impacts from the construction and operation of EHW-2 have not been adequately addressed in the JARPA, DEIS, or SDEIS. An additional table should be added that contains the anticipated mitigation for indirect and cumulative impacts. The Puget Sound Nearshore Ecosystem Recovery Project (PSNERP) data could be used to address indirect impacts.

Navy's response: Table 4-1 of the Supplement to the DEIS (Table 2-3 in the Final EIS) identifies impacts to aquatic resources that must be mitigated under the Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (USACE and USEPA 2008), including direct impacts to habitat caused by piling placement and shading effects of the facility. Indirect impacts are addressed under each resource area in Section 3 of the Final EIS. Cumulative impacts are addressed in Section 4 of the Final EIS.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including indirect effects and cumulative impacts. This analysis is presented in Section VII of the ROD.

(7) PNPTC comment: PNPTC is concerned about the proposed work window, particularly for adult salmonids that may be moving through the area during that time. The Navy needs to address these species of concern and have a plan for adaptive management.

Navy's response: See IN-WATER WORK WINDOW response.

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy is responsible for implementing and abiding by the work window specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(8) PNPTC comment: There is concern from federal, state, tribal, and local agencies regarding the data indicating that the photic zone ends at -30 feet. Waters below -30 feet should be evaluated.

Navy's response: Neither the DEIS nor the SDEIS stated that the photic zone at NBK Bangor ends at 30 feet below MLLW. Rather, marine vegetation is concentrated in nearshore waters and is limited beyond that depth at the base. The Navy has conducted underwater surveys that show that marine vegetation at NBK at Bangor is limited below 30 feet MLLW (Morris et al. 2009). While some macroalgae were documented as deep as about 60 to 70 feet below MLLW at the base, coverage at these depths is sparse (less than 10 percent) or absent. The majority of the deep-water shading of the EHW-2 (4.4 of 5.9 acres) would be from the wharf, warping wharf, and lightning towers, which are located even deeper at depths of approximately 70 to 100 feet below MLLW.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including impacts to marine vegetation in deeper waters. This analysis is presented in Sections V and VI of the ROD.

(9) PNPTC comment: PNPTC is concerned about operational effects from a second EHW and additional information is needed about the duration, degree of activity, lifespan, and cumulative effects. They are also concerned about staging during construction, particularly whether Port Gamble Bay would be used for staging barges, tugs, and heavy equipment. They would like to see a construction activity schedule and staging plan. The plan needs to be approved by the Port Gamble S'Klallam Tribe before construction can proceed.

Navy's response: None provided.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including operational effects and cumulative effects. Analysis of operations is presented throughout the ROD. Analysis of cumulative effects is presented in Section VII of the ROD. The Navy has stated it does not propose to use Port Gamble Bay for any activity relating to construction or operation of EHW-2.

(10) PNPTC comment: PNPTC is concerned that the Biological Opinions (BiOps) prepared by NMFS and USFWS may not adequately address the reasonable and prudent measures (RPM) or terms and conditions required under Section 7 of the Endangered Species Act (ESA) to be exempted from incidental take.

Navy's response: The Navy consulted with the federal regulatory agencies (USFWS and NMFS) that have jurisdiction by law regarding activities that could potentially affect ESA-listed species. Terms and conditions from the Biological Opinions and the Navy's proposed implementation are discussed in the Final EIS (Section 7.0 of Appendix F).

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy is responsible for implementing and abiding by RPMs specified in the BiOps issued by the Services.

c. Suquamish Tribe: The Tribe provided written comments dated 9 March 2012. The Tribe referenced letters they sent to the Navy on the DEIS dated 17 May 2011 and 21 November 2011. The Tribe has also reviewed the JARPA and draft Compensatory Mitigation Plan they received through FOIA requests to the Corps.

(1) Suquamish comment: "Treaty Rights." The proposed EHW-2 project is within the Tribe's U&A fishing grounds and stations. The Tribe objects to issuance of a Corps permit because the Navy has not mitigated the impacts to Suquamish's treaty rights. The DEIS and SDEIS do not address impacts to tribal treaty rights and state that there will be no impact to tribal treaty rights. Restricted area regulations do not supersede reserved treaty rights. The overwater structure would displace a large portion of tribal U&A, would affect the right to a share of harvest, and would not be protective of fish habitat. These impacts would exist for a least 50 years and the Navy has not committed to decommissioning or removing the wharf when it is no longer needed.

Navy's response: As a result of tribal comments and further discussions during government to government consultations, the Final EIS includes updated text describing tribal treaty rights and potential impacts. The Navy has revised the text throughout Section 3.19 and section 4.3.18. The present design life of the proposed EHW-2 is 50 years. The wharf will be used for the offload/onload and maintenance of weapons systems until no longer needed for that purpose, at which time its use and disposition will be evaluated in accordance with applicable regulations. As described in the Final EIS, Appendix F, Section 9.0, the Navy is proposing actions to mitigate for perceived impacts from EHW-2 on treaty rights.

District Engineer's response: The Suquamish have not reached an agreement with the Navy and have not signed a Memorandum of Agreement (MOA). However, the Suquamish Tribe's right to fish in the area in question is by invitation of the Skokomish. The Skokomish Tribe, who has the primary usual and accustomed fishing rights in the area, has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. In light of this fact, and that the project is for national security, it is our opinion that Tribal Treaty rights have been appropriately addressed and the project will not violate Tribal treaty rights.

The Corps conducted Government to Government (G to G) meetings with the Suquamish Tribe on 17 February 2012 and 21 June 2012. During these meetings the Tribe discussed concerns regarding their usual and accustomed treaty rights, EHW-2 project impacts, and the proposed mitigation. The Tribe submitted information for the Corps' consideration regarding their usual and accustomed treaty rights via letters dated 15 June 2012, 19 June 2012, and 29 June 2012.

(2) Suquamish comment: "Section 10, Rivers and Harbors Act and Section 404, Clean Water Act - Permits." The information in the JARPA is lacking in specificity and completeness in order to fully evaluate the project with respect to Corps regulatory permit requirements and regulations. There is a lack of information in the DEIS and SDEIS regarding certain direct, indirect, temporary, and cumulative impacts associated with the EHW-2. Since the FEIS has not been released the Tribe does not know whether the Navy has addressed issues raised by Suquamish, other tribes, and other stakeholders. The Compensatory Aquatic Resource Plan does

not adequately identify the extent of project impacts and the proposed compensatory mitigation does not adequately offset environmental losses or take all appropriate and practical steps to avoid and minimize adverse effects. The Navy is submitting information to the Corps to supplement its mitigation plan, which requires the Tribe to file FOIA requests with the Corps in order to determine what new information is being submitted to and considered by the Corps. This does not support public transparency and required the Corps to engage in government to government (G to G) consultation with the affected tribes.

Navy's response: See HEA APPROACH response.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including direct, indirect, temporary, and cumulative impacts. Analysis of direct, indirect, and temporary impacts is presented throughout the ROD. Analysis of cumulative effects is presented in Section VII of the ROD. The Corps has determined the Navy has avoided and minimized impacts to the aquatic environment to the maximum extent practicable through design revisions and implementation of Best Management Practices. The Navy is no longer proposing to implement permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD. The Corps has been responsive to the Tribe's requests for information through the Freedom of Information Act and conducted timely Government to Government meetings on 17 February 2012 and 21 June 2012.

(3) Suquamish comment: "Unavoidable Direct, Indirect, Temporary, and Long-term Impacts from EHW-2." The Navy had not provided a complete and quantitative description of direct, indirect, temporary, and long-term impacts associated with the project. During a 17 November 2011 multi-agency meeting, Suquamish, other tribes, and agencies requested the Navy clarify impacts, separating direct "footprint" and indirect impacts and describe impacts associated with overwater coverage and piling in deep water (>30 feet). The Navy agreed to include tables summarizing impacts in the FEIS, which is not yet available for review. Specifically, the Tribe states the Navy has failed to assess impacts including but not limited to: (a) geoduck, (b) eelgrass, (c) deep water flora and fauna, (d) sediment transport, (e) artificial nighttime lighting, (f) underwater noise, (g) freshwater wetland and stormwater, and (h) cumulative impacts.

Navy's response: Direct, indirect, temporary, and long-term impacts are addressed under each resource area in Section 3 of the Final EIS. Cumulative impacts are addressed in Section 4 of the Final EIS. Where permanent loss of habitat is anticipated, mitigation will be provided per Table 2-3. At the November 17, 2011 meeting, the Navy requested input from agencies and tribes on specific resources not fully addressed in the Draft EIS and Supplement, including the basis and data supporting these concerns. The Navy reviewed all comments received after the November meeting; no comments included specific studies or scientific data that were inconsistent with the analysis in the Draft EIS. The Navy performed additional evaluation of project impacts and relationship to selected mitigation using the HEA approach. The Navy believes the analysis to be technically and scientifically accurate.

(a) Geoduck: Section 3.7 of the Final EIS discusses that the proposed action would impact benthic organisms within pile footprints, and overwater shading may slightly affect sessile benthic organism productivity. The Navy's proposed mitigation is based upon functional loss analysis of the habitat, not loss of individual organisms.

(b) Eelgrass: Section 3.5 of the Final EIS analyzes impacts to eelgrass including fragmentation. Sections 3.8 (marine fish), 3.9 (marine mammals), and 3.10 (marine birds) discuss the impacts of reduced overall biological productivity through shading and reduction in the size of eelgrass beds. The Navy will fully mitigate for permanent impacts to eelgrass beds from EHW-2.

(c) Deep water flora and fauna: Neither the DEIS nor the SDEIS stated that the photic zone at NBK Bangor ends at 30 feet below MLLW. Rather, marine vegetation is concentrated in nearshore waters and is limited beyond that depth at the base. The Navy has conducted underwater surveys that show that marine vegetation at NBK at Bangor is limited below 30 feet MLLW (Morris et al. 2009). While some macroalgae were documented as deep as about 60 to 70 feet below MLLW at the base, coverage at these depths is sparse (less than 10 percent) or absent. The majority of the deep-water shading of theEHW-2 (4.4 of 5.9 acres) would be from the wharf, warping wharf, and lightning towers, which are located even deeper at depths of approximately 70 to 100 feet below MLLW.

(d) Sediment transport: Appendix M of the Final EIS responds to this issue. *Please see response to letter T2, comment 9.*

Response to letter T2, comment 9: The proposed action would add another structure along the Bangor shoreline. However, based on evidence and data presented in Section 3.1.1, the Navy does not anticipate this new structure would result in significant changes to the overall Bangor shoreline. Pilings installed to support the EHW-2 are expected to cause small, localized changes in water movement and possibly localized sediment accretion/shoaling. However, based on impact evaluations, the effect would be localized and would not contribute cumulatively to changes in sediment transport in areas beyond the immediate project area. Thus, the project would not affect the sediment budget and rates of erosion/accretion outside of the project footprint. Accumulation of sediments inshore of the EHW structure would occur slowly and would not smother fauna or submerged vegetation.

This conclusion is supported by coastal processes analyses performed by Golder Associates (2010b) for studies of Devil's Hole. This assessment concluded that storm waves are the principal mechanism driving longshore sediment transport along the Hood Canal shoreline. Wave energy is related to the direction and speed of the regional winds. The general wave environment in Hood Canal is characterized as low energy. As a result, the magnitude of the net longshore transport rate is low – approximately 150 cubic yards (cy) per year to the northeast (Golder Associates 2010b). This direction of net transport agrees with regional transport directions presented by Kitsap County Department of Community Development (2007) and by the WDOE Coastal Atlas (https://fortress.wa.gov/ecy/coastalatlas/viewer.htm), as well as geomorphologic indicators such as shoreline orientation and delta asymmetry. Golder Associates (2010b) also evaluated historical information (topographic sheets and orthophotos) to assess the magnitude of shoreline change that has occurred in the project vicinity. These

assessments show that relatively little shoreline change has occurred over the last two decades, and only moderate change has occurred since 1876, indicating that the shoreline in the region is fairly stable as a result of the relatively sheltered environment and relatively low net longshore transport rates.

Several waterfront facilities currently exist on NBK at Bangor. These structures were constructed at substantial distances from each other, leaving relatively long expanses of uninterrupted shoreline and open water between them. Depending on the direction and intensity of the local winds, individual structures offer varying amounts of fetch for the generation of wind waves, as well as protection from the effects of those waves. In most cases, the pier facilities are constructed on a foundation of solid pilings configured in a manner that serves to disrupt well-organized wave fields approaching the shoreline from open water, which reduces the amount of energy reaching the shallow subtidal and intertidal zones adjacent to each pier facility and the capacity of the waves to re-suspend and transport unconsolidated seafloor sediments. Evidence from bathymetric surveys and aerial photographs confirms the presence of sediment deposits along portions of the shoreline, some of which are co-located with the pier facilities, suggesting that the pilings in the pier foundations promote a depositional environment and the accretion of unconsolidated material in the form of shallow subtidal shoals and broadening intertidal beaches in the immediate vicinity of the structures (Morris et al. 2009). However, in some cases, the co-occurrence of shoreline structures and shoals may be coincidental. For example, an aerial photograph of the existing EHW taken shortly after the structure was constructed shows the presence of a shoal immediately inshore of the wharf, indicating that the shoal was present at the time the wharf was constructed (Prinslow et al. 1979; Plate 1). Other localized areas of shoaling, such as immediately north of Keyport-Bangor Point, are clearly related to sediment discharge from the adjacent wetland (Devil's Hole).

The pilings associated with the EHW-2 would attenuate some of the energy of surface waves associated with storm events approaching the project site from the north and south. This reduction in wave energy in areas shoreward of the barriers would reduce the frequency and magnitude of sediment resuspension events and promote conditions more conducive to long-term deposition of sediments and accumulation of fine-grained sediment in the form of a shoal area or comparatively broader intertidal area (Kelty and Bliven 2003). While the structure could have a minor effect on the frequency and magnitude of storm-related wave events that provide sufficient energy to resuspend bottom sediments in nearshore areas of the project site, this is not expected to result in substantial, long-term reductions in the longshore sediment transport rates. This effect would be limited to the immediate vicinity of the structures, and would not affect the longshore sediment transport processes or result in erosion of the shoreline within or adjacent to NBK at Bangor. This is supported by the conclusion from Golder Associates (2010b) study that the presence of other Navy structures along the Bangor shoreline has not caused appreciable changes in the morphology of the shoreline.

In addition to the wharf structure, the proposed project would construct a trestle abutment above the high tide line. The abutment would be exposed to wave run-up only during extreme high tides. This impact would be inconsequential because infrequent, short, and highly localized interactions would not interfere with alongshore currents or sediment transport processes. While the project would replace the natural shoreline with a concrete structure, the size of this

structure is small in comparison to the overall length of undeveloped shoreline in the area, and the effect on the shoreline would be minimal. This additional information has been added to Sections 3.1.1 and 3.1.2.1 of the EIS.

(e) Artificial nighttime lighting: LIGHTING. The Final EIS acknowledges that the lighting of the trestles and wharf for the EHW-2 has the potential to alter fish behavior in the immediate vicinity of the light. Prinslow et al. (1979) and summaries within Nightingale and Simenstad (2001) indicate that lighting may, or can, have an effect on fish species distribution and behavior. Prinslow et al. (1979) state that "Increased light intensity along the trestles might increase prey and predator concentrations there as well, with subsequent impact on outmigrant populations." However, as stated by Nightingale and Simenstad (2001), light intensity may need to exceed some threshold before behavioral effects occur: "The level of intensity of artificial night lighting appears to influence the behavior of fishes. Prinslow (1980) found that lighting of 2-13 lux did not (alter) their fish catches. However, lighting of 200-400 lux did appear to attract salmonids at times but not consistently. How the response of apparent attraction of high intensity night lighting has not been fully explored and warrants further exploration to test for the extent of predator attraction to night lighting and varying alterations to ambient nightlight conditions."

Nightingale and Simenstad (2001) suggest further study of the effects of lighting in nearshore marine habitats is needed to determine the alterations in predator and prey behavioral interactions, and the potential impacts to nearshore migrating juvenile salmonids. However, the Rondorf et al. (2010) paper cited in the Suquamish letter dated March 6, 2012, placed substantially more emphasis on addressing shading effects of overwater structures on freshwater non-native fish (northern pike minnow, smallmouth bass, walleye, and channel catfish) predation on juvenile Chinook salmon in freshwater reservoir portions of the Columbia River than they did on the effects of artificial lighting. In fact, with respect to lighting, much of their focus was on maximizing natural light penetration and reducing the shadow effects of overwater structures (important factors incorporated into the design of nearshore portions of EHW-2).

The Suquamish letter correctly states that Rondorf et al. (2010) suggest that "It is important to consider whether artificial illumination outside of the normal circadian cycle affects organisms. Artificial lighting that is often present on over-water structures may disorient migrating juvenile salmonids, compromise their ability to avoid nocturnal predators, and affect the photosynthesis of aquatic vegetation...The presence of artificial light may facilitate juvenile fish feeding which in turn may increase their vulnerability to predation at night." Yet, the paper also states that "Intuitively, one might think that additional light would be beneficial to visual ambush predators. However, Petersen and Gadomski (1994) found that with increasing light intensity the predation rate between northern pikeminnow and juvenile Chinook salmon decreased. This suggests that northern pikeminnow feed more actively under the low-light such as at dusk and dawn. This relationship was also shown during studies between sculpin and sockeye fry (Tabor et al.1998). This was probably due to an enhanced ability of the fry to detect and avoid sculpin, rather than a suppression of sculpin predatory behavior."

However, unless nearshore migrating salmonids encounter strong contrasts between shaded and unshaded areas along their migratory corridor, their predation risk should not change substantially. As noted by Rondorf et al. (2010), "The Oncorhynchus spp. eye contains a large

number of rods and cones, showing that it is adapted for vision in both bright and dim light (Brett and Ali 1958). Rods and cones contained within the visual cell layer respond to changes in light by changing their position. The visual cells of smolts are oriented such that they are responsive to ambient light, and not to a circadian clock (Simenstad et al. 1999)... When light levels change abruptly, the eye has to adapt quickly in order to distinguish objects in the background (Dowling 1967; Riggs 1971)...The amount that a fish's eye must change from one state to another when encountering such a stimulus depends upon the intensity of the introduced light. When the introduced light is bright, the eye will not respond to a dim light, which it may have detected under lower light conditions (Simenstad et al. 1999). This makes it difficult for juvenile salmon to detect predators in the shaded region beyond the brightly lit area."

In the design phase of the EHW-2 project, trestle height overwater was taken into account to minimize the effects of altering the light effects on nearshore habitats and fish, with specific focus on migrating juvenile salmonids. In addition, the trestles that cross the nearshore were designed in a manner to minimize overwater coverage in this sensitive habitat to minimize direct and indirect impacts to nearshore species and their habitats. The reduced total overwater area correspondingly decreased the amount of light required to illuminate the trestles in the nearshore environment. The Final EIS acknowledges that the additional lighting and the presence of the physical structures themselves will alter fish behavior and occurrence in the immediate project vicinity. Based on the information presented above on the counteracting effects of artificial lighting, it is not clear that artificial lighting on the EHW-2 would result in increased predation on juvenile salmon.

With respect to zooplankton, at slack tides the artificial lighting could attract zooplankton to the surface or slightly delay their setting out of the water column. A number of zooplankton species have been shown to exhibit positive phototaxis (movement towards the light). For example, within Hood Canal, decapods (crabs and shrimp) larvae (zoea) can seasonally dominate the spring/summer zooplankton community, and exhibit phototaxis. Should the zoea encounter the additional light for an extended period of time, the light could affect decapod zoea diel vertical migration and settling. However, as described in Section 3.6.2 of the Final EIS, plankton are distribution is largely affected by wind, tides, and currents as they have limited mobility. The Hood Canal surface currents quickly move planktonic organisms through the area, with currents in the upper water column ranging from about 0.07 to 0.1 ft/second. Plankton, including zoea, moving through the project area could be exposed to artificial lighting on the order minutes to a couple of hours, depending on the current direction. It is unlikely that this duration would be sufficient to alter their distribution in the waters around EHW-2, or substantially reduce their abundance via predation. As a result, the artificial lighting from the EHW-2 to is not expected to significantly affect annual survivability, recruitment or distribution of zooplankton within Hood Canal.

The compensatory mitigation action plan accounted for functional degradation associated with artificial lighting through the HEA analysis. Functional degradation was generally less significant than the losses of physical habitat. Nonetheless, the proposed mitigation would compensate for this functional degradation.

(f) Underwater noise: Information from the Test Pile Program has been incorporated into the Final EIS for EHW-2 and species monitoring plans. Sections 3.8 and 3.9 of the Final EIS address noise impacts to fish and marine mammals. Reports from the Test Pile Program have not been finalized; the Navy will provide the monitoring reports to the tribe when finalized.

(g) Freshwater wetland and stormwater: Section 3.14.2 of the Final EIS has been updated to indicate that the entire 0.2 acres of wetland 32 would be lost as a result of upland road construction. The Navy will fully mitigate for these wetland impacts. Section 3.12 of the Final EIS includes mitigation measures and regulatory compliance that the Navy would implement to accommodate newly-generated stormwater from the EWH-2 and associated upland construction. The Stormwater Pollution Prevention Plan for the project will be developed by the contractor selected to construct the wharf. Individuals or organizations desiring the Stormwater Pollution Prevention Plan may request a copy from the regulatory agencies (EPA or Ecology) or may request a copy by making a Freedom of Information Act (FOIA) request to: NAVFAC NW, Attention: FOIA Coordinator, 1101 Hunley Road, Silverdale, WA 98315.

(h) Cumulative impacts: Appendix M of the Final EIS responds to this issue. *Please see response to letter T2, comment 34.* See LIGHTING response.

Response to letter T2, comment 34: The Regions of Influence (ROIs) identified for the cumulative impact analysis vary by resource but were developed in accordance with CEQ guidance on cumulative impacts: Considering Cumulative Effects under the National Environmental Policy Act, Council on Environmental Quality, Executive Office of the President, 1997. This guidance indicates that cumulative impact ROIs are generally larger than ROIs for project-specific impacts and should reflect the location and range of affected resources. Cumulative impact ROIs should also reflect the magnitude of the proposed action and its impacts, indicating that cumulative effects analysis should be conducted on the scale of human communities, landscapes, watersheds, or airsheds. For migratory wildlife, the breeding grounds, migration route, wintering area, or total range of affected population units are geographic areas that could be used. Applying this guidance to in-water projects, the appropriate scale is often watersheds or entire water bodies, as well as the range of mobile resources (to the extent feasible). Therefore, as described in Section 4.1.1 of the EIS (which has been expanded to discuss the CEQ guidance for selecting cumulative impacts ROIs), the Navy determined that the appropriate ROIs for marine and coastal resources such as water quality, marine habitat, fish, marine mammals, and marine birds should be all of Hood Canal and/or the Hood Canal watershed.

For the project-specific analyses for hydrography, sediment, and water quality, the ROI is consistent with the drift cell scale, while the cumulative impacts ROI was expanded to include Hood Canal. This is consistent with CEQ guidance discussed in the previous paragraph and with the regulation at 40 CFR 1508.7 cited in the comment. Chapter 4 includes details on the larger individual projects in the region for which information is available. The cumulative effects of multiple projects including smaller projects are addressed with newly added statistics on shoreline modification in the region (Section 4.2.2.1).

Estimates of cumulative overwater shading from multiple structures at Bangor is provided in Section 4.3.5 of the Final EIS. Shade-related impacts to habitats and food resources utilized by juvenile salmonids are provided in Sections 4.3.5 and 4.3.7. Design aspects to minimize EHW-2 shade-related impacts on habitats utilized by forage fish and juvenile salmonids is addressed in Section 4.3.8. Potential impacts from predators, migrational barriers, habitat loss, and prey alterations are also addressed in Section 4.3.8. For more specific detail on the effects of an additional shade-producing structure please see Section 3.8.2.1.2 of the Final EIS.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including direct, indirect, temporary, and long-term impacts to geoduck, eelgrass, deep water flora and fauna, sediment transport, artificial nighttime lighting, underwater noise, freshwater wetland and stormwater, and cumulative impacts. Analysis of direct, indirect, and temporary impacts is presented throughout the ROD. Analysis of cumulative effects is presented in Section VII of the ROD.

(4) Suquamish comment: "Compensatory Mitigation." The proposed mitigation actions do not adequately address project impacts. The Navy's analysis needs to include a description of the specific types and amounts of ecological processes, structures, and functions that would be impacted and how the proposed mitigation will offset the specific impacts. They should also describe the specific criteria used in reviewing candidate mitigation site locations and actions and provide a rationale for dismissing site locations and actions from further analysis. Specifically, the proposed compensatory mitigation plan fails to appropriately address impacts to geoduck, eelgrass, and sediment transport processes.

Navy's response: See HEA APPROACH response.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation at Dabob Bay and Shine Tidelands. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD. The Navy submitted an ILF use plan to the Corps titled *Hood Canal Coordinating Council In Lieu Fee Program Use Plan: ILF Use Plan for Mitigation for Navy Explosives Handling Wharf #2, Naval Base Kitsap Bangor*, dated 14 August 2012, which describes the ecological processes, structures, and functions being impacted. The Corps' evaluation of the use plan is documented in Section IX of the ROD.

(5) Suquamish comment: "In-lieu Fee Mitigation." Suquamish is participating on the IRT and is reviewing the interim nearshore/marine credit/debit tool. Revisions should be made to the Instrument to address Service Areas and the description of specific past, current, and projected ecosystem threats and their geographic distribution, and how the proposed ILF program would address these threats.

Navy's response: None provided.

District Engineer's response: The Corps evaluated the HCCC ILF program instrument independently of this project.

(6) Suquamish comment: The Navy has not demonstrated that the parcels proposed for preservation at Dabob Bay are under threat of destruction. The Tribe recommends using WDNR or Readiness and Environmental Protection Initiative funds to purchase the properties rather than proposing it as mitigation for EHW-2. If compensatory mitigation is not possible within the same drift cell as the project impacts, then the mitigation actions should occur within the same type of shoreform (bluff-backed beach).

Navy's response: None provided.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation. The Navy is using the HCCC ILF program to provide compensatory mitigation for impacts to aquatic resources. The program will construct mitigation projects within the service area of the impact to the maximum extent practicable.

(7) Suquamish comment: "In-water Work Window." The Navy's proposed in-water work window is July 16 through February 15. The work window needs to be adjusted to reflect specific knowledge of the timing and habitats used by juvenile and adult salmonids in Hood Canal. The Tribe recommends a work window of August 15 to January 15. They share concerns expressed by WDFW regarding impacts on forage fish from pile driving and other in-water construction activities. The Navy and the Corps should consult with affected tribes and WDFW on the work window.

Navy's response: See IN-WATER WORK WINDOW response.

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy is responsible for implementing and abiding by the work window specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(8) Suquamish comment: "Endangered Species Act/Biological Opinion." The Tribe states that in the National Marine Fisheries Service (NMFS) Biological Opinion (BO), NMFS relies only on the Navy's implementation of Reasonable and Prudent Measures (RPMs) relating to pile driving and construction of the EHW-2, and the agency defers to mitigation through the HCCC ILF program, which is not approved. The Tribe requests to be involved in discussions with the federal services, Navy, and other agencies in helping to determine the most effective means of avoiding, minimizing, and mitigating for impacts to listed species.

Navy's response: The Navy consulted with the appropriate federal regulatory agencies, USFWS and NMFS, regarding activities that could potentially affect ESA-listed species. Terms and conditions from the Biological Opinions and the Navy's proposed implementation are discussed in the Final EIS (Section 7.0 of Appendix F). HUMPBACK WHALE. After a period of at least 15 years with no confirmed sightings of humpback whale in Hood Canal, an individual was observed in several locations including Dabob Bay several times during the week beginning January 27, 2012. This occurrence was likely a stray individual outside the normal range for this

species in Washington inland waters; because this was an exceptional occurrence in Hood Canal, humpback whale was not carried forward in the analysis.

District Engineer's response: As the Federal Lead, the Navy consulted with the NMFS and USFWS on impacts to ESA-listed species. The Navy requested informal consultation with NMFS for humpback whale on 18 April 2012. NMFS issued a Letter of Concurrence for the Navy's determination of "not likely to adversely affect" on 26 April 2012 (NMFS Ref. No. 2012/01318).

d. Port Gamble S'Klallam Tribe (PGST): The Tribe provided written comments dated 8 March 2012 and 10 March 2012.

Comments from the Tribal Historic Preservation Office dated 8 March 2012: The Tribe's concerns regarding cultural resources and Section 106 of the National Historic Preservation Act (NHPA) compliance include the basis for determination of the Area of Potential Effect (APE), questions about the level of effort for cultural resource identification and evaluation, and the absence of analysis and discussion regarding cumulative impacts associated with construction and operation of the project. They are the only Tribe that resides directly in the maritime transportation corridor for construction and operation of the proposed facility. The Tribe is already impacted from existing vessel traffic, security zone closures, and other disruptions to fishing activities associated with NBK-Bangor activities.

(1) PGST comment: "The Area of Potential Effect (APE) was improperly identified." The APE as identified by the Navy in the DEIS is deficient and is based solely on the perceived ground-disturbing footprint of the project. By limiting the APE to the construction site the Navy has ignored impacts that construction and facility use will have on historic properties and cultural resources, including Traditional Cultural Places (TCPs) and Traditional Cultural Landscapes in the Upper Hood Canal. Access to these sites is already limited by weather, harvest regulations, and other factors, and the Tribe is concerned about impacts to the integrity of these areas resulting from vessel traffic associated with the construction of EHW-2. Undertakings that limit Tribal members' access to these sites impact their integrity and eligibility for the National Register.

Navy's response: The EIS analyzes the impacts to cultural resources, including tribal resources and historic properties within the defined boundaries of the APE. The Navy believes that the APE as previously defined is adequate. In accordance with 36 CFR 800.16(d), the Navy defined the APE to include those areas where the undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The Navy's analysis of the project relied on the best available data and reasonably foreseeable activities.

District Engineer's response: As the Federal lead for compliance with Section 106 of the National Historic Preservation Act (NHPA), the Navy has consulted with the State Historic Preservation Office (SHPO) regarding the potential effect of the EHW-2 project on the visual context and aesthetic environment of the NRHP-eligible properties within the Area of Potential Effect (APE). On 1 December 2011, the State Historic Preservation Officer concurred with the

Navy's evaluation of the Delta Pier and EHW as eligible for the NRHP and with the finding of no adverse effect on NRHP-eligible historic properties and with the Navy's APE.

(2) PGST comment: "Impacts to Vessel Traffic on Cultural Resources and Traditional Cultural Properties." The DEIS does not address long term and cumulative impacts of vessel impacts from construction and operation of EHW-2 on cultural resources in the Hood Canal maritime transportation corridor. Actions that will impact Tribal members' ability to visit cultural sites includes:

(a) Increased vessel traffic, bridge openings, and security closures can result in tribal members having to wait an increased amount of time to travel or may present safety issues to Tribal members.

(b) The Tribe's fishing at traditional harvest sites and areas is highly seasonal and often coordinated with fishing openings. Increased vessel traffic has a high likelihood for cumulative impacts to cultural resources through disruption of visitation to cultural sites.

(c) The Navy has failed to acknowledge fisheries management seasons and the impacts of vessel activities. The EHW-2 construction window overlaps with Dungeness crab, geoduck, Lingcod, and native clam harvesting and will interrupt Tribal fishing and shellfish harvesting.

(d) The increase in vessel traffic will alter the aesthetic nature of the cultural landscape. Tribal members' utilization of cultural sites could decline if the members feel their activities are scrutinized by non-Tribal members. The integrity of the TCPs is directly impacted if there is a decline in active use of cultural sites due to increased industrial marine traffic throughout the viewshed.

Navy's response: In the Navy's view, the presence of construction vessels three times per week is consistent with existing uses of navigable waters within Hood Canal. It is the Navy's belief that the limited presence of additional marine traffic will not limit tribal members' access or use of traditional cultural properties that may exist within Hood Canal or along its shoreline. The Navy acknowledges that tribal members present in and along the Hood Canal shoreline could see construction vessels approximately three times per week during the construction period. To assist in avoiding any conflicts with potential tribal usage of Hood Canal or its shoreline, the Navy proposes to notify the tribe of anticipated construction vessel traffic. This would provide tribal members the opportunity to plan activities accordingly.

District Engineer's response: Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, would directly impact Tribal resources. The FEIS addresses mitigation for impacts to tribal treaty resources. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. Though the Jamestown S'Klallam, Lower Elwha Klallam and Port Gamble S'Klallam Tribes have only secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of

Agreement on 27 April 2012 to address their concerns. In the Navy's ROD signed on 4 May 2012 the Navy committed to implementing the mitigation measures as described in the MOA.

(3) PGST comment: "Because the APE was improperly identified, the adequacy of the Traditional Cultural Properties assessment is in question." The DEIS states that there are no TCPs in the proposed project's APE. Within the context of the NHPA, it is the Tribe's cultural practices of travelling to traditional marine harvest sites in upper Hood Canal and engaging in traditional harvest practices and teaching cultural history that qualifies them as TCPs. Because the APE was improperly delineated, the DEIS and SDEIS do not include an inventory or evaluation of potential TCPs throughout the broader area EHW-2 will impact and no possible mitigation measures have been identified.

Navy's response: Please see response to comment 1 above regarding the Area of Potential Effect. The Navy anticipates three barge trips through the Hood Canal Bridge per week during construction. These trips are one-way, not round trip. This has been clarified in the FEIS text in Section 3.25. Overall operational traffic through Admiralty Inlet and Hood Canal will not change as a result of the operation of EHW-2, as discussed in Section 3.25.2 of the FEIS. On the average, a construction vessel would transit Hood Canal three times a week seven months of the year for the duration of the three-year in-water construction period. Construction vessels would not require security escort vessels nor standoff distances that are associated with submarine traffic.

District Engineer's response: As the Federal lead for compliance with Section 106 of the National Historic Preservation Act (NHPA), the Navy has consulted with the State Historic Preservation Office (SHPO) regarding the potential effect of the EHW-2 project on the visual context and aesthetic environment of the NRHP-eligible properties within the Area of Potential Effect (APE). On 1 December 2011, the State Historic Preservation Officer concurred with the Navy's evaluation of the Delta Pier and EHW as eligible for the NRHP and with the finding of no adverse effect on NRHP-eligible historic properties and with the Navy's APE.

(4) PGST comment: "Because the APE was improperly identified, the adequacy of the Submerged Cultural Resources assessment is in question." TCPs and Traditional Cultural Landscapes are not limited to terrestrial or above surface features. They can and do include submerged ones. The DEIS states that there are no visible historic properties or prehistoric or historic period features on or extending above the EHW-2 seafloor. This does not correlate with the Tribe's analysis as there are submerged, intertidal, and nearshore cultural resource sites throughout the broader area that may be impacted by EHW-2 that have not been systematically surveyed, identified, and evaluated. Many of these sites are traditional harvest sites and are eligible for the National Register as TCPs and Traditional Cultural Landscapes. The potential impact on these sites has not been addressed by the Navy.

Navy's response: Please see response to comment 1 above regarding the Area of Potential Effect.

District Engineer's response: As the Federal lead for compliance with Section 106 of the National Historic Preservation Act (NHPA), the Navy has consulted with the State Historic

Preservation Office (SHPO) regarding the potential effect of the EHW-2 project on the visual context and aesthetic environment of the NRHP-eligible properties within the Area of Potential Effect (APE). On 1 December 2011, the State Historic Preservation Officer concurred with the Navy's evaluation of the Delta Pier and EHW as eligible for the NRHP and with the finding of no adverse effect on NRHP-eligible historic properties and with the Navy's APE.

(5) PGST comment: "Because the APE was improperly identified, the level of effort required to identify impacts to Traditional Cultural Properties and Submerged Cultural Resources has not been made." The Navy's efforts do not meet the level of effort standards outlined by the Advisory Council on Historic Preservation (ACHP) because the identified APE does not consider the immediate and direct impacts or foreseeable and cumulative impacts that may be further removed from the immediate ground disturbing construction footprint of the project. The geographic region between NBK-Bangor and Foulweather Bluff is of high cultural and historic significance to the Tribe. Many cultural resources will be impacted by the construction, existence, and operation of EHW-2.

Navy's response: Please see response to comment 1 above regarding the Area of Potential Effect.

District Engineer's response: As the Federal lead for compliance with Section 106 of the National Historic Preservation Act (NHPA), the Navy has consulted with the State Historic Preservation Office (SHPO) regarding the potential effect of the EHW-2 project on the visual context and aesthetic environment of the NRHP-eligible properties within the Area of Potential Effect (APE). On 1 December 2011, the State Historic Preservation Officer concurred with the Navy's evaluation of the Delta Pier and EHW as eligible for the NRHP and with the finding of no adverse effect on NRHP-eligible historic properties and with the Navy's APE.

(6) PGST comment: "Eligibility for the National Register." Multiple historic properties and cultural resource sites including TCPs and Traditional Cultural Landscapes in the upper Hood Canal are eligible for the National Register of Historic Places. These sites have not been identified and evaluated in the DEIS. Because of the number of individual sites eligible for the National Register as TCPs in the area and based on the connections between them in relation to the Tribe's culture and traditional practices, these sites form a network of linked sites that comprise a traditional cultural landscape in the geographic area that will be impacted by EHW-2. The identification and evaluation of the Port Gamble S'Klallam Upper Hood Canal Cultural Landscape that is eligible for the National Register has not been evaluated in the DEIS or SDEIS.

Navy's response: Please see responses to comments 1, 2, and 3 above regarding these issues.

District Engineer's response: As the Federal lead for compliance with Section 106 of the National Historic Preservation Act (NHPA), the Navy has consulted with the State Historic Preservation Office (SHPO) regarding the potential effect of the EHW-2 project on the visual context and aesthetic environment of the NRHP-eligible properties within the Area of Potential Effect (APE). On 1 December 2011, the State Historic Preservation Officer concurred with the

Navy's evaluation of the Delta Pier and EHW as eligible for the NRHP and with the finding of no adverse effect on NRHP-eligible historic properties and with the Navy's APE.

(7) PGST comment: "Conclusion." The comments in the letter are summarized in this section along with an additional comment regarding ecological impacts. Ecological impacts may impact migratory patterns or result in habitat loss for species like salmon, crab, or shellfish and must also be evaluated for impacts they will have on cultural resources and traditional cultural harvesting practices. This is especially true in relation to harvest sites that are TCPs and Traditional Cultural Landscapes as the biological and ecological uniqueness of different harvest sites is an important element contributing to their eligibility for the National Register. Impacts to the productivity of these species ultimately affects the cultural integrity of TCPs and Traditional Cultural Landscapes.

Navy's response: Please see responses to comments 1, 2, and 3 above regarding these issues. The Navy evaluated ecological impacts to fish, shellfish, cultural resources, and tribal harvesting practices in Sections 3.7, 3.8, 3.18, and 3.19 of the DEIS. Mitigation is proposed for all significant impacts.

District Engineer's response: The Corps has determined the project would impact Tribal treaty resources during construction. Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, would directly impact Tribal resources. The FEIS addresses mitigation for impacts to tribal treaty resources. The Navy is mitigating for these impacts through separate Tribal treaty mitigation. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. While the Jamestown S'Klallam, Lower Elwha Klallam and PGSK Tribes have secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. In the Navy's ROD signed on 4 May 2012, the Navy committed to implementing the mitigation measures as described in the MOA. On 6 June 2012, the Port Gamble S'Klallam Tribe provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action.

Comments from the Natural Resources Department dated 10 March 2012: The Tribe referenced letters they sent to the Navy on the DEIS and SDEIS. At this point the Tribe and the Navy have not been able to reach an agreement which ensures treaty rights infringements will be redressed. Until they have such an agreement, the Tribe objects to Corps' issuance of a permit.

(1) PGST comment: "The EHW-2 Will Infringe the Exercise of Treaty Fishing Rights." The proposed project would harm the Tribe's treaty rights to take fish, including shellfish. The proposed facility and its associated uses would physically eliminate the Tribe's access to part of its U&A fishing areas, preclude the Tribe's access in other areas due to construction vessel traffic, and degrade important marine & nearshore habitat.

(a) "Background on the Tribe's Treat Fisheries." The Tribe described fishing and shellfish harvesting practices within the Tribe's U&A, including Hood Canal.

(b) "The Treaty of Point No Point Reserves Perpetual Fishery Rights to the Tribe, Which the Navy Cannot Infringe." The Tribe described the history and purpose of the Treaty and the trust responsibility of federal agencies to uphold treaty rights. Both Navy and Army Corps policies acknowledge the trust responsibility and obligate the agencies to consult with tribes when their actions affect tribal treaty rights or resources.

(1) "The Treaty of Point No Point Protects Three Essential Components of the Tribe's Fishery: Access to Fishing Places, Sufficient Harvests, and Necessary Fish Habitat." The EHW-2 project would adversely affect each of these components. The Tribe's U&A encompasses the marine and nearshore areas of NBK-Bangor. The right of the Tribe to access and fish at these places exists regardless of who owns the land beside or beneath the waterway. The ability of the Tribe to access all potential fishing places is crucial to maintain harvest stability and is of critical cultural importance, and helps to define the Tribe's identity. Exclusion of treaty fishers from U&A places is a violation of tribal treaty fishing rights and is subject to injunction. The size of the area or recent fishing history does not preclude the area from being subject to treaty rights. An overwater structure that precludes tribal fishing at a site may violate treaty rights, even if the tribes remain able to harvest their full share of the runs. Implicit in the Treaty is also the right of protection of habitat without which there would be no fish to take.

(2) "The Wharf and Associated Structures Would Infringe on All Aspects of the Treaty Fishing Right." Overwater components of the wharf will occupy tribal U&A fishing grounds. These structures will physically interfere with or preclude fishing activities. Vessel traffic will usurp or limit tribal access to fishing places. The wharf will affect salmon migration and site utilization, which could increase the fishing effort of the tribal members, which is already constrained by limited fishing seasons, regulations, and the availability of fishers and gear. Present fisheries are already diminished and are not now providing the Tribe with a moderate living. Additional degradation caused by the wharf will further reduce fisheries and infringe upon treaty rights.

(i) The DEIS and SDEIS make statements that the wharf will not affect tribal treaty rights. This is based on the mistaken assumption that the Corps' restricted area regulations limit the Tribe's right of access to its U&A at Bangor. Tribes can and do fish within restricted areas with permission from the base commander per Corps' regulations.

(ii) There is a discrepancy between the DEIS and conversations the Tribe has had with the Navy regarding the operational lifetime of the structure. Thus the infringement on exercise of treaty rights will last for much longer than the DEIS or Navy's public representations might suggest.

(iii) Compensatory mitigation for environmental impacts cannot compensate for treaty right impacts. Statements in the DEIS state that the compensatory mitigation would fully compensate for impacts to tribal resources so that the proposed action would not contribute to cumulative effects. Impacts treaty rights are separate and distinct from impacts to the environment.

Navy's response: As a result of tribal comments and further discussions during government to government consultations, the Final EIS includes updated text describing tribal treaty rights and potential impacts. The Navy has revised the text throughout Section 3.19 and section 4.3.18. The present design life of the proposed EHW-2 is 50 years. The purpose of the wharf is to provide a facility for offload/onload and maintenance of weapons systems. The wharf will be used for that purpose until no longer needed, at which time its use and disposition will be evaluated in accordance with applicable regulations.

District Engineer's response: The PGSK have secondary or invitational usual and accustomed fishing rights in the area. The Skokomish Tribe has primary fishing rights in the area. Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, would directly impact Tribal resources. The FEIS addresses mitigation for impacts to tribal treaty resources. The Navy has entered into a Memorandum of Agreement with the Skokomish to address potential usual and accustomed fishing right impacts. While the Jamestown S'Klallam, Lower Elwha Klallam and PGSK Tribes have secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. In the Navy's ROD signed on 4 May 2012, the Navy committed to implementing the mitigation measures as described in the MOA. On 6 June 2012, the PGSK provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action.

(2) PGST comment: "Issuing the Section 10 Rivers and Harbors Act and Section 404 Clean Water Act Permits is Not in the Public Interest." The Corps must consider the adverse impact that EHW-2 would have on the Tribe's treaty fishing rights, which is an important public interest factor.

(a) Environmental Impacts. The Navy's JARPA lacks basic information about tribal treaty protected areas and tribal resource impacts. Because the Navy has not provided adequate information about the project impacts, the adequacy of the proposed mitigation is called into question.

(1) Direct Environmental Impacts. The JARPA does not include all of the direct impacts from EHW-2 including impacts from vessel activities and from construction, operation, and maintenance on intertidal and subtidal areas, salmonids, aquatic vegetation, and seafloor topography.

(a) Vessel Activities and Related Impacts to Tribal Fishing and Harvesting. Additional vessel traffic would directly impact aquatic habitats and species and tribal fishing. Analysis of impacts from wakes, vessel noise, and increased security is needed. Tribal fishing and harvesting openings are limited to specific days and times by fisheries management regulations and the increased vessel traffic will limit harvesting and fishing activities within these openings. Impacts analysis is needed for future maintenance activities for the wharf.

Navy's response: Appendix N of the Final EIS provides responses to these issues. *Please see responses to letter T2-1, comments 7, 8, 9, 10, and 17.*

Response to Comment 7: The referenced table only addresses compensatory aquatic mitigation, not tribal treaty resource impacts. The Navy would notify the tribe of anticipated construction vessel traffic to provide tribal members the opportunity to plan activities accordingly. Construction would not affect tribal access to existing shellfish harvest sites. Operational vessel traffic would not increase under the proposed action. Operationally, the Navy anticipates no increase in vessel activity or nearshore activity from existing conditions. Maintenance and project site construction activity will occur within an on-water naval restricted area between two existing wharfs. Therefore, barges and tugs associated with this activity will be limited to slow, controlled speeds, and are unlikely to produce wakes larger than naturally occurring wind-generated waves. For the transit of barges into and out of the canal, this activity supporting in-water construction will occur during the allowable in-water work window, minimizing impacts from wakes generated during periods of peak juvenile salmonid occurrence.

Response to Comment 8: Maintenance is addressed in Section 2.2.9. Maintenance activities are not anticipated to result in permanent or temporary loss of habitat; therefore, no maintenance impacts are included in the compensatory aquatic mitigation table. An increase in operations at an Explosives Handling Wharf is anticipated. However, overall boat traffic at the Bangor waterfront is not anticipated to change as a result of this action, as discussed in Section 3.25.2 of the FEIS.

Response to Comment 9: The referenced table only addresses compensatory aquatic mitigation, not tribal treaty resource impacts. The Navy anticipates three barge trips through the Hood Canal Bridge per week during construction. These trips are one-way, not round trip. This has been clarified in the FEIS text in Section 3.25. Overall operational traffic through Admiralty Inlet and Hood Canal will not change as a result of the operation of EHW-2, as discussed in Section 3.25.2 of the FEIS. On the average, a construction vessel would transit Hood Canal three times a week seven months of the year for the duration of the three-year in-water construction period. Construction vessels would not require security escort vessels nor standoff distances that are associated with submarine traffic. Current marine traffic in Hood Canal includes tribal, Navy, commercial and private vessels. In the Navy's view, the presence of construction vessels three times per week is consistent with existing uses of navigable waters within Hood Canal. The Navy acknowledges that tribal members present in and along the Hood Canal shoreline could see construction vessels approximately three times per week during the construction period. To assist in avoiding any conflicts with potential tribal usage of Hood Canal or its shoreline, the Navy will notify the tribe of anticipated construction vessel traffic. This would provide tribal members the opportunity to plan activities accordingly. Tribal mitigation is discussed in Section 9.0 of the Mitigation Action Plan.

Response to Comment 10: The EIS describes construction vessel traffic and its environmental impacts to the extent possible based on available information. See also the response to Comment 17. The Navy would coordinate directly with the affected tribes to avoid conflicts between construction vessels and tribal fishing activities. Construction would not affect tribal access to shellfish harvest sites. Operational vessel traffic would not increase under the proposed action.

Response to Comment 17: Potential impacts from vessel wakes are discussed above for comment 7. Propeller wash impacts during construction will be limited to shallower waters where it could increase turbidity and will not be expected at the greater depths where the main wharf and warping wharf will be constructed. Impacts from prop wash on bathymetry, water quality, marine vegetation, and benthic communities are discussed in their respective section. The control measure in place to minimize these impacts can be viewed on page 2-5 of the DEIS (Prop Wash Control Measure [Section 2.1.2.4. of the Mitigation Action Plan]. Because the proposed action does not include assessing the potential impacts for homeported vessels and because this discharge is being addressed under Uniform National Discharge Standards for Vessels of the Armed Forces, no additional water quality analysis for the submarine seawater cooling overboard discharge is included in the scope of the EHW-2 EIS analyses. The EHW is designed to provide an explosives handling area for those submarines already homeported at NBK at Bangor. Building the EHW will not increase the operational tempo of currently homeported submarines, and it will not increase the number of submarines that may be homeported at NBK at Bangor. Consequently, there will be no net increase in submarine cooling water discharges as a result of this project. Due to the strong Hood Canal tides and currents, the majority of construction vessels occurring in deeper waters, and the observation of the in-water work windows, it is unlikely that construction vessel cooling systems will adversely affect salmonids, forage fish, or their habitats.

District Engineer's response: Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, would directly impact Treaty fishing rights. The FEIS addresses mitigation for impacts to tribal treaty resources. The Navy is mitigating for these potential impacts through separate Tribal treaty mitigation. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. While the Jamestown S'Klallam, Lower Elwha Klallam and PGSK Tribes have secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. In the Navy's ROD signed on 4 May 2012, the Navy committed to implementing the mitigation measures as described in the MOAs. On 6 June 2012, the Tribe provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(b) Vessel Activities and Related Impacts to Resources and Ecological Structures, Processes, and Functions. The SDEIS does not adequately address impacts of vessel wakes or propulsion and cooling systems on salmonids and aquatic habitats. All operation, construction, and maintenance activities by vessels, barges, and supply ships in the Hood Canal and Port Gamble Bay must be fully described and addressed with anticipated dates and traffic patterns. The Tribal opposes any project that involves additional vessel activity in Port Gamble Bay unless it is related to (Model Toxins Control Act) MTCA cleanup and restoration actions. Port Gamble Bay is adjacent to the Tribe's reservation and is the primary location of their subsistence harvest and traditional cultural practices.

Navy's response: The Navy does not propose to use Port Gamble Bay for any activity relating to construction or operation of the proposed EHW-2.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including salmonids. This analysis is presented in Section VI.A of the ROD. The Navy is not using Port Gamble Bay for any construction or operation of the proposed EHW-2.

(c) Impacts to Intertidal and Subtidal Areas and Shellfish Species. The DEIS fails to describe the detailed impacts on individual species in the intertidal and subtidal areas. The Tribe supports WDNR's request that a geoduck survey be completed at the proposed project location. Direct temporal and permanent impacts including habitat displaced by piles and overwater and partial shading, during construction and over the operational lifespan of the wharf, must be analyzed. In Government to Government (G to G) meetings and the DEIS, the Navy has not fully recognized the extent of impacts to the Tribe's traditional resources and values.

Navy's response: Section 3.7 of the Final EIS discusses that the proposed action would impact benthic organisms within pile footprints, and overwater shading may slightly affect sessile benthic organism productivity. The Navy's proposed mitigation is based upon functional loss analysis of the habitat, not loss of individual organisms.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including benthic habitat and geoduck. This analysis is presented in Section VI.A of the ROD.

(d) Impacts to Salmonids. The Tribe in partnership with NOAA Fisheries is participating in an EPA-funded study and is collecting data about salmon migration. As the full data will not be available until after the start of EHW-2 construction, the Tribe recommends that the Navy provide an adaptive management strategy to incorporate new scientific information on aquatic species and habitat. The DEIS fails to address impacts to salmonids in all life stages during the construction work window. Overwater structures can affect salmonid migration, thereby affecting Tribal fishing practices along the shoreline areas of Hood Canal. Impacts to the Tribe's subsistence and ceremonial fishing cannot be valued and these resources are considered irreplaceable and priceless to Tribal members.

Navy's response: Appendix N of the Final EIS responds to this issue. *Please see response to letter T2-1, comments 13, 14, and 16.* Also, see WORK WINDOW response. Impacts to salmonids are addressed in Section 3.8.2.1 of the Final EIS.

Response to Comment 13: The Navy is observing the currently established work window in place for this portion of Hood Canal. The Navy's nearshore fish studies have indicated that the current work window would minimize in-water construction activities during periods of peak juvenile salmonid nearshore occurrence. The Navy included the best available scientific data at the time of EIS preparation. The Navy included the best available scientific data at the time of EIS preparation. Although WDFW has implemented a step-wise 100% tagging of Hood Canal hatchery coho and Chinook in the last few years requiring 100% fin clips or tags (CWT) (Kimbel

2012, WDFW, pers. comm.), as recently as 2007 up to 12% of all Hood Canal hatchery Chinook received no clip or tag (Bhuthimethee et al. 2009a, as cited from the DEIS), making them indistinguishable from "naturally spawned" or "wild" Chinook. The potential occurrence of, and associated impacts to, adult summer-run chum salmon that could occur in the nearshore environment during the allowable in-water work window has been added in multiple locations throughout Section 3.8.

Kimbel, M. 2012. Mark Kimbel, Hatchery Evaluations Manager, Washington Department of Fish and Wildlife, Olympia, WA. Phone call, January 4, 2012. Personal communication with Chris Hunt, Marine Biologist, Science Applications International Corporation, Bothell, WA, re: the recent progression of the state to meet its goal of 100% marking (e.g. finclipping, CWT) of Hood Canal hatchery coho and Chinook salmon, prior to their release into Hood Canal waters.

Response to Comment 14: The DEIS states that adult salmonids are not as dependent on nearshore habitats for refuge as juvenile salmonids, and therefore construction activities will have little or no effect. While this is true for most salmonid species the DEIS has been revised within environmental consequences sections of 3.8 to indicate that adult summer-run chum salmon are more abundant in the nearshore during their return migration than other adult salmonids, and, therefore, have the potential to experience greater impacts from the project, notably during construction.

Response to Comment 16: There would be no increase in vessel traffic relative to existing conditions. The impacts of shoreline structures on the movement of salmonids and forage fish are addressed under Physical Barriers (pg 3.8-48) and Forage Fish (pg 3.8-53). Immediately following the existing text under Physical Barriers (Operations) that states: "Juvenile salmonids have been shown to avoid crossing the shade/light line created by an overhead pier/dock (as summarized in Simenstad et al. 1999; Nightingale and Simenstad 2001a; and Southard et al. 2006)," the following statement was added: "This hesitation is a behavioral response likely adapted to avoid predation by ambush predators occurring within the shaded environment. The addition of another shade/light line along the shoreline could, therefore, potentially increase habitat available for ambush predators of salmonids." The DEIS (3-19.2.1.2) was revised to include a discussion of potential longterm presence, operation, and maintenance of the EHW-2 structure on tribal net fishing activities.

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy is responsible for implementing and abiding by the work window specified in the BiOps issued by the Services. Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, would directly impact Tribal resources. The FEIS addresses mitigation for impacts to tribal treaty resources. The Navy is mitigating for these impacts through separate Tribal treaty mitigation. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. While the Jamestown S'Klallam, Lower Elwha Klallam, and PGSK Tribes have secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. In the Navy's ROD signed on 4 May 2012, the Navy committed to

implementing the mitigation measures as described in the MOAs. On 6 June 2012, the PGSK provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action.

(e) Impacts to Sediment and Seafloor Topography. The SDEIS does not include impacts of scouring and sediment disturbance around the EHW-2 pilings. The Navy has not provided analysis or scientific evidence to verify the determination of no net impact due to shell and barnacle particle accumulation. They have also failed to address impacts from waves, wakes, and piling spacing. The Navy should monitor sediment disturbance and its effects on benthic communities before and after construction to ensure natural processes are sufficient to restore sediment to its original state. Human- induced changes to sediment size or supply can reduce settlement and growth or kill shellfish.

Navy's response: Appendix N of the Final EIS provides additional response to these issues. *Please see response to letter T2-1, comments 19 and 23.*

Response to Comment 19: The comment requests that the Navy provide a detailed monitoring plan in the FEIS and ROD, with specifics regarding post-construction monitoring of water and sediment quality and bathymetry as well as effects on habitat and biological communities. The DEIS analyzes impacts to bathymetry, water and sediment quality, habitat, and biological species. During construction, some short-term, localized changes to bathymetry are anticipated. These changes would be short term and not significant since bottom sediments would be redistributed naturally by bottom currents. Water depths at the main wharf and warping wharf would be greater than 80 feet below MLLW; at these depths, prop wash from tug boats would not significantly alter bathymetry. Temporary and localized changes in water quality are expected during construction and operation. However, these changes are not expected to result in conditions that would exceed permit limits or water quality standards. Since no substantial changes to bathymetry or water quality are anticipated, no sediment, bathymetry, or water quality surveys are proposed. Permanent impacts to in-water habitats are anticipated; these impacts will be mitigated through the compensatory mitigation action. The NMFS (2011) and USFWS (2011) Biological Opinions include reasonable and prudent measures and terms and conditions, including species and acoustic monitoring requirements, that the Navy must implement. These are further described within the Mitigation Measures and Regulatory Compliance sections for marine fish (Section 3.8.2.7), marine mammals (Section 3.9.2.7), and marine birds (Section 3.10.2.7).

Response to Comment 23: The comment requests that the SEIS provide results of modeling of sediment scouring/accumulation around pilings. As discussed in the EIS, pilings supporting the EHW-2 would cause small, localized changes in water movement and possibly localized sediment accretion/shoaling. The impacts of increased turbulence in flow and resulting winnowing of fines from the substrate in proximity to the pile structures were addressed and characterized as minor. Based on impact evaluations, the effect would be localized and would not contribute cumulatively to changes in sediment transport in areas beyond the immediate project area. Accumulation of sediments and decrease of water depths over time due to attenuation of wave energy was discussed as a minor impact as well, but the time-scales on which this would occur (10s of years) would not interfere with life cycle of short-lived, shallow-

or surface dwelling benthic organisms and would be negligible to longer-lived, deep benthic dwellers. Thus, the project would not affect the sediment budget and rates of erosion/accretion outside of the project footprint. No modeling was conducted as it was not warranted based on the magnitude of the expected impacts. The analysis to support the conclusion of no significant impact was sufficient.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including effects of changes to sediments and seafloor topography on benthic communities. This analysis is presented in Section VII of the ROD.

(2) Indirect Environmental Impacts. The JARPA does not address indirect impacts on aquatic habitats including habitat fragmentation, impacts to adjacent areas, risks of spills and contamination, and impacts to sediment and seafloor bathymetry. These impacts extend beyond project boundaries and affect species throughout the Hood Canal watershed. The Tribe recommends the Navy provide a separate table or summary outlining mitigation for these indirect impacts.

Navy's response: Indirect impacts are addressed under each resource area in Section 3 of the Final EIS. Where indirect impacts cause permanent loss of habitat, mitigation will be provided per Table 2-3 of the Final EIS.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including indirect impacts on habitat fragmentation, impacts to adjacent areas, risks of spills and contamination, and impacts to sediment and seafloor bathymetry. This analysis is presented in Section V.A., VI.A, and VII of the ROD.

(a) Habitat Fragmentation and Impacts to Adjacent Areas. The impacts listed in the JARPA only account for shading, fill, and displacement from piling and does not account for indirect impacts to ecosystem composition, structure, and function as a whole. For mitigation assessment the Navy should consider the Hood Canal ecosystem on a scale beyond the project footprint instead of piecemeal accounting of individual indirect impacts. The Navy does not address the impacts of habitat fragmentation on the functionality of adjacent habitats such as effects of connectivity of nearshore migratory areas. Studies have shown the importance of connectivity between habitats for migration, feeding, and spawning. The Tribe expressed concern about the effect of artificial lighting on adjacent habitats.

Navy's response: Appendix N of the Final EIS responds to this issue. *Please see response to letter T2-1, comment 21.*

Response to Comment 21: Regarding eelgrass, statements acknowledging fragmentation of the eelgrass bed at the EHW-2 location were added to Section 3.5.2.1. Fragmentation of this eelgrass bed would not affect eelgrass beds outside of the immediate area. The impacts of habitat fragmentation on marine fish were described in Section 3.8.2.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including indirect impacts on habitat fragmentation and impacts to adjacent areas. This analysis is presented in Section VI of the ROD.

(b) Potential Spills and Releases of Contaminants. The Navy should evaluate the likelihood of a spill or release in Hood Canal by comparing the risk from one EHW with the risk of two EHWs. The Navy should then update the Mitigation Action Plan (MAP) to reflect the increased risk of impacts and the level of mitigation required to address these risks.

Navy's response: Appendix N of the Final EIS responds to this issue. *Please see response to letter T2-1, comment 22.*

Response to Comment 22: The Navy anticipates no increase in vessel activity or nearshore activity from existing conditions. Therefore, the potential for spills is not expected to increase. During operations of EHW-2, the Navy would implement response measures immediately to minimize potential impacts to the surrounding environment from spills. Through compliance with current practices and BMPs, impacts from spills are not expected to result in conditions that would exceed permit limits, exceed water quality standards, or permanently impact aquatic habitats. Section 3.2.2.1.1 of the DEIS discussed the potential for spills and releases of contaminants from construction activities. As stated in Section 3.2.2.1.1.7, spills during construction would likely be small and highly localized. The Navy would implement response measures immediately to minimize potential impacts to the surrounding environment. Since the Navy does not anticipate an increased risk of potential spills, no change has been made to the impact/mitigation table in the FEIS.

District Engineer's response: The Navy is required to maintain State Water Quality Standards through implementation of aquatic protection plans.

(c) Impacts to Sediment and Seafloor Bathymetry from Pilings. See comment 2(e) above.

Navy's response: Appendix N of the Final EIS responds to this issue. *Please see response to letter T2-1, comment 23.*

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including sediment and seafloor bathymetry from pilings. This analysis is presented in Section VII of the ROD.

(3) Cumulative Environmental Impacts. The JARPA does not address cumulative impacts and the MAP does not include mitigation of these impacts. The Navy should consider the cumulative destruction of habitat, stresses on aquatic species, risks of spills and releases, impacts of vessel traffic, waves, and wakes, and other operational and maintenance activities on tribal fishing and resources over time. The MAP should address the cumulative impacts of construction and operational activities on adjacent habitats, species abundance and distribution outside of the project area, and the impacts to ecosystem composition, structure, and function at scales beyond the EHW-2 project boundaries. Without full knowledge of all of the impacts, the Corps cannot determine the proposed PRM is commensurate with the amount and type of

impacts caused by EHW-2 construction and operation. For all of the reasons above the wharf is not in the public interest and the Navy's permit application should be denied.

Navy's response: Appendix N of the Final EIS responds to this issue. Please see response to letter T2-1, comment 24.

Response to Comment 24: Chapter 4.0 of the EIS addresses cumulative impacts, including those to tribal resources under the current definition of the APE. See also the response to comment 17. The proposed compensatory mitigation is intended to compensate for the loss of aquatic habitat. Although the compensatory mitigation will benefit species that are harvested by the tribes, the Navy concurs that compensatory mitigation is not intended to mitigate for impacts to treaty rights. The language has been removed from Section 4.3.19.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including cumulative impacts on Tribal resources. Although there would be no change in operations at the EHW-2, increased vessel and barge traffic during construction, as well as disturbance to migrating adult salmon during pile driving, could directly impact Tribal resources. The FEIS addresses mitigation for impacts to tribal treaty resources. The Navy is mitigating for these potential impacts through separate Tribal treaty mitigation. The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. Though the Jamestown S'Klallam, Lower Elwha Klallam, and PGSK Tribes have only secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. On 6 June 2012, the Tribe provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action. In the Navy's ROD signed on 4 May 2012, the Navy committed to implementing the mitigation measures as described in the MOAs.

(b) Threatened and Endangered Species Impacts. The Tribe is concerned that listed species will not be fully protected due to inadequacies of the NMFS and USFWS BiOps. G to G consultation required under Secretarial Order 3206 was lacking throughout the Section 7 consultation process.

(1) Concerns Regarding Biological Opinions and Incidental Take Statements. It is unclear from the JARPA whether the Navy plans to comply with all of the reasonable and prudent measures described in the Services' incidental take statements (ITSs). The work window recommended by NMFS does not consider scientific knowledge about salmonid migration and will likely cause unmitigated take of listed species. The Corps and the Navy should consult with the affected tribes regarding the most appropriate work window. The Tribe also expressed concern about USFWS' BiOp ITS for marbled murrelet. They have concerns about the monitoring plan and adaptive management plan and how and when pile driving shutdowns would be required.

Navy's response: The Navy consulted with the appropriate federal regulatory agencies, USFWS and NMFS, regarding activities that could potentially affect ESA-listed species. Terms and

conditions from the Biological Opinions and the Navy's proposed implementation are discussed in the Final EIS (Section 7.0 of Appendix F).

District Engineer's response: As the Federal Lead, the Navy consulted with the NMFS and USFWS on impacts to ESA-listed species. The Navy is responsible for implementing and abiding by the work window and RPMs specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(2) Failure to Analyze Impacts to Humpback Whales. The Tribe is concerned about the Navy's failure to disclose or mitigate effects to humpback whales. They referred to the Suquamish Tribe's 6 March 2012 comments citing new information about humpback whale sightings in Hood Canal. The Corps should not issue any permits until more analysis is done. Section 7 formal consultation may need to be reopened.

Navy's response: See HUMPBACK WHALE response.

District Engineer's response: The Navy requested informal consultation with NMFS for humpback whale on 18 April 2012. NMFS issued a Letter of Concurrence for the Navy's determination of "not likely to adversely affect" on 26 April 2012 (NMFS Ref. No. 2012/01318).

(3) Failure to Consult with Tribe During Section 7 Consultation. Secretarial Order 3206 requires the Departments of Interior and Commerce consult with Tribes when tribal trust resources or the exercise of tribal rights could be affected by a project. Neither USFWS or NMFS consulted with the Tribe on the EHW-2 or its effects to listed species, tribal resources, or the exercise of tribal rights. The Navy did not invite the Tribe to participate in this aspect of the decision process.

Navy's response: Request that USACE coordinate with USFWS and NMFS regarding this comment.

District Engineer's response: As the Federal Lead, the Navy consulted with the NMFS and USFWS on impacts to ESA-listed species. The Navy requested informal consultation with NMFS for humpback whale on 18 April 2012. NMFS issued a Letter of Concurrence for the Navy's determination of "not likely to adversely affect" on 26 April 2012 (NMFS Ref. No. 2012/01318). The Skokomish Tribe has the primary usual and accustomed fishing rights in the area and has reached an agreement with the Navy to address potential impacts to usual and accustomed treaty fishing rights. While the Jamestown S'Klallam, Lower Elwha Klallam, and PGSK Tribes have secondary or invitational right to fish in the area in question, the Navy has also entered into a Memorandum of Agreement on 27 April 2012 to address their concerns. On 6 June 2012, the PGSK provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action; therefore the Corps considers this comment to be resolved.

(3) PGST comment: "The Navy Improperly Failed to Apply for a 404 Permit for Piling Placement." The Tribe believes the placement of pilings requires procurement of a 404 permit. The Tribe understands that compensatory mitigation associated with the Section 10 permit may

address some of the concerns regarding the piling, but it is unclear from the mitigation plan what specific mitigation measures are being implemented to mitigate for the impacts of piling placement, particularly in deep water.

Navy's response: Request USACE respond to this comment. The Navy's analysis indicates that the proposed pilings would not function as fill as defined by 33 CFR Part 323 and USACE 1990. The proposed project design includes at least 25 feet between bents (rows of pilings). As discussed in Section 3.1.2.1.2.1 of the EIS, the support piles installed for the EHW-2 would alter current speeds beneath the wharf and trestles, which would cause erosion of fine-grained sediments near some piles impacted by turbulent flows, as well as settling and accumulation of fine-grained sediments at the base of other piles (Chiew and Melville 1987). Over the lifetime of the EHW-2, tidal currents would result in a gradual coarsening of surface sediments and thin scouring initially around the perimeter of each pile, and groups of piles (Sumer et al. 2001). Scouring would be greater around larger piles, but similar around the group of piles. However, shells and barnacles that accumulate on the trestle and wharf piles would also slough off over time and contribute to the sediment content below the piles. The loss of fine-grained sediment would be offset by the accumulation of shell and barnacle particles. These two processes would result in no net impact to seafloor bathymetry below the trestle support piles.

District Engineer's response: The piling are not a discharge regulated under Section 404 as their spacing and configuration do not have the effect of fill. However, they do eliminate substrate and impact aquatic habitat. Therefore, the Corps has evaluated the effects of piling on aquatic resources and determined that compensatory mitigation is required for those impacts. This analysis is presented in Section VII of the ROD.

(4) PGST comment: "The Public Should Have the Opportunity to Comment on a Final Mitigation Action Plan." The Tribe feels that the timing of the JARPA is improper. They are concerned that the Corps and Ecology may make a permit decision without having a full public interest review. The public has not had an opportunity to provide meaningful comments on documents, including the compensatory mitigation plan, that have been submitted by the Navy to the Corps since the close of the public comment period.

Navy's response: The Mitigation Action Plan is Appendix F to the Final EIS, which will be circulated for public review prior to final Navy decision.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4. This analysis is presented in Section VI of the ROD.

(5) PGST comment: "Compensatory Mitigation." The Tribe fully supports and prefers the development and implementation of the HCCC ILF program for EHW-2 compensatory mitigation over PRM. If PRM is necessary, they would like to see other options than those presented in the JARPA. They have asked the Navy to evaluate restoration and acquisition projects in Port Gamble Bay, but the Navy has not responded to this request.

(a) Restoration of Port Gamble Nearshore. The Tribe supports a proposal to restore Port Gamble Bay at the former Pope Resources mill site. The project would restore eelgrass beds,

beaches, and other actions to return the shoreline to a more natural state. The project would mitigate for disturbance by the proposed construction and operation of EHW-2.

Navy's response: See PORT GAMBLE BAY response.

District Engineer's response: The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD. The Navy is no longer pursuing implementation of permittee-responsible mitigation. While the Corps supports the idea of restoring the nearshore at Port Gamble Bay, we do not consider cleanup sites to be appropriate mitigation sites.

(b) Conservation of Land Surrounding Port Gamble Bay. The conservation of lands around Port Gamble Bay as compensatory mitigation would protect in-kind nearshore habitats impacted by EHW-2.

Navy's response: The alternative mitigation proposals at Shine Tidelands State Park and Dabob Bay were selected as compensatory aquatic mitigation for marine and nearshore impacts from EHW-2. Conservation of upland property around Port Gamble Bay would be out-of-kind mitigation that would not compensate for losses in marine waters and nearshore.

District Engineer's response: The Corps does not believe the conservation of lands around Port Gamble Bay is appropriate mitigation for the aquatic resource impacts of this project.

(c) The Tribe does not believe the PRM proposed by the Navy fully compensates for loss of aquatic resources and functions. They also have concerns about the timing of project implementation. Under the Mitigation Rule, implementation of compensatory mitigation should occur prior to or concurrent with project impacts to the maximum extent practicable. The Tribe is also concerned about the Navy's lack of transparency regarding the process for selecting PRM projects. In developing the plan the Navy did not consult with tribes that have treaty protected fishing rights in the area. The analysis for assessing potential projects and the process for selecting the two PRM sites was not described in detail in the JARPA. It is not clear whether the proposed PRM address all of the EHW-2 impacts as there are inconsistencies in the NEPA documents about the impacts. In general the Tribe supports the objectives of the Shine Tidelands project but does not feel that it is appropriate compensatory mitigation for the EHW-2 project. They also cannot support the Dabob Bay preservation because the mitigation plan does not provide enough information to evaluate whether the project will compensate for the project impacts. They also question whether the site meets the criteria for preservation in the Rule that the site must be at risk. The Navy should provide a list of all projects considered but not selected and provide the analysis and process for project selection, including the Port Gamble Bay projects.

Navy's response: See responses for HEA APPROACH and MITIGATION SELECTION PROCESS.

District Engineer's response: The Navy is no longer pursuing implementation of permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

(6) PGST comment: "Conclusion." For all of the reasons stated above, the Navy's permit application should be denied. The Tribe looks forward to G to G consultation with the Corps regarding the permitting process and their comments.

Navy's response: None provided.

District Engineer's response: On 6 June 2012, the Tribe provided a letter to the Corps stating the Tribe withdraws its pending objections to the permit action.

4. Organizations and Individuals.

a. Guy Stitt, AMI International: Mr. Stitt provided written comments dated 16 February 2012.

(1) AMI International comment: "I am writing to provide my support for the addition of a second Explosive Handling Wharf at Bangor Submarine Base. 1. China's rapid development of both land based and sea-based Nuclear Ballistic Missiles is a significant. Their lack of Transparency in the rapid expansion of all aspects of their military is frightening. 2. Add to this North Korea's potential as a Nuclear Ballistic Missile capable country. The Pacific is a region that requires far greater diligence from our Navy. With these added fleet numbers in the Pacific area, it is no wonder why we require a second explosive handling wharf. I am a resident of Kitsap County and am in total agreement with this project."

Navy's response: Comment noted.

District Engineer's response: Comment noted.

b. Richard Brocksmith, Hood Canal Coordinating Council (HCCC): Mr. Brocksmith provided written comments dated 26 February 2012.

(1) HCCC comment: "The in-water work windows should reflect the most recent information on fish presence. In particular, summer chum salmon juveniles are migrating along the project area as early as December. In-water work should avoid the majority of summer chum salmon juveniles by avoiding at least mid/late January and into late spring."

Navy's response: See IN-WATER WORK WINDOW response.

District Engineer's response: As the Federal Lead for consultation with NMFS and USFWS for the ESA, the Navy is responsible for implementing and abiding by the work window specified in the BiOps issued by the Services. It is the Navy's responsibility to comply with all applicable work windows as required by the permitting agencies.

(2) HCCC comment: "The impact to wetland #32 should be avoided by eliminating or at a minimum rerouting the access road to the north. Wetland #29 also appears to have impacts from clearing that should be avoided. If the buffer impacts cannot be avoided or further minimized, then they must be mitigated."

Navy's response: The preferred alternative would result in impacts to freshwater wetlands and non-wetland waters. As discussed in Section 2.2.1.2, there was no practicable alternative that would meet the Navy's access road requirements and avoid impacts to freshwater wetlands. The Navy will fully mitigate for impacts to freshwater wetlands.

District Engineer's response: The Corps has determined the Navy has avoided and minimized impacts to wetlands to the maximum extent practicable. The Navy has compensated for impacts to wetlands through purchasing credits from the HCCC ILF program.

(2) HCCC comment: "Disturbance to riparian areas within 200 meters of the marine and wetland shorelines should be avoided, minimized, or at least properly mitigated. It is unclear that this has been done. Temporal losses should also be addressed. Unmitigated impacts to riparian areas would be inconsistent with local Shoreline Master Program policies and the Coastal Zone Management Act. There seems to have been an effort to minimize shoreline impacts where the trestle meets uplands, but it is very difficult to assess that given the lack of available detail. If it has been avoided and minimized, then remaining impacts should be mitigated."

Navy's response: "Impacts to areas within 200 meters of the marine and wetland shorelines were minimized by combining trestles for the preferred alternative. This reduced the footprint of the shoreline abutment required to support the trestles. Disturbance to upland areas was minimized to the extent possible. The Navy proposes to fully mitigate for impacts to regulated aquatic resources, including nonwetland waters of the United States."

District Engineer's response: The Corps has determined the Navy has avoided and minimized impacts to the nearshore to the maximum extent practicable. The Navy has compensated for impacts to nearshore aquatic resources through purchasing credits from the HCCC ILF program.

(3) HCCC comment: "The most southeasterly approach trestle, approximately 1800 feet in length, seems as if it could be moved waterward to join the main wharf to avoid shallower water and unnecessary impacts from infrastructure, lighting, operations, etc. It seems likely the layout is a result of ingress/egress needs for vehicles, but this need could be addressed in other ways to avoid these impacts in shallow water."

Navy's response: The Navy made every effort to locate the south-easterly trestle as close to the wharf structure as possible. The missile transport vehicles have a minimum turning radius, which results in the exact layout shown on the current plans. This segment of the trestle is located over water that averages 45' (from MLLW) in depth.

District Engineer's response: The Corps has evaluated the project design and determined it is the least environmentally damaging alternative meeting the evaluation criteria described in Section IV of the ROD.

(4) HCCC comment: "It is unclear from the information available what the artificial lighting components of the project are and how they will be used, and thus whether or not the impacts of artificial lighting have been avoided, minimized, and/or mitigated. Artificial lighting has clearly documented impacts to the behavior of biological organisms (such as fish) and the complex predator/prey relationships occurring within the project area. The Navy should be required to avoid and then minimize their effects. For unavoidable impacts, the Navy should develop and implement protective measures such as operating procedures that reduce their impacts."

Navy's response: See LIGHTING response.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including artificial lighting. This analysis is presented in Sections VI and VII of the ROD. The Navy has minimized the effects of artificial lighting to the maximum extent practicable.

(5) HCCC comment: "The cumulative effects analysis uses multiple assumptions that limit its ability to accurately predict the proposal's cumulative impacts, and it is unclear how the existing analysis has been used to establish mitigation measures. Parameters should include past, present, and future impacts across local and regional scales, including physical, biological, and ecological impacts from construction, habitat and resource loss/diminishment, operations, and maintenance. In the context of EHW1 and multiple, adjacent piers on the relatively short shoreline of the Bangor Base, there is likely a threshold for impacts for natural resources that could be exceeded. For example, the preponderance of evidence suggests overwater structures have behavioral impacts on migrating salmonids, and though EHW2 has been partially minimized in the nearshore corridor, the additional disruption calls into question whether the proposed project exceeds the threshold for harm or take of federally listed salmonid species. We are not confident this has been well addressed by the Navy or NMFS's Biological Opinion. All new structures of this size have a cumulative effect."

Navy's response: The cumulative impacts analysis in Section 4.0 of the Final EIS addresses the impacts of past, present, and reasonably foreseeable future in conjunction with the proposed action. The analysis is based on the best available information on the impacts of over-water structures and acknowledges the behavioral effects of over-water structures on salmonids. See HEA APPROACH response. Harm and take of federally-listed salmonid species has been addressed in the NMFS and USFWS Biological Opinions.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including cumulative effects of structures on salmonids. This analysis is presented in Sections VI and VII of the ROD. As the Federal Lead, the Navy consulted with the NMFS and USFWS on impacts to ESA-listed species.

(6) HCCC comment: "The information presented on the options for permittee-responsible mitigation is insufficient to assess their adequacy."

Navy's response: Further discussion of the permittee-responsible mitigation has been added to the Final EIS, in Section 6.0 of Appendix F. Also see MITIGATION SELECTION PROCESS response.

District Engineer's response: The Navy is no longer pursuing implementation of permittee-responsible mitigation. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD.

c. Heather Trim, People for Puget Sound: Ms. Trim provided written comments dated 26 February 2012.

(1) People for Puget Sound comment: "We have previously commented on this project and I have attached these comments for your reference rather than repeating our concerns other than to emphasize that we believe that the existing pier should be removed once the new pier is constructed as the stated capacity needs will be met by the new pier. The existing pier is close to the shoreline and its removal would be highly beneficial for the ecosystem health."

Navy's response: A second EHW is essential to maintaining TRIDENT program capabilities and is therefore essential to national security. Because one EHW alone would not provide enough operational days to support future TRIDENT program requirements, the Navy could not remove the existing EHW once the EHW-2 is built. PURPOSE AND NEED. Section 1.2 of the Final EIS discusses the purpose and need for a second EHW. This discussion is based on the Explosives Handling Wharf-2 Business Case Analysis & Risk Assessment (dated 6 November 2008, classified as Secret/Formerly Restricted Data). This document concludes that the existing Explosives Handling Wharf (EHW) alone cannot provide the number of days needed per year to support the eight TRIDENT submarines homeported at the Bangor waterfront. The Business Case Analysis also concludes to fully support the TRIDENT program the Navy needs EHW facility support in excess of 200 additional days a year than can currently be provided by the existing EHW.

District Engineer's response: The Corps has evaluated the need for two EHWs and determined both are needed to meet TRIDENT program requirements. This analysis is presented in Section IV of the ROD.

(2) People for Puget Sound comment: "The proposed project will have significant impacts and thus should be carefully reviewed for construction and post-construction adverse effects on the ecosystem."

Navy's response: Section 3 of the Final EIS includes a review of existing conditions and analyses of potential effects from construction and operation of the EHW-2 facility. Section 4 analyzes the impact of EHW-2 on the environment when added to other past, present, and reasonably foreseeable future actions.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project. This analysis is presented in Sections V, VI, and VII of the ROD.

(3) People for Puget Sound comment: "We also support the proposal by Forterra and others that the compensatory mitigation options be expanded to include Port Gamble Bay as there is an opportunity for significant benefit of an area currently under private ownership. One of the biggest challenges we face in the restoration of Puget Sound/Straits is the improvement of private lands as other methods for protecting public lands often become available."

Navy's response: See PORT GAMBLE BAY response.

District Engineer's response: While the Corps supports the idea of restoring the nearshore at Port Gamble Bay, we do not consider cleanup sites to be appropriate mitigation sites.

d. Michelle Connor, Forterra: Ms. Connor provided written comments dated 27 February 2012.

(1) Forterra comment: "Section 4.3 of the SDEIS discusses two compensatory mitigation alternatives currently under consideration by the Navy - but the selection of these alternatives appears arbitrary because the SDEIS does not describe a methodology used to select the proposed alternatives...the SDEIS does not give any indication of how those factors were used to select the identified alternative compensatory mitigation sites or to exclude other locations from consideration as alternative compensatory mitigation sites. In the event that the factors listed in the DEIS were not the factors used to select the potential compensatory mitigation sites, the SDEIS does not specify which factors were used instead. Additionally, the SDEIS does not mention what if any consultations may have taken place with federal agencies, state agencies, local governments, tribal governments, environmental advocacy / conservation organizations or the general public when selecting these two alternatives and eliminating other alternatives. Given the significance of impacts and the wide range of responsible agencies and involved stakeholders working to ensure the health and restoration of Hood Canal, it is critical that appropriate consultations have taken place in order to ensure that appropriate mitigation - in both scale and kind - has been identified."

Navy's response: See MITIGATION SELECTION PROCESS response.

District Engineer's response: The Navy included additional information in the FEIS in Section 6.0 of Appendix F to explain the Navy's eight phase mitigation selection process. The Corps' evaluation of this information is presented in Section IX of the ROD.

(2) Forterra comment: "Finally, the SDEIS states that the Navy will continue reviewing —the feasibility, habitat values, and potential benefits of all mitigation alternatives. (SDEIS 4-7) Despite the promise of continuing review of mitigation alternatives, the SDEIS fails to describe any process under which such review will take place or any mechanism by which interested parties may provide comments and feedback on potential mitigation sites."

Navy's response: The Navy published the Supplement to the Draft EIS to solicit comments and feedback from agencies, tribes, and the public on potential mitigation sites. Comments received and Navy responses have been included in Appendix N of the Final EIS.

District Engineer's response: The Corps has evaluated the comments received and Navy responses in Appendix N of the FEIS and considered them in the ROD.

(3) Forterra comment: "Furthermore, we request that any amended SDEIS:

- include justification for the selection and/or exclusion of each compensatory mitigation site based on the factors listed in the DEIS, and
- adequately describe any review process to be used by the Navy in its continuing review of compensatory mitigation sites."

Navy's response: See MITIGATION SELECTION PROCESS response.

District Engineer's response: The Navy included additional information in the FEIS in Section 6.0 of Appendix F to explain the Navy's eight phase mitigation selection process. The Corps' evaluation of this information is presented in Section IX of the ROD.

(4) Forterra comment: "We recommend that the Navy choose to address mitigation through the In Lieu Fee Compensatory Mitigation program. We fully support the Navy election to exercise this approach as a preferred alternative to satisfying the Navy project's compensatory mitigation requirement."

Navy's response: The ILF program is the Navy's preferred mitigation.

District Engineer's response: The Navy is using the HCCC ILF program to compensate for unavoidable impacts to aquatic resources.

(5) Forterra comment: "The Navy has identified Dabob Bay Natural Area Preserve, Dosewallips and Shine Tidelands State Parks as target offsite compensatory mitigation sites to the exclusion of other comparable sites that may also warrant protection due to their reference condition and/or potential to benefit from restoration to restore ecological function. The proposed EHW-2 would be built on eastern Hood Canal, thus having a direct, substantial impact on marine, riparian and upland resources on the east side of Hood Canal. We strongly support the selection of at least one compensatory mitigation alternative in eastern Hood Canal. Port Gamble Bay encompasses a suite of reference and restoration sites similar to those impacted by the wharf expansion and comparable to Dabob Bay, Dosewallips and Shine Tidelands State Parks. As a priority site on eastern Hood Canal, we specifically recommend that the Navy expand its candidate mitigation sites to include Port Gamble Bay and its watershed…The Navy has previously expressed reservations regarding Port Gamble Bay as a potential compensatory mitigation site due to issues of industrial contamination in the bay. There is no legal reason why Navy mitigation cannot be strategically provided in concert with other actions in the bay. Given the tremendous potential "lift" at Port Gamble Bay, we urge the Navy to work with relevant agencies and stakeholders to find a means for participating in this landmark conservation, cultural and ecological restoration effort. We recommend that the Navy support a portfolio of

projects encompassing the full range of value-added protection and restoration opportunities within the bay. Priority strategies specific to Port Gamble Bay include protection and restoration of critical resource areas, re-connection of estuaries to tidal influx through fill and dike removal, and shoreline restoration through bulkhead and piling removal. By the time the Navy makes its final selection of mitigation alternatives, we will have greater clarity regarding how any proposed clean-up action in the bay would influence conservation and restoration mitigation options the Navy might select."

Navy's response: See PORT GAMBLE BAY response.

District Engineer's response: The Navy is no longer proposing to implement permittee-responsible mitigation at Shine Tidelands and Dabob Bay. While the Corps supports the idea of restoring the nearshore at Port Gamble Bay, we do not consider cleanup sites to be appropriate mitigation sites.

e. Jay Newkirk: Mr. Newkirk provided written comments dated 2 February 2012.

(1) Newkirk comment: "I subscribe to the analysis that this project is not necessary and am, therefore, against it."

Navy's response: See PURPOSE AND NEED response.

District Engineer's response: The Corps has determined this project is needed. The Corps' evaluation of Project Need is presented in Section II of the ROD.

f. Virginia Paulsen: Ms. Paulsen provided written comments dated 22 February 2012.

(1) Paulsen comment: "On April 27, 2011 I submitted my comments on the Draft Environmental Impact Statement Trident Support Facilities Explosives Handling Wharf (EHW-2) to Ms. Christine Stevenson, Project Manager. I never received any confirmation that Ms. Stevenson received my comments, nor any reply whatsoever to my comments from the Navy."

Navy's response: Responses to comments on the Draft EIS are included in the Final EIS.
District Engineer's response: Comment noted.

(2) Paulsen comment: "I did not receive any notice about this proposal…The Applicant has failed to give sufficient time for public comments…request that the time for the public to submit comments on this matter be extended…with the final date for submitting a public comment not to end on a Saturday or Sunday weekend date…This seems like a questionable policy - a closing date for public comments on a Sunday (2/26/2012)."

Navy's response: Request that USACE provide response to this comment.

District Engineer's response: The Corps followed its standard procedures for issuing a public notice, which included sending it to everyone on the Corps' mailing list within the geographic

area, which for this project is List 1 (which includes Clallam, Jefferson, Kitsap, and Mason), anyone who is signed up to receive PNs on the Special Topic List for the entire state, and all property owners adjacent to Naval Station Kitsap-Bangor and the mitigation sites at Dabob Bay and Shine Tidelands. While submission of comments on the public notice within the 30 day comment period guarantees consideration during the permit evaluation, the Corps considers all comments received up until a permit decision is made. The Corps evaluated the request for the extension of the comment period and determined an extension was not warranted.

(3) Paulsen comment: "Current facilities and wharf at Bangor appear adequate to support the current fleet of submarines. Thus the new proposed wharf is unnecessary…Given the fact that the most recently signed START treaty calls for the reduction of nuclear armaments and materials in the US the Navy's proposed expansion and construction of a 2nd wharf at Bangor (EHW-2) is not only unnecessary but also undermines and countermands the START treaty. Specifically, the New Strategic Arms Reduction Treaty (New START), which entered into force on February 5, 2011, commits the United States and the Russian Federation to reduce and limit the number of deployed and non-deployed strategic offensive arms to the agreed aggregate numbers. Beginning April 6, 2011, inspections under the New START Treaty may be conducted in the Russian Federation and the United States. Thus, the proposed expansion of a large new wharf (EHW-2) at the Bangor Nuclear Submarine Base counters and challenges the aims and intents of the US commitment to the START treaty. There is no need for additional submarines at the Navy's Bangor Nuclear Submarine site or for a large expanded wharf, such that proposed at Bangor given the current size of the submarine fleet at Bangor, Kitsap Peninsula. For this reason alone, the proposed wharf expansion should not be constructed."

Navy's response: COST AND NATIONAL DEFENSE. The Navy recognizes that individuals may have different views on the most appropriate approach to the defense of the United States. However, current U.S. government policy is that the TRIDENT submarine program remains a vital part of the nation's sea-based strategic deterrence mission. Per the April 2010 Nuclear Posture Review Report, "as long as nuclear weapons exist, the United States will sustain safe, secure, and effective nuclear forces. These nuclear forces will continue to play an essential role in deterring potential adversaries and reassuring allies and partners around the world." A second EHW is consistent with the new START Treaty.

District Engineer's response: The Corps has determined this project is needed. The Corps' evaluation of Project Need is presented in Section II of the ROD. Comments related to the START treaty are beyond the purview of the Corps and therefore were not evaluated in the ROD.

(4) Paulsen comment: "All of this information – that on most of Page 2, and on Pages 3 and 4 is tangential to the construction of the proposed wharf expansion EHW-2, and thus does not constitute relevant information about the proposed wharf EHW-2 on which public might make informed comments. Thus, the US Army and Navy seem to be deliberately concealing from the public necessary, sufficient, accurate, complete, clear, timely and relevant information on which to make their public comments."

Navy's response: Request that USACE respond to this comment.

District Engineer's response: The Corps' public notice contained the required elements described in 33 CFR 325.3.

(5) Paulsen comment: "Fig 2 shows where the Proposed EHW-2 site would be located, as well as the Existing EHW, the Pure Water facility site, the three new buildings site, and the replacement parking spaces. There is no discussion or clarification of the purpose(s) that will be served by these three new buildings."

Navy's response: The purpose of these buildings is described in the Navy's permit application (JARPA). Three new buildings totaling 22,191 square feet would be constructed to house the functions of four buildings that would be demolished. Two of the new buildings would house industrial functions, and one building would be administrative.

District Engineer's response: Information about these proposed structures was presented in the JARPA submitted by the Navy on 13 January 2012.

(6) Paulsen comment: "Fig 4, titled UPLAND FEATURES OF THE PROJECT AFFECT WETLANDS, is an extremely detailed diagram but it is impossible to know where it is actually located in relationship to Fig 1, Fig 2 and Fig 3. Fig 5 concerns the gradient of the upland features of the project affecting wetlands. Again it is impossible to determine where and how this figure is located with respect to the first three figures."

Navy's response: Figure 1 is scaled to show Bangor in relationship to the region. Figure 2 is scaled to show Bangor itself and the location of project components. Figure 3 shows the EHW-2 in-water facility area and the immediate upland area. Figure 4 is an enlarged view of the eastern project area shown on Figure 3. The commenter is encouraged to compare the stormwater pond, which is shown in both Figures 3 and 4 to understand the relationship of the features shown in Figure 4 to the in-water facility.

District Engineer's response: Figure 1 is a regional map. Figure 2 depicts areas where the proposed work would impact waters of the U.S. Figure 3 is a close-up view of the area of the trestle abutment and access road, where impacts to the nearshore and Wetland 32 would occur. Figure 4 shows an elevation and plan view of the proposed Wetland 32 impacts. Area 5 is an overview map depicting locations of all proposed project components.

(7) Paulsen comment: "Fig 7. Are the piles not to be driven into the seabed below the Mudline? Or will the piles for this wharf be placed at the Mudline level which implies that the wharf would, if that is the design, move with the Mudline."

Navy's response: The piles would extend into the seabed below the mudline.

District Engineer's response: The piles would be driven into substrate below the mudline as described in Chapter 2 of the FEIS.

(8) Paulsen comment: "The purpose of these three buildings should be discussed in the body of the Application."

Navy's response: The purpose of these buildings is described in the Navy's permit application (JARPA). Three new buildings totaling 22,191 square feet would be constructed to house the functions of four buildings that would be demolished. Two of the new buildings would house industrial functions, and one building would be administrative.

District Engineer's response: Information about these proposed structures was presented in the JARPA submitted by the Navy on 13 January 2012

(9) Paulsen comment: "Fig 10. This figure (Sheet 10/15) provides a detailed diagram of the OUTFALL GRAVITY BLOCK WALL GRADING. I cannot find on any of the previous figures any reference to this OUTFALL."

Navy's response: The proposed outfall is located in the top left portion of Figure 4.

District Engineer's response: The proposed outfall is shown in Figure 3.

(10) Paulsen comment: "Fig 14. This map refers to the SHINE TIDELANDS RESTORATION SITE, and provides only the most general view, indicated by a rectangle on this map, about what area will actually be restored, if this application is approved. It is a very uninformative map."

Navy's response: Figure 14 is provided as a location map, figure 15 shows site details.

District Engineer's response: Figure 14 is a regional map and Figure 15 shows the location of the area proposed for restoration.

(11) Paulsen comment: "All of these maps and figures and diagrams should have been discussed and clarified in the body of the JOINT PUBLIC NOTICE."

Navy's response: Request that USACE provide response to this comment.

District Engineer's response: The Corps' public notice contained the required elements described in 33 CFR 325.3.

(11) Paulsen comment: "The presence and operations of the Bangor submarines no doubt contribute to the reduction in the number of species and the number of members of each species observed in, on and around various sites of Hood Canal. My preference is for more birds rather than nuclear submarines...The number of species and the number of members of these species have significantly and substantially since 1942 when the Bangor site was used as a place for storage and transportation of munitions. It is inevitable that the Nuclear Submarine Base at Bangor has contributed greatly to the diminution of these varied species and to the deterioration of the environment on Hood Canal. The proposed expanded 2nd wharf EHW-2 will further destroy the marine environment, on, within, around, under and above these waters, and thus will

contribute to the destruction of this earth, our home, and to our eventual demise as a species. Unless an accurate before/after count of all species in the HOOD CANAL takes place, the extent of losses and destruction of this wharf to marine life will never be known. Thus, prior to the construction of this 2nd expanded wharf, an accurate and complete count of all known marine species, as well as those species dependent upon the aquatic wildlife must be undertaken and completed.

Navy's response: There has been a decrease in the abundance of some species in the Hood Canal region over the past several decades. This is discussed in Section 4.0, Cumulative Impacts, of the Final EIS. Because there has been much development in the region during that time, however, it is very difficult to determine the contribution, if any, of Navy facilities and operations to those declines. One of the major environmental problems in Hood Canal is low levels of dissolved oxygen (DO), which have had an adverse effect on fish populations in particular. This problem is most severe in the southern end of the canal and is believed to be caused primarily by inputs of nutrients and bacteria from leaking septic systems and animal waste runoff, combined with poor water circulation in that part of the canal. DO levels are generally good in northern Hood Canal, the site of NBK at Bangor. The Navy does not discharge significant quantities of oxygen-reducing materials to the canal. Therefore, there is no indication that the Navy is responsible for low DO levels in Hood Canal.

The Public Notice for the Corps of Engineers permit and the Final EIS for the project acknowledge and describe the environmental impacts of the proposed EHW-2, including impacts on marine species. Section 4.0 of the Final EIS describes the cumulative impacts of multiple Navy facilities and operations on the marine environment and species. The Public Notice and the Final EIS (Appendix F) describe the actions the Navy would take to avoid, minimize and compensate for the environmental impacts of the project. These actions include monitoring of underwater noise, marine mammals, and marine birds during pile driving to prevent adverse impacts to these species from pile driving. In addition, Section 6.0 of Appendix F describes the habitat enhancement and preservation actions the Navy would fund to compensate for the impacts of the project on marine habitats and species. With the implementation of these compensatory aquatic mitigation actions, the proposed project would not have a net adverse impact on marine habitats and species in Hood Canal.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project. This analysis is presented in Sections V, VI, and VII of the ROD. The Corps has determined the Navy has avoided and minimized impacts to the aquatic environment to the maximum extent practicable through design revisions and implementation of Best Management Practices. Impacts to aquatic resources will be mitigated in accordance with the 2008 Compensatory Mitigation Final Rule.

(12) Paulsen comment: "If the Applicant has not read and reviewed information about the dangers of earthquakes and tsunamis in the Puget Sound area Applicant(s) should do as soon as possible. To quote from the WSDNR report "More than 1000 earthquakes occur in the state annually with at least 20 damaging earthquakes during the past 125 years." The implications of such seismological activity puts the current EHW and the proposed expanded EHW-2 wharf at risk for serious and sustained damage. Even if were not for the fact that the submarines ported at

Bangor's submarine base are nuclear subs, containing plutonium with its half life of 4.5 Million years, such possible, potential and probable seismological damage to the wharves and the submarines should rationally inhibit and constrain the location and construction of any submarine base at Bangor, WA."

Navy's response: EARTHQUAKE AND TSUNAMI HAZARDS. As indicated in Section 3.12.1.1.5 of the EIS, the Navy acknowledges that earthquake and tsunami hazards exist within Hood Canal along the Bangor waterfront and that the occurrence of such an event could impact Navy facilities and vessels. It is unlikely, however, that a large earthquake generated from the offshore tectonic zone (similar to that in Japan in March 2011) would produce any significant tsunami event in Hood Canal because of the protected nature of the canal and the attenuation of wave energy as it turns direction upon entering the canal. The design of the EHW-2 incorporates state-of-the-art seismic standards as requirements for construction. The seismic criteria used in the design accounts for the low probability worst-case scenario event of 2 percent exceedance in a 50-year period, or an approximate scenario of once in 2,475 years. The main wharf facility, wharf, and wharf cover are designed to be structurally stable if this event occurs. This is in accordance with ASCE 7-05 (American Society of Civil Engineers design guide) and MOTEMS (Marine Oil Terminal Engineering and Maintenance Standards), which are approved standards for such a design. Both design guides are based on United States Geological Survey (USGS) data and are intended to account for the worst-case scenario.

District Engineer's response: The Corps has evaluated potential impacts from earthquakes and tsunami hazards. This analysis is presented in Section VI of the ROD.

(12) Paulsen comment: "In addition to the lethality of radioactive nuclear elements that may leak into the environment – the air, waters and land – surrounding the Bangor submarine wharves and the submarines themselves, there are additional pollutants that disturb the natural environment. These pollutants include NOISE. During construction of a 2nd wharf – EHW-2 – there will be considerable noise, what with trucks, trains, cars, cranes and possibly aircraft that will be coming and going over the five years of construction, possibly 24/7, if this project is approved. There is no discussion of the level of NOISE, or of its impact on the environment. It is known that continued loud noise is disruptive to sea creatures, especially large mammals, such as Orcas and various other whales which frequent Hood Canal, Puget Sound, and the Strait of Juan de Fuca. It is intolerable and unacceptable that the marine environments and habitats of these highly intelligent sea creatures should be jeopardized by the predictable, probable loud, continuous and persistent NOISE occurring as a consequence of construction, operation, maintenance of and repair to the proposed EHW-2."

Navy's response: NOISE. Section 3.4 of the Final EIS discusses fundamentals of underwater noise, as well as anticipated noise as a result of construction of EHW-2. Sections 3.9, 3.10, and 3.11 discuss the potential impacts of underwater noise on marine fish, marine mammals, and marine birds, respectively. As described in the Mitigation Action Plan, the Navy will implement mitigation measures including visual monitoring of marine mammals and marbled murrelets, and shut down of pile driving when these species approach or enter areas where injury from pile-driving noise may occur. These measures are expected to prevent adverse impacts to these species. Section 3.16 of the Final EIS discusses airborne noise from construction and operation

of the EHW2. Section 3.16.2 of the EIS acknowledges that construction noise would be audible at locations along the Hood Canal shoreline, but also points out that this noise would not violate state airborne noise standards calculated at residential receptor locations. Operations and maintenance noise is expected to be similar to existing operational noise levels at the NBK at Bangor waterfront. Operation of the EHW-2 would not result in an increase in vessel traffic.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including noise. This analysis is presented in Section VI of the ROD.

(13) Paulsen comment: "There is no doubt that submarines add non-normal underwater vibrations, fact that is not usually acknowledged. The waters on and under the surface of Hood Canal are roiled by the operations of the submarines as they come and go in and out of Hood Canal. Given the large size of these Nuclear Submarines their presence and operations upset and disturb the underwater environment and habitat of all sea creatures. While various species may adapt to the usual tidal movements which occur morning and night, the activities of the Nuclear Submarines are not normal or predictable (except to Bangor Base commanders and staff.) These vibrations contribute to the degradation of the habitats marine and avian species in the Northern and North Central sections of Hood Canal, and those areas adjacent and contiguous to the Bangor Submarine Base. Additionally, there are deliberate exercises involving sonar. Training exercises harm dozens of protected species of marine mammals—Southern Resident killer whales, blue whales, humpback whales, dolphins, and porpoises—through the use of high-intensity mid-frequency sonar. The Navy uses a vast area of the West Coast for training activities including anti-submarine warfare exercises involving tracking aircraft and sonar; surface-to-air gunnery and missile exercises; air-to-surface bombing exercises; sink exercises; and extensive testing for several new weapons systems. These training exercises are a source of environmental degradation and deliberate harm to other creatures who call the marine environment their home and habitat. This is totally unacceptable."

Navy's response: Once the second EHW is built, a portion of the operations and boat traffic currently occurring at the existing EHW and other facilities would be divided between the two EHWs. The increase in future operations at the waterfront would only require that boats remain at an EHW longer when in port for maintenance and upgrades. Once the second EHW is built, a portion of the operations and boat traffic currently occurring at the existing EHW and other facilities would be divided between the two EHWs. Overall noise from submarine traffic will not change as a result of construction of EHW-2. Training range exercises are addressed in separate environmental documents and are not part of the proposed EHW-2. The Navy's official website for the Northwest Training and Testing (NWTT) Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) is: https://nwtteis.com/.

District Engineer's response: The overall level of boat traffic and activity at the Bangor waterfront would not increase as a result of operating the EHW-2. The training range exercises are outside of the Corps' purview and therefore were not evaluated in the ROD.

(14) Paulsen comment: "Toxic wastes include various effluents and toxic wastes, as a product of construction, since construction materials are likely to be dumped into the seawater around the wharf into Hood Canal, and flowing into both the Puget Sound and the Strait of Juan

de Fuca. As well there is the potential for explosive materials to be released into the atmosphere as well as the aqueous marine environment. Apparently a huge amount of toxic materials were accidentally dumped in February 2000, most of which was not recovered. Accidents occur, even with the greatest care, and thus the most intelligent response at this time should be preventive and pro-active given that reactive responses are ineffective. That said, the proposed expanded EHW-2 should not be built given the very large amount of toxic waste that will be released during and after the construction of this 2nd expanded wharf."

Navy's response: Section 2.2.8 of the Final EIS details the Navy's Current Practices and Best Management Practices, which will be implemented to prevent contamination during construction and operation of the EHW-2. Measures include but are not limited to development and implementation of a Debris Management Plan, a Spill Response Plan, and a Stormwater Pollution Prevention Plan. Toxic wastes and effluent would not be discharged into Hood Canal. Regarding the February 2000 incident, please see Appendix M of the Final EIS, *response to letter P50-5, comment 22.*

Response to comment 22: As discussed in Section 3.3 of the EIS, sediments in the project area were tested for the presence of chemical contaminants. Bottom sediments in the vicinity of the proposed EHW-2 location did not show any evidence of recent or historical contamination. Therefore, the proposed action is not expected to result in remobilization of sediment contaminants into Hood Canal. In February 2000, a contractor was grit blasting the structural steel of the bridge crane of the existing EHW in preparation for painting the crane. The contractor had erected an enclosure that contained all blast material and then funneled it into a barrel. The funnel clogged, and before the clog was noticed, the containment system collapsed into the water. The incident was reported as a release, as the commenter noted. The amount of blast grit released into Hood Canal was estimated to be 5,000 pounds. Divers were able to retrieve 900 pounds of grit from the sea bottom. A sample of the grit was tested for toxicity using Toxicity Characteristic Leaching Procedure (TCLP) for eight metals. The only material detected in the grit was chromium, which was found in a concentration of 2.5 parts per million (ppm). Since this was below the dangerous waste criteria level for chrome, the waste did not qualify as dangerous waste and no further action was taken. The Washington Department of Ecology (WDOE) publishes marine Sediment Quality Standards (WAC 172-204-320) for determining potential impacts to marine life due to chemical contamination. WDOE's "no effects" level for chromium is 260 ppm. Sediment sampling at 13 locations completed for the EHW-2 project found chromium concentrations of 13.4 ppm to 16.6 ppm, well below the 260 ppm "no effects" level specified in the Sediment Quality Standards and comparable to background levels for Puget Sound.

District Engineer's response: The Navy is required to maintain State Water Quality Standards through implementation of aquatic protection plans.

(14) Paulsen comment: "Although no radiation leakage from the Bangor submarine site has ever been reported there have occurred serious accidents that almost led to the release of radioactive materials. The Navy's discussion in this JOINT PUBLIC NOTICE does not even mention, consider or discuss the enormous damage that would potentially occur as a consequence of a leak of radioactive elements into the marine, atmospheric and land

environments and habitats as well as to humans, and their health and well-being. The potential and probable lethality of nuclear materials to human lives is extremely serious, as the recent Fukushima earthquake, tsunami and meltdown of four nuclear plants should have made abundantly clear. A discussion of how such potential radiation leakage will be minimized and controlled and contained if it occurs at The Bangor Nuclear Submarine Base- Kitsap - must be included in the JOINT PUBLIC NOTICE."

Navy's response: SAFETY. Missiles are handled in accordance with strict standard operating procedures. These procedures are developed based on, among other requirements, maintaining the safety and security of the public, workers, and the missiles themselves. The existing EHW on NBK at Bangor, as well as two EHWs at Naval Submarine Base Kings Bay, Georgia, have operated safely for over 30 years. Accidents are prevented by incorporating test results and over 30 years of experience into an overall system of safety, which includes facilities, equipment, training, and personnel. Weapons systems are tested under extreme conditions that are well above conditions to which the weapons system might be subjected during the Navy's weapons handling operations. The Navy uses a layered safety system that includes highly trained personnel, detailed administration, and specifically designed equipment to ensure its missiles and weapons are safe and reliable. The Navy's military and civilian personnel responsible for handling explosives at the EHW-2 would undergo the same training, qualifications, and annual proficiency requirements as personnel currently working at the existing EHW. Procedures currently in place to inform the public of an emergency or accident at the existing EHW would be used in the event of an emergency or accident at the EHW-2.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of safety. This evaluation is presented in Section VI of the ROD.

(15) Paulsen comment: "On Page 1 of the JOINT PUBLIC NOTICE, under WORK, the Navy proposes to "install lighting on and under the wharf and approach trestles and over the surrounding water ranging from 100-Watt metal halide lights to 1,500 Watt quarts lights". Such lighting constitutes a serious disturbance of the usual ordinary diurnal and nocturnal patterns of light and dark. All creatures benefit from the normal patterns of light and dark, as the sun rises and sets during the course of each day of every year. The darkness gives all creatures opportunity to rest, and to escape detection from predators. But the above lights will be on at night thus seriously disturbing normal and usual light/dark patterns for creatures on the sea floor and in the waters around the Bangor submarine base. Light of the nature proposed by the Navy constitutes serious environmental and habitat degradation."

Navy's response: See LIGHTING response.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including lighting. This analysis is presented in Sections VI and VII of the ROD.

(16) Paulsen comment: "On Page 2, under WORK, the Navy plans to "excavate up to 300 cubic yards of material, and place up to 70 cubic yards of rock and gravel bedding material to

construct an abutment at the shore". This is a huge amount of material to be intruded into the marine and shore environment at the Bangor Submarine site. It will undoubtedly disturb those minute creatures which exist on the seafloor at and below the mudline, and which constitute a food source for other marine life, such as crabs, mussels, shrimp, as well as disturb the habitat of various species of fish. The proposed wharf expansion (EHW-2) will thus significantly and substantially pollute the marine and shore environments during construction, and probably long afterwards. This habitat destruction will never be remedied, and thus constitutes permanent cumulative habitat deterioration and degradation. The many Submarines homeported at Bangor, coming and going at various times through the Canal, past the Shine Tidelands and into Puget Sound, the Strait of Juan de Fuca and from there into the Pacific Ocean have likely reduced the number of marine and avian species surviving in Hood Canal. Acknowledging that historical baseline data on every species that once lived in, on and around Hood Canal has never been gathered, the presence and activities of the Nuclear Submarines at Bangor no doubt seriously disturbs marine and avian life."

Navy's response: As required by the Compensatory Mitigation for Losses of Aquatic Resources, Final Rule (USACE and USEPA 2008), the Navy will mitigate for impacts to aquatic resources that will be lost as a result of excavation and construction of an abutment at the shore.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project, including excavation of and placement of fill in the nearshore. This analysis is presented in Section V of the ROD. The Navy has mitigated for impacts to nearshore aquatic resources through purchasing credits from the HCCC ILF program.

(16) Paulsen comment: "Hood Canal has been used for both recreational and commercial uses even during the lengthy period of occupation by Native Indigenous Tribes. Since the arrival of persons of European heritage Hood Canal as been used extensively for recreation and commerce. The presence of the nuclear submarines at Bangor in Hood Canal seriously interferes with recreational and commercial uses on Hood Canal, at Dabob Bay, at Shine Tidelands and other places around, contiguous with and adjacent to the Bangor Nuclear Submarine Base. Hood Canal is the only true saltwater fjord in the lower United States. Its clear deep waters provide world-class shrimp and salmon fishing, scuba diving, and miles of pristine shoreline for boaters, kayakers, beachcombers and lovers of nature."

Navy's response: Section 3.21 of the Final EIS acknowledges that construction of the EHW-2 will result in pile driving noise disturbance to residences along Hood Canal and recreational uses within Hood Canal and surrounding areas. The Navy will notify the public prior to construction activities each year. In addition, the Navy will request that the U.S. Coast Guard issue a Notice to Mariners regarding marine vessel traffic during EHW-2 construction. As discussed in Section 2.2.9 of the Final EIS, the overall number of submarines operating in Hood Canal will not change as a result of construction and operation of EHW-2.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of effects of the project on recreation and economics. This evaluation is presented in Section VI of the ROD.

(17) Paulsen comment: "No doubt the presence of Bangor's nuclear submarines constrains such boating activities, with preference given to the submarines. That the "Navy proposes to acquire and preserve marine and intertidal habitat", at Dabob Bay is alarming, since this entire area is now and historically used for recreational purposes by the taxpaying citizens of the areas around Hood Canal. There are many sites at which recreational use of Dabob Bay occurs, and it is only accessible by boat. This means that persons who want to crab, fish, etc. at Dabob Bay are highly likely to have to navigate around the Bangor Nuclear submarines which also use Hood Canal. Thus, the Navy is appropriating for its use and convenience traditional access to this area and interfering with historical and contemporary recreational use. This is unacceptable."

Navy's response: If Permittee-Responsible Mitigation is selected as the mitigation implemented for the EHW-2 project, the Navy will acquire and preserve marine and intertidal habitat in Dabob Bay. As discussed in Appendix F of the Final EIS, this action would be consistent with the purposes of Washington Department of Natural Resource's Dabob Bay Natural Area, which is to permanently conserve one of Puget Sound's remaining highest-quality large embayments. This acquisition and preservation would not include additional submarine use of Dabob Bay.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of effects on navigation. This evaluation is presented in Section VI of the ROD.

(18) Paulsen comment: "A variety of commercial activities occur on and around Northern Hood Canal. This includes commercial harvesting of various crustaceans (e.g., crabs, shrimp, oysters, clams) as well as salmon fishing. As well there are restaurants, private recreational sites, boating such as kayaking, all of which contribute to the incomes of those engaged in such commercial pursuits, as well as contributing to revenues of the State of Washington and to Kitsap County. The presence and operations of the submarines at the Bangor Submarine Base on the shores of Hood Canal is likely to inhibit and constrain these various commercial activities, although in unknown ways, because of the lack of baseline data with which to compare past and present and future commercial activities. It is preferable to have commercial rather than military and/or naval activities on Hood Canal."

Navy's response: As discussed in Section 2.2.9 of the Final EIS, the overall number of submarines operating in Hood Canal will not change as a result of construction and operation of EHW-2.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of effects on economics. This evaluation is presented in Section VI of the ROD.

(19) Paulsen comment: "Nowhere is there any discussion or information about the full costs of constructing, this proposed 2nd wharf or the expenses of maintaining and repairing this facility. An intelligent person cannot make a decision to pursue a venture without fully estimating and knowing the costs of a project. If it has not come to the attention of the Army and/or the Navy this nation is experiencing a prolonged and extremely serious economic and fiscal crisis. At every level this economic crisis has impacts on individuals and families at the

micro-social level, to organizations of various kinds at the meso-level and at all levels of government, from local municipal, county and state to the federal level. Debts are occurring at all levels with the inability of governments to provide for necessary and usual services. The Federal Debt now stands at approximately $14 TRILLION, an amount that is increasing each day. The cost for the current life extension program at Bangor is estimated by those knowledgeable in this matter is thought to be $40 BILLION, which is an enormous expense at a time when the government is experiencing great difficulty in meeting domestic civilian needs. This $40 billion is for the life extension program for the Trident missiles and nuclear warheads at Bangor. The new wharf project is part of the life extension program. It would be a far better and wiser expenditure of public taxpayer dollars to preserve and protect, restore and remedy the damage done to the environment caused by the 70 year presence of the Navy on Hood Canal at Bangor, Kitsap Peninsula. This effort is much preferable to constructing a very large expanded 2nd wharf (EHW-2) at Bangor."

Navy's response: See COST AND NATIONAL DEFENSE response.

District Engineer's response: Expenditure of public funds on defense is outside of the Corps' purview and therefore was not evaluated in the ROD.

(20) Paulsen comment: "I do not feel safer with the Bangor Trident Submarine base located approximately 20 miles west of where I live. I feel less safe. Not only is the possibility of a serious accident at this submarine base of concern, since there have been serious accidents, but the very presence of this nuclear submarine base invites a close scrutiny by those who think the United States is the real enemy on this planet. This nation has signed a START treaty that aims to reduce nuclear weaponry in the world, in this nation, and in Russia. I do not want an escalation of armaments given that this nation is involved in a reduction of armaments with other nations. The proposed expansion of a 2nd wharf – EHW-2 – appears to me to be an escalation of nuclear armaments rather than a reduction. I do not want the huge sums of taxpayer dollars expended on the expansion of a new much larger wharf when the civilian domestic needs of US citizens are going unmet. If one of the intents of this proposed project to construct an expanded wharf is to provide jobs, an alternative use of public monies is to preserve and protect, restore, repair and renovate the natural environment in Hood Canal, its waters, bays, marshlands, tidal areas, such that the usual creatures who live in this habitat on which humans depend can survive and thrive. For all these reasons I do not support, indeed I oppose, the proposed expansion of a 2nd wharf at the Bangor Submarine base located on Hood Canal."

Navy's response: See SAFETY and COST AND NATIONAL DEFENSE responses.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of safety. This evaluation is presented in Section VI of the ROD. Expenditure of public funds on defense is outside of the Corps' purview and therefore was not evaluated in the ROD.

g. Tom Shea: Mr. Shea provided written comments dated 23 February 2012.

(1) Shea comment: "My comment is that the U.S. Army Corps of Engineers needs to put a hold on all steps toward the proposed 2nd wharf at Bangor, for the following reasons: 1. Given the extent and complexity of proposed construction as detailed in the Corps of Engineers News Release, Feb. 10, 2012, there is no way this will not have a negative effect on the aquatic life of the water surrounding the proposed construction. Certainly the Corps must do a detailed environmental study on every point of proposed construction. Viewing the Corps news release: "1,250 pipe piles, from two to four feet wide" reads like major damage to the surrounding waters. In that light, mitigating some surrounding park land reads like a bad joke. 1. At the Navy's public hearing at the Seattle Public Library, April 21, 2011, we had three minutes each to address the environmental issues from the Navy's 906 page study. Most of the 25 citizen present agreed the study and proposed four-month initial foray into our our waters was deficient. It ignored the environmental impact on the people who support human use and respect for our waters. 2. Given that the future of nuclear submarines, the present fleet has already begun downsizing in terms of missile payload and trial times at sea. The completion of 'Life Extension" plan for D-5 Missile replacement is 2016. That's also the earliest date for a second wharf completion. With more downsizing there may be no need for a second wharf. 3. "A U.S. Navy plan to update the naval leg of the nuclear triad with a new nuclear-armed submarine is about to come under scrutiny, with potential implications for the future of the U.S. nuclear force posture. The two major areas of scrutiny are cost and strategic necessity. The Obama administration has requested $493 million for preliminary work on the submarine, such as design and engineering. However, program costs will increase substantially when construction of the submarine begins."...Center for Strategic Studies, Sept. 30, 2010 And, given the Start Treaties negotiations , there's still more cuts to come.

Navy's response: See COST AND NATIONAL DEFENSE response. Federal requirements for mitigation are based upon resource impacts. The proposed mitigation is based upon the Navy's detailed analysis of potential impacts from EHW-2, presented in the Final EIS. The Navy has determined that restoration of Shine Tidelands State Park and preservation of lands at Dabob Bay would be appropriate mitigation for the aquatic resource impacts from EHW-2. Section 6.0 of Final EIS Appendix F includes a detailed assessment of project impacts and anticipated mitigation benefits of the Shine Tidelands mitigation action.

District Engineer's response: The Corps has evaluated the impacts to aquatic resources from the EHW-2 project. This analysis is presented in Sections V, VI, and VII of the ROD. The Corps has determined the Navy will purchase sufficient credits from the program to compensate for unavoidable impacts to aquatic resources. The Corps' determination of the mitigation sufficiency is presented in Section IX of the ROD. Comments about the nuclear program are beyond the Corps' purview and therefore were not evaluated in the ROD.

h. Glen Milner: Mr. Milner provided written comments dated 14 February 2012 and 23 February 2012.

(1) Milner comment: "However, I fail to understand how this environmental review could have satisfied notification requirements by a public notice on August 24, 2011 and an additional notice on February 10, 2012 when the public comment period began on January 27, 2011. Christopher Dunagan at the Kitsap Sun informed me that he had not received a notice about this

public comment period. I am requesting an extension for public comments and a public hearing. I believe many citizens are impacted by this project in Hood Canal and would appreciate the opportunity to learn more about it."

Navy's response: PUBLIC HEARING. In a letter dated March 9, 2012, Ms. Blackwell stated "Six comments requested a public hearing be held to consider this application. However, due to the public's limited response to the public notice I am not proposing a public hearing at this time." The Navy has provided multiple opportunities for public review and comment on the proposed EHW-2, and believes that an additional public hearing is not necessary. As part of the EIS for EHW-2, the Navy held three public scoping meetings in June 2009 and three Draft EIS public hearings in April 2011. In addition, the public has had four opportunities to provide written input on the EHW-2 project during the comments periods for scoping, the Draft EIS, the Supplement to the Draft EIS, and the Final EIS.

District Engineer's response: The Corps followed its standard procedures for issuing a public notice, which included sending it to everyone on the Corps' mailing list within the geographic area, which for this project is List 1 (which includes Clallam, Jefferson, Kitsap, and Mason), anyone who is signed up to receive PNs on the Special Topic List for the entire state, and all property owners adjacent to Naval Station Kitsap-Bangor and the mitigation sites at Dabob Bay and Shine Tidelands. While submission of comments on the public notice within the 30 day comment period guarantees consideration during the permit evaluation, the Corps considers all comments received up until a permit decision is made. The Corps evaluated the request for the extension of the comment period and request for a public hearing and determined they were not warranted.

(2) Milner comment: "In addition to my substantive concerns, I have grave concerns about procedural errors in this environmental assessment that may result in a negative environmental impact in Hood Canal. There was inadequate public notice, as explained below. For that reason, and because of strong public interest in whether this costly and dangerous project proceeds, I am requesting a public hearing on the Navy's permit application. The Corps is required to consider the public interest in making its determination on this proposal, and witnessing the passionate testimony of the local residents would be invaluable in this effort."

Navy's response: Request that USACE provide response to comments about the public notice. In a letter dated March 9, 2012, Ms. Blackwell stated "Six comments requested a public hearing be held to consider this application. However, due to the public's limited response to the public notice I am not proposing a public hearing at this time." The Navy has provided multiple opportunities for public review and comment on the proposed EHW-2, and believes that an additional public hearing is not necessary. As part of the EIS for EHW-2, the Navy held three public scoping meetings in June 2009 and three Draft EIS public hearings in April 2011. In addition, the public has had four opportunities to provide written input on the EHW-2 project during the comments periods for scoping, the Draft EIS, the Supplement to the Draft EIS, and the Final EIS.

District Engineer's response: The Corps followed its standard procedures for issuing a public notice, which included sending it to everyone on the Corps' mailing list within the geographic

area, which for this project is List 1 (which includes Clallam, Jefferson, Kitsap, and Mason), anyone who is signed up to receive PNs on the Special Topic List for the entire state, and all property owners adjacent to Naval Station Kitsap-Bangor and the mitigation sites at Dabob Bay and Shine Tidelands. The Corps evaluated the request for a public hearing and determined it was not warranted. The Corps has completed a public interest review pursuant to 33 CFR 320.4. This evaluation is presented in Section VI of the ROD. The Corps attended all three public hearings held during the DEIS comment period on April 19, 20, and 21, 2011, in Poulsbo, Chimacum, and Seattle, Washington, respectively.

(3) Milner comment: "The Project Poses Obvious Environmental Concerns. The proposed wharf would impair navigation and lessen the margin of safety for boaters in the area. It also would present an aesthetic blight that would impact the public's enjoyment of the water and surrounding area. The proposed dock would harm forage fish habitat and the salmonids that prey on forage fish. The Corps must also not ignore the cumulative impacts of pier development in the affected area."

Navy's response: The FEIS addresses environmental impacts associated with the proposed EHW-2 and the Navy's proposed measures to avoid, minimize, and mitigate any adverse impacts. As discussed in Section 3.25, marine-based construction equipment would not interfere with normal navigational activities in Hood Canal. During operation of EHW-2, overall vessel traffic within Hood Canal will not change as a result of EHW-2 construction. As discussed in Section 3.22.2.1.2, the EHW-2 would not substantially change the visual character of the existing setting. Impacts to marine vegetation and plankton are addressed in sections 3.5 and 3.6; impacts to forage fish are addressed in section 3.8. The Navy has consulted with the National Marine Fisheries Service regarding impacts to salmonids and Essential Fish Habitat, and will implement measures to avoid, minimize and mitigate impacts to these species. Cumulative impacts of the EHW-2 project are addressed in Section 4 of the FEIS.

District Engineer's response: The Corps has evaluated impacts to navigation, boating safety, aesthetics, forage fish, salmonids, and cumulative effects of structures in the affected area. This evaluation is presented in Sections VI and VII of the ROD.

(4) Milner comment: The Test Pile Program provides new and essential information for this environmental review. The program results should be made available for public comment and the Corps should obtain the information for environmental review.

Navy's response: Information from the Test Pile Program (TPP) was incorporated into the Final EIS for EHW-2 and species monitoring plans. Section 3.9.1, Marine Mammals, Existing Environment, of the Final EIS was updated to include species occurrence information obtained during marine mammal monitoring surveys for the TPP implementation. Impact calculations (exposures) for marine mammals in the project area have been updated in Section 3.9.2 Marine Mammals, Environmental Consequences, to reflect this revised species occurrence and density information. Acoustic monitoring during the test pile program demonstrated pile-driving noise was consistent with the existing noise analysis in the EIS. The marine mammal, marbled murrelet, and acoustic monitoring plans required by the NMFS and USFWS Biological Opinions

for EHW-2 incorporate lessons learned from TPP regarding the layout of monitoring transects, deployment of observers, and recording and analysis of acoustic measurements.

District Engineer's response: The Navy has included information obtained from the test pile program in the FEIS. The Corps has considered this information in its evaluation.

(5) Milner comment: "In the Draft EIS, the Navy stated that 20 structures would be "modified or demolished" to comply with explosives siting requirements yet failed to address the added and connected projects. The Navy attempted to correct this error in the Supplement to the Draft EIS but only addressed four buildings. To assess water impacts, all 20 structures need to be identified as well as upgrades at other buildings for the support of the Life Extension Program. It seems likely that additional construction projects will occur at a later date, after the conclusion of the Draft EIS. The Navy must address upgrades to buildings at "other work locations" and include these projects in this environmental review for the proposed second EHW."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 10.* The FEIS addresses all building modifications, demoliton and construction that would be needed to comply with explosives siting requirements as a result of the EHW-2 project.

Response to comment 10: The buildings that would be modified or demolished are identified in Section 2.2.1 of the EIS, which states that modifications to these buildings would not disturb any undeveloped areas or native vegetation. The impacts of modifying or demolishing these buildings are addressed in Sections 3.18.2 and 3.26.2. of the EIS. Four new buildings will be constructed to house the functions of some of the buildings. The EIS has been updated to describe these new buildings and the potential environmental impacts. The need for additional EHW operational days does not translate into the need for an equal number of additional operational days at other base facilities used for the TRIDENT D5 Life Extension Program. Any additional workload will be accomplished within the footprint of existing facilities.

District Engineer's response: The Navy provided additional information about these proposed activities in Chapter 2 of the FEIS.

(6) Milner comment: "The Navy devoted one full paragraph of its 945-page Draft EIS to "Operations." The Navy failed to address the possible environmental harm from a 560-foot submarine, with a displacement of 18,750 tons submerged, nuclear power plant, and the capability of speeds of 20 plus knots or 23 miles per hour. The Navy only states, "Operations of the EHW-2 would not result in an increase in boat traffic at the NBK Bangor waterfront." This statement is repeated in various parts of the Draft EIS with statements concerning a change in current velocities while a submarine is moored at the EHW.

However, the Navy incorrectly stated that the second EHW "may be used as a backup explosives handling facility for OHIO-class guided missile submarines (SSGNs) currently homeported at NBK Bangor..." The SSGN submarines are currently loaded with Tomahawk missiles at Naval

Magazine Indian Island, where the missiles are stored. This statement either reflects a change in explosives operations at Bangor or it is incorrect.

Activities at the second EHW, once it becomes operational as well as during construction, need to be addressed for possible environmental harm in Hood Canal.

The Navy should clarify the statement regarding Tomahawk missile loading operations. This was either an error or a significant change in explosives handling at Bangor."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 12.*

Response to comment 12: The Navy confirms that the EHW-2 may be used as a back-up explosives handling facility for Ohio-class guided missile submarines (SSGNs) homeported at the Bangor waterfront, as stated in Section 2.2.9. The primary facility is still Indian Island.

District Engineer's response: The Navy has provided clarifying information about these activities in Chapter 2 of the FEIS.

(7) Milner comment: "Major issues, such as the definition of an "operational day" could not be answered by Navy personnel in the scoping sessions."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 14.*

Response to comment 14: An EHW operational day is any day that supports fleet and missile requirements. To support the TRIDENT program, more than 200 days per year are needed in addition to the number of days the existing EHW facility can provide. Currently, the existing EHW can provide approximately 200 days per year. After 2024, when pile replacement has concluded at the existing EHW, the Navy has estimated the existing EHW would provide 300 days per year. As discussed in Section 1.2.1 of the EIS, due to changing operational and weapons systems requirements, the Navy has determined the TRIDENT fleet will need EHW facility support approximately 400 days per year. This is more than the number of days the current EHW facility would be able to provide once pile replacement has been completed.

District Engineer's response: The Navy has provided clarifying information about operational days in Chapter 1 of the FEIS.

(8) Milner comment: "Chapter 3.26.1, "Existing Environment" is more of secrecy than "Mutual Aid." " Comments regarding incidents at Bangor and safety concerns.

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 16.*

Response to comment 16: There has never been an accident at the existing EHW that jeopardized the safety of the base, the local population, or the environment. The existing

EHW on NBK at Bangor, as well as two EHWs at Naval Submarine Base Kings Bay, Georgia, have operated safely for over 30 years. Accidents are prevented by incorporating test results and over 30 years of experience into an overall system of safety, which includes facilities, equipment, training, and personnel. Weapons systems are tested under extreme conditions that are well above conditions to which the weapons system might be subjected during the Navy's weapons handling operations. The Navy uses a layered safety system that includes highly trained personnel, detailed administration, and specifically designed equipment to ensure its missiles and weapons are safe and reliable. The Navy's military and civilian personnel responsible for handling explosives at the EHW-2 would undergo the same training, qualifications, and annual proficiency requirements as personnel currently working at the existing EHW. Procedures currently in place to inform the public of an emergency or accident at the existing EHW would be used in the event of an emergency or accident at the EHW-2. Please see Section 3.26 of the EIS for a discussion of the public health and safety of current operations and the proposed action. Please see response to comment 22 below regarding the February 2000 accident.

Response to comment 22: As discussed in Section 3.3 of the EIS, sediments in the project area were tested for the presence of chemical contaminants. Bottom sediments in the vicinity of the proposed EHW-2 location did not show any evidence of recent or historical contamination. Therefore, the proposed action is not expected to result in remobilization of sediment contaminants into Hood Canal. In February 2000, a contractor was grit blasting the structural steel of the bridge crane of the existing EHW in preparation for painting the crane. The contractor had erected an enclosure that contained all blast material and then funneled it into a barrel. The funnel clogged, and before the clog was noticed, the containment system collapsed into the water. The incident was reported as a release, as the commenter noted. The amount of blast grit released into Hood Canal was estimated to be 5,000 pounds. Divers were able to retrieve 900 pounds of grit from the sea bottom. A sample of the grit was tested for toxicity using Toxicity Characteristic Leaching Procedure (TCLP) for eight metals. The only material detected in the grit was chromium, which was found in a concentration of 2.5 parts per million (ppm). Since this was below the dangerous waste criteria level for chrome, the waste did not qualify as dangerous waste and no further action was taken. The Washington Department of Ecology (WDOE) publishes marine Sediment Quality Standards (WAC 172-204-320) for determining potential impacts to marine life due to chemical contamination. WDOE's "no effects" level for chromium is 260 ppm. Sediment sampling at 13 locations completed for the EHW-2 project found chromium concentrations of 13.4 ppm to 16.6 ppm, well below the 260 ppm "no effects" level specified in the Sediment Quality Standards and comparable to background levels for Puget Sound.

District Engineer's response: The Navy has provided additional information on this subject in Appendix M of the FEIS.

(9) Milner comment: "Much of the information involving explosive hazards, Explosive Safety Quantity Distance (ESQD) arc maps, has been released to the public in the past by the Navy. I am attaching two ESQD arc maps for the Explosives Handling Wharf and the Bangor base…Although the maps are old, they are the most recent available. The Corps should obtain

an updated arc map because the impact from an accidental explosion should be a prime consideration in any environmental review."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 17.*

Response to comment 17: *OPNAVINST 5570.2 directs that material originating before the effective date of the instruction which is found to have DoD UCNI, shall be protected as DoD UCNI.*

District Engineer's response: The Corps has evaluated impacts to safety related to explosives in the affected area. This evaluation is presented in Section VI of the ROD.

(10) Milner comment: "There is no weapon system in the U.S. arsenal with the operational risks of a Trident submarine. No weapon has as much explosive material, in the form of solid rocket propellant, and the number of nuclear warheads tightly packed in a confined vessel."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 18.*

Response to comment 18: Thank you for the comment.

District Engineer's response: The Corps has evaluated impacts to safety related to explosives in the affected area. This evaluation is presented in Sections VI of the ROD.

(11) Milner comment: "At Naval Submarine Base Bangor, the largest ESQD arcs originate out of the Explosives Handling Wharf where the missiles are loaded onto the submarines. The K-30 ESQD arc, the separation required from the Explosives Handling Wharf to transportation activities, is currently not enforced in Hood Canal. During missile loading and unloading operations at the Explosives Handling Wharf, an area the distance of .88 miles across Hood Canal is transformed into an explosives handling zone that is expected to be separated from marine traffic. Although the K-30 ESQD arc is enforced for the base, no marine traffic in Hood Canal is informed of the danger. And there is no protection for marine life or other aquatic resources."

Navy's response: The Hood Canal is considered a Naval Operations Area (with explosive arcs), as annotated in NOAA Charts and enforced by the U.S. Coast Guard. Because the Hood Canal is not designated a "Shipping Lane", no notification to Marine Traffic is required.

District Engineer's response: The Navy has provided clarification on this issue in the response above.

(12) Milner comment: "The Navy has not addressed naval restricted areas that extend into Hood Canal from the second EHW…The zone contains connected floats or fencing that shut off part of Hood Canal to transportation and recreation but the Navy has not mentioned this restriction or what type of restriction is required for the second EHW.

The floating security fence should be addressed in the environmental review if the second EHW requires this type of protection. It is certainly a restriction to navigation and recreation and may impact the environmental health of Hood Canal."

Navy's response: Sections 3.25.2.1.1.1 and 3.25.2.1.2.1 state that construction and operation of the EHW-2 would not require changes to the marine Restricted Areas on NBK at Bangor. In addition, Section 3.25.2.1.1.5 states that EHW-2 would not require modifications to the existing prohibited area designated by the Federal Aviation Administration. The floating security fence will not change as a result of construction or operation of EHW-2.

District Engineer's response: The Navy has provided clarifying information on this subject in Chapter 3 of the FEIS.

(13) Milner comment: "Another water quality issue is the fact that the base at Bangor has never met Emergency Planning and Community Right-to-Know Act (EPCRA) requirements involving the reporting and emergency response for Trident missile hazardous materials. This would include activities at the proposed second EHW...As you know, the EPCRA is a federal law. This should be resolved before the issuance of any permits for the proposed second Explosives Handling Wharf. Naval Base Kitsap-Bangor has never been in compliance with EPCRA requirements."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 23.*
Response to comment 23: Naval Base Kitsap is in full compliance with DoD reporting requirements for military munitions end items, under EPCRA Sections 311 and 312. The Department of Defense issues specific policy guidance to federal DoD facilities regarding how DoD facilities shall comply with EPCRA requirements in the "Consolidated Emergency Planning and Community Right-to-Know Act (EPCRA) Policy for DoD Installations, Munitions Activities, and Operational Ranges". Section 7.3 of this policy states that "hazardous chemical components of military munitions and munitions related items are subject to EPCRA Sections 311 and 312 reporting requirements if they are stored in bulk form and are not military munitions or munitions end items (e.g., rockets, bombs, mines, bullets, fuses, initiators, or bursters)." Inventories of chemicals contained in finished munitions end items are exempt from reporting under EPCRA Sections 311 and 312. Additionally, the Occupational Safety and Health Administration (OSHA) consistently interprets military munitions end items and the hazardous chemicals and EHS within them to be exempt from OSHA MSDS requirements and EPCRA Section 311 and 312 reporting requirements.

District Engineer's response: The Navy has provided clarification on this subject in Appendix M of the FEIS.

(13) Milner comment: "The Navy has never stated when a second EHW needs to be operational in order to meet the needs of the Life Extension Program. The second EHW can wait at least another year to allow the Navy time for an adequate notice and consideration of all environmental issues concerning this project."

Navy's response: Appendix M of the Final EIS responds to this issue. Please see *response to letter P50-5, comment 25.*

Response to comment 25: The Initial Operational Capability is needed by 2018 and takes into account construction, outfitting, testing and certification of the EHW-2. In order to meet this date, it is necessary to continue with the EIS on its current schedule.

District Engineer's response: The Navy has provided clarification on this subject in Appendix M of the FEIS.

i. Elizabeth White: Ms. White provided written comments dated 24 February 2012.

(1) White comment: "I am writing to voice my opposition to a 2nd Explosive Handling Wharf at Bangor here in Washington State. We need fewer nuclear weapons, not more. I believe the entire nuclear naval base should be decommissioned. Our financial priorities need to be on helping people and increasing our social safety net."

Navy's response: See COST AND NATIONAL DEFENSE response.

District Engineer's response: Comment noted.

j. Barbara Smith: Ms. Smith provided written comments dated 25 February 2012.

(1) Smith comment: "I am requesting a public hearing and time extension for the U.S. Navy (Bangor) NWS-2009-572 project because the Navy failed to adequately notify citizens about this project. I only learned about it today on the radio, and this isn't sufficient time for me to read and comment on the proposed project."

Navy's response: See PUBLIC HEARING response.

District Engineer's response: Six requests for a public hearing were received. The Corps evaluated the request for the extension of the comment period and request for a public hearing and determined they were not warranted. This evaluation is presented in Section III of the ROD. The Corps followed its standard procedures for issuing a public notice.

k. Gabriel LaValle: Mr. LaValle provided written comments dated 25 February 2012.

(1) LaValle comment: "I am writing in response to the new public comment period for the proposed second Explosives Handling Wharf at Bangor that I recently learned of through Glen Milner. I first would like to request that you hold a public hearing and a time extension because the Navy again failed to adequately notify citizens. Second, I would like to say that I believe the proposed second Wharf to be a unnecessary for multiple reasons all pointed out by Glen Milner and the Ground Zero Center for Non-violent Action of which I am a member. Last, I will say as a small business owner of Sustainable Horticulture service in the Puget Sound area I am more than aware that the Hood Canal is a vital and integral part of the natural environment in my home

state. I am a 4th generation Washingtonian and I believe it is all of our responsibility to preserve the natural beauty and health of our state. This project does threaten wildlife and none of the efforts to try to prevent damage are sufficient in my opinion to warrant this project moving forward. I pointed out at the last public hearing that I have no trust that those who are paid by the Navy actually have the environment or the citizens of Washington's best interests in mind with the proposal and pushing forward of this unneeded, harmful proposed second Explosives Handling Wharf."

Navy's response: See responses for PURPOSE AND NEED. Hood Canal natural environment comment noted.

District Engineer's response: The Corps evaluated the request for the extension of the comment period and determined an extension was not warranted. Six requests for a public hearing were received. The Corps evaluated the request for a public hearing and determined a public hearing was not warranted. This evaluation is presented in Section III of the ROD. The Corps' evaluation of Project Need is presented in Section II of the ROD.

l. Mike McCormick: Mr. McCormick provided written comments dated 25 February 2012.

(1) McCormick comment: "I request an extension on the deadline for public comments and a series of public hearings on the proposed second Explosive Handling Wharf at the Bangor Submarine Base in Washington State."

Navy's response: Request that USACE provide response to the comment about comment extension. Also, please see PUBLIC HEARING response.

District Engineer's response: The Corps evaluated the request for the extension of the comment period and determined an extension was not warranted. Six requests for a public hearing were received. The Corps evaluated the request for a public hearing and determined a public hearing was not warranted. This evaluation is presented in Section III of the ROD.

m. Mary Gleysteen: Ms. Gleysteen provided written comments dated 25 February 2012.

(1) Gleysteen comment: "I am therefore distressed to find that The Army Corps of Engineers, without adequate notice or an opportunity for public hearing, is undertaking consideration of and action on the proposed wharf before it has been approved through required environmental reviews."

Navy's response: See PUBLIC HEARING response.

District Engineer's response: The Corps followed its standard procedures for issuing a public notice. Six requests for a public hearing were received. The Corps evaluated the request for a public hearing and determined a public hearing was not warranted. This evaluation is presented in Section III of the ROD.

(2) Gleysteen comment: "This is particularly problematic since new information is being obtained as a result of the test pile program and there has been no opportunity for citizen and agency review or comment on the additional data."

Navy's response: Information from the Test Pile Program has been incorporated into the Final EIS for EHW-2 and species monitoring plans.

District Engineer's response: The Navy has included information obtained from the test pile program in the FEIS.

(3) Gleysteen comment: "I am struck by the fact that the Washington State Legislature in response to public comment about lack of notice and opportunity to be heard on SB 6107, recently delayed confirmation of that Shorelines Bill, which in all probability would have had significantly less impact on the shorelines than the Proposed Second Wharf. Certainly the federal government should afford us similar protections."

Navy's response: Request that USACE provide response to this comment.

District Engineer's response: This comment is outside of the Corps' purview and therefore was not evaluated in the ROD.

(4) Gleysteen comment: "As an individual, I am concerned both about the health of our waterways, protection of their natural resources, recreational opportunities and safety issues related to increased traffic of nuclear weapons on Hood Canal."

Navy's response: As discussed in Section 2.2.9 of the Final EIS, the overall number of submarines operating in Hood Canal will not change as a result of construction and operation of EHW-2. The Final EIS analyzes the environmental concerns identified by this commenter.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4. This evaluation is presented in Section VI of the ROD.

(5) Gleysteen comment: "Since the Clean Water Act provisions are complex and often difficult for citizens to understand, please extend the time for written comments and schedule a public hearing."

Navy's response: Request that USACE provide response to the comment about comment extension. Also, please see PUBLIC HEARING response.

District Engineer's response: The Corps evaluated the request for the extension of the comment period and determined an extension was not warranted. Six requests for a public hearing were received. The Corps evaluated the request for a public hearing and determined a public hearing was not warranted. This evaluation is presented in Section III of the ROD.

n. Aditya Ganapathiraju: Mr. Ganapathiraju provided written comments dated 25 February 2012.

(1) **Ganapathiraju comment:** "As a concerned member of the Seattle community and associate member of Washington State Physicians for Social Responsibility, I'd like to voice my strong opposition to the proposed 2nd explosives handling wharf at Naval Base Kitsap-Bangor, an unnecessary and dangerous project that would escalate rather than reduce nuclear dangers. As Tom Rogers (Navy Captain-Retired) of Poulsbo, who worked on nuclear attack submarines for over 3 decades concludes, the whole endeavor is a "ridiculous" amount of taxpayer money wasted on "a Cold War relic," which does nothing to strengthen deterrence or security and achieves nothing more than "making defense contractors rich." I urge you to take the no-action alternative."

Navy's response: See COST AND NATIONAL DEFENSE response.

District Engineer's response: Comments on the nuclear program are beyond the Corps' purview and therefore were not evaluated in the ROD. The Corps has determined this project is needed, and the No Action alternative does not meet the project need. The Corps' evaluation of Project Need is presented in Section II of the ROD.

o. Charles Schmid: Mr. Schmid provided written comments dated 25 February 2012.

(1) Schmid comment: "Even though I have testified and written regarding the environmental issues around dredging and installation for the proposed wharf, I never recieve any feedback about the concerns submitted. Nor have I heard about the recent request from the Army Corps of Engineers on the project."

Navy's response: The Navy would like to clarify that the EHW-2 project does not propose or require dredging. Responses to comments on the Draft EIS are included in the Final EIS.

District Engineer's response: Seattle District, Regulatory Branch is not aware of any previous comments from Mr. Schmid. The Corps has considered the comments submitted by Mr. Schmid in response to the public notice as documented below.

(2) Schmid comment: "This proposed wharf will cover huge areas of Hood Canal - already in danger."

Navy's response: Any functional losses of aquatic resources will be compensated in accordance with the Clean Water Act.

District Engineer's response: The Corps has determined the Navy has avoided and minimized impacts to the aquatic environment to the maximum extent practicable through design revisions and implementation of Best Management Practices. The Navy has compensated for impacts to aquatic resources through purchasing credits from the HCCC ILF program.

(3) Schmid comment: "It is justified in a confidential report which the public is not allowed to see, or even see an unclassified version."

Navy's response: Since the Draft EIS was released, additional non-sensitive information regarding purpose and need and alternatives has been added to Sections 1.2 and 2.2.10 of the Final EIS.

District Engineer's response: This comment is beyond the Corps' purview and therefore has not been evaluated in the ROD.

(4) Schmid comment: "And fee-in -lieu of funds are being used in an area not even nearby - as if any fees could be set for the potential environmental damage to Hood Canal."

Navy's response: Mitigation through the In Lieu Fee program would occur within the designated service area of the program. The service area will be determined by the ILF Interagency Review Team, which includes experts from agencies and tribes.

District Engineer's response: The Navy has avoided and impacts to aquatic resources in Hood Canal to the maximum extent practicable. For unavoidable impacts to aquatic resources, the Corps has determined use of the HCCC ILF program is appropriate and complies with the 2008 Federal Rule for Compensatory Mitigation.

(5) Schmid comment: "It is time for the State of Washington, and other State and fedearl agencies, which pride iteselves on its environemtnal reputation, to add its voice to the potential damage to the environemnt which will result form this giant pier. You only have to look at the guidelines you have established for our valuable shorelines and which our City applies to its citizens."

Navy's response: Request that USACE provide response to this comment.

District Engineer's response: The Corps has determined the Navy has avoided and minimized impacts to the aquatic environment to the maximum extent practicable through design revisions and implementation of Best Management Practices. Impacts to aquatic resources will be mitigated in accordance with the 2008 Compensatory Mitigation Final Rule.

(6) Schmid comment: Without someone speaking up, we taxpayers will have spent 1 billion dollars for something for which we never will have seen the justification - or maybe see it only years later when declassified. And we will ask why no governmental agency spoke up in opposition.

Navy's response: See COST AND NATIONAL DEFENSE response.

District Engineer's response: This comment is beyond the Corps' purview and therefore was not evaluated in the ROD.

p. Mike Stuart: Mr. Stuart provided written comments dated 26 February 2012.

(1) Stuart comment: "I'll start by quoting Congressman Markey, in his introduction to the SANE act to decrease spending on nuclear weapons: "It is insane to spend hundreds of billions

on new nuclear bombs and delivery systems to fight a long-past Cold War while ignoring our 21st century security needs and seeking to cut Medicare, Medicaid and social programs that millions of Americans depend on. The SANE Act will cut spending on outdated, wasteful nuclear weapons and related programs over the next ten years and will strengthen our long-term economic and national security." The SANE act would reduce the number of nuclear submarines on active patrol from 12 to 8. Congress has mandated that all sectors of government, including the military, shall decrease their spending. In addition, many think we need to re-orient our priorities toward the needs of America's civilian population. Even if the SANE act does not pass, we are likely in an era when military spending no longer is exempt from cuts. If we do decrease the number of nuclear weapons and submarines, then you don't need another wharf at Bangor. In addition, the presence of nuclear weapons in a heavily populated area is frightening. There have been accidents on Bangor submarines. None have been as serious yet as the fire on the Russian nuclear sub Yekaterinburg near Murmansk. However, human nature is the same in America and Russia, and despite the best intentions and planning, there will be more accidents at Bangor. I doubt that civilians will ever know how much radioactive contamination was spread during the fire on the Yekaterinburg. There are a lot of people downwind or downcurrent from a possible accident at Bangor. The world already has too many people suffering from being too close to nuclear weapons. The original Project 4.1 which deliberately subjected people to radioactivity was horrendous enough; we don't need another inadvertent extension to it."

Navy's response: See COST AND NATIONAL DEFENSE and SAFETY responses.

District Engineer's response: Comments on military spending are beyond the Corps' purview and therefore are not evaluated in the ROD. The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of safety. This evaluation is presented in Section VI of the ROD.

q. Mary Hanson: Ms. Hanson provided written comments dated 26 February 2012.

(1) Hanson comment: "I oppose the Navy's plan to build a second explosives handling wharf at the Bangor submarine base. Handling nuclear bombs and missile fuel, for over 400 work days per year as proposed for the combined explosives handling wharves, poses an unacceptable increased risk of a "dirty bomb"-type accident, especially in the event of a severe earthquake."

Navy's response: See SAFETY response.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4, including an evaluation of safety. This evaluation is presented in Section VI of the ROD.

(2) Hanson comment: "Naval Base Kitsap Bangor was built in the 1970's, before scientists discovered, in the late 1980's, that the huge offshore Cascadian Subduction Zone was active, and that shallow crustal faults also posed a significant seismic threat in the Hood Canal area of Puget Sound. The Japan earthquake's tsunami went far inland, "walls of water up to 120 feet high washed away entire communities on the Japanese coast." Japan had an extensive earthquake

warning system, and had construction codes far stricter than Washington State has. At Bangor, we have nuclear bombs and highly explosive missile fuel being constantly handled right on the water. In Scientific American (May 2011), reporter Sid Perkins warned that , according to Chris Goldfinger, a marine geologist at Oregon State University, "the northern portion of the (Cascadian) subduction Zone, from the middle of Vancouver Island to the Washington-Oregon border, has a 10 to 15 percent chance of suffering a magniude 8.0 or greater quake in the next 50 years.""

Navy's response: See EARTHQUAKE AND TSUNAMI HAZARDS response.

District Engineer's response: The Corps has evaluated potential impacts from earthquakes and tsunamis. This analysis is presented in Section VI of the ROD.

(2) Hanson comment: "The funding that should be going to building earthquake warning systems and strengthening critical infrastructure, creating jobs that actually increase our security, should not go to doubling the missile handling capacity of the Bangor explosives wharf. A prudent approach to protecting our marine and land environment would remove nuclear weapons and nuclear waste from areas at high seismic risk. Proposals to cut back the submarine based nuclear arsenal (see Seattle Times 2-15-12 by Craig Whitlock and Walter Pincus)would moot the "need" for a second explosives handling wharf."

Navy's response: See COST AND NATIONAL DEFENSE response.

District Engineer's response: Comments on the nuclear program are beyond the Corps' purview and therefore are not evaluated in the ROD.

r. Debra Winter: Ms. Winter provided written comments dated 26 February 2012.

(1) Winter comment: "Please do not allow the 2nd Explosives Handling Wharf at Bangor."

Navy's response: Comment noted.

District Engineer's response: Comment noted.

s. Karol Milner: Ms. Milner provided written comments dated 26 February 2012.

(1) Milner comment: "The Corps should deny the permit because construction of the proposed dock is contrary to the public interest under 33 C.F.R. § 320.4."

Navy's response: A second EHW is essential to maintaining TRIDENT program capabilities and is therefore essential to national security.

District Engineer's response: The Corps has completed a public interest review pursuant to 33 CFR 320.4. This evaluation is presented in Section VI of the ROD. The Corps has determined that issuance of a DA permit for the EHW-2 project is not contrary to the public interest.

(2) Milner comment: "The wharf project is expensive and damaging to the Hood Canal. Should the wharf be built, it is likely that it would be not be needed by the time it is completed due to projected cuts in the number of submarines at Bangor. The money spent on this project could be directed to our education system, health care programs and affordable housing."

Navy's response: See PURPOSE AND NEED and COST AND NATIONAL DEFENSE responses.

District Engineer's response: The Corps has determined this project is needed. The Corps' evaluation of Project Need is presented in Section II of the ROD. Expenditure of public funds on defense is outside of the Corps' purview and therefore was not evaluated in the ROD.

(3) Milner comment: "There was not sufficient notice for public comment on this issue. I have attended scoping meetings in the past and know that people are interested in what the Navy does in this area. Please provide a public hearing and a time extension for comments on this issue. There should be an opportunity for the public to respond."

Navy's response: Request that USACE provide response to the comment about comment extension. Also, please see PUBLIC HEARING response.

District Engineer's response: The Corps followed its standard procedures for issuing a public notice. Six requests for a public hearing were received. The Corps evaluated the request for a public hearing and determined a public hearing was not warranted. This evaluation is presented in Section III of the ROD. The Corps evaluated the request for the extension of the comment period and determined an extension was not warranted.

t. Margaret H. Vamvas: Ms. Vamvas provided written comments dated 27 February 2012.

(1) Vamvas comment: "I am adamently opposed to spending sparse public dollars to build an explosvies handling wharf at Bangor. We surely need no more ability to help the use of weapons there. I have been opposed to the nuclear weapons there for many years. I am also opposed to any more danger to the ecosystems in Hood Canal."

Navy's response: See response for COST AND NATIONAL DEFENSE.

District Engineer's response: Expenditure of public funds on defense is outside of the Corps' purview and therefore was not evaluated in the ROD. The Corps has completed a public interest review pursuant to 33 CFR 320.4. This evaluation is presented in Section VI of the ROD.