NEAH BAY SECTION 107
NAVIGATION IMPROVEMENT PROJECT
NEAH BAY, WASHINGTON

APPENDIX H

PUBLIC COMMENTS

September 2020

US Army Corps
of Engineers®
Seattle District

Makah Tribe

<u>Comment Set 1, Submitted by the Washington Department of Ecology on 12 August 2020</u>:

Thank you for the opportunity to comment on the draft Integrated Feasibility Report and Environmental Assessment. My comments are listed below.

1. Water Quality (Section 4.6, and others.) The cited ambient DO (4-5 mg/L) for Neah Bay is well below standards for the area (7 mg/L). Applicable standards would only allow project-related deviation (decrease) of 0.2 mg/L from ambient. Ecology will require monitoring of DO during in-water work and beach placement, since at this low DO, even small decreases may have major impacts.

USACE response: Comment noted. USACE will be prepared to monitor DO during construction if needed.

2. Maps/Figures:

a. Several times, the three creeks in the area are mentioned, but I did not see them on any map. It would be helpful to include them on Figure 1-2.

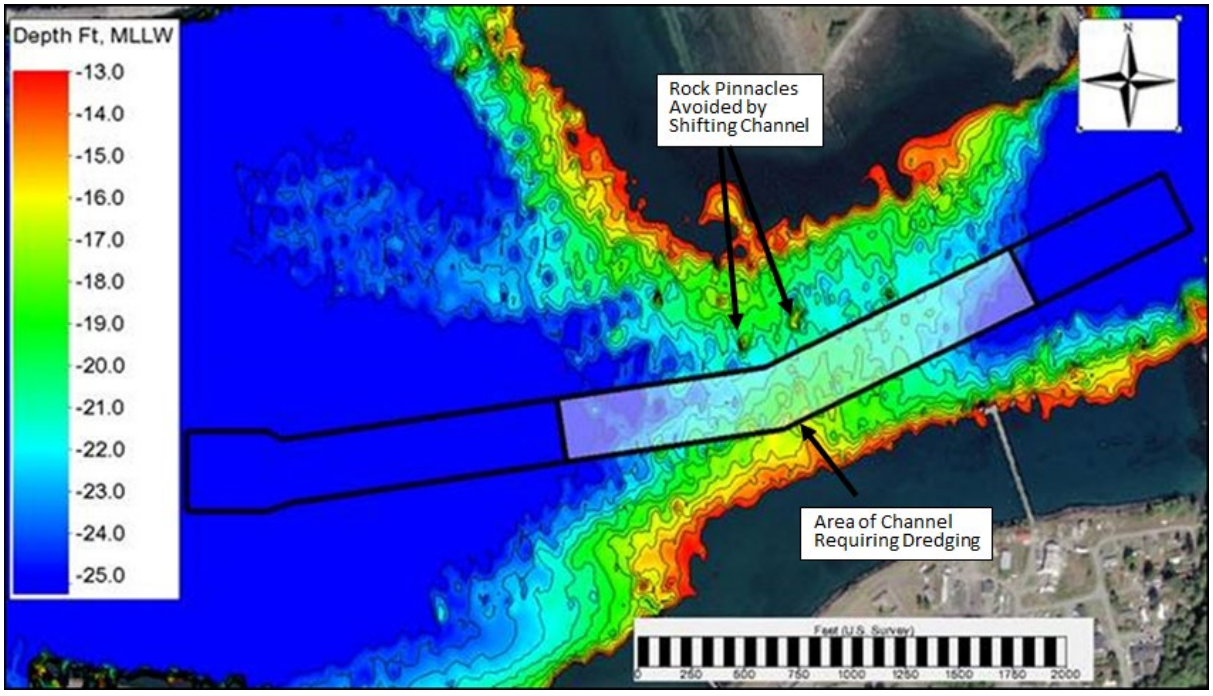
USACE response: The confluences of both Agency and Halfway Creeks were shown on Figure 1-2. The Village Creek will be added to Figure 1-2 in the Final Feasibility Report/Environmental Assessment (FR/EA). See updated figure below:

b. Figure 1-4 is the cross section with the underlying rock. Is this a generic cross section, since it doesn't reference where the cross section is located? If it is from a specific location, can a reference line be added to Figure 1-3?

USACE response: Figure 1-4 was meant to be a typical section showing the general condition of the channel. In the Final FR/EA it will be Figure 1-5. The section is from channel station 19+00; note has been added to the figure.

c. The "Rock Pinnacles" are mentioned throughout the report, but other than Figure 1-4 cross section, they are not included on any maps. Can the figure in Appendix B be brought into a figure showing the rock profiles and proposed navigational channel footprint?

USACE response: *Refer to new Figure 1-3 of the final FR/EA showing channel depths including rock pinnacles and channel alignment. Rock pinnacles were avoided by shifting the channel to south. See new figure below:*



d. Reference to the pinnacles say that the shallowest it is likely to be is -24. However, looking at the figure in appendix B, it looks like it is at -20 in some areas that may be in the proposed channel. (see below- convert to "rich text" if it doesn't show up)

USACE response: Similar to previous response, reference new figure 1-3. The channel was shifted to the south to avoid the shallowest rock areas.

3. Cumulative Impacts evaluation:

a. Project is described as not requiring maintenance over 50 years. Would this be true if impacts of vessel traffic to side-slope sloughing is considered?

USACE response: Yes, side slope sloughing is not a concern for maintenance as the dredge cut depth (2-4 ft) is not deep enough for side slope sloughing to significantly impact channel depths.

b. Cumulative impacts of the disposal, along with the Tribal marina dredging (disposing downstream of the Corps location):

   i. If benthic recovery (invertebrates and algae) relies a lot on migration from upstream as "feeder", is there sufficient feeder upstream of the Corps site? Since the Corps site would then function as the "feeder" for the Tribal site, it is important that the Corps site is able to recover rapidly. (Section 4-10).

USACE response: USACE is not sure what is meant by "feeder", and if it refers to biota or sediment. Section 5.1.1 of the FR/EA describes the expected transport of material along the shoreline. This applies to material placed by the USACE and the Makah Tribe. Healthy marine vegetation and invertebrate communities exist in Neah Bay as described in section 4.10. USACE anticipated that the material placed along the shoreline will colonize with invertebrates and marine vegetation from the surrounding areas. This has been the case for numerous USACE dredging and beneficial use of dredged materials projects. Eelgrass does exist in parts of Neah Bay, but not within the placement area. With the placement of

dredged materials along this stretch of shoreline it is possible that the depths and substrate would better support eelgrass, although it is not a guarantee that eelgrass will colonize the area.

ii. Page 77 dismisses the evaluation of the impacts to the marina dredging, since it is not Corps dredging. However, the cumulative placement of Corps and Tribal material upstream of the marina may result in increased dredging for the Tribe (it may not be Corps dredging but should at least be considered under "environmental justice"). This should not be dismissed, but discussed (selection of preferred alternative 2 over alternative 3 = half the volume). Also, do models show that the bulk of the material will not go directly into the marina via the fish passage, but rather continue past the breakwater into deeper water?

USACE response: The models show the bulk of the material moving slowly along shore towards breakwater and fish gap building the intertidal shoreline until it encounters the marina breakwater, where the majority of material is then directed offshore into deeper water. Also the USACE would have maintenance responsibilities for the Federal entrance channel into the marina so infill into the marina is a USACE dredging concern. However, model data does not identify a need for maintenance dredging in the navigation channel or the marina.

4. Section 4.4, impact to navigation and Economics. It is mentioned here that the improvements may result in increased use of the marina by distressed vessels. This is good for the coast, but could result in increased spills in the Marina, which should be considered in the discussions.

USACE response: There is an increased risk of a leak or spill within Neah Bay and the Tribal marina with increased vessels. The risk is relatively low. The Makah Tribe has procedures in place for dealing with spills inside Neah Bay including an inventory of response equipment, maintaining an active roster of eligible first responders, and the ERTV rescue tug moored in the marina; and there are local response companies. A paragraph has been added to section 4.6.2 of the FR/EA discussing this issue.

5. Section 6.2 and Appendix D, in relation to the BiOp. Appendix D pointed out many errors in the project description, which lead to some recommendations that may not be applicable. Will NMFS be updating the BiOp for the final project documentation?

USACE response: USACE submitted the errata to National Marine Fisheries Service. No response has been received to date. USACE is able to comply with all of the Terms and Conditions of the Biological Opinion regardless of the errors in the Opinion.

Comment Set 2, Submitted by the U.S. Environmental Protection Agency on 14 August 2020:

Enclosure to EPA's Comment Letter on Public Notice CENWS-PMP-20-05

The Clean Water Act Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material are the substantive environmental criteria used to evaluate proposed discharges of dredged or fill material.2 The Guidelines require the Corps make written factual determinations of the potential short-term or long-term effects of a proposed discharge on the physical, chemical, and biological components of the aquatic environment and "[s]uch factual determinations shall be used in § 230.12 in making findings of compliance or non-compliance with the restrictions in § 230.10."3

The following are detailed comments submitted by the U.S. Environmental Protection Agency in response to the U.S. Army Corps of Engineers Public Notice CWNWS-PMP-20-05, Neah Bay Section 107 Navigation Improvement Project, Neah Bay, Washington.

From our review of the project description and cross-sections, it appears that all dredged material placement will occur above MLLW (i.e., no "subtidal" placement). Placement would create a 100 foot wide shelf at +12' MLLW (FS/EA Fig 5-4). The fill would then drop down a 10:1 slope over a 100' wide swath to approximately +2.5' MLLW, the lowest fill elevation. Mean higher high water in Neah Bay is +7.96' MLLW. No acreages or elevations for the placement are provided in the narrative project descriptions and analysis.

Project documentation identifies that the proposed work includes beneficial use of dredged material for beach nourishment. We agree with the goal of nourishing the intertidal beach in and downdrift of the proposed placement location, however, the rationale for the current placement design is not clear (e.g., there is little information on the existing receiving area and the elevations pre- and post-placement are not provided). The Corps documentation should provide a coastal engineering and habitat-based rationale for the proposed placement design and conversion of existing areas. . Rather than converting "subtidal" area to "intertidal" area (as is stated throughout the Corps' documentation), the current design converts deeper intertidal areas to shallow intertidal and upland beach areas. We request/recommend the project description/documentation define terminology used to describe elevations (i.e., "subtidal", "intertidal" and "upland beach"), and provide a coastal engineering and habitat-based rationale for the proposed placement design and conversion of existing areas. This design rationale for beneficial use placement should be clearly described and supported, with stated goals and objectives (e.g., quantifying areas higher than MHHW in the proposed design, estimating how long areas above MHHW will remain essentially upland, explaining why placement at these upper elevations is required, etc.). If a goal is to improve clamming, an important goal for the Makah Tribe in this and adjacent areas, please describe what are the best elevations for clamming and how this design enhances those opportunities. The design rationale should also address when the beach will be unavailable for clamming.

USACE response: The rationale for the selection of the placement area is described in section 5.1.1. Figure 5-3 shows a typical cross-section of the beach elevations (past, present, and post-project). There will be locations where the material goes deeper. Note that the project is currently in the feasibility phase of design. When the project is approved and receives funding it will move to the preconstruction, engineering, and design (PED) phase where design details, including pre and post project tidal elevations across the entire placement area, will be developed and refined. USACE's rough estimate of the placement area is 5.75 acres. Below are approximations of habitat conversions post material placement:

- ***3 acres will be converted from intertidal to upland beach***
- ***2.5 acres will be converted from low intertidal to high intertidal***
- ***.25 acres will be converted from subtidal to higher subtidal/ low intertidal***

The Final Feasibility Report/Environmental Assessment (FR/EA) has been updated to reflect these estimated conversions. It is introduced in section 4.5.2, Hydraulics and Geomorphology, of the Final FR/EA.

The "goal" is to create conditions that more closely match the beach that was present historically, prior to the road and revetment that blocks sediment input from Halfway and Agency Creeks. That is the only goal or objective, as this is a navigation improvement project and not a restoration project. There is no goal to restore clamming, although it is a potential ancillary benefit of the placement. The Makah Tribe has stated that the historical beach that was present prior to the revetment and the roadway was used for clamming. USACE will not research clamming elevations and design the project based on ideal conditions for clams. The placement of sediment, and its dispersal along the shoreline, is expected to provide conditions similar to historical conditions.

In terms of cumulative effects, the Corps' documentation states that it is highly unlikely that the Makah Tribes' dredging project, associated with permit # NWS-2016-0826 for the Neah Bay Dock Expansion, will occur at the same time as the Corps Section 107 project. The Tribe's project involves dredging approximately 187,000 cy of material, with placement on an immediately adjacent intertidal beach area. We agree that simultaneous dredging is highly unlikely, however, we believe it is very possible that the projects could be dredged sequentially in the same dredging season. Neah Bay's remote location and high mobilization costs make it less costly to dredge these two projects in the same season. Therefore, the Corps documentation and analysis should anticipate this possibility, which will affect description/analysis of issues such as recolonization of the placement area and water quality effects.

USACE response: While it is possible that the Makah Tribe dredge project will occur during the same season, it is not necessarily "very possible" given their funding process. USACE has added language to sections of Chapter 4 to address cumulative impacts of sequential dredging of the two projects. USACE maintains that it will not rise to the level of significance.

Additionally, the Corps has no proposed monitoring associated with this project. How is the success of this beneficial use to be determined? We recommend the Corps collaborate with the Makah Tribe to conduct physical monitoring, including bathymetric monitoring and beach surveys, over time, to determine whether shoreline beneficial use placements have performed as anticipated, and created additional intertidal areas for activities such as clamming. We recommend the physical monitoring include the Neah Bay southern shoreline from Baada Point to the marina breakwater.

USACE Response: The National Marine Fisheries' (NMFS) Biological Opinion Terms and Conditions require the following post-project monitoring:

> ***a. Conduct monitoring for rooted SAV and macro-invertebrate presence within the dredge material disposal site one year and five years post placement.***
>
> ***b. Conduct biannual monitoring of the dredge material disposal site and the area immediately down-drift of the placement location to determine sediment retention and drift efficacy.***

These monitoring parameters were negotiated with NMFS. This effort will be collaborated with the Makah Tribe. Terms and Conditions have been added to section 5.7 of the Final FR/EA.

We also identified several statements in the Environmental Assessment where additional information and analysis or corrections are needed to address the factual determinations required by 40 C.F.R. § 230.11 and to make a reasonable and defensible judgment that the proposed discharges will comply with the Guidelines under 40 C.F.R. § 230.12, specifically:

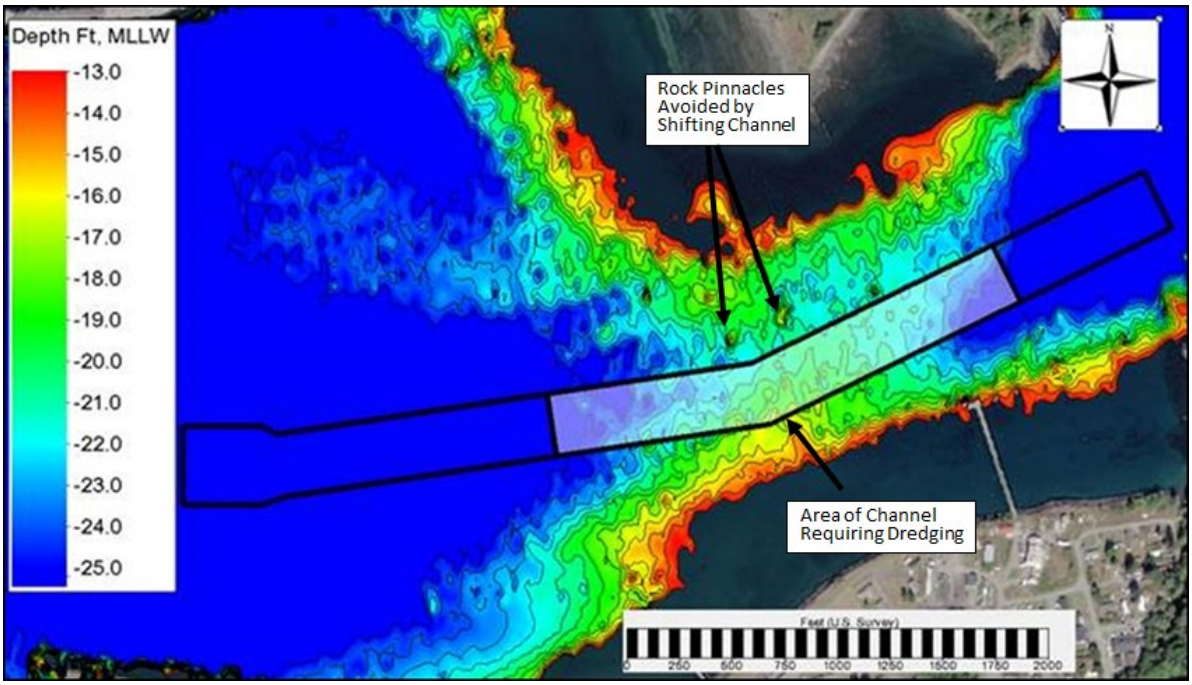
1. Section 1.5 States that the placement will occur in "subtidal areas" and is intended to restore intertidal habitat. This is an example of the language that should be updated/corrected based on our comments above relative to elevations and project description.

USACE response: An estimated .25 acres will be converted from subtidal to higher subtidal/ low intertidal. The Final FR/EA has been updated to reflect this estimated conversion.

2. Section 3.3. This section and footnote in Table 3-5 indicate rock may be encountered at elevations deeper than -22' MLLW or -21' MLLW respectively. Given the recommended project depth of -21' MLLW + 2' overdepth, how will rock be handled during hydraulic dredging?

USACE response: Based on the accuracy of the acoustic surveys, there is risk that there is rock within the overdepth prism. If rock is found during PED, when the Sediment Suitability Determination (SSD) will be done, we will reduce the overdepth dredging. This has been added to the footnote on table 3-5. Note that a new figure has been added to the Final FR/EA

(Figure 1-3) that shows the location of the rocky pinnacles and the location of the channel, which avoids this rock. See new figure below:



3. Section 3.5.2 This section claims benefits to intertidal habitats, migratory pathways, eelgrass, shellfish, etc. However, the document needs to provide clear documentation that the material will be placed and provide elevations that will in fact do that. A clearer explanation of the initial placement and elevations, with anticipated sediment movement and elevations will support these claims.

USACE response: The rationale for the selection of the placement area is described in section 5.1.1. Figure 5-3 shows the elevations of the beach (past, present, and post-project). The "goal" is to create conditions that more closely match the beach that was present historically, prior to the road and revetment that blocks sediment input from Halfway and Agency Creeks. The placement of material, and its dispersal over time, is expected to be similar to historical conditions and thus provide shallow water habitat for the biota that once used this habitat prior to the downgrading and deepening of the shoreline. USACE is not guaranteeing or committing to certain biota colonizing the area. The FR/EA merely speculates as to what types of biota may colonize the area based on shallower depths and sediment type. Note that more precise details about placement elevations and methods will be determined during the PED phase of the project.

4. Section 4.3.1 Historical Conditions. Discussion of 1995-1996 inner breakwater construction should identify and include the associated mitigation beach, which was constructed by the removal of Evans Mole and placement of dredged material on and between Evans Mole and the

new inner breakwater. The goal of this mitigation beach was to provide better clamming habitat and access for tribal members, especially elders. The beach, as a mitigation component for construction impacts, was set aside in the Project Cooperation Agreement as enacted by Tribal Resolution 71-95. This feature should be included in documentation as material from this project may be expected to eventually nourish this area of the Bay shoreline as well.

USACE response: The placement area associated with the Navigation Improvement Project is separate from this mitigation beach but would provide nourishment to the former mitigation area. Final FR/EA states that areas downdrift of placement will receive materials and eventually become shallower. This is discussed in section 4.9.3.

5. Section 4.3.3. Future Actions. Please include permit number for the Makah Tribe's dock expansion project – # NWS-2016-0826.

USACE Response: Permit number has been added to the Final FR/EA.

6. Section 4.4 Navigation and Economic Conditions. Documentation is inconsistent as to whether a deeper channel will change vessel usage in Neah Bay. As discussed here, a deeper channel will allow larger vessels to use Neah Bay, including as a port of refuge in rough conditions. This discussion also acknowledges that a deeper channel will allow deeper draft vessels to enter Neah Bay providing additional economic opportunities for the Makah Tribe. Additional and different vessel traffic should be acknowledged in the project effects sections of documentation, for example in a discussion of invasive species and vectors into Neah Bay.

USACE response: Discussions of increased vessel traffic has been added to pertinent resources including water quality, noise, fish, marine mammals, and birds. The larger vessels entering Neah Bay would not be of the size of large, container-carrying ships that cross the Pacific Ocean and introduce species that are not native to the region. While it is possible that vessels from the elsewhere on the West Coast could bring invasive species into Neah Bay, it is unlikely.

7. Section 4.4.4 Cumulative Effects. Current documentation states that it is unlikely that the Makah Tribes' dredging project, associated with permit # NWS-2016-0826 for the Neah Bay Dock Expansion, will occur at the same time as the Corps Section 107 project. We agree that simultaneous dredging is highly unlikely. However, we believe it is likely that the projects could be dredged sequentially in the same dredging season. Neah Bay's remote location and high mobilization costs make it less costly to dredge these two projects in the same season. Therefore, the Corps documentation and analysis should anticipate this possibility, which will affect description/analysis of issues such as recolonization of the placement area and water quality effects.

USACE response: While it is possible that the Makah Tribe dredge project will occur during the same season, it is not necessarily "very possible" given their funding process. USACE has added language to sections of Chapter 4 of the Final FR/EA to address cumulative impacts of

sequential dredging of the two projects. USACE maintains that it will not rise to the level of significance.

8. Section 4.5.4 Cumulative Effects. This discussion should be edited based on changes to the project description, as materials from both projects will be placed in intertidal areas, not subtidal.

USACE response: The Final FR/EA has been updated to reflect the tidal zone changes as described previously in this appendix.

9. Section 4.6 Water Quality. We agree that there are no major sources of pollution within the Bay. However, the Tribe's most recent sediment characterization in support of the Dock Extension project should be documented. Grain size data from that sediment characterization are presented. The finding of an area of sediment contamination at the existing commercial fishing dock and trestle should also be noted. Hg, PAHs and pthalates were found. We agree that the Corps' dredging is relatively distant from this area, but similar to other contextual data from the Bay, this information should be narratively provided in Corps documentation.

USACE response: USACE members of the DMMP anticipate the material will be suitable for beneficial use, as shown in table 5.6 of the FR/EA. An SSD will be done during the PED phase to verify this assumption. USACE does not expect the contaminants found surrounding the fishing dock to be present in the entrance channel. The project is economically justified only with shoreline disposal. So if the SSD determines that the material is not suitable for beneficial use it is unlikely that the project will move forward.

10. Section 4.6 Water Quality. Dissolved oxygen (DO) levels averaging 4.5 to 5.5 mg/L are surprising given the description of strong tidal flushing in the Bay. Are there any other data on DO in the Bay, and what factors (e.g., fish waste disposal) might cause this? This parameter along with turbidity will be important components of any water quality monitoring plan. Should the Tribe's Dock Extension occur in the same dredging season, will there be cumulative or long-term effects on water quality (specifically DO) due to accretion at the fish gap?

USACE response: Washington Department of Ecology (WDOE) has submitted comments on the draft FR/EA and identified the need for dissolved oxygen (DO) monitoring during construction. USACE will develop a water quality monitoring plan and seek a water quality certification (WQC) from WDOE and the Makah Tribe during the PED phase. Sequential dredging impacts to water quality have been addressed in the Final FR/EA. However, USACE maintains that the impacts will be temporary and not rise to the level of significance.

11. Section 4.6.2 Water Quality Preferred Alternative. The reference to placing "the spoils onto a barge" should be corrected. Standard turbidity management practices such as temporary berms and turbidity curtains are mentioned as potential BMPs. Grain size data from the dock extension dredging project are referenced as comparable to this project. These data reveal total fines of over 50% in one DMMU, with others comprised mostly of "very fine sand" and

fines (silts and clays). The Corps' future sampling of the channel for grain size and TOC should guide a more detailed dredging plan and water quality monitoring plan and inform management practices for beach dewatering and disposal to minimize turbidity and DO effects. EPA will participate in the DMMP process to characterize channel dredged material. We would also like to review the more detailed dredging plan when this project has advanced to that stage.

USACE response: The Final FR/EA changed all instances of "spoils" to "material". Please note the project is currently at the feasibility level of design. When the projects receives approval and funding for the PED phase, more refined design details, including best management practices (BMPs), will be developed. A SSD will be pursued during the PED phase, as will a WQC from WDOE and the Makah Tribe, both of which will inform construction methods and BMPs.

12. Section 4.8.2 Noise. Equipment reworking materials on the beach will also contribute to noise effects.

USACE response: Language has been added to section 4.8.2 of the Final FR/EA.

13. Section 4.9 Marine Vegetation. Please provide the existing elevations in the placement area, pre- and post-project to augment this discussion. Elevation ranges for important species, such as eelgrass, should be provided. In terms of bull kelp presence/absence in the channel, the depths are in the range that can support kelp, so other possible factors such as substrate, currents, etc. may not be favorable in that location (rather than "photic zone").

USACE response: Figure 5-3 shows a typical cross-section of the beach elevations (past, present, and post-project). Some areas may have materials placed deeper. Design details will be refined during the PED phase, including tidal elevations across the entire beach pre and post placement. USACE is not guaranteeing or committing to certain biota colonizing the area. The FR/EA merely speculates as to what types of biota may colonize the area based on shallower depths and sediment type. Eelgrass recruitment is not a "goal", but rather a possibility, so depth ranges of eelgrass will not be provided. The reference to the photic zone and marine vegetation has been reworded in the Final FR/EA to the following: "No marine vegetation exists in the navigation channel, as the substrate is not favorable for kelp species and it is too deep for eelgrass."

14. Section 4.9.2 Marine Vegetation. This section needs editing to better describe the project in terms of subtidal, intertidal and upland beach designations at the placement location.

USACE response: The Final FR/EA has been updated to reflect the tidal zone changes as described previously in this appendix. Design details will be refined during the PED phase.

15. Section 4.10.2 Benthic Invertebrates. Is a shift in benthic community composition expected in the placement area and downdrift, based on grain size and/or elevation changes? Please

specifically address effects to clamming resources. In the Section 4.10.4 cumulative effects discussion include effects on recolonization, in the event the Corps' and Tribe's dredging and placement occur sequentially in the same dredging year.

USACE response: Any areas that transition to higher elevations, both areas with immediate placement and areas that receive materials via littoral drift, could experience benthic community changes due to shallower depths and substrate changes. This language has been added to section 4.10.2 of the Final FR/EA. Clamming resources will not be specifically addressed under 4.10.2 since it is not a project goal and there are no targets. Clamming is addressed under 4.16, Tribal Trust Assets, in that there is a possibility that tribal clamming could improve. Discussion of the cumulative impacts of sequential dredging has been added to section 4.10.4.

16. Section 4.11 Fish. Is the lack of forage fish spawning in Neah Bay due to lack of appropriate habitat, or lack of monitoring? Has monitoring been performed more recently than 1988? Do the elevations and substrate provided by this project potentially provide better forage fish spawning habitat?

USACE response: According to WDFW's forage fish mapper, there has not been documented forage fish spawning. That does not necessarily mean there is not spawning. If any spawning does occur, it is most likely herring, which are known to spawn on marine vegetation. This is stated in section 4.11.2 of the draft FR/EA. It is probable that that the placement area will provide better forage fish spawning habitat, but this is not a project goal and no targets are being set. Potential for forage fish spawning improvement has been added to section 4.11.2 of the Final FR/EA.

17. Section 4.14.2 T&E Species. Please list the NMFS BiOp terms and conditions that the Corps intends to comply with.

USACE response: Terms and Conditions have been added to section 5.7 of the Final FR/EA.

18. Figure 5-3. The proposed placement elevations indicated by the orange line (-1' to +15' MLLW) are inconsistent with other project descriptions and indicate a conversion to a +15' MLLW upland beach over a large swath of the project.

USACE response: Figure 5-3 is only meant to show the change in beach elevation over the years. Please reference Figure 5-4 for proposed elevations and typical cross section.

19. Figure 5-4 indicates intertidal areas currently at +4' to +5' MLLW will be converted to +12' MLLW over a 100-foot swath. This is the only figure that explains the potential elevation changes associated with the current placement design. The narrative should describe the areas, and elevation changes more clearly, and consistently define and use the terms subtidal, intertidal and upland beach.

USACE response: The Final FR/EA has been updated to reflect the tidal zone changes as described previously in this appendix. Design details will be refined during the PED phase.

20. Section 5.5.1 and Figure 5-5. Does this figure include the Tribe's placement of dredged material? If not, please provide a figure for cumulative effects purposes. What does "predicted shoreline" mean in terms of elevations? Please label the figure to indicate "predicted shoreline" and a time frame of 15 years.

USACE response: There is no equivalent figure for the Tribe's placement, nor do we have a figure that includes both. Note that Figure 5-5 is conceptual and elevations down drift have not been modelled. Further details and modeling of sediment transport will occur during the PED phase. USACE has made a qualitative judgment that both the USACE's and the Makah Tribe's material placement will provide a benefit to the shoreline by creating more shallow water habitat and upland beach that is consistent with historical conditions prior to the revetment and road, which have caused a downgrading of the beach.

21. Section 5.5.1. Sediment Transport Rate. This section states that the shoreline net transport rate is 4,000 cy/year. The calculation that 36,000 cy of material will take 15-20 years to be transported off site is not consistent. Please clarify.

USACE response: 4,000 cy is the net transport rate over the entire shoreline. Estimates for beach nourishment are based on a proportion of that and historical shoreline retreat shown in in figure 5-3.

22. Section 5.5.1. Fish Gap. Given the Corps' and Tribe's large placement projects, is the fish gap likely to remain open to allow some fish passage and water exchange into the marina? This should be disclosed in Corps' documentation, as it could have effects on marina water quality and fish passage.

USACE response: The fish gap has been stable around +4 to +6 and is usable at high tides. It is expected to stay that way post project.

23. Section 5.1.2.1 Dredged Material Management. How will "temporary longitudinal dikes" be constructed? We assume by pushing up dredged material using heavy equipment. Please provide a general description.

USACE response: They will likely be built with a small bulldozer or other earth moving equipment as material comes out of the dredge pipe. Best management practices and construction methods will be optimized during the PED phase.

24. Section 5.1.3 Best Management Practices. The water quality monitoring plan should be consistent not only with the Ecology certification, but also the Makah Tribe's certification. Equipment and materials brought to Neah Bay from other areas should be cleaned and assured to be free of sediment, plant materials and organisms from previous project sites (invasive

species). If new, the single point of access to the beach should be closed/cut off once the project is completed to ensure other equipment cannot access the beach from an access point constructed by the Corps' contractor.

USACE Response: Added the Makah Tribe to any reference to a water quality monitoring plan or water quality certification. A water quality certification will be obtained from WDOE and the Makah tribe during the PED phase. Best management practices will be refined at that time.

25. Section 5.2.1 and Table 5-1 Sediment Composition. Summarizing these data obscures that the Dock Extension Suitability Determination found those materials to be composed primarily of very fine sand and fines (silts and clays). A more detailed table would provide a better sense of those data for this analysis. Perhaps the grain size in the channel will be coarser, given its' location toward the mouth of the Bay. The upcoming confirmation sampling in the channel will provide additional information that can inform the dredging plan and best management practices to protect water quality, based on the actual dredging prism.

USACE response: The SSD for the Navigation channel will be pursued during PED. The Dock SSD is the closest sediment sampling that has occurred, so the USACE is making assumptions that it will be similar. Added a footnote to table 5-1 stating the sand is very fine. The navigation channel SSD will inform the BMPs and design during the PED phase.

26. Appendix D. CWA Section 404(b)(1) Evaluation Overall Comment. EPA's comments on the FR/EA apply to the CWA Section 404(b)(1) analysis, which references the FS/EA, and should be augmented accordingly. A clarified project description, that accurately depicts the placement location including elevations and acreages pre- and post-project, must be provided. Based on our review of the project, it does not appear that subtidal areas are being affected. The description must accurately disclose conversion of intertidal areas to different elevations, including upland beach, if that is being proposed. Any conversion of areas to elevations above MHHW, for example, should be specifically justified as necessary for the overall project success and long-term benefit of intertidal habitat areas.

USACE response: The 404(b)(1) analysis has been updated to reflect the tidal zone changes described previously. Design details will be refined during the PED phase. Conversion to upland beach is justified in that it more closely matches historical conditions prior to the downgrading of the shoreline.

27. Appendix D. CWA Section 404(b)(1) Evaluation, p. 4. Best management practices listed in Section 5.1.3 of the FR/EA should be added to the Impact Minimization Measures section.

USACE response: Added best management practices to Impact Minimization Measures.

28. Appendix D. CWA Section 404(b)(1) Evaluation, Turbidity, p. 6. Sediment in the marina is mostly very fine sand and fines (silts and clays), which will not necessarily "sink rapidly to the

bottom", as indicated. BMPs for dewatering and rehandling this material on the beach will be necessary to ensure turbidity is not an issue.

USACE response: Reworded text in 404(b)(1) to reflect the need for a SSD and WQC to inform/refine BMPs. Noted that fine material may stay suspended for longer periods of time.

29. Appendix D. CWA Section 404(b)(1) Evaluation, Water Circulation, p. 7. Will water circulation through the fish gap and into the marina eventually be affected as material moves down drift? Could there be long-term DO effects, especially when considered cumulatively with the Tribe's dredging project?

USACE response: The fish gap has been stable around +4 to +6 and is usable at high tides. It is expected to stay that way post project.

30. Appendix D. CWA Section 404(b)(1) Evaluation, Aquatic Food Web. This discussion should be informed by the more detailed project description including elevations and transition from lower intertidal to higher intertidal at the placement site. Also, if areas of upland beach are proposed, this should be discussed.

USACE response: The 404(b)(1) analysis has been updated to reflect the tidal zone changes described previously in this appendix. Design details will be refined during the PED phase. Conversion to upland beach is justified in that it more closely matches historical conditions prior to the downgrading of the shoreline.

31. Appendix D. CWA Section 404(b)(1) Evaluation, General Evaluation of Dredged Material, p. 9. The discussion should state that the material is predominantly very fine sand, silts and clays, with a smaller fraction of coarser sands and gravel. Dredged material testing is being performed to confirm exclusion, and to inform the future design and best management practices for disposal.

USACE response: Edited document to reflect material is fine sand.

Other Minor Edits:
1. Suggest global edit of "dredge material" to "dredged material".

USACE response: Done

2. Suggest global edit of "spoils" to "material".

USACE response: Done

3. Figure 1-2. Please add the following locations: Evans Mole, Village Creek.

USACE response: Done

4. Figure 1-3 and Section 3. Please add the location of the “rock pinnacle” to Figure 1-3.

USACE response: A new Figure 1-3 has been added to the Final FR/EA that shows the rock pinnacle.

5. Table 3-4. The footnote is cut off.

USACE response: Shrunk text to fit on one page.

6. Add AIS to acronyms (Section 3.5.1).

USACE response: Done

7. Figure 4-1. Labels for “Beneficial Placement Area” are mis-spelled.

USACE response: Corrected

8. Appendix D. 404(b)(1) Analysis p. 5. Edit Clallum to Clallam.

USACE response: Done