

DRAFT FINDING OF NO SIGNIFICANT IMPACT

Mouth of the Columbia River Dredged Material Placement Sites Update Clatsop County, Oregon and Pacific County, Washington

Army Corps of Engineers, Portland District

I find the Proposed Action, as described in the environmental assessment (EA) for “*Mouth of the Columbia River Dredged Material Placement Sites Update; Clatsop County, Oregon and Pacific County, Washington,*” will not significantly affect the quality of the human environment and that an environmental impact statement is not required. The EA was prepared by the Corps of Engineers, Portland District.

PROJECT PURPOSE AND NEED

The purpose of the Proposed Action is to add two sites to the network of long-term dredged material placement sites, supporting overall regional sediment management and increase the operational flexibility of dredging in the Mouth of the Columbia River (MCR) and Columbia River Federal Navigation Channel (FNC). The two proposed sites are a shoreline placement site at East Sand Island (ESI) and an in-water placement site off-shore from North Head (North Head Near Shore, NHNS), along the Washington coast. Expanding the network of placement sites retains a critical sand resource in the Columbia River littoral zone that would otherwise be lost if materials were placed in offshore sites.¹ Furthermore, expanding the network of nearshore sites increases the efficiency of dredging operations by utilizing sites closer to the MCR as opposed to sites located further offshore, where transit times and placement costs are increased.

The structural stability of ESI plays an integral role in stabilizing the FNC and maintaining safe navigation in the MCR and FNC. The need for adding ESI to the network of placement sites arises from an area of erosion on the south shoreline of ESI, which will continue to erode and ultimately result in the island breaching without the addition of supplemental material. Without supplementing the shoreline with dredged materials, an island breach would likely alter sediment transport and shoaling patterns in the MCR and estuary. Shoreline placement at ESI is needed in 2018 to prevent the island from breaching and periodic placement would be needed to maintain the shoreline and prevent an island breach in the future.

The need for adding the NHNS site to the network of placement sites arises from limited opportunities to place dredged material at existing sites in the MCR. While the existing sites redistribute sediment back into the littoral zone, the area is still experiencing a depletion of sediment and an additional site is needed to support sediment management efforts along the Washington coast. An additional nearshore site would increase opportunities to retain clean, sandy material in the littoral zone without over-burdening the existing nearshore placement sites.

Each potential site location was evaluated based on adherence to the following criteria:

- Meet the Corps’ mission to maintain the MCR FNC;
- Comply with all applicable federal laws and regulations;

¹ A littoral zone is a nearshore environment with naturally occurring erosive and depositional (accretion) processes. A constant sediment source is needed in order to balance the sediment budget within a zone.

- Promote ongoing conservation and protective efforts in the MCR action area; and
- Regulate placement activities to maximize sediment management in the MCR and LCR.

BACKGROUND

The MCR FNC and associated side channels are important to the regional and national economy, where approximately \$26 billion worth of U.S. products bound for world markets and 46 million tons of incoming cargo pass through the MCR project annually. More than 12,000 commercial vessels and 100,000 recreational/charter vessels navigate through the MCR annually. According to the Pacific Northwest Waterways Association, more than 40,000 jobs along the lower Columbia River are dependent on seaport activity.

Maintenance of the MCR requires regular dredging of sediments because of the recurring formation of shoals. Dredged materials are placed in-water, at designated upland and shoreline placement sites. Over the past 5–10 years, approximately one-third of the sand dredged from the MCR was placed in off-shore sites, functionally removing a large proportion of clean (uncontaminated) sandy material from the estuary and the littoral zone. Sandy material in the littoral zone is needed to sustain jetties, beaches, and marine habitats. Because the downstream portion of the Columbia River is a sediment-starved system, many shoreline areas need a supplemental source of sandy material to address erosion and balance the sediment budget.

The Action Area for the Proposed Action encompasses two locations. The first site is limited to ESI at River Mile (RM) 5 and 7 and the shallow-water habitat immediately adjacent to the island's shoreline i.e., shoreline placement/beach nourishment. ESI is owned by the Corps and was historically used as a placement site for dredged materials prior to 1983. Since that time, ESI has experienced progressive erosion along the south shoreline, with little to no accretion occurring due to the high energy wave environment. The NHNS placement site is located directly offshore from the North Head Lighthouse approximately two miles north of Cape Disappointment and the North Jetty, near Ilwaco in Pacific County, Washington. Depths in the NHNS site range between -20 and -60 feet (ft.) deep and the area is considered subtidal with the potential for materials placed here to recirculate onto the shoreline between Benson Beach and Peacock Spit (the shoreline below Cape Disappointment). The dimensions of the placement site are anticipated to be approximately 9,540 ft. by 7,040 ft. (approximately 2.4 acres).

PROPOSED ACTION

To increase operational flexibility of the Corps' dredging mission, the Proposed Action includes adding ESI and the NHNS site to the network of placement sites in the MCR, and the associated construction at ESI to prepare the shoreline for placement.

East Sand Island

At ESI, there are two phases of the proposed action: the first phase consisting of construction and preparation of the placement site, following by an operational use of the site through the placement of dredged materials. In conjunction with this action, the Corps is proposing to:

1. Remove select pilings from a derelict pier structure on the southern shoreline of ESI to reduce concentrated wave energy from diffracting waves and river currents focusing energy along the shoreline; the Proposed Action includes the removal of select pilings and the rocks supporting the pilings;

2. Placement of approximately 80,000 cubic yards (cy) of dredged material on the shoreline of ESI in 2018, covering approximately 14.5 acres;
3. Conduct periodic shoreline placement to supplement the shoreline with sandy material and stabilize the island through the beneficial use of dredged materials on an as-needed basis, as determined by the Corps.

North Head Near Shore Site

The NHNS site would be used as a beneficial use placement site where material would be placed in thin layers in different areas within the designated boundary. Following placement, the sediment is expected to disperse into the littoral cell and supplement nearby beaches, and thus help protect the MCR coastal zone from increased storm and wave events. Adding the NHNS placement site to the network of existing placement sites increased the Corps' flexibility in managing sediment dredged from the MCR. The total volume of material dredged per season averages approximately 3.5-4.5 million cubic yards; the addition of NHNS site would not increase the volume or scope of current dredging activities.

A maximum of 500,000 cy of dredged material would be placed at the NHNS site during any given placement event. Material would be placed in a thin layer to reduce potentially adverse impacts to species and increase the rate of habitat recovery.

PUBLIC AND AGENCY INVOLVEMENT

Coordination with governmental agencies and stakeholders has been ongoing throughout the National Environmental Policy Act (NEPA) process. State and federal agencies, tribes and various stakeholders have been invited to comment on the actions and aid in determining effects of the project on various resources. Specific actions are outlined below.

The U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NOAA Fisheries) were engaged in the Endangered Species Act consultation process via submittal of a biological assessment in January 2018. The Corps determined that the Proposed Action *May Affect*, and would *Likely Adversely Affect* listed salmonids and steelhead and their critical habitat. The Corps anticipates that NOAA Fisheries will provide a biological opinion, concluding consultation for the proposed action. The Proposed Action is also anticipated to *May Affect*, but would *Not Likely Adversely Affect* listed species under the jurisdiction of the USFWS. The Corps anticipates that USFWS will provide a Letter of Concurrence on the anticipated effects of the action.

The states of Oregon and Washington were also involved in the environmental compliance process associated with this project. In January 2018, the Corps will engage the Oregon Department of Environmental Quality (DEQ) in the water quality certification process by submitting an application to amend the current water quality certification for CR FNC O&M activities. Similarly, the Corps submitted a Joint Aquatic Resources Permit Application to Washington Department of Ecology (DOE) in November 2017. The Corps also submitted a Coastal Zone Management Act (CZMA) consistency determination concurrence request in December 2017 to the Washington DOE and the Oregon Department of Land Conservation and Development. If no response is received within 60-days of receipt, the Corps presumes the States of Washington and Oregon concur with the Corps' consistency determination.

Tribes with interests in affected resources were notified of the Proposed Action via letter sent in December 2017. On January 25, 2018, the Corps issued a public notice to media outlets on the

Portland District Web page announcing the opening of a 30-day comment period on the EA. On January 26, 2018, the Corps sent an e-mail to interested parties notifying them of the availability of the EA for public comment.

ENVIRONMENTAL EFFECTS

The EA covers many environmental issues including: hydrology (Section 5.2); water quality (Section 5.3); fish and wildlife, including federally listed threatened and endangered species (Section 5.6); cultural resources (Section 5.8); socio-economic resources (Section 5.9); and cumulative impacts (Section 6.3). The following summarizes the environmental compliance activities of the leading issues.

Biological Impacts

Placement of dredged materials at ESI may result in temporary and short-term displacement or burial of aquatic organisms, but effects not expected to be permanent and organisms are expected to recolonize the area following placement. Additionally, the new shoreline and its associated shallow water habitat would be available for use by aquatic species after placement and the action would restore shallow water habitat on the southern shoreline, stabilizing the island from breaching which could have adverse impacts to both terrestrial and aquatic fish and wildlife. ESI would continue to function as a training structure to stabilize the navigation channel in this reach and minimize dredging needs in the FNC. The placement of dredged material at the NHNS site may temporarily disrupt the deepwater aquatic habitat during and immediately after work; however, no significant direct or indirect impacts on the biological environment are expected.

ESA-Listed Species and Critical Habitat Impacts

While the minor direct and indirect effects from shoreline placement at ESI and in-water placement at the NHNS site are similar to the effects considered in the NOAA Fisheries 2012 Biological Opinion, the Corps is consulting with NOAA Fisheries and USFWS on effects to species and critical habitat from the Proposed Action. Temporary effects to listed species and habitat during placement and removal of rocks and pilings at ESI are expected to dissipate quickly once work is completed. Similarly, the direct and indirect effects to ESA-listed fish species and critical habitat from in-water placement at the NHNS site are also within the range of effects considered in the NOAA Fisheries 2012 Biological Opinion.

Water Quality

Placement of dredged material on ESI would increase turbidity at the water/shore interface zone as sediment is placed both directly into the shore and/or subsequently moved by earth-moving equipment into the water to create the shoreline profile. There may be a temporary and localized reduction in water quality during the placement of dredged materials at the NHNS site during in-water placement. These impacts would be minor and temporary in nature, and would cease once dredging/placement is completed. The Corps has submitted applications to the States of Washington and Oregon to update or renew the existing water quality certifications to include placement activities at ESI and the NHNS site.

FINAL DETERMINATION

Authority: Congress authorized MCR FNC project through various Rivers and Harbors Acts (RHA), the earliest one being enacted in 1884. The RHAs gave way to the Water Resources

Development Acts (WRDA) starting in 1973. Maintenance dredging and in-water placement of dredged sediments to maintain authorized navigation channels is carried out in accordance with Sections 102 and 103 of the Marine Protection, Research and Sanctuaries Act of 1972, Sections 401 and 404 of the Clean Water Act of 1977, and in accordance with regulations at 33 Code of Federal Regulations (CFR) parts 335 through 338 (“Operation and Maintenance of Army Corps of Engineers Civil Works Projects Involving Discharge of Dredged or Fill Material into Waters of the U.S. or Ocean Waters” and affiliated procedures, etc.).

Under NEPA, the Corps evaluates whether any effects associated with the alternatives under consideration are significant. 40 C.F.R. § 1508.27 lists criteria useful to assess whether the proposed action will “significantly affect the human environment”:

- 1) Impacts that may be both beneficial and adverse: Shoreline placement at ESI may benefit juvenile salmonids by increasing shallow-water habitat in the lower estuary (Section 5.6). Localized increased turbidity due to placement and dredging activities may cause temporary adverse impacts on aquatic species and habitat in the vicinity of the project. However, those impacts are likely to be short-lived as the construction activity is temporary in nature (Section 5.3). Neither the beneficial, nor the adverse impacts, discussed in the EA are expected to be significant.
- 2) The Degree to which the Action Affects Public Health and Safety: Public health and safety would not be adversely affected by these actions. Dredge material placement is performed by the Corps’ contractors who are required to adhere to strict safety measures while working (Section 5.10). The general public is not allowed to enter construction sites while dredge placement operations are underway.
- 3) Unique Characteristics of Geographical Area: As discussed in Chapter 4 of the EA, the project area is located within the Columbia River. ESI, though historically used as a placement site, is eroding and will likely breach in the absence of supplemental material placed along the shoreline. The NHNS site is located on the Washington coast and placement of dredged materials is expected to retain sediment in the littoral zone, supporting regional sediment management efforts.
- 4) Highly Controversial Effects on the Quality of the Human Environment: The effects of the proposed actions are not controversial. No Congressional interest is associated with the project, nor has there been substantial public or tribal interest in the project.
- 5) Highly Uncertain, Unique, or Unknown Risks: Adding two sites to the dredge material placement network, as proposed in the EA, is considered routine activity that has predictable outcomes. No portion of the project is associated with highly uncertain, unique, or unknown risks. Shoreline placement at ESI will rebuild the shoreline to its former footprint, and placement at the NHNS site will increase flexibility of dredging operations in the MCR and retain sediment in the littoral zone.
- 6) Future Precedents: The actions and associated impacts described in the EA are considered minor modifications to the placement network and are routine in nature. Neither placement at ESI, nor placement at the NHNS site would set a precedent for future actions undertaken by the Corps. Both types of actions typically take place within the MCR on an annual basis and nothing related to the two new actions would deviate from methods, timing, or impacts associated with previous activities of a similar nature.

- 7) Significant Cumulative Impacts: The impacts analysis for the proposed actions presented in the EA did not reveal significant cumulative impacts (Section 6.3). Adding shoreline placement on ESI and in-water placement at the NHNS site are not likely to result in significant cumulative impacts when combined with the impacts of other past, present, and future actions. Several other actions are taking place and/or scheduled to take place within the MCR FNC; however, none of them is associated with individual impacts that would result in significant cumulative impacts when combined with other actions.
- 8) National Register of Historic Places (NRHP) and Other Historical and Culturally Significant Places: ESI is an important component of the MCR navigation infrastructure needed to maintain the FNC. However, cultural resources are present on the island and will be adversely affected by the proposed activities. Corps cultural resources staff are coordinating with the Oregon State Historic Preservation Office to develop a Memorandum of Agreement to mitigate for adverse effects.
- There are no cultural or historic resources at the NHNS site, and therefore placement at this location has no potential to effect cultural resources (Section 5.8).
- 9) Endangered or Threatened Species or Critical Habitat: As discussed above and in the Section 5.6 of the EA, potential impacts on ESA-listed species or critical habitat are not expected to be significant. Additionally, the direct and indirect effects of this project are within the range of effects considered in the NOAA Fisheries 2012 Biological Opinion. It is anticipated that NOAA Fisheries will prepare a biological opinion to conclude Section 7 consultation and USFWS will prepare a Letter of Concurrence.
- The anticipated direct and indirect effects on USFWS ESA-listed species, which may result from shoreline placement at ESI and in-water placement at the NHNS site are not expected to be significant. The project is not likely to adversely affect USFWS species or designated critical habitat and the direct and indirect effects of this project on USFWS ESA-listed species are within the range of effects considered in the 2014 and 2010 ESA consultations. The Corps is awaiting confirmation from USFWS for this determination.
- 10) Other Legal Requirements: The Corps' compliance with other applicable laws and regulations is discussed in the EA.

CONCLUSION

Based upon the impacts analysis contained in the subject EA and the information discussed above, I have determined that the proposed actions to add East Sand Island as a shoreline placement site and the North Head Nearshore Placement Site as an in-water site along the Washington Coast would not have a significant effect on the human environment; therefore, the action does not require the preparation of an EIS.

Date: _____

 Aaron L. Dorf
 Colonel, Corps of Engineers
 District Commander