

## Technical Memorandum

Date: 30 January 2017

Subject: Kalama Manufacturing and Marine Export Facility – Supplemental Shoreline and Habitat Preservation

From: Dan Gunderson

To: File

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### INTRODUCTION

The Port of Kalama (Port) has prepared and submitted a Compensatory Mitigation Plan (dated September 2016) for the Kalama Manufacturing and Marine Export Facility project (project). As discussed and described in permit application and documentation submitted for the project, the project has fully implemented the mitigation sequencing process and incorporates numerous measures to avoid and minimize impacts to habitat function. The final compensatory mitigation plan includes a suite of habitat restoration measures (pile removal, engineered logjam installation, riparian restoration, and wetland buffer enhancement) that fully offset the unavoidable impacts of the project.

During the course of the public hearing process on the Port's Shoreline Substantial Development and Conditional Use Permits, the Port agreed to provide additional voluntary habitat preservation and to provide further ecological benefit. Specifically, the Port has agreed to protect an area of approximately 90 to 95 acres of high-quality habitat adjacent to the north of the site from development through the establishment of restrictive covenants. Approximately 30 acres within this area have previously been protected under a Memorandum of Understanding. The purpose of this memorandum is to document the condition of the habitat and the range of ecological functions that will be preserved through the Port's actions.

### HABITAT PRESERVATION

The area to be preserved represents a high-quality mosaic of habitat types that include shorelines of the state, forested and emergent wetlands associated with the Columbia River, forested riparian habitats, floodplains, and tidally influenced aquatic habitats.

The wetlands within the area proposed for preservation have been identified as Category II wetlands, which provide high levels of water quality, hydrologic, and habitat functions (ELS 2014). Aquatic portions of the site are documented habitat, and designated critical habitat for several populations of Endangered Species Act (ESA)-listed salmonids. The aquatic habitats in the area to be preserved provide an area of off-channel refugia for juvenile salmonids, which is a habitat type that has been identified as a limiting factor for salmon survival and recovery in

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the Lower Columbia River (NMFS 2011). Historic development throughout the Lower Columbia River and estuary have eliminated many of these off-channel habitats and, as a result, these important habitats are relatively rare.

The site is also documented habitat for Columbian white-tailed deer (*Odocoileus virginianus leucurus*), which are listed as threatened under the ESA (81 FR 71386) and are listed as a Washington Department of Fish and Wildlife (WDFW) priority species. The forested and riparian habitats to be preserved will maintain an area of high quality refuge, cover, and foraging habitat for Columbian white-tailed deer.

The entirety of the area to be preserved is identified by WDFW as representing multiple priority habitat types (WDFW 2017). Priority habitat types mapped within the area to be preserved include a number of freshwater wetland and riverine habitat types. A portion of the site is also identified as a waterfowl concentration area.

Preservation of this 90 to 95 acre area represents a substantial amount of additional voluntary mitigation, which will serve to further benefit habitat function at the site. The ratio of habitat preservation to new overwater coverage from the project, for example, would represent a ratio of over 90:1.

## REFERENCES

- Ecological Land Services (ELS). 2014. Wetland Delineation Report for the Port of Kalama North Port Marine Terminal Improvements. Cowlitz County, Washington. Dated December 2014.
- National Marine Fisheries Service (NMFS). 2011. Columbia River Estuary ESA Recovery Plan Module for Salmon and Steelhead. NMFS Northwest Region. Portland, OR. January. Prepared for NMFS by the Lower Columbia River Estuary Partnership (contractor) and PC Trask & Associates, Inc., subcontractor.
- Washington Department of Fish and Wildlife (WDFW). 2017. Priority Habitat and Species (PHS) data; accessed on 27 January, 2107 at <http://wdfw.wa.gov/mapping/phs/>.