



Biological Resources Fact Sheet



The Columbia River is home to endangered species and species of concern, such as salmon

This fact sheet includes a summary of the proposed export terminal's potential impacts on fish, wildlife and vegetation, and identifies mitigation measures to address these impacts. In addition to a No-Action Alternative, two alternative locations for the proposed export terminal are analyzed in the Draft Environmental Impact Statement (EIS): the On-Site Alternative and Off-Site Alternative. The alternative project areas are adjacent to each other and are located in Cowlitz County along the Columbia River. The river and the natural environment are home to numerous special-status plant and animal species. Construction and operation of the proposed export terminal could affect these species and their habitats.

How were impacts on biological resources identified and analyzed?

The Draft EIS describes the existing conditions for fish, wildlife, and vegetation at the On-Site Alternative and Off-Site Alternative project areas. The analysis considered the project description, including best management practices, design features, and avoidance and minimization measures identified by the Applicant, when evaluating potential impacts on biological resources. The assessment identified the potential mechanisms of impact and reviewed the current scientific and commercial information and literature related to impact mechanisms relevant to fish, wildlife, and vegetation and the context and magnitude of project-related activities that would contribute to the potential impacts.

The Draft EIS evaluated how activities associated with the proposed export terminal would affect fish, wildlife, and vegetation. The Draft EIS assessed impacts associated with increased noise (both terrestrial and underwater noise), permanent and temporary habitat modifications, accidental spills of hazardous materials, vessel-generated wakes, and coal dust deposition in aquatic and terrestrial habitats.

How would the proposed export terminal affect biological resources?

Two types of impacts were evaluated as part of this analysis: construction impacts and operational impacts.

Construction

Potential impacts related to construction of the proposed export terminal include both temporary and permanent impacts. Temporary impacts related to construction include shading of aquatic habitats during construction of the proposed new docks, accidental spills of hazardous materials from construction equipment, and disruption to fish and wildlife due to noise generated by pile driving and other construction activities. Permanent impacts resulting from the On-Site Alternative would include the removal of approximately 24 acres of wetlands; removal of approximately 26 acres of upland vegetation; replacement of 0.10 acre of river bottom habitat by 610 new piles in the Columbia River for the proposed docks; and removal of 500,000 cubic yards of sediment from the Columbia River from approximately 48 acres of deepwater habitat to provide sufficient depth for vessels to access the proposed docks. Permanent impacts resulting from the Off-Site Alternative would include the removal of approximately 51 acres of wetland; removal of approximately 155 acres of upland vegetation; replacement of 0.10 acre of river bottom habitat by 597 piles in the Columbia River for the proposed docks; and removal of 50,000 cubic yards of sediment from the Columbia River from approximately 15 acres of deepwater habitat to provide sufficient depth for vessels to access the proposed docks.

Operations

Potential impacts related to operation of the proposed export terminal on fish, wildlife and vegetation include the shading of aquatic habitat associated with the proposed docks and project-related vessels, noise generated during operations (both underwater and terrestrial noise), impacts from increased vessel traffic in the Lower Columbia River (e.g., fish stranding associated with vessel wakes, potential vessel strikes of seals and sea lions), alteration of habitat during maintenance dredging, and coal dust deposition. In general, noise levels, vessel wakes and potential vessel strikes in and around the Columbia River would be similar to existing conditions. Noise generated by the proposed export terminal during operations would be similar to that generated by existing industrial, commercial and residential activities in the area. At full operating capacity, the proposed export terminal is projected to account for approximately 20% of the vessel traffic in the Lower Columbia River.

Coal dust would be generated during operation of the proposed export terminal through the movement of coal in the project area. Coal dust would also become airborne from the large coal stockpiles that would be located within the project area. The concentrations of coal dust would be highest within and adjacent to the project area, and would decline to low levels within a few thousand feet of the proposed export terminal.

What measures could reduce impacts on biological resources?

The Draft EIS identifies the following mitigation measures to reduce impacts on fish, wildlife and vegetation:

- Employ the best available methods to decrease underwater noise during in-water pile driving, which may include a confined bubble curtain, temporary noise attenuation pile, double-walled noise attenuation pile, or other similar noise reduction technology.
- Implement a “soft-start” method during in-water impact pile driving, where the operator of the pile driver gradually increases the force of the impact pile driver over the course of several pile strikes before using the full-force of the impact pile driver.
- Monitor for signs of distress from fish and wildlife during in-water pile driving and dredging activities.



Several common bird species, such as the great blue heron shown above, were recorded near the project area during site visits

- Conduct eulachon surveys prior to construction and maintenance dredging within the in-water work areas that are being disturbed to ensure such activities would not affect eulachon spawning, eulachon larvae or eggs.
- Monitor and reduce coal dust emissions from the project area during operation.
- Conduct rare plant surveys of the project area prior to construction to ensure rare plants are not affected or to determine an appropriate course of action if rare plants are impacted.
- Conduct aquatic vegetation surveys prior to construction to ensure aquatic vegetation is not affected or to determine an appropriate course of action if aquatic vegetation is impacted.
- Develop and implement a revegetation plan.
- Monitor for noxious weeds and, if observed in the project area, coordinate with the Cowlitz County Noxious Weed Control Board on an appropriate course of action to control the noxious weeds.

A detailed list of mitigation measures can be found in the Draft EIS in Chapter 8, *Minimization and Mitigation Measures*.

How can I comment on the Draft EIS for the proposed export terminal?

All comments are valued equally, no matter how they are submitted. You can comment by mail, online, or in person at public hearings held during the public comment period. The comment period for this Draft EIS runs from September 30 through November 29, 2016.

Mail written comments to the following address:

Millennium Bulk Terminals—Longview NEPA EIS, c/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

Submit comments online at:

www.millenniumbulkeiswa.gov/submit-comments.html

Submit comments in person (orally or in writing) at one of two public hearings:

Monday, October 24, 2016 1:00 – 9:00 p.m.
Cowlitz County Event Center
1900 7th Avenue
Longview, WA 98632

Tuesday, October 25, 2016 1:00 – 9:00 p.m.
Clark County Event Center
17402 NE Delfel Road
Ridgefield, WA 98642

Where can I find more information?

Chapter 5 of the Draft EIS contains detailed information about the natural environment and biological resources. Section 5.6, *Vegetation*; Section 5.7, *Fish*, and; Section 5.8, *Wildlife*, present information on current conditions, analysis and findings related to the potential impacts of the proposed export terminal on fish, wildlife, and vegetation.

Visit www.millenniumbulkeiswa.gov for more information on the proposed export terminal and the Draft EIS.