

This chapter describes the preliminary recommendations of the Surface Transportation Board's (STB) Section of Environmental Analysis (SEA) and the Washington State Department of Transportation (WSDOT) for environmental mitigation. SEA and WSDOT developed the mitigation measures identified below based on an independent analysis of the project and a review of all information available to date, including comments from various federal, state, and local agencies; the public; and other interested parties.

If construction and operation of the proposed project is authorized, SEA and WSDOT recommend that such authority be subject to the mitigation measures identified below. If there are conflicts between the measures in the Environmental Assessment (EA) and any federal, state or local requirement or permit issued for the proposed project, such federal, state or local requirement shall prevail and supersede the measures of this EA.

### **Air Quality**

1. The Port of Moses Lake (Port)<sup>1</sup> shall implement best management practices and appropriate fugitive dust suppression controls, such as spraying water on haul roads adjacent to construction sites and exposed soils, street sweeping, covering loaded trucks, and washing haul trucks before they leave the construction site.
2. The Port shall comply with the requirements of all applicable federal, state, and local regulations regarding open burning and the control of fugitive dust related to rail line construction activities.
3. The Port shall revegetate areas disturbed during construction with native grasses or other appropriate native habitat as soon as possible after construction activities are completed to minimize windblown dust.
4. The Port shall shut off construction equipment when it is not in direct use to reduce idling emissions.
5. The Port shall verify that construction equipment is properly maintained and regularly inspected and that required pollution control devices are in good working condition.

### **Cultural, Historic, and Archaeological Resources**

6. The Port shall ensure that any sites that are eligible for the National Register of Historic Places are not disturbed prior to completion of the

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<sup>1</sup> It is understood that the Port may utilize contractors, in which case the Port shall ensure that its contractors implement the mitigation measures in this chapter.

Section 106 review process of the National Historic Preservation Act, 16 U.S.C. 470f.

7. A Programmatic Agreement (PA) shall be developed by the STB's Section of Environmental Analysis, WSDOT, and the Washington State Department of Archaeology and Historic Preservation (State Historic Preservation Office or SHPO), and the Port shall be a signatory to the PA. The PA shall require that areas within the limits of the project disturbance that have not been surveyed be surveyed prior to construction and shall guide potential mitigation if it is determined that the proposed project would have any adverse effects on historic, cultural or archaeological resources.
8. In the event that any unanticipated historic or cultural properties, archaeological sites, human remains, funerary items, or assorted artifacts are discovered during the proposed construction, the Port shall immediately cease all work and notify the Washington State Department of Archaeology and Historic Preservation (State Historic Preservation Office or SHPO), the Surface Transportation Board's Section of Environmental Analysis, the Washington State Department of Transportation, interested federally-recognized Tribes, and consulting parties, if any, to determine if additional consultation and mitigation is necessary. In the event that human remains are discovered, the Port shall also notify appropriate law enforcement agencies.

### **Fish, Wildlife, and Vegetation**

9. The Port shall abide by construction timing and guidelines stipulated by the Washington Department of Fish and Wildlife through the Hydraulic Project Approval (HPA). If there are differences between the measures in this Environmental Assessment and the conditions of the HPA, the HPA criteria shall apply.
10. The Port shall consult with the Washington Department of Fish and Wildlife and comply with its applicable laws and regulations so that project-related construction activities are conducted in a manner that avoids or minimizes impacts to birds and bats (roosting bald eagles, overwintering waterfowl, migrating shorebirds, foraging bats, and nesting birds).
11. To minimize disturbance to wildlife and vegetation to the maximum extent possible, the Port shall limit construction activities, including staging areas, and vehicle turnaround areas, to the right of way or within previously disturbed areas. Existing vegetation shall be preserved to the maximum extent possible.
12. To preserve water quality in aquatic or wetland habitat, the Port shall implement measures to prevent uncured concrete from coming into

contact with surface waters, and all refueling shall occur more than 200 feet from a water body or wetlands.

13. The Port shall minimize the impacts that could result from over-water structures, such as the structure crossing Parker Horn or Crab Creek. To minimize or avoid impacts to walleye spawning, the Port shall avoid work within the waters of Crab Creek/Parker Horn between April 1 and May 30.
14. To minimize or avoid impacts to nesting burrowing owls, the Port shall avoid new construction work in areas within 0.5 miles of identified nesting areas close to Segment 1, Alternative 1A, Segment 2, and Alternative 2A between February 15 and September 25. If construction activities take place during this period, then the Port shall consult with the Washington Department of Fish and Wildlife to ensure that construction activities are conducted in a manner that avoids or minimizes impacts to burrowing owls.
15. To minimize or avoid impacts to bald eagle roost trees, the Port shall locate the project alignment and support areas, such as staging areas, away from roost trees. If clearing of any roost trees is required, the Port shall create artificial roosts in an appropriate site near the existing roost.
16. To preserve existing aquatic and moist site vegetation habitats for the northern leopard frog to the maximum extent possible, the Port shall minimize clearing activities and locate equipment staging areas in previously disturbed areas, to the extent possible.
17. To minimize or avoid impacts to Yuma myotis and Townsend's big-eared bats, the Port shall install bat boxes (alternative bat roosting structures) to allow bat roosting near the Crab Creek/Parker Horn crossing.

### **Hazardous Materials**

18. Prior to initiating any construction activities, the Port shall consult and coordinate with the U.S. Environmental Protection Agency's Region 10 Office (USEPA) and the Washington State Department of Ecology concerning appropriate investigation, if more is needed, and mitigation, as may be required, for the sites listed below. If more investigation is needed, such investigation shall be conducted by a qualified environmental professional, as defined by ASTM International and the USEPA.
  - a. On Segment 1 and Alternative 1A, the Bernard Cattle Company site at the southwest corner of Broadway and Road 4 NE (Cherokee Road).
  - b. On Segment 1, the Grant County Road District No. 2 facility on the south side of Wheeler Road (Road 3 NE) between RP 1 and RP 2.

- c. On Segments 2 and Alternative 2A, the Randolph Road Base Dump (14A – EPA Site No. 8), and the Paint Hangar Leach Pit (14B – EPA Site No. 22).
  - d. On Segment 2, the Boeing polychlorinated biphenyl cleanup area located on Tyndall Road.
  - e. On Alternative 2A, at the prior location of the Grant County Public Utility District Diesel Generating Facility located on Tyndall Road NE and the County shooting range located east of Randolph Road.
19. The Port shall coordinate with the operator of the rail line to develop a Spill Prevention Control and Countermeasures (SPCC) plan and an emergency response plan. In a manner consistent with applicable legal requirements, the SPCC plan and emergency response plan shall address the following:
- a. Definition of what constitutes a reportable spill.
  - b. Requirements and procedures for reporting spills to appropriate government agencies.
  - c. Equipment available to respond to spills and where the equipment will be located.
  - d. Training of personnel and training records.
  - e. List of government agencies and response personnel to be contacted in the event of a spill.
  - f. Measures to address the transport of hazardous materials by rail.
20. The Port shall observe the requirements of the Federal Railroad Administration and other federal, state and local applicable requirements concerning the handling and disposal of any hazardous waste or hazardous materials and clean-up in the event of a spill during construction.
21. The operator of the rail line shall observe the requirements of the Federal Railroad Administration and other federal, state and local applicable requirements concerning the handling and disposal of any hazardous waste or hazardous materials and clean-up in the event of a spill during rail operation.
22. The operator of the rail line shall ensure that locomotives associated with project operations shall be checked regularly for leaks.

## **Land Use**

23. To the maximum extent practicable, the Port shall advise businesses and the public of construction schedules in advance to minimize disruptions.
24. The Port shall abide by all requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601 et seq.). Relocation assistance shall be provided for any commercial properties acquired for the project.
25. To the extent practicable, the Port shall negotiate with affected property owners to minimize any project-related severance impacts.
26. The Port shall submit form 7460 (Notice of Proposed Construction or Alteration) to the Federal Aviation Administration prior to construction.

## **Noise and Vibration**

27. During construction, the Port shall ensure that manufacturer-recommended mufflers have been installed on all diesel-powered equipment used on the project and that all equipment is kept in good operating condition.
28. The Port shall ensure that construction within the boundaries of the City of Moses Lake will not occur between 10:00 PM and 7:00 AM without prior approval by the City Council.

## **Social Elements and Environmental Justice**

29. During project construction, the Port shall comply with applicable state, county and city regulations or requirements regarding detour signs and the routing of construction truck traffic. The Port shall also provide proper notification of the construction schedule to the public and the nearest fire department and emergency response units.
30. The Port or the operator of the rail line shall work with the City of Moses Lake, community organizations, and Longview Elementary School to arrange for a rail safety program, such as Operation Lifesaver,<sup>2</sup> to be offered at least once per year.
31. The Port or the operator of the rail line shall coordinate with the Moses Lake School District to help identify and implement practicable safe crossings.

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<sup>2</sup> Operation Lifesaver seeks to educate drivers and pedestrians about making safer decisions at crossings and around railroad tracks.

32. On Segment 3, the Port shall upgrade the existing crossing gate structures and signs to help provide better advance warnings of approaching trains for pedestrians and drivers.

### **Soils and Geology**

33. The Port shall construct the proposed project in accordance with the American Railway Engineering and Maintenance of Way Association guidelines.
34. The Port shall mitigate the potential liquefaction of loose or soft alluvium or other soils during an earthquake by designing foundation elements for reduced soil strength, accounting for potential ground displacements, and/or implementing ground improvements.
35. The Port shall minimize sedimentation and erosion in the project area by employing best management practices during construction.
36. The Port shall revegetate disturbed areas with native grasses as soon as practicable after project construction ends.

### **Traffic and Transportation**

37. The Port shall ensure, to the extent possible, that all truck activity associated with the construction of the proposed project occurs during daytime hours.
38. The Port shall consider school bus schedules in planning and executing the necessary road work.
39. The Port shall consult with appropriate federal, state, and local transportation agencies to determine the final design of the grade-crossings and associated warning devices.
40. The Port or the operator of the rail line shall comply with applicable Federal Railroad Administration track maintenance and inspections.

### **Visual Quality**

41. To the extent practicable, the Port shall be responsible for the following:
  - a. Ensuring that only the vegetation that needs to be cleared for construction purposes is removed.
  - b. Using native flora and vegetation when replanting disturbed areas.
  - c. Adding compost to the soil before seeding or planting in order to increase plant establishment.

- d. Ensuring that cut-and-fill slopes are blended with the form and line of the existing landscape through grading practices to enhance visual quality.
- e. Ensuring that vegetative buffers, such as trees or bushy shrubs, are located near residential areas to help screen the railroad corridor from viewers. These buffers should be located where additional vegetation would not impair visibility at road crossings.

## **Water Resources**

- 42. The Port shall ensure that any bridge constructed over Parker Horn or Crab Creek is designed such that stormwater runoff does not enter the water body.
- 43. For project-related construction, the Port shall comply with the stormwater management requirements of all federal, state and local regulations regarding stormwater management, including the *Stormwater Manual for Eastern Washington* and National Pollutant Discharge Elimination System requirements.
- 44. The Port shall prepare an approved Stormwater Site Plan and a Temporary Erosion and Sediment Control Plan (TESC) prior to construction. The temporary erosion control measures shall be inspected regularly by the Port and maintained as necessary to ensure that these measures are functioning properly.
- 45. Consistent with applicable legal requirements, the Port shall coordinate with the operator of the rail line to prepare a Spill Prevention Control and Countermeasures Plan (SPCC) to minimize any impacts associated with accidental spills of hazardous materials. The SPCC will require the development of a spill contingency plan and will provide for the implementation of containment and other countermeasures that could prevent spills from reaching navigable waters or wetlands.
- 46. The Port shall implement the following erosion and sedimentation controls:
  - a. Installing silt fencing with geotextile material along the proposed project area perimeter to filter sediment from unconcentrated surface water runoff.
  - b. Placing catch basin inserts in all new and existing catch basins receiving runoff from the disturbed areas of the project.
  - c. Placing straw bales in paths of concentrated runoff to filter sediment.
  - d. Preserving existing vegetation to the maximum extent possible.

- e. Revegetating areas disturbed during construction with native grasses, where practicable. These areas shall be reseeded as soon as practicable to prevent erosion.
  - f. Covering exposed soils with plastic or straw in the event of a major storm.
  - g. Constructing temporary ditches, berms, and sedimentation ponds to collect runoff and prevent discharge of sediment into drainages, streams, or wetlands.
  - h. Installing stabilized construction entrances and exits<sup>3</sup> for truck access to the construction site to protect existing roadways and railroad tracks.
  - i. Cleaning any storm sewer facilities affected by project construction to prevent sediment from leaving the site after construction is completed and erosion control measures are removed.
47. If the TESC measures described above are not adequate to control erosion and sedimentation, all work shall cease and the Port shall consult with Ecology regarding additional erosion control or restoration measures to protect adjacent properties.
48. To avoid or minimize impacts to water resources during construction, the Port shall implement the following measures:
- a. Consulting with the U.S. Army Corps of Engineers and complying with the requirements of the Section 404 permitting process (Segment 1 / Alternative 1A only).
  - b. Consulting with the Washington State Department of Ecology and complying with the requirements of the Section 401 Water Quality Certification process (Segment 1 / Alternative 1A only).
  - c. Locating equipment staging areas further than 200 feet from water bodies (Parker Horn, Crab Creek or wetlands).
  - d. Leaving in place erosion control measures at culvert construction sites until the permanent culvert construction process is completed.
  - e. Coordinating with farmers and/or agricultural businesses regarding drainage issues that might arise.

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<sup>3</sup> A stabilized construction entrance involves placing blacktop or gravel along the edge of the roadway to avoid erosion or displacement of soil where trucks access and leave the roadway.

- f. Applying noxious weed control measures by an appropriately-licensed contractor, using herbicides approved by the U.S. Environmental Protection Agency's Region 10 Office. Herbicides shall not be applied during periods of high wind.
49. To prevent non-sedimentation pollutants (such as hazardous materials) from entering water bodies, the Port shall implement the following measures:
- a. Handling and disposing of all pollutants used on-site during construction in a manner that does not contaminate stormwater, irrigation canals, Parker Horn, or Crab Creek.
  - b. Establishing staging areas for equipment repair and maintenance at least 200 feet from all wetlands or water bodies.
  - c. Inspecting all construction equipment regularly for any fuel, lube oil, hydraulic fluids, or antifreeze leaks. If leaks are found, the Port shall immediately remove the equipment from service and repair or replace it and remediate the spill.
  - d. Disposing any washout from concrete trucks in a manner that avoids dumping it into storm drains or onto soil or pavement.
  - e. Ensuring that thinners and solvents are used at least 200 feet from wetlands or water bodies. Capturing, containing and properly disposing of thinners and solvents.
  - f. Requiring that fuel trucks maintain a minimum distance of 200 feet from water bodies and fueling construction vehicles away from sensitive areas, such as areas of permeable soils where a spill could more easily migrate to surface water.
  - g. Designing staging areas to capture all runoff and/or spills.
  - h. Testing all fill before it is placed into surface water to ensure it is free of polluting materials.
50. The Port shall implement the following construction-related mitigation measures at the Parker Horn or Crab Creek crossing:
- a. Isolating concrete piers or abutments from water in Parker Horn or Crab Creek for seven days to allow the concrete to cure and to avoid toxicity to aquatic life. Uncured or wet concrete shall not be allowed to come into contact with flowing waters. Any isolated water that came into contact with wet concrete and that has a pH greater than nine shall be pumped out and disposed of appropriately.

- b. Consultation with the U.S. Army Corps of Engineers, the Washington State Department of Ecology and the Washington State Department of Fish and Wildlife, and compliance with the requirements of the Clean Water Act Section 404 permit, the Section 401 water quality certification, and the Hydraulic Project Approval.
51. To minimize the operational effects of the proposed project on water resources, the Port or the operator of the rail line shall implement the following railroad practices:
- a. Developing a bridge maintenance plan in compliance with Federal Railroad Administration regulations.
  - b. Regularly checking locomotives associated with the proposed operations to identify and repair fluid leaks or discharges.

## **Wetlands**

52. Prior to submittal of wetland permit applications to appropriate federal, state, and local agencies, the Port shall perform additional field work and conduct analysis for the properties that were previously unavailable for wetland assessment.
53. The Port shall avoid or minimize disturbance to wetland areas whenever possible during construction.
54. The Port shall not allow construction staging areas in wetlands, even within the project right of way.
55. The Port shall prepare a Wetland Mitigation Plan to describe measures to avoid and minimize impacts to wetlands. The following measures shall be included:
- a. Compensating for unavoidable impacts by creating, restoring or enhancing existing wetlands.
  - b. Adhering to current agency guidance on wetland mitigation, *Wetland Mitigation in Washington State*,<sup>4</sup> as well as guidance in the City of Moses Lake's Shoreline Management Master Plan and the Critical Areas Ordinance (for wetlands within the city), and complying with replacement ratios, buffer width, site selection criteria, and other criteria presented in this guidance.
  - c. Identifying a suitable off-site mitigation site.

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<sup>4</sup> Ecology (Washington State Department of Ecology), U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10. *Wetland Mitigation in Washington State*. Washington State Department of Ecology Publication #06-06-011b. Olympia, WA. March 2006.

- d. Designing bridge span widths, fill slope angles, and the alignment to minimize impacts to wetlands and other aquatic resources.
  - e. Restoring disturbed areas in native plant communities near Wetland A and in the Crab Creek or Parker Horn areas to improve habitats and buffer wetlands.
  - f. Including habitat restoration to the extent practicable in the design of the proposed Crab Creek or Parker Horn bridge to offset loss of wildlife habitats.
56. The Port shall implement the following mitigation measures specific to each Wetland Resource. The Port shall comply with additional mitigation measures, if any, required by the U.S. Army Corps of Engineers and/or the Washington State Department of Ecology:
- a. Wetland A (Segment 1 and Alternative 1A): Enhancement<sup>5</sup> of remaining wetland, off-site mitigation.<sup>6</sup>
  - b. Wetland B (Segment 1 and Alternative 1A): Off-site mitigation.
  - c. Wetland C (Alternative 1A only): Wetland creation/enhancement of Crab Creek floodplain, off-site mitigation.
  - d. Wetland D (Alternative 1A only): Wetland creation/enhancement of Crab Creek floodplain, off-site mitigation.
  - e. Wetland E (Segment 1 only): Wetland creation/enhancement of Crab Creek floodplain, off-site mitigation.
  - f. Wetland F (Segment 1 only): Wetland creation/habitat enhancement of Crab Creek / Parker Horn floodplain, off-site mitigation
  - g. Crab Creek (Alternative 1A only): Incorporate habitat structures.
  - h. Parker Horn (Segment 1 only): Incorporate habitat structures.
  - i. Ditches/Canals: Maintain or improve water quality.
57. The Port shall ensure that irrigation ditches and canals are either avoided by spanning both banks with the crossing structure, or that a culvert is installed to allow water to flow beneath the rail fill.

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<sup>5</sup> Enhancements usually involve habitat-related improvements, such as planting additional vegetation to increase plant density, or adding habitat structures like downed wood. It does not include increasing the wetland area.

<sup>6</sup> Off-site mitigation would allow the use of properties for wetland mitigation that are located outside the boundaries of the area disturbed by the project. Such properties are typically located within the same drainage basin or watershed as the impact area.

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