

Mitigation Action Plan
for the
Olympic Peninsula Transmission Line Reinforcement Project
DOE/EA-1576

Summary

This Mitigation Action Plan (MAP) is part of the Finding of No Significant Impact (FONSI) for the Olympic Peninsula Transmission Line Reinforcement Project. The project involves upgrading about 14.5 miles of an existing single-circuit, 115-kilovolt (kV) transmission line to a double-circuit 230-kV line between BPA's Olympia and Shelton substations on the Olympic Peninsula in Mason and Thurston counties, Washington.

This MAP is for the Proposed Action and includes all of the integral elements and commitments made in the Environmental Assessment (EA) to mitigate any potential adverse environmental impacts. No impacts reached the level to be considered significant even without these mitigation measures.

The purpose of this MAP is to explain how the mitigation measures will be implemented, who is responsible for implementation, and at what time during the project they will be implemented.

BPA and its Contractor are responsible for implementation of mitigation measures during various phases of the project. A BPA contractor will remove and rebuild the transmission line. To ensure that the contractor will implement mitigation measures, the relevant portions of this MAP will be included in the construction contract specifications developed for the project. This will obligate the contractor to implement the mitigation measures identified in the MAP that relate to their responsibilities during construction and post-construction.

If you have general questions about the project, contact the Project Manager, Gary Beck, at 360-619-6596. If you have any questions about the MAP, contact the Project Environmental Lead, Gene Lynard, at 503-230-3790 or the Regional Environmental Specialist, Greg Tippetts at 360-704-1638. This MAP may be amended if revisions are needed due to new information or if there are any significant project changes.

Consultation Related To Mitigation Measures

BPA has consulted with the U.S. Fish and Wildlife Service (USFWS) and NOAA Fisheries under Section 7 of the Endangered Species Act. No impacts to federally listed threatened or endangered species are expected.

As part of Section 106 Consultation (Historic Properties), BPA submitted a cultural resources report to the Washington State Department of Archaeology and Historic Preservation on August 1, 2007. On January 16, 2008, the DAHP concurred that while the Olympia and Shelton substations would be considered contributing resources to a larger thematic district of substations, the current project as proposed will have no adverse effect on National Register eligible or listed historic and cultural resources. No mitigation measures are required beyond what is in the EA.

The report was also submitted to the Squaxin Island Tribe in December 2006. No comments from the Tribe were received. In a meeting with the Tribe on December 14, 2006, the Tribe expressed concern about any ground disturbance in many areas near creeks and lakes where the potential for cultural resources is high. As part of the proposed project, two areas of high potential for impacts will be monitored during construction.

BPA has been working with the U.S. Army Corps of Engineers to determine if a Section 404 Clean Water Act permit is required for the proposed project. BPA will comply with all federal requirements for impacts to waters of the U.S. BPA also will comply with other requirements to the extent practicable.

Mitigation Measures

The mitigation measures in the following Mitigation Action Plan table have been identified to reduce potential impacts from the project.

Mitigation Action Plan Table

Environmental Resource	Mitigation
Land Use	<ul style="list-style-type: none"> ▪ BPA’s Project Manager will be available to meet with concerned landowners to discuss issues and concerns. ▪ A proposed schedule of construction activities will be distributed to all potentially affected landowners along the corridor so they know when they might experience construction-related disruptions. ▪ BPA will prepare a notice about construction activities and a proposed schedule for posting on the Washington State Department of Transportation (WSDOT) Traffic Advisory. ▪ Traffic safety signs and flaggers will be used to inform motorists and manage traffic during construction activities along Highways 8, 101 and 108. ▪ Disturbed areas will be revegetated with seed suitable for the site conditions and land use. Native seed will be used where appropriate.
Geology and Soils	<ul style="list-style-type: none"> ▪ Existing structures will be cut at the ground to minimize soil disturbance. ▪ Structures and new roads will be located as far as possible from nearby streams and wetlands. ▪ Culverts, cross-drains, and water bars will be spaced and sized properly. ▪ To minimize erosion, sedimentation, and soil compaction as much work as possible will be conducted during the dry season, when stream flow, rainfall, and runoff are low. ▪ In disturbed areas, mechanical barriers to erosion, as specified in the Storm Water Pollution Prevention (SWPP) plan, will be used. ▪ Vegetative buffers will be retained where possible to prevent sediment from eroding into water bodies.

Environmental Resource	Mitigation
	<ul style="list-style-type: none"> ▪ Disturbed areas will be revegetated with seed suitable for the site conditions and land use. Native seed will be used where appropriate. ▪ After construction, access roads, culverts, and other facilities will be inspected and maintained to ensure proper function and nominal erosion levels. ▪ Revegetation work and sites will be inspected to verify adequate growth; implement contingency measures as needed.
Vegetation	<ul style="list-style-type: none"> ▪ Use existing road systems, where possible, to access structure locations. ▪ Limit disturbance of native plant communities to the minimum necessary. ▪ Revegetate disturbed areas with seed suitable for the site conditions and land use. Native seed will be used where appropriate. ▪ Inspect revegetation work and sites to verify adequate growth and implement contingency measures as needed.
Fish and Wildlife	<ul style="list-style-type: none"> ▪ When working in or next to water bodies, disturbance will be limited to the minimum necessary. ▪ Existing structures will be cut at the ground surface to minimize soil disturbance. ▪ Removal of forest habitat will be limited to those trees that will interfere with transmission lines or those cut to create access roads. ▪ BPA will adopt additional measures identified by the USFWS and/or NOAA Fisheries to avoid or minimize impacts to fish and wildlife, such as avoiding construction in certain areas during spawning, breeding, or nesting seasons. ▪ Disturbed areas will be revegetated with seed suitable for the site conditions and land use. Native seed will be used where appropriate. ▪ Tensioning sites will not be located within 50 feet of streams or wetlands.
Water Quality	<ul style="list-style-type: none"> ▪ An environmental specialist will meet with contractors and inspectors in the field to visit wetlands and waterways near or within construction areas to review avoidance and mitigation measures and any permit requirements. ▪ A SWPP plan addressing measures to reduce erosion and runoff and stabilize disturbed areas will be prepared and implemented. ▪ Existing structures within 50 feet of waterways will be cut at the ground surface to minimize soil disturbance. ▪ When working in or near water bodies and wetlands (buffer areas), disturbance will be kept to the minimum necessary. ▪ Vegetative buffers will be retained where possible to prevent sedimentation into water bodies. ▪ To minimize erosion, sedimentation, and soil compaction, as much work as possible will be conducted during the dry season, when stream flow, rainfall, and runoff are low.

Environmental Resource	Mitigation
	<ul style="list-style-type: none"> ▪ No construction vehicles and equipment will be placed within 50 feet of any stream or wetland unless it is authorized by a permit or is on an existing permanent or temporary road constructed for access to the site. ▪ Tensioning sites will not be located within 50 feet of streams, wetlands, or floodplains. ▪ Roads and structures will be located to avoid wetlands whenever possible. ▪ Roads will be designed and constructed to minimize drainage from the road surface directly into water features, including wetlands. ▪ Mitigation measures required by WDFW will be followed when conducting instream work. ▪ A Spill Prevention Control and Countermeasure (SPCC) plan will be developed and implemented to minimize the potential for spills of hazardous material. ▪ Machinery will be refueled and stored at least 200 feet from wetlands and waterways and will be inspected regularly for leaks.
Wetlands	<ul style="list-style-type: none"> ▪ Roads and structures will be located to avoid wetlands and streams wherever possible. ▪ Any construction activities within wetlands will be designed and implemented to minimize impacts, and BPA will coordinate with the Army Corps of Engineers (ACOE) to obtain a permit pursuant to Section 404 of the Clean Water Act for any fill placed in waters of the United States (i.e., jurisdictional wetlands) and comply with any required mitigation required by the ACOE. ▪ An environmental specialist will meet with contractors and inspectors in the field to visit wetlands and waterways near or within construction areas to go over avoidance and mitigation measures and any permit requirements. ▪ Wetland boundaries in the vicinity of construction areas will be flagged or staked so wetlands and streams can be avoided. ▪ When working next to wetlands and water bodies, disturbance will be limited to the minimum necessary. ▪ No machinery, construction vehicles and equipment will be placed within 50 feet of any stream or wetland unless it is authorized by a permit or is on an existing permanent or temporary road constructed for access to the site. ▪ Tensioning sites will not be located within 50 feet of wetlands. ▪ Machinery will be refueled and stored at least 200 feet from wetlands and waterways and inspected regularly for leaks. ▪ Mitigation measures required by the Washington Department of Fish and Wildlife (WDFW) will be used when conducting instream work. ▪ Erosion control measures to avoid sedimentation of wetlands and streams will be used.

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	<ul style="list-style-type: none"> ▪ When temporary roads are built in wetlands, contractors will underlay temporary fill with geotextile fabric, remove all fill, and revegetate according to required permits. ▪ When holes are excavated for structures in wetlands, contractors will avoid depositing excavated material into wetlands by placing geotextile fabric around the excavation site, removing all excavated material from the wetland, and stabilizing it in an upland area. ▪ Disturbed areas will be revegetated with native species if possible, and specific revegetation guidelines in permits will be followed.
Floodplains	<ul style="list-style-type: none"> ▪ All roads and structures will be located to avoid floodplains, where possible. ▪ Erosion control measures will be used to avoid sedimentation of floodplains. ▪ Tensioning sites will not be located in floodplains. ▪ Disturbed areas will be revegetated with seed from native species.
Visual Quality	<ul style="list-style-type: none"> ▪ Non-lustrous conductors will be used. ▪ Contractors will maintain construction sites free of debris. ▪ BPA will maintain the corridor free of debris resulting from transmission line operation, maintenance, and construction activities after construction.
Air Quality	<ul style="list-style-type: none"> ▪ Water trucks will be used to control dust during construction. ▪ All vehicle engines will be in good operating condition to minimize exhaust emissions.
Socioeconomics	<ul style="list-style-type: none"> ▪ No mitigation measures are recommended.
Cultural Resources	<ul style="list-style-type: none"> ▪ Monitor all construction work in the portions of the right-of-way identified as having a high potential for artifacts. ▪ In the event that archaeological material is encountered during project construction, the BPA archaeologist will immediately be notified and work will be halted in the vicinity of the finds; BPA will immediately notify the Washington DAHP. ▪ If previously undiscovered artifacts are identified during construction, immediately contact representatives of affected tribes. ▪ Immediately stop all construction activities in the vicinity should human remains and/or burials be encountered. Secure the area, placing it off limits for anyone but authorized personnel and immediately notify proper law enforcement, BPA archeologist, and appropriate tribes.
Health and Safety	<ul style="list-style-type: none"> ▪ Before starting construction, the contractor will prepare and maintain a safety plan in compliance with Washington requirements. The plan will be kept on-site and will detail how to manage hazardous materials such as fuel, and how to respond to emergency situations. ▪ During construction, the contractors will hold crew safety meetings at the

Environmental Resource	Mitigation
	<p>start of each workday to review potential safety issues and concerns.</p> <ul style="list-style-type: none"> ▪ BPA will meet with the contractor each month to discuss safety issues. ▪ At the end of each workday, the contractor and subcontractors will secure the site, as much as possible, to protect equipment and the general public. ▪ BPA will construct and operate the new transmission line to meet the National Electrical Safety Code. ▪ If a hazardous material is discovered that could pose an immediate threat to human health or the environment, BPA requires that the contractor notify the Contracting Officer's Technical Representative immediately and stop work in that area until given notice to continue work.
Noise	<ul style="list-style-type: none"> ▪ All construction equipment and vehicles will have muffled exhaust. ▪ Landowners directly impacted along the corridor will be notified prior to construction activities. ▪ Near residences, construction activities will be limited to daytime hours, i.e., between 7:00 a.m. and 7:00 p.m. ▪ To ensure construction personnel are aware of these measures, all measures will be incorporated into contract specifications. ▪ If radio or television interference occurs that is caused by BPA's transmission line, measures will be taken to restore the reception to a quality as good as or better than before the interference.