

# Holcomb-Naselle Transmission Line Rebuild Project

## Finding of No Significant Impact and Floodplain and Wetlands Statement of Findings

Bonneville Power Administration

DOE/EA-2091

March 2020

### INTRODUCTION

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Bonneville Power Administration (BPA) announces its environmental findings for the Holcomb-Naselle Transmission Line Rebuild Project. The project would rebuild the 21-mile-long Holcomb-Naselle No.1 115-kilovolt (kV) transmission line located in Pacific and Wahkiakum counties, Washington.

BPA has prepared an environmental assessment (EA) evaluating the Proposed Action and the No Action Alternative.

Based on the analysis in the EA, BPA has determined that the Proposed Action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 *et seq.*). Therefore, the preparation of an environmental impact statement (EIS) is not required and BPA is issuing this Finding of No Significant Impact (FONSI) for the Proposed Action. The Proposed Action is not the type of action that normally requires preparation of an EIS and is not without precedent.

The comments received on the Draft EA and responses to those comments are included in the Final EA. The Final EA also identifies changes made to the Draft EA.

Attached is a Mitigation Action Plan that lists all the mitigation measures that BPA and its contractors are committed to implementing. The FONSI also includes a statement of findings on how the Proposed Action impacts wetlands and floodplains. Impacts to wetlands and floodplains would be avoided where possible and minimized by the mitigation measures included in the EA and Mitigation Action Plan where there is no practicable alternative.

### PUBLIC AVAILABILITY

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The Final EA, FONSI and MAP will be posted on BPA's project website:  
[www.bpa.gov/goto/HolcombNaselleRebuild](http://www.bpa.gov/goto/HolcombNaselleRebuild)

### PROPOSED ACTION

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Under the Proposed Action, BPA would replace approximately 111 of the existing wood-pole transmission line structures; replace existing conductors and hardware; replace overhead ground wire

and counterpoise in the first 0.5 miles out from Naselle Substation and install overhead ground wire and counterpoise in the first 0.5 miles out from Holcomb Substation; install fiber optic cable on the transmission line; establish a temporary material storage yard, helicopter landing zones, and conductor pulling/tensioning sites; upgrade the access road system; remove danger trees along the transmission line right-of-way edge; and replace equipment within Naselle and Holcomb substations.

BPA is working to determine the best way to sequence the work in 2020 and 2021. BPA will issue a public notification of the construction schedule once it is determined.

## **NO ACTION ALTERNATIVE**

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Under the No Action Alternative, BPA would not rebuild the transmission line or upgrade access roads as a single coordinated project. However, the reliability and safety concerns that prompted the need for the Proposed Action would remain. BPA would continue to operate and maintain the existing transmission line in its current condition, replacing failed conductor fittings, replacing aged and rotting structures as they deteriorate, maintaining access roads to allow access to structures on an as-needed basis, and managing vegetation for safe operation. Given the current poor condition of the transmission line, the No Action Alternative would likely cause more frequent and more disruptive maintenance activities than has been required in the past. It might be possible to plan some repairs, but many would likely occur on an emergency basis as the transmission line continues to deteriorate.

The overall scale and scope of the repairs that would be done under the No Action Alternative would be smaller than what is planned under the Proposed Action. The maintenance program addresses immediate needs to keep the transmission line functioning, and would likely not include more comprehensive improvements such as access road work to improve water runoff, fish-passable culvert replacements, conductor replacement, or installation of fiber optic cable. Access road work under the No Action Alternative would be limited to enhancements necessary to allow access to specific structures for as-needed repairs and maintenance.

## **SIGNIFICANCE OF POTENTIAL IMPACTS OF THE PROPOSED ACTION**

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To determine whether the Proposed Action has the potential to cause significant environmental effects, BPA analyzed the potential impacts of the proposal on human and natural resources and presented them in Section 3 of the EA. Not all of the resources present in the project corridor would be affected by the alternatives because there would be either no or only an extremely small, insignificant impact on the resource from the project. Because these resources are not affected by the proposed project, they were not evaluated further in the EA.

To evaluate potential impacts from the Proposed Action, four impact levels were used – high, moderate, low and no impact. These impact levels are based on the considerations of context and intensity defined in the Council of Environmental Quality regulations (40 Code of Federal Regulations 1508.27). High impacts could be considered significant impacts, if not mitigated, while moderate and low impacts are not. The potential impacts associated with the Proposed Action are summarized below. The Proposed Action, with implementation of selected mitigation measures, would have no significant impacts. The following discussion provides a summary of the Proposed Action’s potential impacts and the reasons these impacts would not be significant.

## Soils and Geologic Hazards

Impacts on soils would be low-to-moderate.

- Construction activities for structure replacement would temporarily disturb about 57 acres of soil, which would be revegetated. Work on structure landings would permanently compact a total of about 1 acre of soil. Measures such as using existing holes, limiting construction to the dry season, use of erosion control devices, and revegetation would limit erosion in disturbance areas.
- Pole wraps and culvert bases would be used on 16 structures located within 50 feet of a wetland or a stream to contain pentachlorophenol and help prevent it from leaching into surrounding soils.
- Soil erosion along roads would be lessened through the addition of water control structures, such as waterbars, drain drips, and new gravel surfacing.
- Reconstruction of the access road turn in line mile 9 would permanently impact about 1 acre from construction of the cut and fill slopes and would impact about 1 acre temporarily. The 1 acre temporarily disturbed around the perimeter of the widening work would be stabilized with best management practices (BMPs) and revegetated.

## Vegetation

Impacts on vegetation would be low-to-moderate in the short term and low in the long term.

- At structure sites, about 80 acres of vegetation would be temporarily disturbed.
- At pulling and tensioning sites, about 9 acres of vegetation would be temporarily disturbed.
- Reconstruction of about 90 feet of existing access road would remove about 0.04 acres of vegetation.
- About 1 acre of vegetation would be permanently removed within the access road turn in line mile 9. In the outer 1 acre temporary disturbance area, vegetation would be allowed to regrow.
- About 415 danger trees would be removed along the 21-mile long right-of-way during construction. Tree removal also would occur at the pulling and tensioning site at structure 1/2 and along an access road in line mile 5. Almost all tree removal would require single tree removal rather than removal of groups of trees (except for the pulling site at structure 1/2 and the reconstructed u-shaped turn in line mile 9).
- Three patches of pink fawn-lily found in the transmission line right-of-way near structures 13/2 and 13/5 would be avoided.
- Noxious weed infestations already exist throughout the transmission line and BPA would implement mitigation measures, such as wash or blow stations and revegetation with native seeds, to prevent further spread of weeds.

## Water Resources, Floodplains, and Fish

Impacts on water resources, floodplains, and fish would be low.

- Except structure 10/1, structures located within 100 feet of streams (5/1, 8/7, 10/1, 12/7, 14/6 and 16/1) would be replaced in the same location in already cleared and disturbed areas. Structure 10/1 would be moved farther away from Alder Creek. Use of erosion control measures and vegetative buffers would help absorb sediments dispersed from work areas. Most construction work would occur during the dry season, which would reduce the potential for runoff.

- About 10 individual trees would be removed within 50 feet of streams, distributed among 6 different streams throughout the length of the project corridor. Some of the trees proposed for removal at the pulling and tensioning site at structure 1/2 would be within 100 feet of Green Creek. Because they are small, these trees likely do not provide shade to the creek.
- Road widening in the line mile 9 turn would occur within about 100 feet of a tributary to Alder Creek. Work would occur during the dry season and temporarily disturbed soils would be mulched and reseeded to minimize erosion.
- Two culvert replacements would occur in fish-bearing streams (in unnamed tributaries to Trap Creek) in line mile 4. Work would occur within the in-stream work window if water is present with BMPs used to prevent sediment movement downstream.
- No trees would be removed and no new structures or roads would be constructed in floodplains.
- Replacement of the two fish-bearing stream culverts would improve fish passage to upstream aquatic habitats. Work conducted during in-water work windows would limit impacts on fish habitat. Vegetation removal or structure replacement would not occur within 300 feet of the Willapa River where bull trout habitat may be present.

### **Wetlands**

Impacts on wetlands would be low.

- Three structures would be replaced in wetlands. Wetland mats would be used to lessen impacts on wetland soils and vegetation during structure work. About 5 acres total of wetland vegetation would be temporarily disturbed during construction at structures in or near wetlands.
- Road improvement in wetlands would occur along six sections of access road. Although improvement would not include road widening, temporary impacts would occur from removal of vegetation along roads distributed across 10 wetlands.
- One pulling and tensioning site would be partially located in a wetland at structure 21/10. Wooden mats would be used and all temporary disturbance areas in wetlands would be reseeded with an appropriate native seed mix.
- No trees would be removed in wetlands.

### **Wildlife**

Impacts on wildlife would be low. Impacts on marbled murrelet would be low-to-moderate but temporary.

- Wildlife, especially nesting birds, could be temporarily displaced by the removal of danger trees. Danger tree removal in suitable marbled murrelet habitat and within 110 yards of known occupied marbled murrelet habitat would be avoided between April 1 and September 23 to minimize displacement of nesting birds.
- Vegetation removal/disturbance would temporarily impact wildlife habitat. Use of appropriate weed control measures would reduce the long-term impact to wildlife habitat.
- Construction noise and activity levels would be temporary and wildlife would be expected to return after construction is complete.
- Bird flight diverters would be placed on the conductors in eight locations along the transmission line to lessen the risk of potential collisions.

- Occurrences of Dunn’s salamander and Van Dyke’s salamander have been identified within the riparian areas of Trap Creek about 0.2 mile southwest of line mile 5. However, riparian areas crossed by the right-of-way and roads are cleared of all tall-growing vegetation so impacts on heavily forested stream borders, rocky seeps, and wet talus slopes where the salamanders may be present are unlikely.
- Western toad utilizes various habitats around ponds and slow-moving rivers and streams. Because the culvert work in streams would occur in the dry season, western toad would likely not be present or would be temporarily displaced.
- Marbled murrelet, assumed present in occupied habitat (line mile 13), could be disturbed by construction during the nesting season, April 1 through September 23. In occupied habitat, work would begin two hours after sunrise and end two hours before sunset during the nesting season to reduce disturbance. Approximately 66 danger trees that would be removed in marbled murrelet suitable and known occupied habitat, 3 danger trees in known occupied habitat, either have no nesting platforms or do not have potential structure for nesting platforms.
- Suitable habitat for streaked horned lark and yellow-billed cuckoo would not be impacted because trees would not be removed in riparian areas. Inhabitants of two northern spotted owl nest trees, located more than 2 miles east of the project corridor, could be temporarily disturbed if the birds pass through the corridor during construction.

## **Cultural Resources**

Impacts on cultural resources would be none-to-low.

- Rebuilding the transmission line would not adversely affect the characteristics that make it eligible for listing in the National Register of Historic Places.
- Cultural site 45PC247 is located in and around an existing structure and has been disturbed by the previous construction and maintenance of the line. The existing structure is not proposed for replacement and access road work would not occur in the site boundaries. To prevent temporary disturbance to the site, all vehicles and equipment would be parked within the existing access road prism. Additionally, the number of vehicles would be limited within the site. Site boundaries would be marked for avoidance prior to construction and the right-of-way would be blocked by flagging to prevent disturbance to the site.

## **FLOODPLAIN AND WETLAND STATEMENT OF FINDINGS**

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In accordance with the Department of Energy’s NEPA implementing regulations and compliance with Floodplain and Wetland Environmental Review Requirements (10 CFR Part 1021 and 1022), BPA assessed the project’s potential impacts to floodplains and wetlands (see Sections 3.2.3 and 3.2.4 of the EA), considered alternatives to avoid impacts, and identified measures to mitigate adverse effects.

Structure replacement and access road work would not occur in floodplains. Five danger trees would be removed along the edge of Green Creek’s floodplain in line mile 1 and three danger trees would be removed along the edge of an unnamed stream’s floodplain in line mile 21.

About 1800 square feet of wetlands that could not be avoided would be permanently impacted from replacement of three transmission structures and culvert replacement. Relocation of these structures out of the wetlands was not considered because the line would need to be rerouted requiring additional right-of-way. Additionally, the line crosses the wetlands in a perpendicular manner making avoidance difficult. About 0.5 acres of wetlands that could not be avoided would be temporarily impacted from

replacement of these same structures, culvert replacement, line component replacement at one structure, and placement of one pulling and tensioning site located partially within a wetland. Impacts would be minimized by using the existing road system and complying with conditions in the US Army Corps of Engineers Section 404 Authorization. Additional measures used to minimize potential impacts to wetlands would include, working in the dry season, if possible; flagging wetland boundaries; using temporary equipment mats in wetlands in the wet season; implementing erosion control measures; using barrier wraps on wood poles placed within 50 feet of wetlands and streams to help prevent potential leaching of pentachlorophenol; depositing and stabilizing excess soils in upland areas outside of wetlands; and restoring and replanting disturbed areas.

## **DETERMINATION**

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Based on the information in the EA, as summarized here, BPA determines that the Proposed Action is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA (42 USC 4321 *et seq.*). Therefore, an EIS will not be prepared and BPA is issuing this FONSI for the Proposed Action.

Issued in Portland, Oregon.

/s/ SCOTT G. ARMENTROUT

SCOTT G. ARMENTROUT  
Executive Vice President  
Environment, Fish and Wildlife

March 12, 2020

Date

# Holcomb-Naselle Transmission Line Rebuild Project

## Mitigation Action Plan

### SUMMARY

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This Mitigation Action Plan is for the Holcomb-Naselle Transmission Line Rebuild Project. The project would rebuild the existing 21-mile-long 115-kilovolt (kV) transmission line by replacing many of its wood-pole structures and other line components and improve its road system in Pacific and Wahkiakum counties, Washington.

This Mitigation Action Plan is for the Proposed Action and includes all of the integral elements in the environmental assessment (EA) to mitigate potential adverse environmental impacts.

BPA, BPA's access road contractor (AR Contractor), BPA's tree clearing (TC Contractor), and BPA's best management practices implementation and monitoring contractor (BMP Contractor) are responsible for implementing the mitigation measures during various phases of project construction. *Relevant portions of this mitigation action plan will be included in the construction contract specifications, which will obligate BPA and its contractors to implement the mitigation measures identified that relate to BPA and contractor responsibilities during and after construction.*

If you have any general questions about the project, contact the Project Manager, Amanda Williams: toll-free phone 800-622-4519, direct line 360-619-6634, or email [amloran@bpa.gov](mailto:amloran@bpa.gov).

If you have questions about the Mitigation Action Plan, contact the BPA lead for the environmental review, Tish Eaton: toll-free phone 800-622-4519, direct line 503-230-3469, or e-mail [tkeaton@bpa.gov](mailto:tkeaton@bpa.gov).

If you have questions about the Mitigation Action Plan during implementation, contact the BPA environmental leads for project implementation, Jonnel Deacon: toll-free phone 800-622-4519, direct line 503-230-5646, or e-mail [jwdeacon@bpa.gov](mailto:jwdeacon@bpa.gov) or Greg Tippetts: toll-free phone 800-622-4519, direct line 360-570-4338, or e-mail [gptippetts@bpa.gov](mailto:gptippetts@bpa.gov).

This Mitigation Action Plan may be amended if revisions are needed due to new information or if there are project adjustments.

## MITIGATION MEASURES

Minimization and mitigation measures identified to reduce potential impacts associated with the Proposed Action are provided in the Mitigation Action Plan Table.

**Mitigation Action Plan Table**

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
<b>Soils and Geologic Hazards</b>	
Stabilize permanent disturbance areas by applying a weed-free gravel (if available) top layer to the roadways.	After construction (BMP Contractor)
Place new structures in existing structure holes to the maximum extent practicable to reduce ground disturbance.	During construction (BPA)
Conduct project construction, including tree removal, during the dry season when rainfall, runoff, and stream flow are low to minimize erosion, compaction, and sedimentation, to the extent practicable.	During construction (BPA/AR Contractor)
Contact BPA geotechnical specialists and the underlying landowner if geotechnical issues, such as new landslides, arise during construction.	During construction (BPA/AR Contractor)
Install appropriate erosion-control devices where needed to minimize soil transport.	Before and during construction (BMP Contractor)
Retain vegetative buffers where possible to prevent sediments from entering waterbodies.	During construction (BPA/AR Contractor)
Include water control structures on reconstructed and improved access roads using low grades, water bars, and drain dips to help control runoff and prevent erosion.	During and after construction (AR Contractor)
Properly space and size culverts on access roads.	During design (BPA)
Apply water from water trucks on an as-needed basis to minimize dust and reduce erosion due to wind.	During construction (BPA/AR Contractor)
Revegetate disturbed areas to help stabilize soils as soon as work in that area is completed and appropriate environmental conditions exist, such as moderate temperatures and adequate soil moisture.	After construction (BMP Contractor)
Inspect revegetated areas to verify adequate growth and implement contingency measures as needed.	After construction (BMP Contractor)
Inspect and maintain access roads and cross-drains to ensure proper function and nominal erosion levels after construction.	After construction (BPA/AR Contractor)
<b>Vegetation</b>	
Use the existing road system to access structure locations.	During construction (BPA/AR Contractor/BMP Contractor)
Minimize the construction area and disturbance to vegetation to the extent practicable, especially in Marbled Murrelet habitat, wetlands, and waterbody crossings.	During construction (BPA/AR Contractor)
Flag rare plant populations in line mile 13 for avoidance during access road work.	Before construction (BPA/BMP Contractor)
Locate materials storage and staging areas in previously disturbed areas.	Before construction (BPA/AR Contractor)



BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
Conduct as much work as possible, including tree removal during the dry season to minimize erosion and soil compaction.	During construction (BPA/AR Contractor/TC Contractor)
Conduct tree removal in a manner that minimizes disruption to remaining trees and shrubs.	During construction (TC Contractor)
Cut trees and leave existing root systems intact to help prevent erosion.	During construction (TC Contractor)
Return temporarily disturbed areas to their original, pre-construction contours and conduct site restoration and revegetation measures before or at the beginning of the first growing season following construction.	After construction (BMP Contractor)
Revegetate disturbed areas with grasses, forbs, or shrubs to ensure appropriate vegetation coverage and soil stabilization prior to rainy season (November 1).	After construction (BMP Contractor)
Keep pulling/tensioning equipment inside the transmission line right-of-way for pulling/tensioning sites located on right-of-way.	During construction (BPA)
Conduct post-construction site restoration monitoring once a month until site stabilization is achieved.	After construction (BPA/BMP Contractor)
Prior to construction, identify noxious weed infestation areas for avoidance (as practicable).	Before construction (BPA)
Implement measures to minimize noxious weed spread—inspect vehicles before entering construction areas, install and use weed wash stations and wash before entering or leaving work areas, or use other appropriate equipment cleaning measures.	During construction (BPA/AR Contractor/TC Contractor)
<b>Water Resources, Floodplains, and Fish</b>	
Conduct soil-disturbing activities during the dry season and culvert work when streams are dry, where possible.	During construction (BPA/AR Contractor)
Comply with applicable Clean Water Act permits for work in streams.	During construction (BPA/AR Contractor)
Divert stream flow around the work area and maintain downstream flow if construction occurs during times when streams are flowing.	Before and during construction (AR Contractor)
Isolate in-water work areas prior to culvert installations, dewater work area as necessary for construction and to minimize turbidity, and do not discharge turbid water to streams.	Before and During construction (AR Contractor)
Return temporary disturbance areas for culvert and road work to pre-construction contours: mulch, seed, and plant as per plans and specifications.	After construction (BPA/AR Contractor/BMP Contractor)
Restrict construction vehicles and equipment to access roads and designated work areas.	During construction (BPA/AR Contractor/TC Contractor)
Store, fuel, and maintain all vehicles and other heavy equipment (when not in use) in a designated upland staging area located a minimum of 150 feet away from any stream, waterbody, or wetland or where any spilled material cannot enter natural or manmade drainage conveyances.	During construction (BPA/AR Contractor/TC Contractor)
Dispose of waste material generated from access road work in a stable upland site (in gentle terrain more than 200 feet from waterbodies or wetlands) approved by the BPA environmental lead, smooth to match	During construction (BPA/AR Contractor)

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
adjacent grades, and seed for stability. In steep terrain or near waterbodies or wetlands, haul waste material offsite.	
Design culverts (non-fish bearing drainages) for the 100-year storm event to minimize future maintenance needs.	During design (BPA)
Develop and implement a spill prevention and spill response plan.	Before and During construction (BPA/BMP Contractor)
Confirm equipment is clean (e.g., power-washed) and that it does not have fluid leaks prior to contractor mobilization of heavy equipment to site; inspect equipment and tanks for drips or leaks daily and make necessary repairs within 24 hours.	Before and During construction (BPA/AR Contractor/TC Contractor)
Contain petroleum product spills immediately, eliminate the source, deploy appropriate measures to clean and dispose of spilled materials in accordance with federal, state, and local regulations, and contact the BPA Environmental Lead.	During construction (BPA/AR Contractor/TC Contractor)
Maintain emergency spill control materials, such as oil booms and spill response kits, on-site at each ford or culvert replacement site at all times and ready for immediate deployment.	During construction (AR Contractor)
Install cross-drains per BPA access road design specifications.	During construction (AR Contractor)
Revegetate disturbed areas using a slow-release fertilizer.	After construction (BMP Contractor)
Locate water drafting sites (locations where contractor may fill water trucks) to minimize adverse effects on stream channel stability, sedimentation, and in-stream flows.	During construction (BPA/AR Contractor)
Conduct in-water work between August 1 and September 30 for all tributaries of the Willapa River and between August 1 and September 15 for tributaries of the Naselle River.	During construction (AR Contractor)
Install culverts in accordance with WDFW fish passage requirements.	During construction (AR Contractor)
Limit the placement of fill for access road work in floodplains to the minimum required.	During construction (AR Contractor)
Install erosion-control measures prior to work in or near floodplains.	Before construction (BMP Contractor)
Prepare and implement a storm water pollution prevention plan.	Before and During construction (BPA/AR Contractor/BMP Contractor)
Use pole wraps and culverts on structures located within 50 feet of a stream or floodplain.	During construction (BPA)
<b>Wetlands</b>	
Use temporary equipment mats when working in wetlands in the wet season and only drive vehicles and equipment across wetlands during the dry season.	During construction (BPA)
Comply with applicable Clean Water Act for all work in wetlands.	During construction (BPA/AR Contractor)
Install erosion-control measures prior to work in or near wetlands (e.g., silt fences, straw wattles, and other sediment control measures)	Before construction (BMP Contractor)
Avoid depositing excavated material in wetland areas.	During construction (BPA/AR Contractor)
Avoid locating construction staging, equipment or materials storage, or vehicle fueling within 150 feet of wetland areas.	During construction (BPA/AR Contractor/TC Contractor)

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
Use existing roads to access structure locations.	During construction (All)
Remove any temporary equipment mats and revegetate.	After construction (BPA/BMP Contractor)
Restore all temporary disturbance areas to original contours and decompact, if necessary.	After construction (BMP Contractor)
Reseed all temporary disturbance areas in wetlands with native species and monitor revegetated wetland areas to ensure adequate cover.	After construction (BMP Contractor)
Use herbicides to control vegetation near wetlands in accordance with BPA's Transmission System Vegetation Management Program Final Environmental Impact Statement/Record of Decision (BPA 2000) to limit impacts on water quality.	After construction (BPA)
Use pole wraps and culverts on structures located within 50 feet of wetlands	During construction (BPA)
<b>Wildlife</b>	
Install bird diverters where the line crosses rivers, wetlands, or other high bird-use areas, and it would be technically feasible: transmission line spans 2/2 - 2/3, 4/7 - 5/2, 12/7 - 12/8, 13/1 - 14/1, 14/6 - 14/7, and 15/8 - 16/3.	During construction (BPA)
Restore areas disturbed by construction at a minimum to pre-construction condition.	After construction (BPA/AR Contractor/BMP Contractor)
Remove danger trees in suitable marbled murrelet habitat and within 110 yards of known occupied marbled murrelet habitat outside the nesting season (April 1 and September 23).	During construction (TC Contractor)
Provide maps of areas (including within 110 yards of known occupied marbled murrelet habitat between April 1 and September 23) to be avoided by helicopters to minimize impacts on wildlife.	Before and During construction (BPA)
Schedule work as late in the marbled murrelet nesting season as possible, while still ensuring road work is completed prior to the start of the wet season.	During construction (All)
Schedule work within 110 yards of known occupied (13/4 to 13/6) marbled murrelet habitat during the nesting season (April 1 to September 23) to begin two hours after sunrise and end two hours before sunset; pre-work meetings occurring within two hours of sunrise would occur off-site at a developed location.	During construction (All)
Remove all food scraps and food packaging of any kind from the project sites and transport off-site after each work day; food cannot be left exposed and unattended for any amount of time; no food may be fed to or left for wildlife.	During construction (All)
The BPA environmental lead will inspect the work area and provide trash management recommendations anytime they are on-site and find trash or food being improperly managed.	During construction (BPA)
<b>Cultural Resources</b>	
Locate transmission structures, equipment and material storage area, and access roads to avoid known cultural resource sites and limit ground disturbance.	Before and During construction (BPA/AR Contractor)

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
Conduct archaeological monitoring in the vicinity of cultural site 45PC247. No ground disturbing activities would occur within or near the existing site boundaries for 45PC247. The number of vehicles would be limited within the site and only parked within the existing access road prism.	During construction (BPA)
Follow BPA's Inadvertent Discovery Procedure which requires that if an inadvertent discovery of cultural resources is made all work in the vicinity would stop immediately and the BPA archaeologist, Washington Department of Archaeology and Historic Preservation (DAHP), affected Tribes, and Washington Department of Natural Resources (WDNR), if applicable, would be notified immediately.	During construction (All)
Stop all operations immediately within 200 feet of the inadvertent discovery of human remains, suspected human remains, or any items suspected to be related to a human burial are encountered during project construction; secure the area around the discovery and immediately contact local law enforcement, the BPA archaeologist, the Washington DAHP, the affected Tribes, and WDNR, if applicable.	During construction (All)
Provide cultural resources awareness training to explain cultural resource-related avoidance and mitigation measures to the BPA transmission line maintenance crew, construction contractors and inspectors during preconstruction meetings.	Before and During construction (BPA)
Depict cultural sites as sensitive areas to avoid in construction documents, on construction maps, and in the field.	Before construction (BPA)
<b>Other Resources</b>	
Place absorbent matting and concrete blocks or cribbing to keep wood poles off the ground in material staging yards.	During construction (BPA)
Provide a construction schedule to all potentially affected landowners.	Before and During construction (BPA)
Maintain existing access to residences and other areas during construction.	During construction (BPA/AR Contractor)
Coordinate with commercial timber landowners to ensure that access road enhancements, gates, and construction and maintenance activities would minimize disruptions to commercial forestry operations.	Before and During construction (All)
Compensate landowners for the value of any property damaged by construction activities, as appropriate.	After construction (BPA)
Use traffic safety signs and flaggers to inform motorists and manage traffic during construction activities on affected roads.	During construction (BPA/AR Contractor)
Install permanent gates at selected locations to minimize unauthorized use of BPA access roads and unauthorized entry to BPA right-of-way.	After construction (AR Contractor)
Where existing rural roadways are narrow, provide traffic control to ensure traffic safety.	During construction (AR Contractor)
Follow the applicable state, county, and city requirements for traffic control and lane closures.	During construction (BPA/AR Contractor)
Use water trucks to control dust during construction, as needed.	During construction (BPA/AR Contractor)

BEST MANAGEMENT PRACTICES AND MITIGATION MEASURES	IMPLEMENTATION
Keep all vehicles in good operating condition to minimize exhaust emissions.	During construction (All)
Turn off construction equipment during prolonged periods of non-use.	During construction (All)
Drive vehicles at low speeds (less than 20 miles per hour) on access roads and in the BPA right-of-way to minimize dust.	During construction (All)
Locate staging areas as close to construction sites as practicable to minimize driving distances between staging areas and construction sites.	Before construction (BPA/AR Contractor)
Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance where practicable.	Before construction (BPA/AR Contractor)
Encourage the use of the proper size of equipment for the job to maximize energy efficiency.	During construction (All)
Recycle or salvage non-hazardous construction and demolition debris where practicable.	After construction (All)
Dispose of wood poles at an appropriate facility in the local area where practicable.	After construction (BPA)
Use local rock sources for road construction that meet road material and weed free standards, if possible.	During construction (BPA/AR Contractor)
Use non-reflective conductors.	During construction (BPA)
Focus security lighting at staging areas and the material storage yard inward to minimize spillover of light and glare.	During construction (BPA)
Require that BPA and all contractors maintain a clean construction site and remove all construction debris.	During and After construction (All)
Use sound-control devices on construction equipment with gasoline or diesel engines and limit construction noise to daylight hours (7:00 a.m. to 7:00 p.m.) to reduce noise impacts.	During construction (All)