

**Mitigation Action Plan
for the
Albany-Eugene Transmission Line Rebuild Project**

Mitigation Measures	Time of Implementation
Land Use and Recreation	
<ul style="list-style-type: none"> Distribute the proposed schedule of construction activities to all potentially affected landowners and post in recreational areas along the corridor so landowners and recreational users would know when they can expect to experience construction-related disruptions 	Prior to construction
<ul style="list-style-type: none"> Maintain access during construction 	During construction
<ul style="list-style-type: none"> Conduct construction activities in coordination with agricultural activities to the extent practicable 	During construction
<ul style="list-style-type: none"> Instruct equipment operators and construction crews to close gates to avoid disturbances to livestock and to stay within the corridor to minimize impacts to crops 	During construction
<ul style="list-style-type: none"> Coordinate with individual landowners to ensure that new and/or temporary access roads and gates, and construction and maintenance activities would not disrupt agricultural and commercial operations 	Prior to construction
<ul style="list-style-type: none"> Compensate affected farmers for any lost crop production caused by construction of the Proposed Action 	After construction
<ul style="list-style-type: none"> Coordinate with local agencies to avoid construction activities that could disrupt community events or conflict with their own construction activities 	Prior to construction
Geology and Soils	
<ul style="list-style-type: none"> Place new structures in existing structure holes to the maximum extent practicable to reduce ground disturbance 	During construction
<ul style="list-style-type: none"> Conduct project construction, including danger tree removal, to the extent practicable, during the dry season when rainfall, runoff, and stream flow are low to minimize erosion, compaction, and sedimentation 	During construction
<ul style="list-style-type: none"> Install sediment barriers and other appropriate erosion-control devices where needed to minimize sediment transport 	Prior to and during construction
<ul style="list-style-type: none"> Retain vegetative buffers where possible to prevent sediment from eroding into waterbodies 	During construction
<ul style="list-style-type: none"> Control runoff and prevent erosion on access road improvements by using low grades, water bars, and drain dips 	During construction
<ul style="list-style-type: none"> Properly space and size culverts on access roads 	During construction
<ul style="list-style-type: none"> Use water trucks on an as-needed basis to minimize dust and reduce erosion due to wind 	During construction
<ul style="list-style-type: none"> Till or scarify compacted soil at structure sites prior to reseeding 	During and after construction
<ul style="list-style-type: none"> Reseed disturbed areas with a native seed mix as soon as work in that area is completed 	During and after construction
<ul style="list-style-type: none"> Inspect reseeded and revegetated areas to verify adequate growth; implement contingency measures as needed 	After construction
<ul style="list-style-type: none"> Conduct construction activities in coordination with agricultural activities to the extent 	During construction

Mitigation Measures	Time of Implementation
practicable	
<ul style="list-style-type: none"> Assist farm operators in restoring productivity of compacted soils for structure sites on agricultural lands 	After construction
<ul style="list-style-type: none"> Inspect and maintain facilities to ensure proper function and nominal erosion levels 	After construction
Water Resources	
<ul style="list-style-type: none"> Prepare and implement a Storm Water Pollution Prevention Plan 	During design and construction
<ul style="list-style-type: none"> Inspect and maintain tanks and equipment containing oil, fuel, or chemicals for drips or leaks to prevent spills onto the ground or into waterbodies 	Prior to and during construction
<ul style="list-style-type: none"> Maintain and repair all equipment and vehicles on impervious surfaces away from all sources of surface water 	During construction
<ul style="list-style-type: none"> Refuel and maintain equipment away from natural or manmade drainage conveyances, including streams, wetlands, ditches, catch basins, ponds, and culverts; provide spill containment and cleanup; and use pumps, funnels, and absorbent pads for all equipment-fueling operations. Keep, maintain, and have readily available appropriate spill containment and cleanup materials in construction equipment, in staging areas, and at work sites 	During construction
<ul style="list-style-type: none"> Place sorbent materials or other impervious materials underneath individual wood poles at pole storage and staging areas to contain leaching of preservative materials 	During construction
<ul style="list-style-type: none"> Install erosion control measures prior to work in or near floodplains 	Before and during construction
<ul style="list-style-type: none"> Monitor revegetation and site restoration work for adequate growth; implement contingency measures as necessary 	After construction
<ul style="list-style-type: none"> Monitor erosion control Best Management Practices (BMP's) to ensure proper function and nominal erosion levels 	During construction
Wetlands and Floodplains	
<ul style="list-style-type: none"> Obtain and comply with applicable Clean Water Act permits for all work in wetlands or streams 	Before construction
<ul style="list-style-type: none"> Identify and flag wetlands 	Before construction
<ul style="list-style-type: none"> Install erosion-control measures prior to work in or near wetlands, such as silt fences, straw wattles, and other soil stabilizers; reseed disturbed areas as required 	Before, during and after construction
<ul style="list-style-type: none"> Deposit and stabilize all excavated material not reused in an upland area outside of wetlands 	During construction
<ul style="list-style-type: none"> Avoid construction within wetlands and wetland buffers to protect wetland functions and values, where possible. Avoid using these areas for construction staging, equipment or materials storage, fueling of vehicles, or related activities 	During construction
<ul style="list-style-type: none"> Use existing road systems, where possible, to access structure locations 	During construction
<ul style="list-style-type: none"> Remove all temporary fill and geotextile fabric, and revegetate after use of temporary roads built in wetlands 	After construction
<ul style="list-style-type: none"> Use herbicides to control vegetation near wetlands in accordance with BPA's Transmission System Vegetation Management Program Final Environmental Impact Statement (BPA 2000) to limit impacts to water quality 	Before, during and after construction
<ul style="list-style-type: none"> Deposit and stabilize all excavated material not reused in an upland area outside of floodplains 	During construction

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<ul style="list-style-type: none"> Install erosion-control measures prior to work in or near floodplains 	Before and during construction
<ul style="list-style-type: none"> Avoid construction within floodplains to protect floodplain function, where possible 	During design
Vegetation	
<ul style="list-style-type: none"> Prior to construction, conduct a noxious weed survey within the corridor to more specifically identify existing infestations of noxious weeds 	Before construction
<ul style="list-style-type: none"> Prior to construction, visit existing noxious weed infestations and conduct pre-emptive measures to minimize transport and expansion of weed occurrences during construction; flag infestations for avoidance (as practicable) during construction 	Before construction
<ul style="list-style-type: none"> Flag vegetation clearing limits prior to disturbance 	Before construction
<ul style="list-style-type: none"> Clearly mark danger trees and demarcate danger tree removal disturbance limits, log deck areas, and skid/access routes 	Before construction
<ul style="list-style-type: none"> Evaluate Oregon white oak trees designated as danger trees for alternative treatments (e.g., top and trim). If possible, top and/or trim Oregon white oak trees designated as danger trees 	Before construction
<ul style="list-style-type: none"> Identify potential onsite mitigation opportunities specific to vegetation replacement/replanting (e.g., willow planting/cutting installations) 	Before construction
<ul style="list-style-type: none"> Identify offsite mitigation for forested habitats during the permitting process that could replace tree removal occurring as a result of the Proposed Action 	Before construction
<ul style="list-style-type: none"> Coordinate with local watershed councils and land conservancies (e.g., Calapooia Watershed Council, Institute for Applied Ecology, and similar groups) regarding tree salvage for use in nearby habitat restoration projects. Determine potential for assisting with or furthering planned mitigation opportunities and priority projects 	Before construction
<ul style="list-style-type: none"> Use existing road systems (including farm access roads), where practicable to access structure locations 	During construction
<ul style="list-style-type: none"> Minimize the construction area (footprint) to the extent practicable, especially within wetlands and adjacent waterbody crossings 	During construction
<ul style="list-style-type: none"> Install construction “envelopes” of silt fencing, straw wattles, or other barrier materials around construction sites to prevent vehicle turnaround, materials storage, or other disturbance outside designated construction areas 	During construction
<ul style="list-style-type: none"> Place materials storage and staging areas in upland areas (away from wetland/waterbodies) 	During construction
<ul style="list-style-type: none"> Minimize ground disturbance in proximity to existing noxious weed populations 	During construction
<ul style="list-style-type: none"> Implement appropriate measures to minimize the introduction and broadcast of weed seeds/propagules, including inspection of vehicles before entering construction areas and appropriate equipment cleaning measures 	During construction
<ul style="list-style-type: none"> Conduct as much work as possible during the dry season when stream flow, rainfall, and runoff are low to minimize erosion, sedimentation, and soil compaction 	During construction
<ul style="list-style-type: none"> Cut and remove danger trees during the dry season to minimize compaction. Conduct danger tree removal in a manner that minimizes disruption to remaining trees and shrubs 	During Construction
<ul style="list-style-type: none"> Do not disturb existing root system of danger trees by “tipping over” danger trees with an excavator or similar machine due to potential wetland impact constraints 	During Construction
<ul style="list-style-type: none"> Consider using a feller buncher (where access allows) or a “cable and winch” removal approach to limit damage to remaining trees and understory vegetation during danger tree removal 	During Construction

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<ul style="list-style-type: none"> Do not allow danger trees to be chipped and left onsite 	During Construction
<ul style="list-style-type: none"> Top and trim Oregon white oak trees designated as danger trees 	During Construction
<ul style="list-style-type: none"> Top, trim, and/or girdle a percentage of designated danger trees (e.g., in higher quality habitat areas) to reduce impacts to vegetation and wildlife species, such as small mammals and amphibians 	During Construction
<ul style="list-style-type: none"> Consider leaving a small percentage of cut and felled danger trees within the corridor as additional habitat/structure for wildlife, particularly small mammals and amphibians where appropriate 	During Construction
<ul style="list-style-type: none"> Reseed disturbed areas with native grasses and forbs to ensure appropriate vegetation coverage and soil stabilization prior to November 1 (rainy season) 	During and after construction
<ul style="list-style-type: none"> Inspect seeded sites to verify adequate growth and implement contingency measures as needed 	After Construction
<ul style="list-style-type: none"> Schedule maintenance for fall or winter to avoid disturbing or destroying plants before they reproduce 	After construction
<ul style="list-style-type: none"> Salvage natives where possible (especially camas) and replant after construction 	Before, during and after construction
<ul style="list-style-type: none"> Limit herbicide use to appropriate areas 	Before, during and after construction
<ul style="list-style-type: none"> Restrict equipment access to wooden pole structures within or near the remnant native prairie areas to the edges of the ROW where possible 	During construction
Wildlife	
<ul style="list-style-type: none"> Prior to initiating ground-disturbing activities, identify active raptor nest sites by consulting with ODFW and/or USFWS and conduct raptor nesting surveys if required 	Before construction
<ul style="list-style-type: none"> Install bird diverters where the line crosses the Calapooia and Willamette Rivers 	During construction
<ul style="list-style-type: none"> Avoid disruptive construction activities within 330 feet of active bald eagle nests during their critical nesting period (January–June) 	During construction
<ul style="list-style-type: none"> Where practicable, schedule danger tree removal to avoid the critical nesting periods for migratory birds (March 1–September 15) 	During construction
<ul style="list-style-type: none"> Minimize the construction area to the extent practicable 	During construction
<ul style="list-style-type: none"> In areas where cottonwoods would be removed, leave understory layer intact (i.e., do not remove hawthorn, cherry, or willow trees) 	During construction
<ul style="list-style-type: none"> Consider leaving a small percentage of cut and felled danger trees in upland and wetland areas within the corridor as additional habitat/structure for wildlife, particularly small mammals and amphibians 	During construction
Fish	
<ul style="list-style-type: none"> Implement all impact minimization and mitigation measures identified in Section 7 Consultation with USFWS and NOAA Fisheries 	During and after construction
<ul style="list-style-type: none"> Conduct all construction activities according to Oregon Department of Fish and Wildlife (ODFW) in-water work guidelines or ODFW-approved in-water work extension for streams identified as having ESA-listed Oregon chub 	During construction
<ul style="list-style-type: none"> Conduct all construction activities according to ODFW in-water work guidelines or ODFW-approved in-water work extension for all remaining streams identified as containing ESA-listed fish species (Upper Willamette River chinook and Upper Willamette River steelhead) 	During construction