In cooperation with the Bureau of Land Management

Lane-Wendson No. 1 Transmission Line Rebuild Project

Final Environmental Assessment

DEPARTMENT OF ENERGY
Bonneville Power Administration
DOE/EA-1952
April 2016

This document is the final Environmental Assessment (EA) for the proposed Lane-Wendson No. 1 Transmission Line Rebuild Project. Bonneville Power Administration (BPA) prepared this document as an abbreviated final EA because there have been no substantial changes to the proposed action, alternatives, or environmental analysis presented in the draft EA. This abbreviated final EA provides changes made to the text of the draft EA, as well as comments received on the draft EA and BPA’s responses to the comments. This final EA should be used as a companion document to the draft EA (DOE/EA-1952, dated November 2015), which contains the full text describing the project, its potential environmental impacts, and mitigation measures to reduce impacts. The draft EA is available on the project webpage at www.bpa.gov/goto/LaneWendson.

Summary

BPA proposes to rebuild its Lane-Wendson No. 1 transmission line, which runs from Eugene to Florence, Oregon. The aging, 41.3-mile-long 115-kilovolt (kV) line requires replacement of its wood-pole structures and other line components and needs improvements to its access road system, the roads that provide access to the transmission line right-of-way for ongoing operations and maintenance.

BPA released the draft EA on November 30, 2015 for public comment; the comment period ran until January 4, 2016. The EA describes the project, its potential environmental impacts, and mitigation measures to reduce these impacts. BPA sent the draft EA to agencies and interested parties and notified other potentially affected parties about the availability of the draft EA, as well as how to request a copy. (For further information regarding the comment period and comments received, see the section titled Comments Received on draft EA and BPA’s Responses at the end of this document.)
Changes to the EA

A number of minor changes were made since the draft EA and are presented below by the chapter and section in which they appear in the draft EA. Where text has been modified, deleted text is indicated as "strikethrough" format and new text is underlined.

Changes to Table of Contents

The list of appendices has been revised from the draft EA to reflect the addition of Appendix C as follows:

Appendix C. Description of Proposed Action Work on USFS Land

Changes to Chapter 1—Purpose of and Need for Action

1.4 Cooperating Agencies

The last sentence of the third paragraph in Section 1.4 (page 1-4) has been revised from the draft EA as follows:

An Oregon Department of State Lands Removal/Fill Authorization and a US Army Corps of Engineers Section 404 Authorization are both required as a result of impacts from the Proposed Action to wetlands and waters. BPA is in the process of preparing a joint removal fill permit for this project, which would be reviewed by the USACE and DSL.

Changes to Chapter 2—Proposed Action and Alternatives

2.1 Proposed Action

The second bullet point in Section 2.1 (page 2-1) has been revised from the draft EA as follows:

- Replacement of existing conductors (electric wires) and fiber optic cable

The seventh bullet point in Section 2.1 (page 2-1) has been revised from the draft EA as follows:

- Removal of some trees and other vegetation along the transmission line right-of-way and access roads

The following rows in Table 2-1 (pages 2-2 to 2-3) have been revised from the draft EA table as follows:
### Table 2-1. Proposed Action Description

<table>
<thead>
<tr>
<th>Proposed Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length of access road activities</td>
<td>70.8 70.7 miles</td>
</tr>
<tr>
<td>Direction of Travel</td>
<td>15.2 45.4 miles</td>
</tr>
<tr>
<td>Culverts</td>
<td>72 78</td>
</tr>
<tr>
<td>New</td>
<td>15 20</td>
</tr>
<tr>
<td>Repair</td>
<td>16</td>
</tr>
<tr>
<td>Replace</td>
<td>41 42</td>
</tr>
<tr>
<td>Fords</td>
<td>9 40</td>
</tr>
<tr>
<td>Remove</td>
<td>4</td>
</tr>
</tbody>
</table>

### Section 2.1.1 Rights-of-way and Easements

The first paragraph in Section 2.1.1 (page 2-2) has been revised from the draft EA as follow:

The project area crosses private property, state-owned land, and BLM and USFS land. BPA has or is in the process of acquiring *easements* or other authorizations from underlying landowners for all of the transmission line right-of-way and for most access roads. Most of the line is located in a shared 212.5-foot wide right-of-way with the Lane-Wendson No. 2 line; the Proposed Action does not include reconstruction of the Lane-Wendson No. 2 line. Approximately 9.5 miles of the line is in its own 100-foot wide right-of-way. The rebuilt transmission line would remain in the existing transmission line right-of-way. A description of Proposed Action work on USFS land is included in Appendix C.
Section 2.1.2 Replacement Transmission Structures

Figure 2-1 from the draft EA has been replaced with the new Figure 2-1 below:
The heading for Section 2.1.3 (page 2-6) has been revised from the draft EA as follows:

**Section 2.1.3 Conductors, and Overhead Groundwire, and Fiber Optic Cable**

The second paragraph in Section 2.1.3 (page 2-7) has been revised from the draft EA as follows:

For safety reasons, the National Electric Safety Code (NESC) establishes minimum conductor heights. BPA requires the conductors to be at least 24.30 feet from the ground, which exceeds NESC’s minimum conductor height of 18.6 24.9 feet for 115-kV construction, for most of the transmission line because of past safety and landform variation concerns.

The fourth paragraph in Section 2.1.3 (page 2-7) has been revised from the draft EA as follows:

Replacement components would be compliant with the *Suggested Practices for Avian Protection on Power Lines* prepared by the Avian Power Line Interaction Committee (2006[^1]). *Bird diverters* would be placed on the conductors or and/or overhead ground wires (if they are present) in locations on spans where an increased risk of bird strikes exists (e.g., near wetlands and rivers), and where technically feasible. These locations include:

- Structure 1/2 to 3/1
- Structure 25/6 to 26/1
- Structure 33/6 to 33/7

The last paragraph in Section 2.1.3 (page 2-7) has been revised from the draft EA as follows:

The existing fiber optic cable that runs for the length of the line would be reused and reinstalled on the new structures. The existing transmission line does not carry fiber optic cable and new fiber is not part of the rebuild project.

**2.1.4 Staging Areas and Tensioning Sites**

The first sentence of the second paragraph (page 2-7) has been revised from the draft EA as follows:

Tensioning sites are used for pulling and tightening the conductor and fiber optic cable to the correct tension once they are mounted on the transmission structures, as shown in Figure 2-3.

**2.1.5 Access Roads**

**Gates, Culverts, and Bridges**

The second paragraph in the Gates, Culverts, and Bridges section (page 2-9) has been revised from the draft EA as follows:

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[^1]: See Chapter 7 (*References*) of the Lane-Wendson No. 1 Transmission Line Rebuild Project Draft Environmental Assessment for citations used in the Final EA.
Fifteen new culverts would be installed at existing stream or drainage crossings, 42 existing culverts would be replaced, and 16 culverts would be repaired. One new access road bridge would be constructed at an existing ford crossing, and one existing access road bridge would be replaced to support construction equipment. Three of the four existing fords, one would be spanned with temporary construction bridges for construction, replaced with a bridge, one would be improved, and two would be removed.

2.1.6 Vegetation Removal

The second paragraph in Section 2.1.6 (page 2-12) has been revised from the draft EA as follows:

Danger trees are trees that are located adjacent to outside the transmission line right-of-way and are a present or future hazard to the transmission line. Danger trees could violate the Minimum Vegetation Clearance Distance (MVCD) by falling into, bending into, or growing into the conductor or coming close enough to cause flashover of current from the conductor. A swing-into danger tree is a tree that could cause contact or flashover if the conductor swings out from its stationary position due to high winds. Fall-into, bend-into, and swing-into danger trees or logging fringes can pose an imminent threat based on the judgment of the person conducting a maintenance patrol and conditions at the site, that have the potential to fall or grow into or grow too close to the conductor and cause flash-overs or line outages. BPA estimates that up to 40 danger trees could require removal, however the specific number and location of danger trees would be identified after construction is complete when the relationship of the rebuilt line to existing trees can be determined.

2.1.7 Construction Activities

The first paragraph in Section 2.1.7 (page 2-12 and 2-13) has been revised from the draft EA as follows:

Construction would likely take two three construction seasons, with the earliest start of spring or starting in summer 2016. A typical construction crew for a wood-pole structure replacement project consists of 50 to 80 people, including transmission line and road construction workers, inspectors and administrative personnel, surveyors, and other support personnel.

Anticipated Construction Schedule

The first paragraph in the Anticipated Construction Schedule section (page 2-13) has been revised from the draft EA as follows:

The schedule for construction of the Proposed Action depends on a variety of factors, including the completion and outcome of the environmental review process, the duration of regulatory agency reviews, and the timing of permit approvals. If the Proposed Action is implemented, construction would likely begin in June the summer of 2016. Construction work would be done in phases, with construction occurring on more
than one structure at a time in different parts of the transmission line right-of-way. Two Three construction seasons (late spring to early fall 2016, and 2017, and 2018) would be needed to complete the Proposed Action. If construction begins in June Summer 2016, all major construction activities would likely be completed by December 2018 2017. All phases of construction would be coordinated with the Wild Fish Timber Sale in T.17S, R.7W., sections 27 and 33. All affected landowners would receive a letter indicating the exact start date of BPA operations. BPA would pay landowners for any crop or property damage, as appropriate, that could occur as a result of construction activities.

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### Changes to Chapter 3—Affected Environment, Environmental Consequences, and Mitigation Measures

#### 3.1 Land Use and Recreation

##### 3.1.1 Affected Environment

**Land Ownership and Management**

The first sentence in the first paragraph of the Land Ownership and Management section (page 3-4) has been revised from the draft EA as follows:

> Land ownership in the project area is a mix of public and private ownership. Publicly owned lands include parcels owned by ODFW, BLM, City of Eugene, Lane County, Oregon State Board of Forestry, State of Oregon Department of Forestry, and USFS.

##### 3.1.2 Environmental Consequences—Proposed Action

**Agricultural and Forestry Uses**

The third sentence in the second paragraph of the Agricultural and Forestry Uses section (page 3-6) has been revised from the draft EA as follows:

> While construction would likely span two three growing seasons, individual landowners would likely only be affected for one season as construction would be conducted in phases and all construction activities along a given segment of the transmission line would be conducted within a period of a few months.

##### 3.1.3 Mitigation Measures

The following mitigation measures in Section 3.1.3 have been revised or added:

- Schedule construction during periods when active farms along the corridor are likely to be fallow, to the extent practicable, to minimize the potential for crop damage.
- Leave gates as they were found to avoid disturbances to livestock.
• Work with USFS to identify appropriate mitigation measures for project construction activities from access road, trail, or transmission line construction work on National Forest land.

3.2 Geology and Soils

3.2.3 Mitigation Measures

The following mitigation measures in Section 3.2.3 have been revised or added:

• Reseed disturbed areas with a native seed mix as soon as work in that area is completed. On ODFW, BLM and National Forest land, coordinate with each agency prior to construction to specify seed mixes that are acceptable to each agency and BPA.

• Assist farm operators in restoring productivity of compacted soils for structure sites and access roads on agricultural lands.

• Stabilize permanently disturbed areas for new access roads with a top layer of pavement or gravel for the roadway and revegetate the roadway shoulders.

3.3 Vegetation

3.3.1 Affected Environment

Special Status Plant Species

The following row in Table 3-4 (page 3-18) has been revised from the draft EA table as follows:

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Federal Status</th>
<th>State Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lomatium bradshawii</td>
<td>Bradshaw's lomatium desert parsley</td>
<td>E</td>
<td>E</td>
</tr>
</tbody>
</table>

The third and fourth paragraphs in the Special Status Plant Species section (page 3-19) have been revised from the draft EA as follows:

None of the 14 special status species were found within the project area during surveys of areas that would have the potential for these species. Surveys for special-status plant species were conducted in the transmission line right-of-way and new access road areas by qualified botanists during the appropriate flowering periods in 2011, and documented in the Lane-Wendson Transmission Line Rebuild Threatened and Endangered Plant Species and Fender’s Blue Butterfly Nectar Species Survey (Turnstone 2011). Additional surveys were performed in 2014 within prairie habitat for federally-listed threatened or endangered plant species—Kincaid's lupine, Willamette daisy, and Bradshaw's lomatium. Of the 14 special-status species potentially occurring in the project area, only one, Bradshaw's lomatium, has been recently documented none of the species were detected (see further discussions below regarding potential presence and surveys for these species).
Potential presence in the project area was determined by conducting plant surveys and reviewing the Oregon Biodiversity Database (ORBIC) for records of special-status species occurring within two miles of the transmission line (ORBIC 2015). Federally-listed plant species that occur in Lane County include Willamette daisy (Erigeron decumbens var. decumbens), Bradshaw’s lomatium desert parsley (Lomatium bradshawii), and Kincaid’s lupine (Lupinus sulphureus ssp. kincaidii). All of these three federally-listed species are confirmed to occur within one mile of the project area.

The section title text in the Bradshaw’s Desert Parsley section (page 3-19 and 3-20) has been revised from the draft EA as follows:

**Bradshaw’s Lomatium Desert Parsley**

Bradshaw’s lomatium desert parsley (Lomatium bradshawii) is a perennial member of the carrot family (Apiaceae). Once regarded as endemic to the Willamette Valley, additional populations of Bradshaw’s lomatium desert parsley were located in Clark County, Washington, in 1994. Exhibiting a narrow preference for habitat, Bradshaw’s lomatium desert parsley is generally restricted to wet prairie environments, though the species is occasionally found in lightly-wooded wetlands. The majority of extant populations occur along seasonally inundated or saturated margins of waterways, typically growing in poor draining clay soils. Bradshaw’s lomatium desert parsley does not have designated critical habitat.

Multiple subpopulations of Bradshaw’s lomatium desert parsley occur near Coyote Creek and along the north side of Neilson Road opposite the Lane Substation (ORBIC 2015). These populations are associated with open tufted hairgrass, Hall’s aster (Aster hallii), and Oregon coyote thistle (Eryngium petiolatum). Plant surveys were conducted during the flowering window for the Bradshaw’s lomatium desert parsley flowering window in 2014 along access roads and within the right-of-way in wet prairie environments; no new populations were observed (Turnstone 2014); however, the species was observed by ODFW botanical contractors in 2013 on the south side of Coyote Creek along the northern edge of the BPA right-of-way.

**3.3.2 Environmental Consequences—Proposed Action**

**Special-status Plant Species**

The first paragraph in the Special-status Plant Species section (page 3-22 and 3-23) has been revised from the draft EA as follows:

All three of the federally listed vascular plant species that occur in or near project area are imperiled primarily due to losses in prairie habitat. Once common in the Willamette Valley, prairie habitats have been eliminated in 99 percent of their historic range (ODFW 2006). Project activities are unlikely to impact the sub-population of Bradshaw’s lomatium present on the south bank of Coyote Creek, as the plants are located to the east of proposed work areas; approximately 125 feet away from ground-disturbing activities associated with the replacement of structure 3/2. There would be no impact to remnant prairie habitat, ESA listed plants, or other special status species because none are known
to occur within the project area and no new populations were found during plant surveys.

3.3.3 Mitigation Measures

The following mitigation measures in Section 3.3.3 have been revised or added:

- In areas near sensitive botanical resources—such as the population of documented Bradshaw’s lomatium immediately adjacent to the BPA right-of-way—demarcate vegetation clearing limits prior to disturbance.
- Clearly mark trees identified for removal.
- In areas near sensitive botanical resources or other sensitive natural resource areas—such as the population of documented Bradshaw’s lomatium immediately adjacent to the BPA right-of-way—delineate work areas around construction sites to prevent vehicle turnaround, materials storage, or other disturbance outside designated construction areas.
- In or near sensitive areas, place materials storage and staging areas in previously disturbed areas if possible, away from wetlands/waterbodies.
- There are no documented populations of special-status plant species within the project area; however, if new populations of special-status plant species are discovered prior to project implementation, then the following recommendations would be executed for avoiding and minimizing impacts:
  - There is one documented population of a special-status plant species (Bradshaw’s lomatium) within the project area; this and any new populations of special status plant species that are discovered prior to project implementation would be protected by adhering to the following recommendations for avoiding and minimizing impacts:
    - Restrict equipment access to wood pole structures near the populations.
    - Salvage special status species where possible and replant after construction.
- Return temporarily disturbed areas to the original (pre-construction) contours and conduct site restoration and revegetation measures as soon as practicable following construction.
- Revegetate disturbed areas with native grasses and forbs (or landowner-requested species) to ensure appropriate vegetation coverage and soil stabilization prior to rainy season (November 1).
- Inspect seeded sites to verify adequate growth and implement contingency measures as needed.
- Inspect all vehicles before entering construction areas for weeds, and install and use appropriate equipment cleaning measures and weed wash stations at selected locations along the transmission line right-of-way to minimize the introduction and broadcast of
weed seeds/propagules. Require all vehicles and equipment entering ODFW or City of Eugene properties to use the wash station prior to entering the property.

- Minimize disturbance to vegetation; only remove vegetation that would interfere with the proposed construction activities.

- Restore all temporarily disturbed soils according to BLM and Forest Service requirements and agency Biological Opinions for seeding and mulching, to minimize adverse impacts to vegetation.

- Restore all temporarily disturbed soils according to requirements in the USFWS and National Oceanic and Atmospheric Administration (NOAA) Fisheries biological opinions for this project (USFWS 2015; NOAA 2016 [pending]), to minimize adverse impacts to vegetation.

- Replant native riparian species at specified bridge/culvert replacement locations during the dormant season (November 1 to February 1).

- In wetlands where there are temporary disturbances, salvage and stockpile selected topsoil for replacement on cut/fill slopes to improve site restoration and plant establishment.

- Prior to construction, visit existing noxious weed infestations and conduct preemptive measures to minimize transport and expansion of weed occurrences during construction; flag infestations for avoidance (as practicable) during construction. Where practicable, treat noxious weeds adjacent to access roads and structure sites. Perform follow up monitoring and treat infestation areas after construction if needed. BPA would not apply herbicides on BLM Eugene District lands. Vegetation management on BLM and National Forest lands would not include the use of herbicides, unless approved in advance by the appropriate agency.

- BPA would coordinate with ODFW, BLM and Forest Service prior to construction to specify seed mixes that are acceptable to each agency and BPA for revegetation.

- In or near sensitive areas, place materials storage and staging areas in previously disturbed areas away from wetlands and waterbodies.

### 3.4 Streams and Fish

#### 3.4.1 Affected Environment

**Streams**

*Upper Willamette Subbasin*

The second sentence in the Upper Willamette Basin section (page 3-25) has been deleted from the draft EA as follows:

The Upper Willamette Subbasin is located in the southern and central portion of the Willamette Basin. The Upper Willamette River drains into the Willamette River through many tributaries; the closest to the project area is the Long Tom River. The subbasin's
1,197,000 acres are mostly in Lane, Linn, Benton, and Polk Counties and include six watersheds, one of which is crossed by the project area: Long Tom River. Forty five percent of the subbasin is forestland and 39 percent is grassland, pastureland, and hayland. The remaining land supports orchards, vineyards, nursery stock, berries, and development. Nine percent of land in the subbasin is publically owned (NRCS 2006).

3.4.2 Environmental Consequences—Proposed Action

Streams

The last sentence of the second paragraph in the Streams section (page 3-31) has been revised from the draft EA as follows:

Further, erosion rates would likely return to their current levels once vegetation is reestablished or would be reduced based on improvements to access roads and drainage features.

Fish

The following rows in Table 3-10 (page 3-33 and 3-34) have been removed from the draft EA table as follows:

<table>
<thead>
<tr>
<th>Structure ID</th>
<th>Work Proposed</th>
<th>Stream</th>
<th>Potential ESA Fish Present</th>
<th>In-water Work</th>
<th>Fish Salvage Likely Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-017-070</td>
<td>Replace ford with culvert</td>
<td>Small unnamed trib... to Fish Creek</td>
<td>No</td>
<td>Yes</td>
<td>Yes (if not dry)</td>
</tr>
<tr>
<td>C-032-040</td>
<td>Replace culvert</td>
<td>Small unnamed trib... to Knowles Creek</td>
<td>No</td>
<td>Yes</td>
<td>Yes (if not dry)</td>
</tr>
</tbody>
</table>

3.4.3 Mitigation Measures

The following mitigation measures in Section 3.4.3 have been revised or added:

- Install cross-drains long enough so that outlets extend beyond road fill.
- Excavate cross-drain inlets to allow for initial sediment influx after construction.
- Armor first 25 feet of ditch upgradient from cross-drain and catch basin with rock (e.g., pit-run/jaw rock or equivalent) to decrease the water's energy and slow flow.
- Armor cross-drain outlets (e.g., pit run/jaw rock, slash, or equivalent) to decrease the water's energy and slow flows.
- Maintain emergency spill control materials, such as oil booms and spill response kits, on-site at each ford or culvert replacement stream crossing site where in-water work would occur at all times and ready for immediate deployment.
- Include small sorbent booms (sausage booms), sorbent sheets/pads and socks, vermiculite/kitty litter, duct tape, heavy-duty garbage bags, zip ties, and nitrile gloves in spill kits. Restock materials within 24 hours if used.
- Outfit heavy machinery (e.g., excavators) with fire extinguisher, shovel, first aid kits, and caps and plugs for machine hydraulic lines and associated attachments (e.g., hammer/plate compactor, etc.).
- Stockpile and make available large sorbent booms, straw bales, straw wattles, and turbidity curtains at each specified bridge/culvert replacement site to quickly respond to any spills or turbidity and erosion concerns during construction.

3.5 **Wetland, Floodplains, and Groundwater**

3.5.1 Affected Environment

Wetlands and Waters

The first sentence of the second paragraph in the Wetlands and Waters section (page 3-37) has been revised from the draft EA as follows:

Wetland scientists conducted field investigations and identified 286 jurisdictional wetlands and waters, which included 129 wetlands (totaling approximately 112 acres), 135 streams, 20 ditches, and 2 ponds that could be affected by structure replacement and access road construction (MB&G 2015a).

The last sentence of the fourth paragraph in the Wetlands and Waters section (page 3-37) has been revised from the draft EA as follows:

Because of this disturbance and because the project area is maintained free of trees, the majority of the wetlands identified in the project area were classified as PEM (69 total), with some PSS (54 total) and PFO (6 total).

The last sentence of the fifth paragraph in the Wetlands and Waters section (page 3-38) has been revised from the draft EA as follows:

The majority of vegetation communities associated with wetlands in the Willamette Valley are generally maintained through a combination of transmission line maintenance to remove trees and tall shrubs, grazing from livestock, and/or cultivation for agricultural crops; however, some wetlands in the Willamette Valley are managed to create and/or restore native wetland functions and values and sensitive species’ habitats.

3.5.2 Environmental Consequences—Proposed Action

Wetlands and Waters

The first sentence of the second paragraph in the Wetlands and Waters section (page 3-40) has been revised from the draft EA as follows:

Replacement of transmission line structures would impact 70 wetlands and 66 ditches and streams throughout the project.

The last sentence of the fifth paragraph in the Wetlands and Waters section (page 3-41) has been revised from the draft EA as follows:
Temporary wetland and waters impacts from structure replacement would be expected to total approximately 0.997 - 0.926 and approximately 0.008 acre, respectively.

The first sentence of the seventh paragraph in the Wetlands and Waters section (page 3-41) has been revised from the draft EA as follows:

Temporary impacts from the Proposed Action are expected to total approximately 4.72 - 4.48 acres within wetlands and approximately 0.03 - 0.04 acre within waters.

Table 3-11 (page 3-41) has been revised from the draft EA table as follows:

### Table 3-11. Approximate Impacts to Wetlands and Waters from the Proposed Action

<table>
<thead>
<tr>
<th></th>
<th>Wetlands</th>
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<th>Waters</th>
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<tr>
<td></td>
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<td>Temporary Square Feet</td>
<td>Permanent Square Feet</td>
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<td></td>
<td>Acres</td>
<td>Acres</td>
<td>Acres</td>
<td>Acres</td>
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<tr>
<td>Transmission tower</td>
<td>978</td>
<td>0.022</td>
<td>43,450</td>
<td>0.997</td>
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<tr>
<td>replacement</td>
<td>908</td>
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<td>Road construction</td>
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<td>21,926</td>
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<td>1,744</td>
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<td>Culverts, drain dips,</td>
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<td>0.705</td>
<td>2,785</td>
<td>0.064</td>
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<td>bridges, etc.</td>
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<td>0.716</td>
<td>5,882</td>
<td>0.430</td>
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<td>34,205</td>
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<td>8,891</td>
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<td>Temporary access</td>
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<tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1,760</td>
<td>0.040</td>
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</tbody>
</table>

### 3.5.3 Mitigation Measures

The following mitigation measures in Section 3.5.3 have been revised or added:

- Impacts to wetlands and waters would be minimized, to the extent technically feasible, by narrowing road widths in wetlands and by complying with conditions in the USACE/DSL Joint Removal-Fill Permit for the project.

- Minimize impacts to wetlands and waters, to the extent technically feasible, by narrowing road widths in wetlands and by complying with conditions in the Oregon Department of State Lands Removal/Fill Authorization and a US Army Corps of Engineers Section 404 Authorization. BPA would endeavor to limit impacts and disturbance to an area within 25 feet of wood-pole structures; however, field conditions and work and safety requirements may require areas to be disturbed in excess of 25 feet away from structures. Impacts identified in these authorizations include construction
within the City of Eugene's Coyote Prairie North Wetland Mitigation Bank, a sensitive habitat.

- Meet with the City of Eugene regarding construction within the Coyote Prairie North Wetland Mitigation Bank before, during, and after construction to coordinate tilling and restoration of the site; to identify the appropriate seed mix to use for restoration of areas disturbed by construction; and to coordinate the type, amount, and timing of any herbicide used.

- If feasible, construction within the Coyote Prairie North Wetland Mitigation Bank would be limited to dry conditions. However, due to line outage scheduling, if conditions during construction are not dry, wetland mats or low ground pressure equipment would be used to avoid soil compaction and rutting.

- Obtain and comply with applicable US Army Corps of Engineers Clean Water Act and State of Oregon Removal/Fill permits for all work in wetlands or streams.

- Identify and flag wetland boundaries before construction.

- Install erosion-control measures prior to work in or near wetlands (e.g., silt fences, straw wattles, and other sediment control measures) and reseed disturbed areas as required.

- Deposit and stabilize all excavated material not reused in an upland area outside of wetlands.

- Avoid construction within wetlands to protect wetland functions and values, where possible. Avoid using these areas for construction staging, equipment or materials storage, or fueling of vehicles.

- Use existing road systems, where possible, to access structure locations.

- Remove all temporary fill and geotextile fabric and revegetate temporary roads built in wetlands after use.

- Restore all temporary disturbance areas to original contours and decompact, if necessary.

- Replant all temporary disturbance areas within wetlands with native species, as specified in project permits.

- Purchase wetland mitigation bank credits and/or in-lieu fee program mitigation credits, and/or participate in payment-in-lieu programs, as mitigation for permanent wetland impacts, as described in the Oregon Department of State Lands Removal/Fill Authorization and a US Army Corps of Engineers Section 404 Authorization.

- Use multi-layer barrier wraps around base of poles located in wetlands to help prevent leaching of the preservative material into surrounding areas.
3.6 Wildlife

3.6.3 Mitigation Measures

The following mitigation measures in Section 3.6.3 have been revised or added:

- Leave a small percentage of cut and felled danger trees as snags in upland and wetland areas within the transmission line as additional habitat/structure for wildlife, particularly small mammals and amphibians.

- Follow the measures, terms, and conditions outlined in the USFWS Biological Opinion (July 23, 2015), which includes monitoring the response of streaked horned larks to project construction activities and reporting results to the appropriate USFWS office.
  - Conduct pre-construction surveys for streaked horned lark several weeks before construction.
  - Conduct three visits using point-count stations during the breeding season from March through July, with the last survey conducted within two weeks prior to construction.
  - Begin surveys 30 minutes before sunrise and end at 11 am or sooner on hot days (≥80°F) using five-minutes long observation periods at each point-count station.
  - Locate observation points along planned/existing access roads spaced 200 meters apart.
  - If larks are observed, triangulate lark vocalizations to identify the location. Assume vocalizing larks during the breeding period are nesting, and do not conduct nest searches due to the high probability of disturbing nesting and the low probability of finding the actual nest.

- Re-vegetate disturbed areas with weed-free seed mixes and plantings that include nectar plants for Fender’s blue butterfly.

3.7 Cultural Resources

3.7.3 Mitigation Measures

The following mitigation measure in Section 3.7.3 has been added:

- Develop an Inadvertent Discovery Plan that details crew member responsibilities for reporting in the event of a discovery during construction.

3.9 Socioeconomic and Public Services

3.9.2 Environmental Consequences—Proposed Action

Public Services and Lodging

The first sentence of the second paragraph under in the Public Services and Lodging section (page 3-68) has been revised from the draft EA as follows:
The fiber optic cable attached for the length of the line, along with its associated hardware (e.g., risers, junction boxes, etc.), would be transferred to the rebuilt structures. Prior to construction, the underground telephone lines and natural gas lines would need to be located, and coordination with utility companies would occur to avoid impacts to these utility lines.

3.10 Noise, Public Health, and Safety

3.10.2 Environmental Consequences—Proposed Action

The notes on Table 3-20 (page 3-73), Table 3-21 (page 7-74) and Table 3-22 (page 3-75) have all been revised from the draft EA as follows:

Values developed from BPA modeling programs and are based upon a 200-foot right-of-way with 115kV and 230kV line.

3.10.3 Mitigation Measures

The following mitigation measure in Section 3.10.3 has been added:

- Since there would be no significant changes to the electric and magnetic fields in the vicinity of the line, and no impacts would result from operational activities, no avoidance, minimization, or mitigation measures would be needed.

3.11 Transportation

3.11.3 Mitigation Measures

The following mitigation measures in Section 3.11.3 have been added:

- Repair damage to roads caused by construction.
- Keep construction activities and equipment clear of residential driveways to the extent possible.

3.12 Air Quality

3.12.3 Mitigation Measures

The following mitigation measure in Section 3.12.3 has been added:

- Drive vehicles at low speeds (less than 5 miles per hour) on access roads and the BPA easement to minimize dust during high dust conditions.
Changes to Chapter 4—Environmental Consultation, Review, and Permit Requirements

4.2 Vegetation, Wildlife, and Fish

4.2.7 Oregon Fish and Wildlife Habitat Mitigation Policy

The second paragraph in Section 4.2.7 (page 4-3) has been revised from the draft EA as follows:

BPA has coordinated consulted with the ODFW and incorporated its biologist's recommendations to avoid and minimize potential impacts to fish and wildlife resources, as well as provide offsetting mitigation. Several Twelve culverts would be reconstructed to be fish passable as part of the Proposed Action. Additionally, several five existing ford crossings would be replaced with fish passable culverts, one existing ford would be replaced with a full-span bridge, and one bridge would be replaced. Three temporary construction bridges and one new culvert would also be installed to minimize access road impacts to streams. Site restoration measures would also be implemented after project construction according to prescriptions for reseeding and mulching disturbed areas, replanting trees and shrubs removed adjacent to culvert installations.

4.3 Water Resources

The first sentence of the last paragraph in Section 4.3 (page 4-5) has been revised from the draft EA as follows:

An Oregon Department of State Lands Removal/Fill Authorization and a US Army Corps of Engineers Section 404 Authorization are both required as a result of impacts from the Proposed Action to jurisdictional waterbodies. BPA submitted applications for these authorizations on February 23, 2016, and the Oregon Department of State Lands and US Army Corps of Engineers are reviewing these applications. BPA joint removal-fill permit for this project, which would be reviewed by the USACE and DSL.
Changes to Chapter 6—Glossary

The definition for Danger Tree (page 6-2) has been revised from the draft EA as follows:

Danger trees are trees that are located outside the transmission line right-of-way and are a present or future hazard to the transmission line. Danger trees could violate the Minimum Vegetation Clearance Distance (MVCD) by falling into, bending into, or growing into the conductor or coming close enough to cause flashover of current from the conductor. A swing-into danger tree is a tree that could cause contact or flashover if the conductor swings out from its stationary position due to high winds. Fall-into, bend-into, and swing-into danger trees or logging fringes can pose an imminent threat based on the judgment of the person conducting a maintenance patrol and conditions at the site.

Trees (or high-growing brush) in or alongside the transmission line right-of-way that are hazardous to the transmission line. These trees are identified by special crews and must be removed to prevent tree-fall into the line or other interference with the conductors. BPA’s Construction Clearing Policy requires that trees be removed that meet either one of two technical categories: Category A is any tree that within 15 years will grow to within about 18 feet of conductors when the conductor is at maximum sag (212°F) and swung by 6 pounds per square feet of wind (58 miles per hour); Category B is any tree or high-growing brush that after a year of growth will fall within about 8 feet of the conductor at maximum sag (176°F) and in a static position.

The definition for Tensioning Sites (page 6-8) has been revised from the draft EA as follows:

Tensioning sites are used for pulling and tightening the conductor and fiber optic cable to the correct tension once they are mounted on the transmission structures. Tensioning sites are located within the right-of-way where possible or just outside of the right-of-way where the line makes a turn or angle.
Changes to Appendices—Appendix C

A new appendix has been added (Appendix C) entitled “Description of Proposed Action Work on USFS Land.”

Appendix C. Description of Proposed Action Work on Siuslaw National Forest land Note: In addition to the mitigation measures described in Chapter 3, BPA will work with the Forest Service to identify and implement additional mitigation measure to protect resources on National Forest land as appropriate.

<table>
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<tr>
<th>Siuslaw NF Parcel number</th>
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<th>1810080000100</th>
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<tr>
<td>Trail Construction</td>
<td>0.14 mile</td>
<td>0.08 mile</td>
<td>0.00 mile</td>
<td>0.22 mile</td>
</tr>
<tr>
<td>Road Construction</td>
<td>0.00 mile</td>
<td>0.07 mile</td>
<td>0.00 mile</td>
<td>0.07 mile</td>
</tr>
<tr>
<td>Road Reconstruction</td>
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<td>0.14 mile</td>
<td>0.08 mile</td>
<td>0.47 mile</td>
</tr>
<tr>
<td>Road Improvement</td>
<td>0.39 mile</td>
<td>0.46 mile</td>
<td>0.09 mile</td>
<td>0.94 mile</td>
</tr>
<tr>
<td>Road Direction of Travel</td>
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<td>0.00 mile</td>
<td>0.00 mile</td>
</tr>
<tr>
<td><strong>Total Road Work (- Trails)</strong></td>
<td>0.64 mile</td>
<td>0.67 mile</td>
<td>0.17 mile</td>
<td><strong>1.48 miles</strong></td>
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<tr>
<td>Trees removed (&gt;6” dbh)</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>21</td>
</tr>
</tbody>
</table>

Road Features Added or Improved

| Culvert, Replace (1) No fish Ford, Existing (1) Gate, Replace (1) Landing, New (1) Waterbar, New (27) | Culvert, Repair (1) No fish Ford, Existing (1) Ditch Relief, New (1) Landing, New (7) Waterbar, New (7) | Waterbar, New (1) | 2 Culverts 2 Fords 1 Gate 1 Ditch Relief 8 Landings 35 Waterbars |

Transmission Line Structures

<p>| 31/5 (3 poles, 6 guy anchors) 32/1 (2 poles) 32/2 (2 poles) | 30/6 (3 poles, 6 guy anchors) 31/1 (3 poles, 6 guy anchors) 31/2 (2 poles) 31/3 (2 poles) 31/4 (3 poles, 6 guy anchors) | 36/4 (2 poles) | 9 Structures 22 Poles 24 Guy Anchors |</p>
<table>
<thead>
<tr>
<th>Wetland Impacts</th>
<th>Trail Construction - 32ft²</th>
<th>Trail Construction - 62 ft² Road Reconstruction - 550 ft² Road Improvement - 24 ft² Total Wetlands Impacted - 636 ft² Wetlands in ROW (not impacted) - 10,293 ft²</th>
<th>None</th>
<th>668 ft² Wetland Impacts</th>
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</thead>
<tbody>
<tr>
<td>Northern Spotted Owl (NSO) Critical Habitat*</td>
<td>Trail Construction - 0.14 mile Road Reconstruction - 0.25 mile Road Improvement - 0.39 mile Total - 0.78 mile</td>
<td>Trail Construction - 0.08 mile Road Construction - 0.07 mile Road Reconstruction - 0.14 mile Road Improvement - 0.46 mile Total - 0.75 mile</td>
<td>None</td>
<td>Trail Construction - 0.22 mile Road Construction - 0.07 mile Road Reconstruction - 0.39 mile Road Improvement - 0.85 mile Total - 1.53 miles</td>
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<tr>
<td>NSO Highly Suitable Habitat</td>
<td>Trail Construction - 0.004 mile Road Reconstruction - 0.06 mile Road Improvement - 0.06 mile Total - 0.124 mile</td>
<td>Road Improvement - 0.09 mile</td>
<td>None</td>
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<td>Trail Construction - 0.147 mile Road Reconstruction - 0.09 mile Road Improvement -0.41 mile Total - 0.647 mile</td>
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<td>Marbled Murrelet (MAMU) Critical Habitat</td>
<td>Trail Construction - 0.14 mile Road Reconstruction - 0.25 mile Road Improvement - 0.39 mile Total - 0.78 mile</td>
<td>Trail Construction - 0.08 mile Road Construction - 0.07 mile Road Reconstruction - 0.14 mile Road Improvement - 0.46 mile Total - 0.75 mile</td>
<td>None</td>
<td>Trail Construction - 0.22 mile Road Construction - 0.07 mile Road Reconstruction - 0.39 mile Road Improvement - 0.85 mile Total - 1.530 miles</td>
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| Work in MAMU Suitable Habitat Zone B** | Trail Construction - 0.14 mile  
Road Reconstruction - 0.25 mile  
Road Improvement - 0.26 mile  
Total - 0.65 mile | Trail Construction - 0.08 mile  
Road Improvement - 0.46 mile  
Total - 0.54 mile | None | Trail Construction - 0.22 mile  
Road Reconstruction - 0.25 mile  
Road Improvement - 0.72 mile  
Total - 1.19 miles |
|-------------------------------------|--------------------------------------------------|----------------------------------|-----------------|--------------------------------------------------|
| Work in MAMU Suitable Habitat Zone A** | Road Improvement - 0.13 mile | Road Construction - 0.07 mile  
Road Reconstruction - 0.14 mile  
Road Improvement - 0.46 mile  
Total - 0.67 mile | Road Reconstruction - 0.08 mile  
Road Improvement - 0.09 mile  
Total - 0.17 mile | Road Construction - 0.07 mile  
Road Reconstruction - 0.22 mile  
Road Improvement - 0.68 mile  
Total - 0.97 mile |

**MAMU (Marbled Murrelet) zones are defined as follows:

Zone A- Areas where work would occur within 100 yards of known or potential marbled murrelet nesting habitat

Zone B- Areas where work would occur between 100 yards and .25 miles of known or potential marbled murrelet nesting habitat.
Comments Received on Draft EA and BPA’s Responses

In order to solicit comments on the draft EA, BPA mailed the EA, or notification of its availability, to over 150 government agencies, tribes, organizations, and individuals. In addition, BPA posted the EA on the project website. The comment period ran from November 30, 2015, through January 4, 2016, and six comments were received.

The comments were each assigned an identifying number. In some instances, the comments were further subdivided by subject, and each subject was responded to individually. Table 1 provides the comment number and the associated author and affiliation. The comments are reproduced in their entirety.

Table 1. Draft EA Comment Submittals

<table>
<thead>
<tr>
<th>Comment Number</th>
<th>Comment Author / Affiliation</th>
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<tbody>
<tr>
<td>LWTLR15 0001</td>
<td>Peabody</td>
</tr>
<tr>
<td>LWTLR15 0002</td>
<td>Wolf</td>
</tr>
<tr>
<td>LWTLR15 0003</td>
<td>ODFW</td>
</tr>
<tr>
<td>LWTLR15 0004</td>
<td>O’Neal</td>
</tr>
<tr>
<td>LWTLR15 0005</td>
<td>Rippee/THPO</td>
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<tr>
<td>LWTLR15 0006</td>
<td>Miller/City of Eugene Parks and Open Space</td>
</tr>
</tbody>
</table>

Comment LWTLR15 0001 Peabody

*Will you be spraying herbicides or other chemicals once, periodically or at all? If so, what distance from pole lines will this occur?*

*Response to Comment LWTLR15 0001 Peabody*

As described in Section 3.3.3. of the EA, prior to construction activities for the rebuild, existing noxious weed infestations would be treated adjacent to access roads and structure sites—this is to help prevent potential weed spread due to project construction ground disturbance and vehicle activity. Follow-up treatments may be performed if needed.

As described in Section 2.1.8 of the EA, BPA’s ongoing vegetation management along the right-of-way occurs approximately every 3 to 4 years (or more frequently as needed) in accordance with the BPA’s Transmission System Vegetation Management Program Final Environmental Impact Statement and Record of Decision (DOE/EIS-0285). Herbicides may be used as part of ongoing vegetation management, especially to help control noxious weeds or resprouting deciduous trees, as appropriate.
If you have specific questions regarding vegetation management and herbicides use along the right-of-way across your property, please contact BPA’s local Natural Resource Specialist at (541) 988-7433.

Comment LWTLR15 0002 Wolf

Just do it! Quit dinkin’ around. TEP-TPP-1

Response to Comment LWTLR15 0002 Wolf

Thank you for your comment.

Comment LWTLR15 0003 ODFW

Re: Lane-Wendson No. 1 Transmission Line Rebuild Project Draft Environmental Assessment

The purpose of this letter is to provide comments to the Lane-Wendson No. 1 Transmission Line Rebuild Project Draft Environmental Assessment (November 2015). The Oregon Department of Fish and Wildlife (ODFW) has three parcels that are within the planned project area, specifically tax lots: 1705360000503, 180502000400, & 180502000100. All parcels were purchased under the ODFW/BPA Willamette Wildlife Mitigation Program (WWMP), as part of the Willamette River Basin Memorandum of Agreement Regarding Wildlife Habitat Protection and Enhancement between the State of Oregon and Bonneville Power Administration (BPA). Additionally, BPA holds permanent conservation easements on the parcels.

While recognizing the importance of the proposed work and the rights of BPA within the transmission Right-of-way (ROW), ODFW would like to stress the importance of minimizing impacts to these parcels due to the substantial resources that have been allocated to protect and enhance the conservation values attributed to them. Significant restoration efforts are planned and underway as outlined in the Coyote Creek South Management Plan (2015).

The following excerpts of the draft EA are areas that ODFW would appreciate more information and/or to provide feedback specifically to the aforementioned parcels:

1. Bird diverters

Bird diverters would be placed on the conductors and/or overhead ground wires on spans where an increased risk of bird strikes exists (e.g., near wetlands and rivers), and where technically feasible. (p.2-7)

   • ODFW requests installation of bird diverters if applicable.

2. Temporary staging

Temporary areas would be needed to store and stockpile materials, trucks, and other equipment during construction. The staging areas would occupy approximately 30 acres each. Staging areas would be identified by the construction contractor, prior to construction, and appropriate environmental review and approval of the identified sites by BPA would be conducted. (p.2-7)

   • Please provide more information on locations if proposed on ODFW property.
3. Land Ownership and Management

Land ownership in the project area is a mix of public and private ownership. Publicly-owned lands include parcels owned by BLM, City of Eugene, Lane County, Oregon State Board of Forestry, State of Oregon Department of Forestry, and USFS. Many of the privately-owned parcels along the transmission line are owned by timber companies, such as Roseboro and Oxbow Timber. In addition, The Nature Conservancy and the Oregon State University Foundation, both non-profit organizations, own land in the project area. (p.3-4)

- Please update ownership database to reflect ODFW ownership.

Adjacent to the Coyote Prairie site, the project area crosses land referred to as the Coyote Creek property. This 310-acre property was acquired by The Nature Conservancy with the intent of transferring it to ODFW to own, manage, and restore as wet prairie in coordination with the adjacent Fern Ridge Wildlife Area (ODFW 2013). (p.3-4)

- Please update to reflect that ODFW presently owns 310 acres (Coyote Creek South) to the southwest and 225 acres (Coyote Creek North) to the north of the City of Eugene’s Coyote Prairie Mitigation Bank. Both ODFW sites have conservation easements on them held by BPA for conservation values.

4. Recreation Areas

East Coyote and West Coyote Units of the Fern Ridge Wildlife Area – Construction, reconstruction, and improvements to certain segments of access road would take place at least 700 feet south and east of the boundaries of the Fern Ridge Wildlife Area. Given the flat terrain of the area, this work would likely be visible to recreational users, and noise and dust could temporarily affect recreational users. (p.3-5)

- Assuming access road is within tax lot 1805010000104; ODFW has concerns how reconstruction and/or improvements will affect the hydrology of the area as it relates to both completed and planned efforts to restore wet prairie habitats. More specific information is requested on the type of improvements in this area and considerations to limit impacts to natural hydraulic flow.

5. Special-status Plant Species

None of the 14 special-status species were found within the project area during surveys of areas that would have potential habitat for these species. Surveys were conducted in the transmission line right-of-way and new access road areas by qualified botanists during the appropriate flowering periods in 2011, and documented in the Lane-Wendson Transmission Line Rebuild Threatened and Endangered Plant Species and Fender’s Blue Butterfly Nectar Species Survey (Turnstone 2011). Additional surveys were performed in 2014 within prairie habitat for federally-listed threatened or endangered plant species—Kincaid’s lupine, Willamette daisy, and Bradshaw’s lomatium—none of the species were detected (see further discussions below regarding potential presence and surveys for these species).

Potential presence in the project area was determined by conducting plant surveys and reviewing the Oregon Biodiversity Database (ORBIC) for records of special-status species occurring within
two miles of the transmission line (ORBIC 2015). Federally-listed plant species that occur in Lane County include Willamette daisy (Erigeron decumbens var. decumbens), Bradshaw’s desert parsley (Lomatium bradshawii), and Kincaid’s lupine (Lupinus sulphureus ssp. kincaidii). All of these three federally-listed species are confirmed to occur within one mile of the project area. (p.3-19)

- ODFW has documented Bradshaw’s lomatium (see Coyote Creek South Management Plan) immediately adjacent to the BPA ROW in the southwest corner on tax lot 1805020000400. ODFW requests that measures are taken not to disrupt population.

6. Invasive Plants

Implement appropriate measures to minimize the introduction and broadcast of weed seeds/propagules, including inspection of vehicles before entering construction areas, installation and use of weed wash stations at selected locations along the transmission line right-of-way, and other appropriate equipment cleaning measures. (p.3-24)

- ODFW requests that equipment be washed prior to entry. Please provide more information on locations of weed wash stations if proposed within ODFW property.

7. Reseeding/Seed Mixes

- ODFW requests that BPA coordinate all seed mixes to ensure they are in line with restoration efforts.

8. Access Road/Culverts (C-003-21-23)

- ODFW requests that BPA provide more information on the following culverts as it relates to the hydrology of the site.

9. Agriculture Impacts

- ODFW presently leases portions of the proposed impacted parcels. More information regarding impacts to farming practices and acreage is requested.

Response to Comment LWTLR15 0003 ODFW

1. BPA is planning to install bird flight diverters on the first two miles of the transmission line between the Lane Substation and Coyote Creek. Section 2.1.3 of the EA has been revised to describe the proposed location of bird flight diverters.

2. No temporary staging areas are proposed on ODFW property. Poles may be temporarily placed on the ground next to the existing tower to be replaced for several days prior to construction.

3. Section 3.1.1 of the EA has been revised to reflect that ODFW owns the property described in the comment.

4. BPA plans to add gravel to the existing access road from Cantrell Road south to the ROW on Tax Lot 1805010000104. BPA understands that ODFW may be looking at options for removing or altering this road at some time in the future. BPA would work with ODFW to arrive at an acceptable solution at that time.
5. BPA would work with ODFW to identify the population in the field prior to construction and would mark the area as a no entry area on photo maps and the Mitigation Implementation Table that would be developed to specifically instruct construction workers to follow mitigation measures during construction to minimize or avoid impacts to the environment. BPA would also ensure that the population is flagged for avoidance in the field to prevent vehicles or equipment from entering the area. Section 3.3 of the EA has been revised to address Bradshaw's lomatium.

6. As described in Section 3.3.3, BPA would use weed washing stations to help prevent the spread of weed seed. BPA is proposing to locate a weed wash station at the intersection of Cantrell Road and KR Nielsen Road. All vehicles and equipment entering ODFW or City of Eugene properties would be required to use the wash station prior to entering the property.

7. BPA would coordinate with ODFW prior to construction to specify seed mixes that are acceptable to both parties.

8. The culverts in question are located on a small section (135 feet) of new access road proposed in the SW corner of the parcel. The access road generally cuts across the direction of surface and subsurface water is assumed to be flowing (towards Coyote Creek to the east). BPA proposes to place five 18-inch culverts along this small section of access road to maintain hydraulic connectivity of surface and near surface flow.

9. BPA plans to construct this section of line in late summer after crops have been harvested and the ground is dry. No access road is planned in farmed areas; rather, equipment would travel within the right-of-way to reach the towers (referred to as direction of travel).

Comment LWTLR15 0004 O’Neal

Please have your studies look at: The criteria used for improving access roads.

I need more information about: The specific segments of the rebuild project where access roads are planned to be improved.

I live on the south side of the Fern Ridge Substation on Territorial Hwy, south of Veneta, Oregon. This substation is managed by Lane Electric Cooperative. I lease the parcel of land owned by Lane Electric that is outside of the substation fencing. I also own the property located on the East side of Lane Electric’s ownership.

During this last summer (2015), I was contacted by the Portland BPA office requesting permission to place rock across my ownership to facilitate year-round maintenance access. I said "NO" to that request because I use that parcel for grazing my livestock and placing rock down for an access road would take away a large portion of ground that could be used for growing grass.

As a result of that request, I contacted Lane Electric to see if they had been approached by BPA with that same request across their ownership, (the parcel that I lease). They were not aware of any such request and stated that since I was leasing land from them, they would support my decision and request that "NO" rock be placed on their land as well for the purpose of improving access.

I have lived at my current location since 1976 and have never witnessed a BPA powerline maintenance situation that would require a rocked access road across my property. Please note my
comments on the previous page and get back to me with any additional information regarding those topics.

Thank You, Ron O’Neal

Response to Comment LWTLR15 0004 O’Neal

BPA road engineers assess the suitability of access roads to accommodate the equipment necessary to rebuild the line, including cranes, pole trucks, dump trucks, etc. As described in Section 2.1.5 of the EA, there are four categories of access road work for this project:

- **Direction of Travel:** No improvements needed. The ground surface, or existing road or track can be used to access the ROW or structures without any additional work. In wetland areas or when conditions are wet, low ground pressure equipment or crane mats may need to be used in direction of travel areas.

- **Improve:** Some minor improvement needed. The existing road prism or alignment is in generally good condition and has the proper width, but the road surface may be soft or slightly rutted. Usually improvement consists only of grading and/or adding gravel to the road surface only (no work on road structure).

- **Reconstruct:** Some major improvement needed. The existing road prism, alignment or structure is in poor condition or is failing and needs to be reconstructed to reestablish road width, slope, or drainage or correct other deficiencies.

- **New:** An entirely new access road is needed where none currently exists.

In response to Mr. O’Neal’s request to not construct a road across his property, the road design has been changed to show direction of travel only. Thus, BPA is not planning to place rock or other permanent surfacing materials on Mr. O’Neal’s property or across Lane County Electric’s property that is leased by Mr. O’Neal.

Comment LWTLR15 0005 Rippee/THPO

*The Coquille Indian Tribe will defer assignment to the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw at this time.*

Response to Comment LWTLR15 0005 Rippee/THPO

Thank you for letting us know.

Comment LWTLR15 0006 Miller/City of Eugene Parks and Open Space

1. The City of Eugene Parks and Open Space owns a parcel of property affected by the proposed transmission line work. The property is a wetland mitigation bank site called Coyote Prairie North (CPN-WMB). Our main concerns regarding the work are related to altering the hydrology through soil compaction and even minor elevation changes, introduction of invasive species, and removal of native wetland vegetation. Specific comments are below.
We request pre-, during, and post construction meetings to discuss measures to avoid impacts and measures needed to rehabilitate sensitive wetland habitat negatively affected by the proposed work.

2. Potential rehabilitation measures include tilling to rehabilitate compacted soils. We would like tilling to occur only after consultation with the City of Eugene.

3. Also, in areas in which revegetation may be needed, we request BPA coordinate with the City of Eugene and use City-approved wetland seed mixes or compensate the City of Eugene to conduct mutually agreed upon rehabilitation.

4. Section 3.2. The CPN-WMB should be considered a sensitive habitat and as mentioned in the draft EA, disturbance should be limited to an area with a maximum of 25 ft. radius.

5. Also, we support removal and disposal of soils removed by auger.

6. Section 3.3. We support all measures to avoid PCP leaching into surrounding soils.

7. All work at CPN-WMB must be conducted during dry soil conditions to avoid impacts to sensitive soils.

8. Any spraying of herbicide on City of Eugene property must be coordinated and approved by the City.

9. Vehicles must be washed and clean immediately prior to entry to CPN-WMB to avoid introduction of non-native and invasive species.

10. Section 3.5. The draft EA contains the following statement: “The vegetation communities associated with wetlands in the Willamette Valley are generally maintained through a combination of transmission line maintenance to remove trees and tall shrubs, grazing from livestock, and/or cultivation for agricultural crops.” We don't believe this statement reflects actual wetland management practices in the Willamette Valley. Landowners and wetland practitioners use a wide variety of tools to maintain and restore wetlands.

11. In the draft EA, an avoidance time frame has been identified for streaked horned lark. Please identify methods you will use to identify nests. Thank you for the opportunity to comment. We look forward to future conversations.

Response to Comment LWTLR15 0006 Miller/City of Eugene Parks and Open Space

1. Section 3.5.3 of the EA has been revised to reflect that BPA and the selected construction contractor would ensure that meetings take place with the City before, during and after construction.

2. Section 3.5.3 of the EA has been revised to reflect that BPA would work with the City to coordinate tilling and restoration of the site.

3. Section 3.5.3 of the EA has been revised to reflect that BPA would coordinate with the City to identify the appropriate seed mix to use for restoration of areas disturbed by construction.

4. Section 3.5.3 of the EA has been updated to reflect that the wetland bank area is considered sensitive habitat. BPA would endeavor to limit impacts and disturbance to an area within
25 feet of tower structures. However, field conditions and work and safety requirements may require areas to be disturbed in excess of 25 feet away from structures.

5. BPA plans to remove augured soils from the City property.

6. As described in Section 3.5.3 of the EA, BPA plans use impermeable pole wraps on all poles in wetland areas to prevent preservatives from leaching into surrounding soils.

7. Section 3.5.3 of the EA has been revised to reflect that BPA intends to construct on City of Eugene property during dry conditions in the late summer and early fall. However, due to line outage scheduling, if conditions during this time are not dry, BPA would continue construction. If conditions are not dry, wetland mats or low ground pressure equipment would be used to construct the project on City property so as to avoid soil compaction and rutting.

8. Section 3.5.3 of the EA has been revised to reflect that BPA would work with the City to coordinate the type, amount and timing of any herbicide spraying that may be needed.

9. As described in Section 3.3.3, BPA would use weed washing stations to help prevent the spread of weed seed. BPA is proposing to locate a weed wash station at the intersection of Cantrell Road and KR Nielsen Road. All vehicles and equipment entering ODFW or City of Eugene properties would be required to use the wash station prior to entering the property.

10. This statement was directed at the majority of wetlands located in the Willamette Valley which are not specifically maintained for wetland functional values, but instead are under agricultural use. Section 3.5.1 of the EA has been updated to more accurately reflect management for wetland functional values as well.

11. Section 3.6.3 of the EA has been revised to reflect that pre-construction surveys for streaked horned lark would occur several weeks before construction. BPA would conduct three visits using point-count stations during the breeding season from March through July, with the last survey conducted within two weeks prior to construction. Surveys would begin 30 minutes before sunrise and end at 11 am or sooner on hot days (≥80°F). Observation periods would be five-minutes long at each point-count station. Observation points would be located along BPA’s planned/existing access roads and spaced 200m apart. If larks are observed, then biologists would triangulate lark vocalizations to identify the location. BPA would assume vocalizing larks during the breeding period are nesting, and biologists would not conduct nest searches due to the high probability of disturbing nesting and the low probability of finding the actual nest.