

In cooperation with the U.S. Forest Service

Hills Creek-Lookout Point Transmission Line Rebuild Project

Final Environmental Assessment

DEPARTMENT OF ENERGY
Bonneville Power Administration
DOE/EA-1967
June 2017

This document is the final environmental assessment (EA) for the proposed Hills Creek-Lookout Point Transmission Line Rebuild Project (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 those comments. This final EA should be used as a companion document to the draft EA (DOE/EA-1967, dated August 2016), 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 <http://www.bpa.gov/goto/HillsCreekLookoutPoint>.

Summary

BPA proposes to rebuild its Hills Creek-Lookout Point transmission line, which runs from Oakridge to Lowell in Lane County, Oregon. The existing 26-mile-long 115-kilovolt (kV) transmission line is aging, and BPA proposes to replace its wood-pole structures and other line components and improve its road system that provides access to the line.

BPA released the draft EA for public comment on August 10, 2016; the comment period ran until September 19, 2016. The draft EA describes the Project, its potential environmental impacts, and mitigation measures to reduce those 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 Draft EA

A number of minor changes were made since release of the draft EA for public comment 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 Chapter 1—Purpose and Need for Action

1.5 Public Involvement and Consultation

1.5.2 Agency and Tribal Consultation

The first sentence of the first paragraph of Section 1.5.2 has been revised from the draft EA as follows:

BPA ~~is in the process of consulting~~ consulted with the following agencies: Forest Service, National Marine Fisheries Service (NMFS), Oregon Department of Fish and Wildlife (ODFW), Oregon State Historic Preservation Office (SHPO), U.S. Army Corps of Engineers (Corps), and U.S. Fish and Wildlife Service (USFWS).

The bullet points in Section 1.5.2 have been revised from the draft EA as follows:

- BPA consulted with USFWS and ~~is currently in consultation with~~ NMFS for **threatened** (likely to become endangered) and **endangered species** (species in danger of extinction) near the transmission line, pursuant to Section 7(c) of the Endangered Species Act (ESA) and consistent with the Willamette National Forest standards and guidelines (FW-154, FW-157). A Biological Assessment (BA) that addresses project effects on listed fish and wildlife species and their designated **critical habitat** (habitat essential for the conservation of an endangered or threatened species) was prepared. A summary of preliminary effect findings from the Biological Assessment is included in Table E-3 in Appendix E. BPA received a letter of concurrence from USFWS on July 5, 2016. BPA ~~is currently working~~ coordinated with NMFS to prepare a Programmatic Biological Opinion to address potential impacts to ESA-listed **anadromous** fish, fish that live in both fresh and salt water, under their jurisdiction. NMFS issued the Programmatic Biological Opinion on September 22, 2016. Pursuant to the Programmatic Biological Opinion, BPA would submit to NMFS for approval an Action Implementation form prior to initiating construction. The Action Implementation form would provide NMFS an opportunity to review activities that could affect listed anadromous fish species to ensure they are consistent with the terms and conditions of the Programmatic Biological Opinion.
- Pursuant to the Fish and Wildlife Conservation Act and the Oregon Fish and Wildlife Habitat Mitigation Policy, BPA consulted with USFWS and ODFW to develop measures to avoid and minimize impacts to fish and wildlife, as documented in this EA, consistent with the Willamette National Forest standards and guidelines (FW-134).
- BPA has consulted with the Forest Service on numerous design aspects of the Rebuild Project and is continuing to consult with the Forest Service as a participating agency. BPA has prepared biological evaluations to address Forest Service sensitive species per Willamette National Forest standards and guidelines (FW-156, FW-157, FW-169).

- BPA consulted with the Corps on numerous aspects of the Rebuild Project related to promoting the objectives of a 2013 interagency Memorandum of Understanding intended to enhance plant and animal habitat within BPA's right-of-way along the north shore of Lookout Point Reservoir. Such objectives include increasing standing dead wood habitat (i.e., snags), reducing spread of invasive weeds, establishing self-sustaining low growing native plant communities, and avoiding native plantings recently installed within the right-of-way.
- BPA submitted a cultural resources survey report to SHPO and tribes for review through the Section 106 of the National Historic Preservation Act (NHPA) process. BPA consulted with the SHPO to develop a Memorandum of Agreement to address the adverse effect of the project on an eligible historic property, the Hills Creek-Lookout Point Transmission Line. BPA would coordinate with the SHPO and tribes if any previously undiscovered cultural resources are discovered during construction.

The last paragraph of Section 1.5.2 has been revised from the draft EA as follows:

BPA ~~will distribute~~ distributed a copy of the draft EA to all the agencies and tribes consulted. Consultation ~~will be~~ was completed before BPA ~~issues a~~ issued the decision document for this project. Chapter 4 includes a list of persons, tribes, and agencies that ~~will receive~~ received the draft EA.

Changes to Chapter 2—Proposed Action and Alternatives

2.1 Existing Transmission Line

The first sentence of the second paragraph of Section 2.1 has been revised from the draft EA as follows:

The existing line is made-up of ~~226~~ 224 structures—mostly two-pole wood H-frame structures, with some three-pole structures and two lattice-steel towers.

2.2 Proposed Action

2.2.3 Realignment of the Transmission Line in Line Mile Three

The first sentence of the last paragraph of Section 2.2.3 has been revised from the draft EA as follows:

Realignment of this portion of the transmission line would require acquisition of 3 acres of new right-of-way from the Forest Service, as well as construction of two new access roads on Forest Service lands, totaling about 0.1 mile, to access the new structure locations.

2.2.7 Installation of Temporary Load Banks and Backup Generators

Section 2.2.7 has been revised from the draft EA as follows:

As discussed in Section 2.2.12, the existing transmission line would be taken out of service temporarily in two segments during construction. One segment would be Hills Creek Substation to Oakridge Substation; the other would be Oakridge Substation to Lookout Point Substation. When the Oakridge Substation to Lookout Point Substation segment is out of service, the city of Oakridge would be “islanded” from the main electrical grid and the only source of power available to serve Oakridge would be the two hydroelectric generators at Hills Creek Dam. The two generators, which can operate independently or together, each require a continuous minimum electrical load (demand) of 8,700 kilowatts (kW). If this minimum demand is not met, the generators can be damaged. The total daily electrical demand of Oakridge generally fluctuates between 2,200 kW and 6,000 kW; as such, the demand is not sufficient to prevent damage to the generator.

To compensate for this difference between the generators’ required minimum electrical demand and Oakridge’s actual demand, BPA would temporarily install ~~three~~ **up to four load banks** adjacent to structure 1/1 outside Hills Creek Substation. A load bank is a device that creates additional electrical demand and dissipates the excess power. For example, when the Hills Creek generator is producing the minimum 8,700 kW and the Oakridge demand is only 6,000 kW, the load banks would compensate by producing an additional 2,700 kW of demand to prevent damage to the generator. Each load bank would be capable of creating up to 2,500 kW of demand, so one or more units would operate at a given time depending on actual demand in Oakridge.

In addition to the load banks, BPA would also temporarily install up to six trailer-mounted backup diesel generators. The generators would provide backup power to the City of Oakridge in the unlikely event that the two generators at Hills Creek Dam experience a failure that results in an outage longer than a few hours. The load banks, generators, and associated equipment (e.g., transformers, jumper cables that connect to the transmission line) would occupy ~~an area about 200 feet by 210 feet (0.75 acre)~~ a 2-acre area adjacent to structure 1/1. The area would be graded and leveled with crushed rock and soil to provide a suitable base upon which to place the equipment.

The load banks would operate 24 hours per day for the estimated three to four months required to rebuild the Oakridge Substation to Lookout Point Substation segment of the transmission line. During operation the load banks would each produce between 82 to 84 dBA of noise at 10 feet, while the generators, if used, would each produce about 105 dBA of noise at 21 feet (Aaberg 2007). The load banks and generators would be removed after the line was constructed and energized.

2.2.11 Removal of Trees and Other Vegetation

The fourth paragraph of Section 2.2.11 has been revised from the draft EA as follows:

All areas disturbed during construction would be ~~reseeded~~ revegetated as appropriate. The Forest Service would provide a source for seed source or plant materials for revegetating disturbed areas on Forest Service land. Additionally, BPA and the Forest Service are

developing a revegetation plan for the new and abandoned right-of-way associated with the realignment in line mile three. The plan would focus on creating pollinator-supporting habitat by establishing a low growing plant community comprised of native shrubs and forbs. The emphasis on pollinator habitat for this area specifically addresses action items in the National Pollinator Strategy, the National Native Seed Strategy, the Department of Energy Pollinator Protection Plan, as well as other Forest Service strategies.

2.2.12 Construction Activities

Anticipated Construction Schedule

The last sentence of the first paragraph in the Anticipated Construction Schedule subsection of Section 2.1.12 has been modified from the draft EA as follows:

The current schedule calls for construction to begin around May ~~2018~~ 2019 and last for about ~~six~~ seven months, with the majority of work taking place during dry summer months.

2.5 Comparison of Alternatives

The following rows in Table 2-4 have been revised from the draft EA as follows:

Table 2-4. Comparison of the Potential Environmental Impacts by Alternative

Environmental Resource	Impacts of the Proposed Action Alternative	Impacts of the No Action Alternative
Socioeconomics and Public Health Services		
Noise, Public Health and Services Safety		
Greenhouses Gases		
Carbon dioxide emissions	2,700 <u>9,700</u> metric tons	Emissions from vehicles and equipment during routine maintenance and emergency repairs

2.6 Mitigation Measures

The following rows in Table 2-5 have been revised from the draft EA as follows:

Table 2-5. Mitigation Measures for the Proposed Action

Land Use, Recreation and Transportation
<ul style="list-style-type: none"> • <u>Coordinate with ODOT to obtain any permits that may be required for new approaches to ODOT-managed state right-of-way, work within the state highway right-of-way, or use of oversized or over weight vehicles.</u> • <u>Coordinate with Lane County Public Works to obtain any right-of-way permits that may be required for project activities, including hauling, within Lane County roadways and right-of-way.</u>
Vegetation
<ul style="list-style-type: none"> • Minimize the construction area (footprint) and disturbance to vegetation to the extent practicable, especially within <u>Forest Service and Corps habitat restoration areas, wetlands, and adjacent waterbody crossings.</u> • <u>In areas without wildlife or fire danger timing restrictions, conduct as much work as possible, including tree removal during the dry season to minimize erosion, and soil compaction.</u> • <u>Revegetate disturbed areas with native landowner-approved grasses, and forbs, or shrubs to ensure appropriate vegetation coverage and soil stabilization prior to rainy season (November 1).</u> • <u>Keep pulling/tensioning equipment inside the transmission line right-of-way, to the extent practicable.</u> • <u>Prior to construction, flag identify noxious weed infestation areas for avoidance (as practicable) and/or treat noxious weeds adjacent to access roads and structure sites (FW-259).</u> • <u>Develop a native shrub and forb planting plan that would benefit native pollinators for the abandoned and new right-of-way in line mile three.</u>
Wetlands, Floodplains and Groundwater
<ul style="list-style-type: none"> • <u>Avoid and minimize wetland impacts where possible by marking wetland boundaries, using temporary equipment mats, or only crossing wetlands during the dry season.</u>
Wildlife
<ul style="list-style-type: none"> • <u>Restore areas temporarily disturbed by construction to pre-construction condition.</u> • <u>If spotted owl nest sites are discovered prior to construction, implement the following restrictions:</u>
Greenhouse Gases
<ul style="list-style-type: none"> • <u>Obtain approval to operate temporary backup diesel generators under Lane County's General Air Contaminant Discharge permit administered by Lane Regional Air Protection Agency.</u>

2.7 Environmental Consultation, Review, and Permit Requirements

The following rows in Table 2-6 have been revised from the draft EA as follows:

Table 2-6. Environmental Consultation, Review, and Permit Requirements for the Rebuild Project

Permit, Consultation, or Compliance	Relevant Project Information
State and Local Plan and Program Consistency	
Oregon Statewide Planning Goals 2005-2014 Oregon Statewide Trails Plan 2008-2012 Oregon Statewide Comprehensive Outdoor Recreation Plan ORS 197.298 Lane County Code Lane County Comprehensive Plan Rivers to Ridges Vision and Strategies Oakridge-Westfir Community Trails Plan City of Oakridge, Oregon Strategic Plan 2013-2018 City of Oakridge Subdivision Code City of Oakridge Zoning Ordinance Oakridge Comprehensive Plan Westfir Comprehensive Plan Westfir Land Development Code	BPA strives to meet or exceed the substantive standards and policies of state and local plans and programs to the maximum extent practical. The project would not conflict with state or local planning as there would be no change in local land use due to the project—the work would mostly be within the existing transmission line right-of-way and access road footprint. BPA would coordinate with state and local agencies to obtain the necessary access and alert them of potential impacts from the Proposed Action, such as to utilities or floodplains. BPA would also coordinate with ODOT for modification to or any new access roads requiring access off an ODOT-managed state roadway to obtain any permits that may be required for new approaches to <u>ODOT-managed state right-of-way, work within the state highway right-of-way, or use of oversized or over weight vehicles.</u> BPA would also coordinate with Lane County Public Works to obtain any right-of-way permits that may be required for project activities, including hauling, within Lane County roadways and right-of-way.

Table 2-6. Environmental Consultation, Review, and Permit Requirements for the Rebuild Project (continued)

Vegetation, Wildlife, and Fish	
<p>Endangered Species Act (ESA) of 1973 16 U.S.C. § 1531 <i>et seq.</i></p>	<p>BPA prepared a Biological Assessment to address potential impacts on to ESA-listed fish, wildlife, and plant species. BPA received a letter of concurrence from USFWS on July 5, 2016. <u>Table E-3 in Appendix E summarizes preliminary effect findings for ESA-listed species known to occur within Lane County as listed in Exhibit 3 of the project's Biological Assessment.</u></p> <p>In October 2014, BPA initiated consultation with NMFS. The agencies <u>agreed to prepare a Programmatic Biological Opinion to address potential impacts to ESA-listed anadromous fish under their jurisdiction for this and other BPA transmission line projects. NMFS issued its Programmatic Biological Opinion on September 22, 2016. The Programmatic Biological Opinions allows for would likely be developed by NMFS and USFWS where incidental take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct) authorization is necessary of ESA-listed fish species provided BPA follows the prescribed reasonable and prudent measures designed to minimize take.</u> Take authorization is anticipated for Upper Willamette River Chinook because in-water work (fish salvage) would occur in an area where juvenile Chinook could be present. <u>To obtain approval for this incidental take, BPA would submit an Action Implementation form for NMFS prior to initiating construction. The likely outcome of the consultation would be an incidental take permit authorized by Section 10(a)(1)(B) for impacts related to listed fish, wildlife, or plant species during construction.</u></p> <p>To date, BPA has met with and/or communicated via telephone or phone on fifteen (15) separate occasions with USFWS, Forest Service, ODFW, and NMFS to discuss project impacts on ESA-listed species and to determine mitigation and minimization measures. A summary of this consultation can be found in Exhibit 2 of the project's Biological Assessment.</p>
<p>Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) of 1976 16 U.S.C. 1801 <i>et seq.</i></p>	<p>Essential Fish Habitat (EFH) is administered under the amended Magnuson-Stevens Act; EFH for Upper Willamette River Chinook salmon is found within streams in the project area. Compliance with the Magnuson-Stevens Act for Upper Willamette River Chinook salmon <u>has been satisfied by utilizing would be achieved through use of BPA's forthcoming Programmatic Biological Opinion (and the associated impact analysis of the EFH) for this project issued on September 22, 2016 during Section 7 Consultation with NMFS.</u></p>

Table 2-6. Environmental Consultation, Review, and Permit Requirements for the Rebuild Project (continued)

Cultural and Historic Resources	
<p>Antiquities Act of 1906 16 U.S.C. § 431-433</p> <p>Historic Sites Act of 1935 16 U.S.C. § 461-467</p> <p>National Historic Preservation Act (NHPA), as amended, inclusive of Section 106 16 U.S.C. § 470 <i>et seq.</i></p> <p>Archaeological Data Preservation Act of 1974 16 U.S.C. § 469 a-c</p> <p>Archaeological Resources Protection Act (ARPA) of 1979, as amended 16 U.S.C. § 470 aa-mm</p> <p>Native American Graves Protection and Repatriation Act (NAGPRA) 25 U.S.C. § 3001 <i>et seq.</i></p> <p>American Indian Religious Freedom Act of 1978 42 U.S.C. § 1996</p> <p>Indian Sacred Sites Executive Order 13007</p>	<p>BPA provided information about the Proposed Action and requested input on cultural resources from the following tribes: The Confederated Tribes of Siletz Indians of Oregon, Coquille Indian Tribe, Confederated Tribes of the Warm Springs Reservation, Cow Creek Band of Umpqua Tribe of Indians, the Confederated Tribes of Grand Ronde, and the Klamath Tribe. BPA also conducted field surveys of the area of potential effect to identify potential impacts to cultural resources from the Proposed Action (see Section 3.7).</p> <p>BPA's cultural resources contractor (Heritage Research Associates) obtained ARPA permits from the Forest Service and U.S. Army Corps of Engineers prior to conducting cultural surveys. Cultural resource surveys were conducted along the entire transmission line right-of-way and the access road system as described in Section 3.7.</p> <p>BPA is working with the Forest Service, Corps, and Oregon SHPO to determine the appropriate mitigation measures at any sites that could be affected by the Proposed Action. Mitigation measures would likely include additional site characterization before construction, and on-site monitoring during construction.</p> <p>If, during construction, previously unidentified cultural resources that would be adversely affected by the Proposed Action were found, BPA would follow all required procedures set forth in the NHPA, NAGPRA, Archaeological Resources Protection Act, and the American Indian Religious Freedom Act, <u>as applicable</u>.</p> <p>The following summarizes coordination to date about the project:</p> <ul style="list-style-type: none"> • 11/26/2013: BPA met with David Harrelson (Tribal Historic Preservation Office Program Manager Confederated Tribes of Grand Ronde) to discuss project. • 3/27/2014: BPA initiated consultation with Oregon SHPO, Confederated Tribes of Siletz Indians of Oregon, Coquille Indian Tribe, Confederated Tribes of the Warm Springs Reservation, Cow Creek Band of Umpqua Tribe of Indians, the Confederated Tribes of Grand Ronde, and the Klamath Tribe. • 4/22/2014: Confederated Tribes of the Warm Springs Reservation responded to BPA's initiation letter requesting that they receive a copy of the survey report. • 4/28/2014: Oregon SHPO responded to BPA's initiation letter and concurred with the area of potential effect. • 5/29/2014: Cow Creek Band of Umpqua Tribe of Indians responded that the proposed undertaking is outside the tribe's area of interest and therefore they defer comment to other interested tribes. • 9/14/2014: BPA executes a contract with the Confederated Tribes of Grand Ronde to research known, suspected, and potential gathering sites for culturally significant plants. • May 2016 <u>7/25/2016: Anticipated date for submitting BPA submitted survey report and its Determination of Effect to Oregon SHPO and tribes.</u> • <u>8/9/2016: Oregon SHPO issued a letter concurring with BPA's Determination of Effect.</u> • <u>5/15/2017: BPA completes the Section 106 Consultation by executing a Memorandum of Understanding with Oregon SHPO.</u>

Table 2-6. Environmental Consultation, Review, and Permit Requirements for the Rebuild Project (continued)

Air Quality and Greenhouse Gases	
Clean Air Act, as revised in 1990 42 USC § 4701	Air quality impacts of the Proposed Action would be low, localized, and temporary, as discussed in Section 3.11. Mitigation measures are identified to further reduce air quality impacts during construction.
Final Mandatory Reporting of Greenhouse Gases Rule 40 CFR 98	Greenhouse gas emissions were calculated for the Proposed Action construction activities that would produce greenhouse gases: construction of the transmission line and permanent vegetation removal, as discussed in Section 3.12. Greenhouse gas emissions would be below EPA's mandatory reporting threshold. The impact of the Proposed Action on greenhouse gas concentrations would be low.
Strengthening Federal Environmental, Energy, and Transportation Management Executive Order 13423	<u>BPA would obtain approval to operate temporary backup diesel generators under Lane County's General Air Contaminant Discharge Permit administered by Lane Regional Air Protection Agency.</u>
Federal Leadership in Environmental, Energy, and Economic Performance Executive Order 13514	
<u>ORS 468A – Air Quality</u>	

Changes to Chapter 3—Affected Environment and Environmental Consequences

3.1 Land Use, Recreation, and Transportation

3.1.1 Affected Environment

Table 3-2 has been revised from the draft EA to add the Lookout Point Reservoir Riparian Reserve classification as shown on the following page.

Table 3-2. Project Elements on Forest Service Land by Land Use Allocation and Riparian Reserve Classification

Project Element	All Public and Private Lands	Forest Service Lands – by Land Use Allocation									Forest Service Lands – by Riparian Reserve Classification						
		Administratively Withdrawn				Late Successional Reserve		Matrix			All Forest Service Lands	Class 1	Class 2	Class 3	Class 4	Lookout Point Reservoir	All Riparian Reserves
		9D	12A	13B	WA	16A	16B	11A	11C	11F							
Road Construction (miles)	0.1	-	-	-	-	-	-	-	-	<0.1	<0.1	<0.1	-	-	-	-	<0.1
Road Reconstruction (miles)	1	-	-	-	-	<0.1	-	-	0.3	0.3	0.6	<0.1	-	-	-	-	<0.1
Road Improvements (miles)	20	1.5	-	1.0	-	4.0	0.5	-	-	9.0	16.0	2.5	1.5	0.1	1.4	<0.1	5.5
Direction of Travel (miles)	35	0.2	0.2	0.1	0.3	3.0	0.1	0.5	1.0	11.0	16.4	-	-	-	-	0.5	0.5
Road Abandonment and Rehabilitation (miles)	0.5	-	-	-	-	-	-	-	-	0.5	0.5	-	-	-	-	-	-
Access Trail Construction (miles)	2	-	-	-	-	0.5	-	-	-	1.5	2.0	-	-	-	-	0.1	0.1
Access Trail Reconstruction (miles)	0.1	-	-	-	-	-	-	-	-	0.1	0.1	-	-	-	-	-	-
Structures (number of structures)	223	11	-	4	-	24	-	-	-	68	107	11	13	1	14	2	39 41
Tree Removal Outside of Reroute Areas in Miles 2 & 3 (number of trees)	2,700	20	-	-	-	120	5	-	110	290	545	80	95	40	25	10	240 250
Tree Removal Reroute Mile 2 (number of trees)		-	-	-	-	20	-	-	-	110	130	110	-	-	-	-	110
Tree Removal Reroute Mile 3 (number of trees)		-	-	-	-	-	-	-	-	970	970	320	-	-	-	-	320

Notes:

1. Dashes represent zero values.
2. Removal of trees as described in this EA represents tree cutting; trees may or may not be removed from the site depending on landowner preferences. The Forest Service would be responsible for determining how trees removed from Forest Service land would be disposed of – this could include, but is not limited to firewood cutting, stockpiling for stream projects, or leaving it in place as coarse woody debris

3.2 Geology and Soils

3.2.2 Environmental Consequences-Proposed Action

The sixth sentence of the last paragraph of Section 3.2.2 has been revised from the draft EA as follows:

Pole wraps, or other encapsulating methods, would be used on structures located within 50 feet of wetlands or streams or within a 100-year ~~wetlands~~ wetlands floodplain to contain PCP and help prevent potential ~~it from~~ leaching into surrounding soils (see Section 3.5).

3.3 Vegetation

3.3.1 Affected Environment

A new subheading and paragraph has been added to the end of Section 3.3.1 as follows:

Habitat Restoration Areas

In 2013, BPA executed a Memorandum of Understanding with Oregon Department of Agriculture, Oregon Hunters Association, the Corps, and the Forest Service to cooperatively manage vegetation within the transmission line right-of-way along the Lookout Point Reservoir (line miles 17 to 26 approximately). The objective of the Memorandum of Understanding was to cooperatively promote continued improvement of wildlife habitat and native plant communities within the right-of-way, while still allowing BPA to comply with its regulatory requirements for vegetation clearance around its transmission lines. Since the parties executed the Memorandum of Understanding, the Forest Service has conducted seeding and planting efforts totaling about 22 acres within BPA's right-of-way between line miles 13 and 20, while the Corps has conducted planting efforts totaling about 2 acres between line miles 21 and 22. Some of the native species utilized in these revegetation efforts include Roemer's fescue (*Festuca idahoensis*), prairie Junegrass (*Koeleria macrantha*), redosier dogwood (*Cornus sericea*), blue elderberry (*Sambucus nigra*), snowberry (*Symphoricarpos albus*), and chokecherry (*Prunus virginiana*).

3.3.2 Environmental Consequences-Proposed Action

The second paragraph of Section 3.3.2 has been revised from the draft EA as follows:

Within about 26 native wetland and riparian zones, construction activities would include clearing or crushing vegetation in order to replace wood-pole hardware, such as guy wires and guy wire anchors. Vegetation would be ~~removed~~ mowed or cut along the margins of the existing access roads and at the base of structures to aid in construction and safe operation of the line. As described in Section 2.2.11, a total of 51 acres of vegetation would be disturbed or cleared for construction activities, and up to 2,700 trees would require removal. With the exception of 4 acres cleared for the line mile two and three realignments, most of the clearing would occur in small discrete areas of tree removal (e.g., 1 to 5 trees) distributed along the entire 26 mile right-of-way. Consistent with the Forest Service National Desk Guide to Preparing Vegetation Management Procedures for Power Line Authorizations, BPA would

lop and scatter debris from tree and vegetation removed in order to reduce the risk of creating fuels for wildfire.

3.4 Streams and Fish

3.4.2 Environmental Consequences-Proposed Action

Fish

The first paragraph under the subheading Fish in Section 3.4.2 has been revised as follows:

Pursuant to the requirements of Section 7(c) of the ESA, a BA that addresses project effects on listed fish species and their designated critical habitat was prepared, and BPA consulted with USFWS for Bull Trout (Threatened). ~~BPA is currently in consultation~~ consulted with NMFS for Upper Willamette River Chinook (Threatened). A Biological Evaluation (BE) to address potential impacts to Forest Service Sensitive fish species ~~is also being~~ was prepared, while U.S. Forest Service Aquatic Conservation Strategy objectives are addressed separately in Appendix D. ~~BPA will comply with all conditions of the BA and BE, as required by USFWS and NMFS. All mitigation measures identified in the BA and BE have been incorporated into~~ Table 2-5.

The last sentence of the last paragraph under the subheading Fish in Section 3.4.2 has been revised as follows:

~~In addition to t~~The mitigation measures listed in Section 2.6, BPA will implement any other include all measures that stem from consultation with USFWS, as well as those applicable measures from the and NMFS Programmatic Biological Opinion.

3.6 Wildlife

3.6.1 Affected Environment

Special-Status Wildlife Species

The following sentence has been added to the second paragraph of the Special-Status Wildlife Species subsection of Section 3.6.1:

Table E-3 in Appendix E summarizes preliminary effect findings for ESA-listed species known to occur within Lane County as listed in Exhibit 3 of the project's Biological Assessment.

3.7 Cultural Resources

3.7.2 Environmental Consequences

Historical Resources (Structures)

The last sentence of the first paragraph under the Historical Resources (Structures) subsection of Section 3.6.2 has been revised from the draft EA as follows:

However, ~~through consultation with the State Historic Preservation Office this effect would be reduced mitigated by documentation of the original line construction through development of mitigation measures in consultation with the SHPO.~~

3.10 Noise, Public Health, and Safety

3.10.2 Environmental Consequences—Proposed Action

Noise

A new paragraph has been added following the fifth paragraph under the Noise subsection of Section 3.10.2 in the draft EA as follows:

Noise levels from the use of the temporary diesel backup generators are predicted to be about 80 dBA at the property line, which is above the level of ambient conditions. Although it is unlikely that the generators at Hills Creek Dam would fail and necessitate use of the diesel backup generators, if the diesel generators were used, they would not be audible to the closest noise-sensitive land uses (residences) located about 1.5 miles from the generator site; at that distance, noise from the generators would be less than 55 dBA, which is within the range of ambient conditions. Therefore noise from the diesel generators would not be disruptive to noise-sensitive land uses.

3.12 Greenhouse Gases

3.12.2 Environmental Consequences—Proposed Action

Direct Emissions

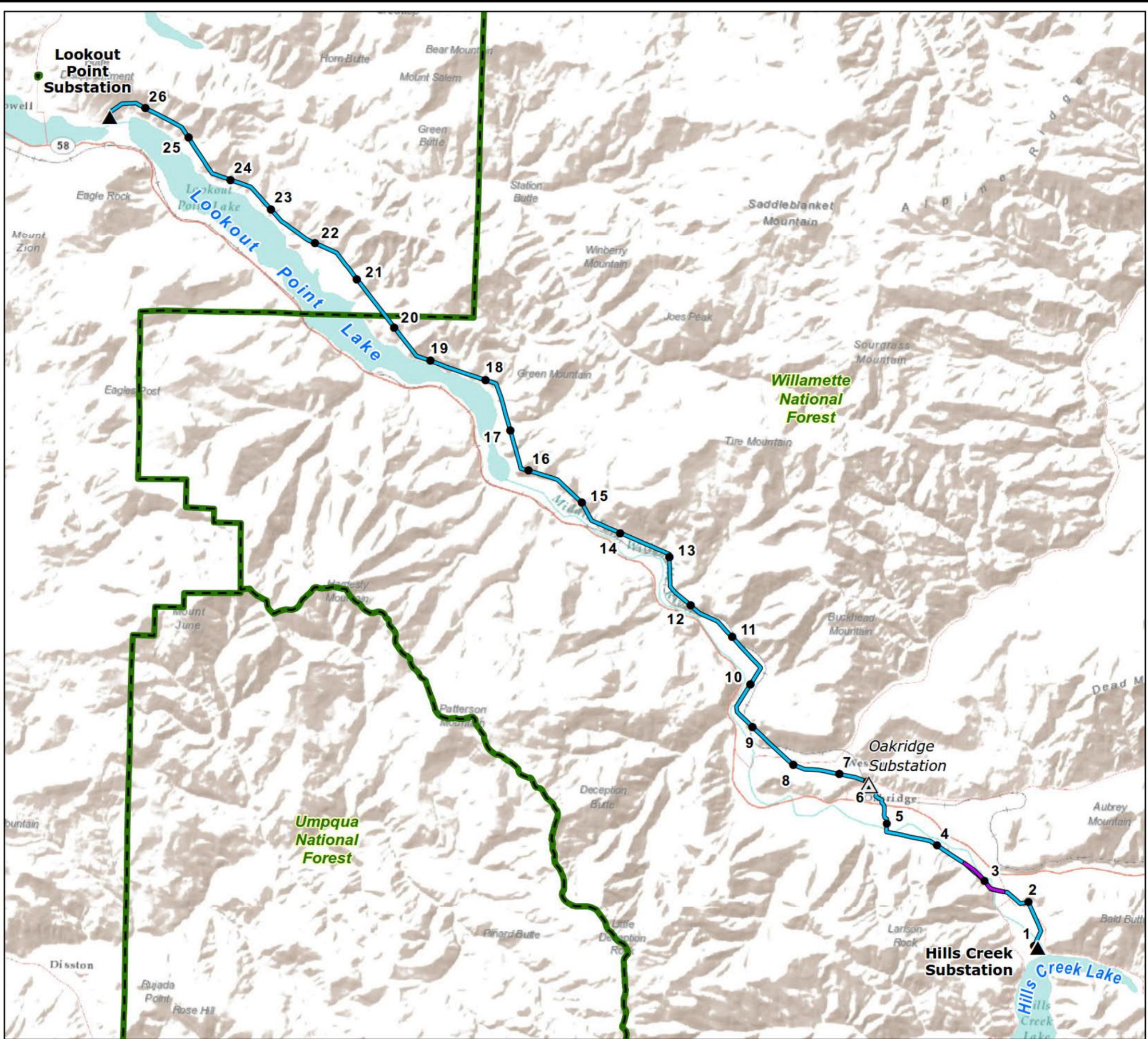
The second paragraph under the Direct Emissions subsection of Section 3.12.2 has been revised from the draft EA as follows:

The Proposed Action could result in an estimated total of 2,700 metric tons of carbon dioxide emissions through the use of vehicles, equipment, and helicopters during construction activities. If the six temporary diesel generators were used during construction, they would emit an estimated 230 metric tons of carbon dioxide per day. If the diesel generators were used for an entire month, which is an unlikely scenario, they would produce an estimated 7,000 metric tons of additional carbon dioxide emissions. Greenhouse gas emissions ~~associated with equipment operation and vehicle use~~ were overestimated to account for all potential construction activities and associated material deliveries to and from the construction site.

Changes to Appendix A – Project Maps

The maps in Appendix A have been revised from the draft EA to include the Lookout Point Reservoir Riparian Reserve classification. The replacement maps start on the following page.

Hills Creek - Lookout Point Transmission Line Rebuild Project Lane County, OR



— Hills Creek - Lookout Point Transmission Line

● BPA Transmission Tower (First of Mile)

— Transmission Line Reroute

● Reroute Tower

▲ BPA Substation

△ Non-BPA Substation

▨ Bureau of Land Management

▨ Corps of Engineers

▨ State Land

BPA Planned Access Roads

— New Construction

- - - New Construction (trail)

— Reconstruction

- - - Reconstruction (trail)

— Improvement

— Existing (no road work)

— Acquire Road Easement

— Temporary Bridge

— Culvert

— Ford

— Gate

Trees to be Removed

Species, DBH, Count

● AS (Quaking Aspen), 10-14in

● BM (Bigleaf Maple), 10-14in

● CH (Cherry spp), 10-14in

● CW (Cottonwood), 10-14in

● DF (Douglas Fir), 10-14in

● GF (Grand Fir), 10-14in

● IC (Incense Cedar), 10-14in

● OA (Oregon Ash), 10-14in

● OT (Other Species), 10-14in

● PM (Pacific Madrone), 10-14in

● RA (Red Alder), 10-14in

● RC (Western Red Cedar), 10-14in

● WH (Western Hemlock), 10-14in

USFS Management Designation

11A, Matrix land

11C, Matrix land

11D, Matrix land

11E, Matrix land

11F, Matrix land

12A, Administratively withdraw

13A, Administratively withdraw

13B, Administratively withdraw

14A, Matrix land

16A, Late Successional Reserve

16B, Late Successional Reserve

6E, Congressionally withdrawn

9C, Administratively withdraw

9D, Administratively withdraw

WA, Administratively withdraw

USFS Riparian Classification

Riparian Class 1

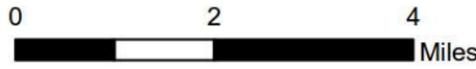
Riparian Class 2

Riparian Class 3

Riparian Class 4

Lookout Point Reservoir
Riparian Reserve

October 2016





Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Transmission Line Reroute
- Reroute Tower
- BPA Substation
- Corps of Engineers

- BPA Planned Access Roads**
- New Construction
- Improvement
- Existing (no road work)
- Acquire Road Easement

- Culvert
- Gate

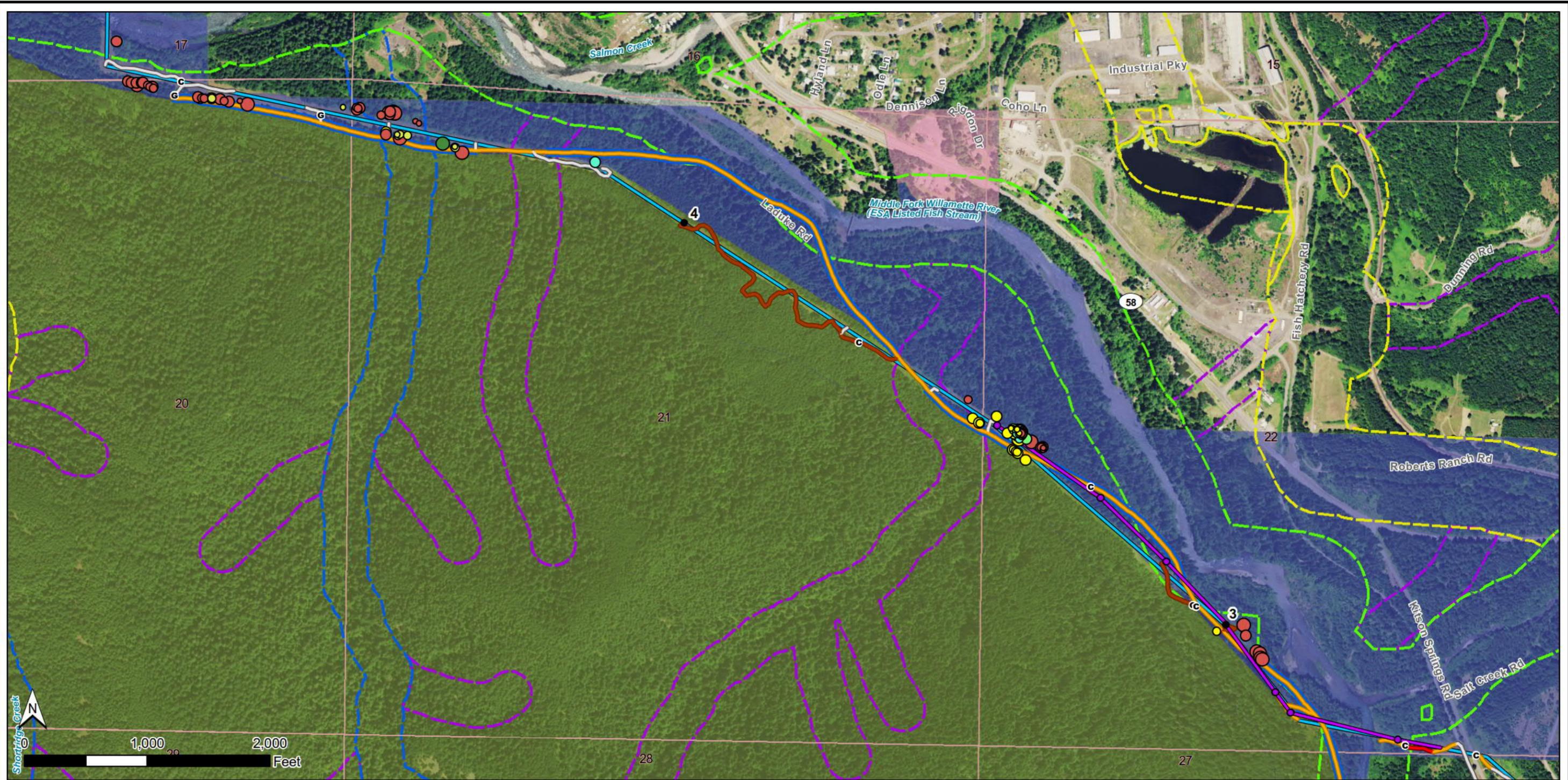
- Trees to be Removed**
- BM, 10-14in
- CW, 10-14in
- CW, 15-20in
- CW, 21-28in
- CW, 29-48in
- DF, 10-14in
- DF, 15-20in

- DF, 21-28in
- IC, 15-20in
- RA, 2-9in
- RA, 10-14in
- RA, 15-20in
- RC, 21-28in
- WH, 21-28in

- USFS Management Designation**
- 11D, Matrix land
- 11E, Matrix land
- 11F, Matrix land
- 16A, Late Successional Reserve
- WA, Administratively withdraw

- USFS Riparian Classification**
- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016



- | | |
|---|---|
| Hills Creek - Lookout Point Transmission Line | BPA Planned Access Roads
New Construction |
| BPA Transmission Tower (First of Mile) | Reconstruction |
| Transmission Line Reroute | Improvement |
| Reroute Tower | Existing (no road work) |
| | Acquire Road Easement |

- c** Culvert
G Gate

- Trees to be Removed**
- BM, 2-9in
 - BM, 10-14in
 - CW, 2-9in
 - CW, 10-14in
 - CW, 15-20in
 - CW, 21-28in
 - DF, 2-9in
 - DF, 10-14in

- DF, 15-20in
- DF, 21-28in
- GF, 21-28in
- IC, 10-14in
- IC, 15-20in
- RA, 2-9in
- RA, 10-14in
- RA, 15-20in

- USFS Management Designation**
- 11F, Matrix land
 - 13B, Administratively withdraw
 - 16A, Late Successional Reserve

- USFS Riparian Classification**
- Riparian Class 1
 - Riparian Class 2
 - Riparian Class 3
 - Riparian Class 4



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- | | |
|---|---|
| Hills Creek - Lookout Point Transmission Line | BPA Planned Access Roads Reconstruction |
| BPA Transmission Tower (First of Mile) | Improvement |
| Non-BPA Substation | Existing (no road work) |
| | Acquire Road Easement |

- | |
|---------|
| Culvert |
| Gate |

Trees to be Removed

- BM, 2-9in
- BM, 10-14in
- CW, 2-9in
- CW, 10-14in

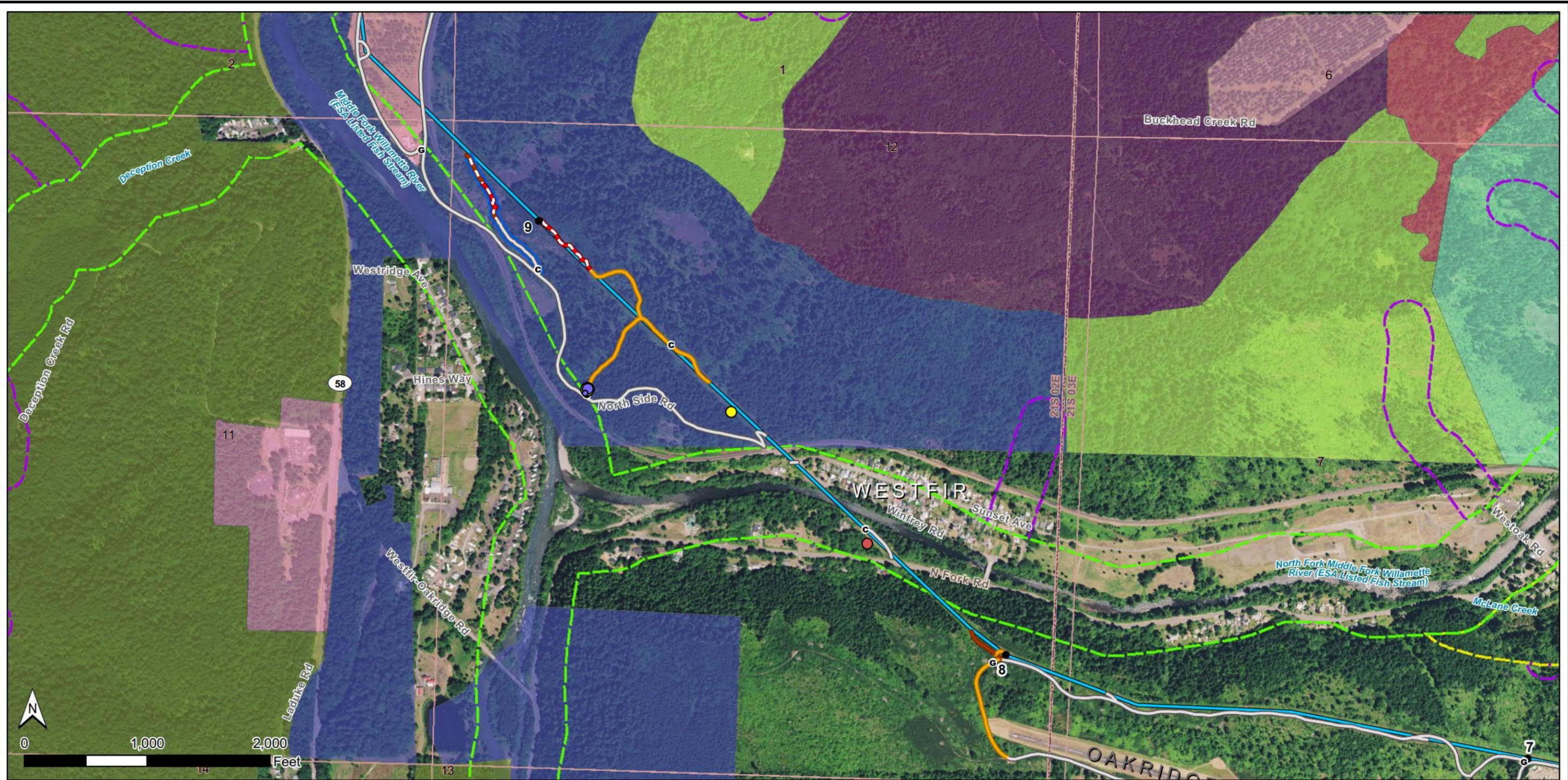
- CW, 15-20in
- DF, 15-20in
- DF, 21-28in
- GF, 21-28in
- OT, 10-14in

USFS Management Designation

- 11F, Matrix land
- 12A, Administratively withdraw
- 13A, Administratively withdraw
- 16A, Late Successional Reserve

USFS Riparian Classification

- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

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POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)

BPA Planned Access Roads

- New Construction (trail)
- Reconstruction
- Reconstruction (trail)
- Improvement
- Existing (no road work)
- Acquire Road Easement

- Culvert
- Gate

Trees to be Removed

- CW, 15-20in
- DF, 15-20in

- DF, 21-28in
- RC, 2-9in
- RC, 15-20in

USFS Management Designation

- 11C, Matrix land
- 11F, Matrix land
- 13B, Administratively withdraw
- 14A, Matrix land
- 16A, Late Successional Reserve
- 6E, Congressionally withdrawn
- 9C, Administratively withdraw

USFS Riparian Classification

- Riparian Class 1
- Riparian Class 2
- Riparian Class 4

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Existing (no road work)
- Acquire Road Easement

- BPA Planned Access Roads**
- Existing (no road work)
 - Acquire Road Easement

- Culvert
- Gate

Trees to be Removed

- AS, 10-14in
- BM, 15-20in
- CW, 2-9in
- CW, 10-14in
- CW, 15-20in

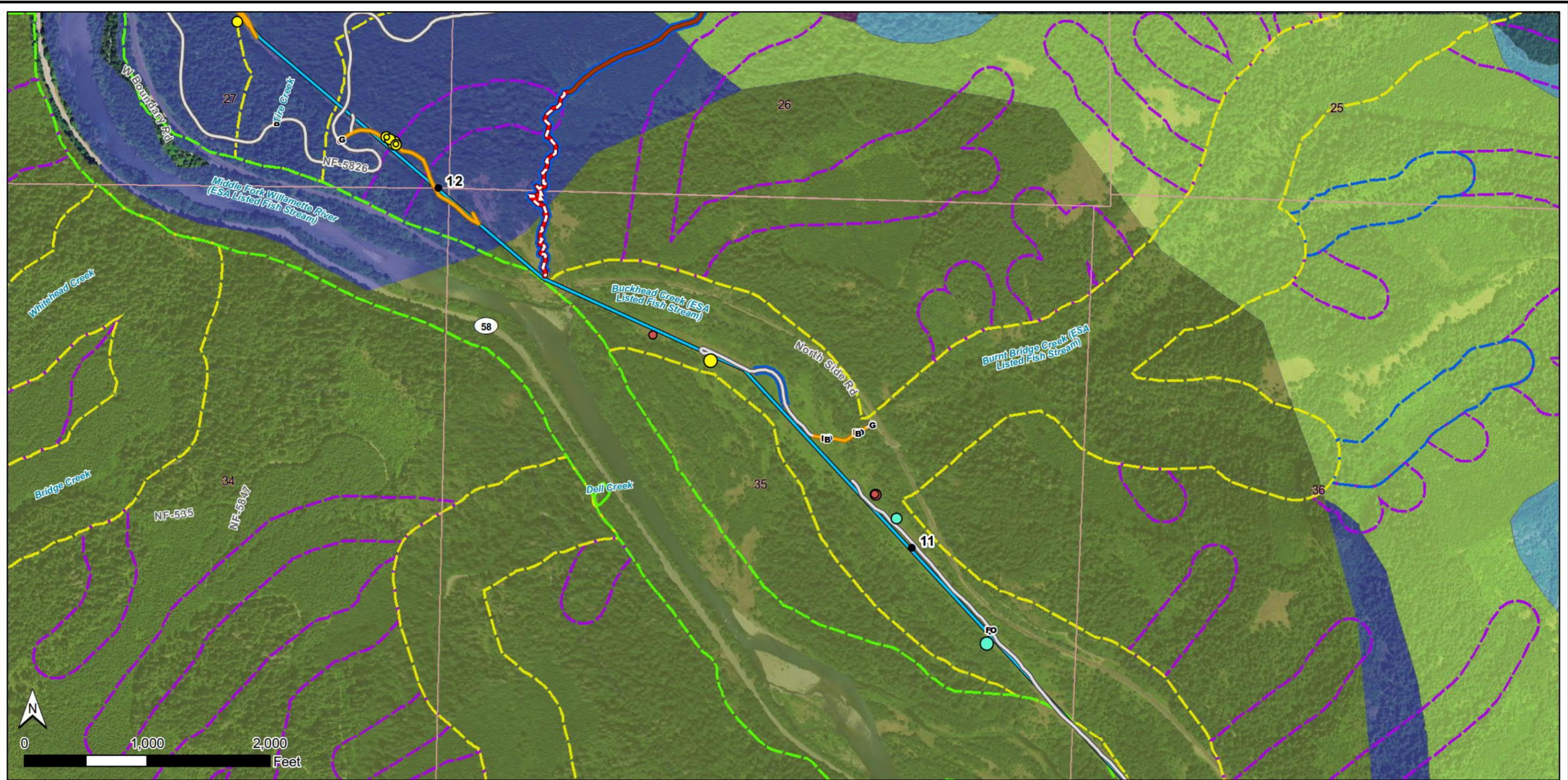
- CW, 21-28in
- OA, 10-14in
- RA, 15-20in
- WH, 2-9in
- WH, 10-14in

USFS Management Designation

- 11A, Matrix land
- 11C, Matrix land
- 11F, Matrix land
- 13B, Administratively withdraw
- 14A, Matrix land
- 16A, Late Successional Reserve
- 16B, Late Successional Reserve

USFS Riparian Classification

- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)

- BPA Planned Access Roads**
- New Construction (trail)
 - Reconstruction
 - Improvement
 - Existing (no road work)
 - Acquire Road Easement

- Temporary Bridge
- Culvert
- Ford
- Gate

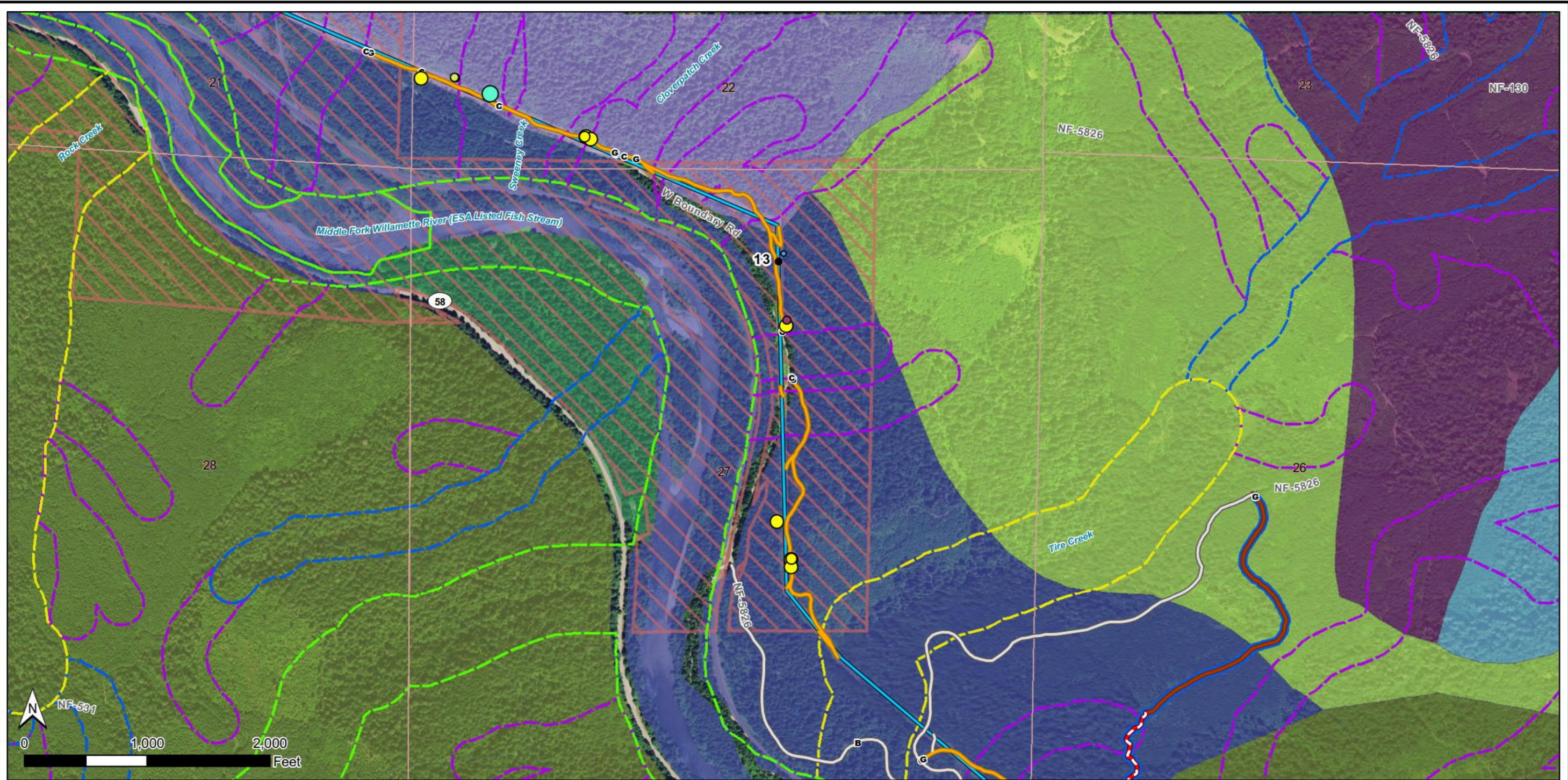
- Trees to be Removed**
- CW, 10-14in
 - CW, 15-20in
 - DF, 2-9in

- DF, 15-20in
- DF, 21-28in
- IC, 15-20in
- IC, 21-28in

- USFS Management Designation**
- 11A, Matrix land
 - 11C, Matrix land
 - 11F, Matrix land
 - 14A, Matrix land
 - 16A, Late Successional Reserve
 - 16B, Late Successional Reserve

- USFS Riparian Classification**
- Riparian Class 1
 - Riparian Class 2
 - Riparian Class 3
 - Riparian Class 4

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Corps of Engineers

- BPA Planned Access Roads**
- New Construction
- New Construction (trail)
- Reconstruction
- Improvement
- Existing (no road work)
- Acquire Road Easement

- Temporary Bridge
- Culvert
- Gate

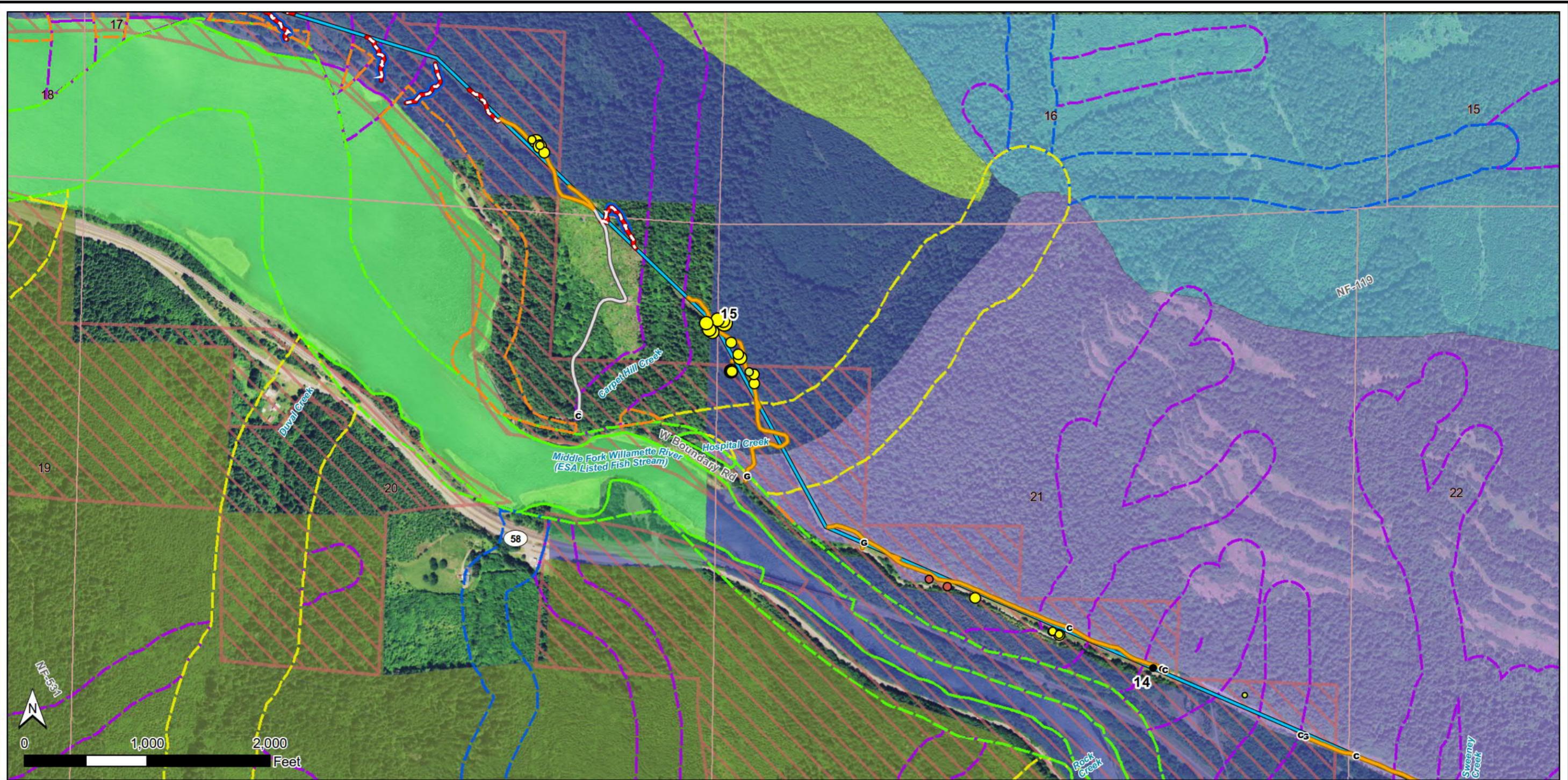
- Trees to be Removed**
- BM, 10-14in
- DF, 15-20in
- DF, 21-28in

- IC, 29-48in
- PM, 10-14in
- WH, 2-9in

- USFS Management Designation**
- 11A, Matrix land
- 11C, Matrix land
- 11F, Matrix land
- 12A, Administratively withdraw
- 14A, Matrix land
- 16A, Late Successional Reserve
- 9D, Administratively withdraw

- USFS Riparian Classification**
- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- | | |
|---|--------------------------|
| Hills Creek - Lookout Point Transmission Line | BPA Planned Access Roads |
| BPA Transmission Tower (First of Mile) | New Construction (trail) |
| Corps of Engineers | Improvement |
| | Existing (no road work) |
| | Acquire Road Easement |

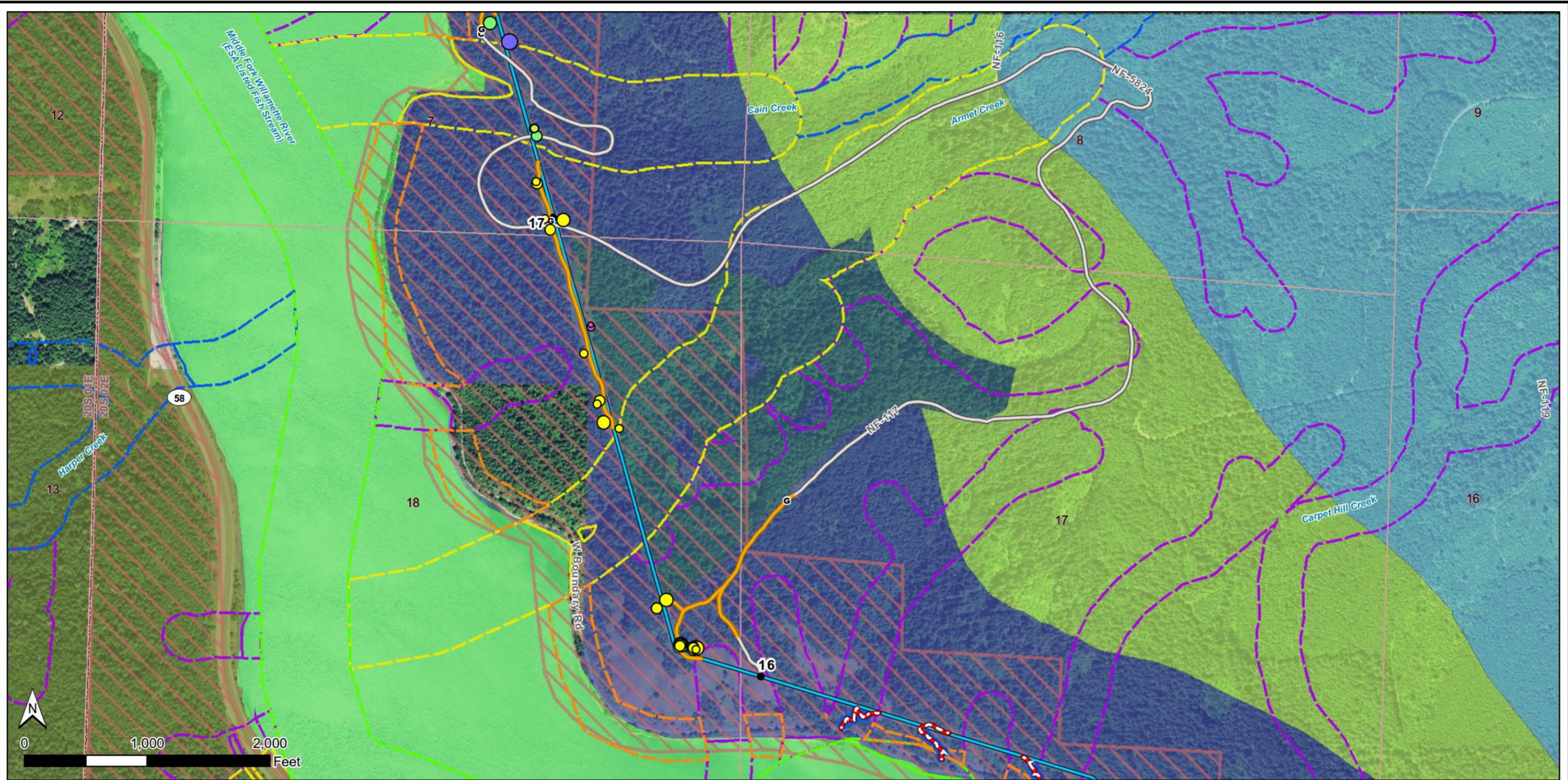
- | | | |
|---|---------|----------------------------|
| c | Culvert | Trees to be Removed |
| g | Gate | BM, 2-9in |
| | | BM, 10-14in |
| | | CW, 10-14in |

- | | |
|--|-------------|
| | DF, 10-14in |
| | DF, 15-20in |
| | DF, 21-28in |
| | DF, 29-48in |

- | | |
|--|--------------------------------|
| | 11A, Matrix land |
| | 11C, Matrix land |
| | 11F, Matrix land |
| | 12A, Administratively withdraw |
| | 16A, Late Successional Reserve |
| | 9D, Administratively withdraw |
| | WA, Administratively withdraw |

- | | |
|--|--|
| | Riparian Class 1 |
| | Riparian Class 2 |
| | Riparian Class 3 |
| | Riparian Class 4 |
| | Lookout Point Reservoir Riparian Reserve |

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

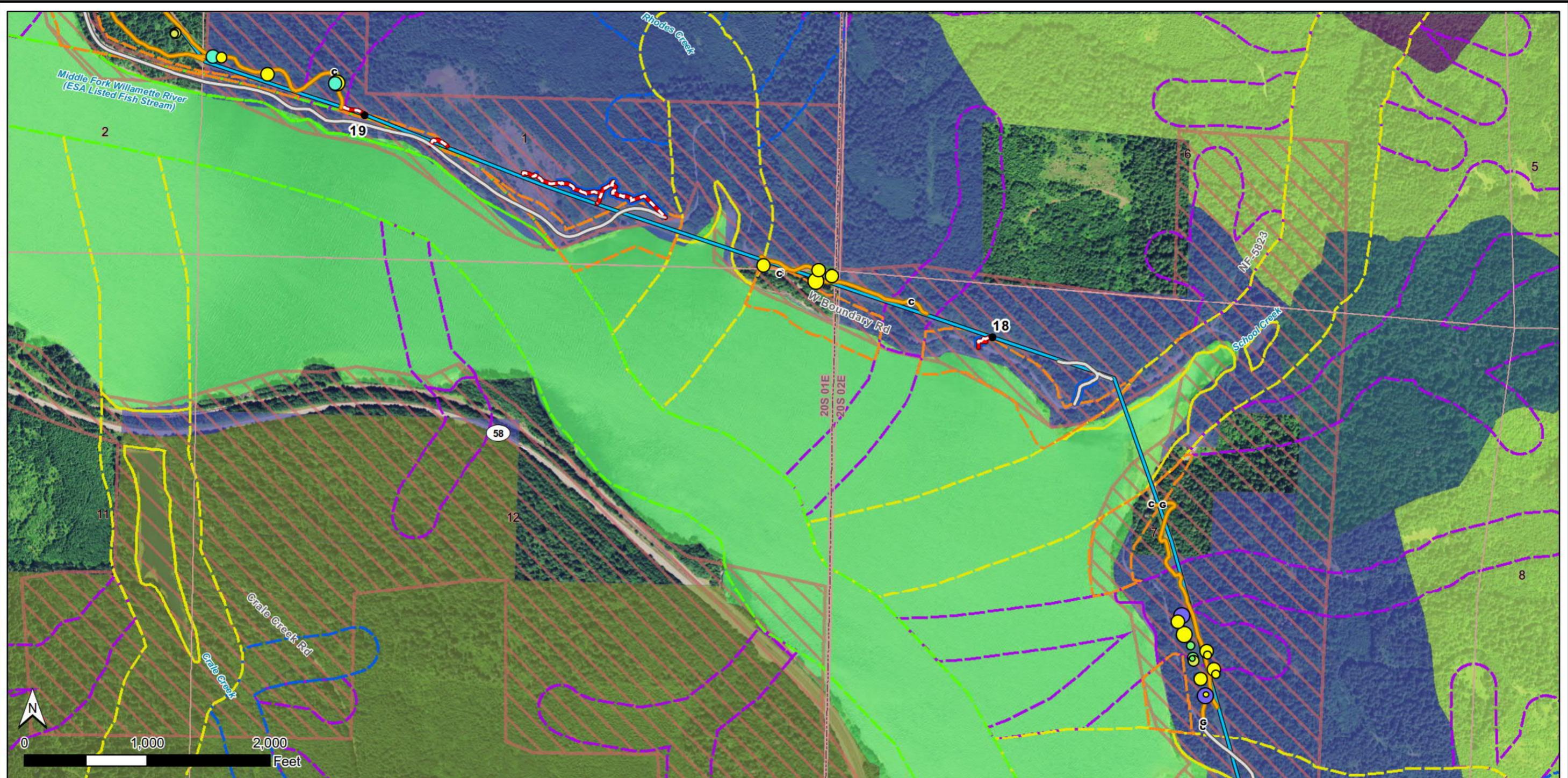
October 2016

Bonneville
POWER ADMINISTRATION



<ul style="list-style-type: none"> Hills Creek - Lookout Point Transmission Line BPA Transmission Tower (First of Mile) Corps of Engineers 	<ul style="list-style-type: none"> BPA Planned Access Roads New Construction (trail) Improvement Existing (no road work) Acquire Road Easement 	<ul style="list-style-type: none"> c Culvert g Gate 	<ul style="list-style-type: none"> Trees to be Removed BM, 10-14in CH, 2-9in CH, 10-14in DF, 10-14in DF, 15-20in 	<ul style="list-style-type: none"> DF, 21-28in RA, 10-14in RA, 15-20in RA, 21-28in RC, 29-48in 	<ul style="list-style-type: none"> USFS Management Designation 11A, Matrix land 11C, Matrix land 11F, Matrix land 16A, Late Successional Reserve 16B, Late Successional Reserve WA, Administratively withdraw 	<ul style="list-style-type: none"> USFS Riparian Classification Riparian Class 1 Riparian Class 2 Riparian Class 3 Riparian Class 4 Lookout Point Reservoir Riparian Reserve
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Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Corps of Engineers

- BPA Planned Access Roads**
- New Construction (trail)
- Improvement
- Existing (no road work)
- Acquire Road Easement

- c** Culvert
- g** Gate

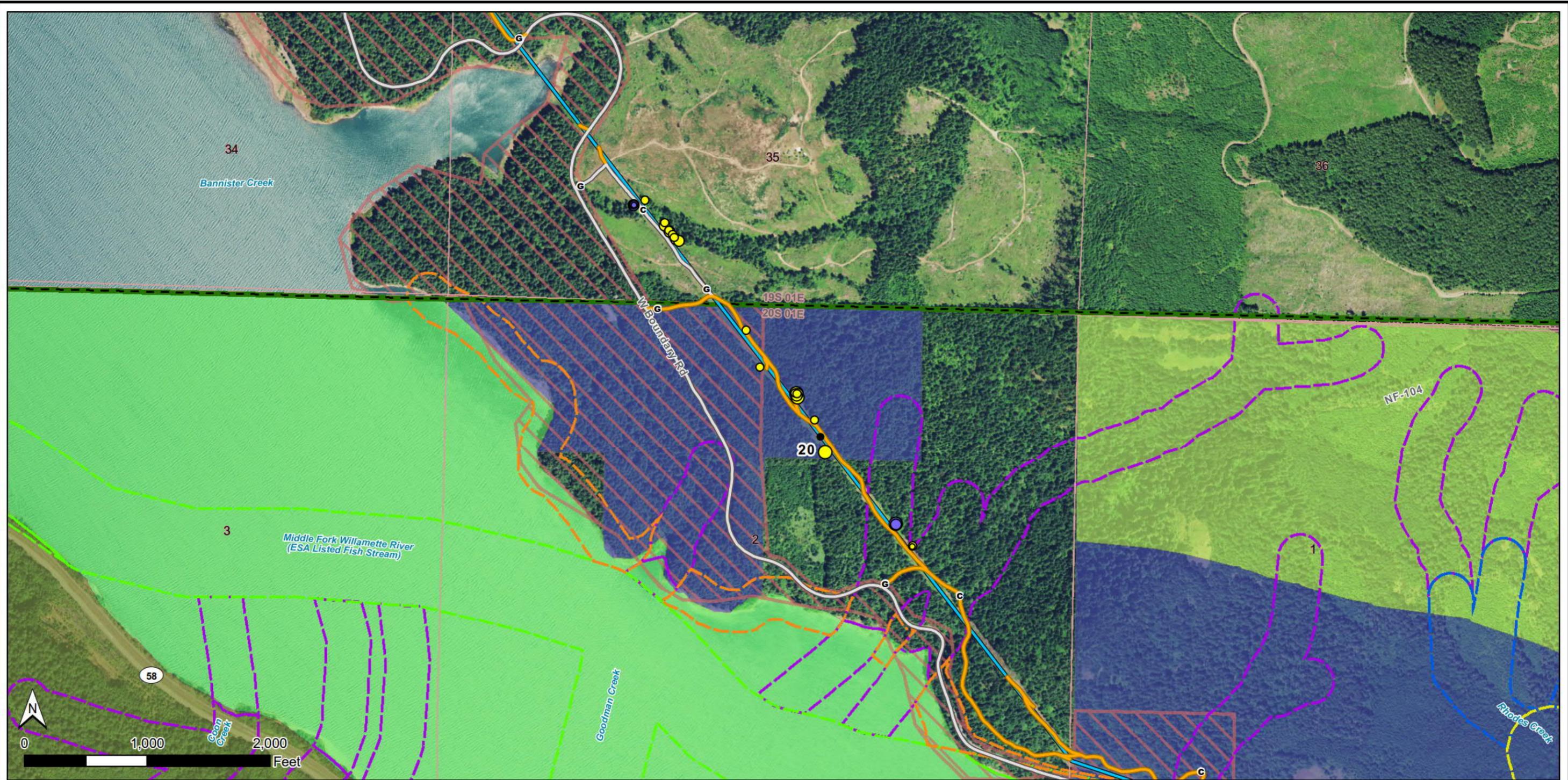
- Trees to be Removed**
- BM, 10-14in
- BM, 15-20in
- DF, 2-9in
- DF, 10-14in
- DF, 15-20in
- DF, 21-28in

- DF, 29-48in
- IC, 21-28in
- RA, 2-9in
- RA, 10-14in
- RA, 15-20in
- RC, 29-48in

- USFS Management Designation**
- 11C, Matrix land
- 11F, Matrix land
- 14A, Matrix land
- 16A, Late Successional Reserve
- 16B, Late Successional Reserve
- WA, Administratively withdraw

- USFS Riparian Classification**
- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4
- Lookout Point Reservoir Riparian Reserve

Aerial Imagery Source: National Agriculture Imagery Program (NAIP) 2014



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Corps of Engineers

- BPA Planned Access Roads Improvement
- Existing (no road work)
- Acquire Road Easement

- Culvert
- Gate

Trees to be Removed

- DF, 2-9in
- DF, 10-14in
- DF, 15-20in
- DF, 21-28in

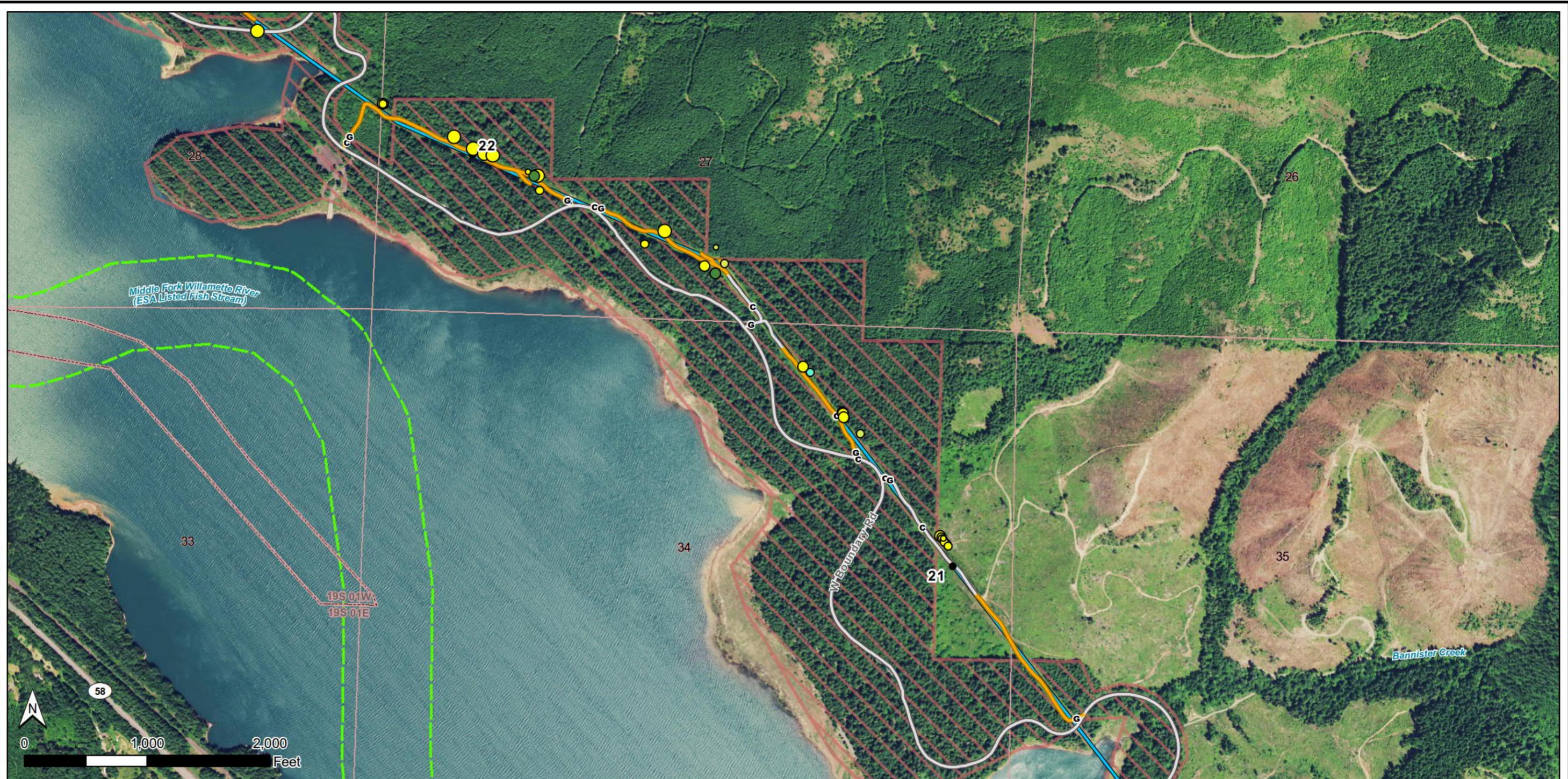
- RC, 2-9in
- RC, 10-14in
- RC, 15-20in
- RC, 21-28in

USFS Management Designation

- 11C, Matrix land
- 11F, Matrix land
- 14A, Matrix land
- 16A, Late Successional Reserve
- WA, Administratively withdraw

USFS Riparian Classification

- Riparian Class 1
- Riparian Class 2
- Riparian Class 3
- Riparian Class 4
- Lookout Point Reservoir Riparian Reserve



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- | | |
|---|--------------------------------------|
| Hills Creek - Lookout Point Transmission Line | BPA Planned Access Roads Improvement |
| BPA Transmission Tower (First of Mile) | Existing (no road work) |
| Corps of Engineers | Acquire Road Easement |

- | | |
|----------|---------|
| c | Culvert |
| g | Gate |

- Trees to be Removed**
- BM, 2-9in
 - BM, 10-14in
 - DF, 2-9in
 - DF, 10-14in

- DF, 15-20in
- DF, 21-28in
- GF, 15-20in
- IC, 10-14in

- USFS Riparian Classification**
- Riparian Class 1



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Corps of Engineers
- State Land

- BPA Planned Access Roads**
- Improvement
- Existing (no road work)
- Acquire Road Easement

- c** Culvert
- g** Gate

Trees to be Removed

- BM, 10-14in
- BM, 15-20in
- CW, 2-9in
- CW, 10-14in

- DF, 2-9in
- DF, 10-14in
- DF, 15-20in
- DF, 21-28in

USFS Riparian Classification

- Riparian Class 1
- Riparian Class 2



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016



- Hills Creek - Lookout Point Transmission Line
- BPA Transmission Tower (First of Mile)
- Corps of Engineers
- State Land

- BPA Planned Access Roads Improvement
- Existing (no road work)
- Acquire Road Easement

- c** Culvert
- g** Gate

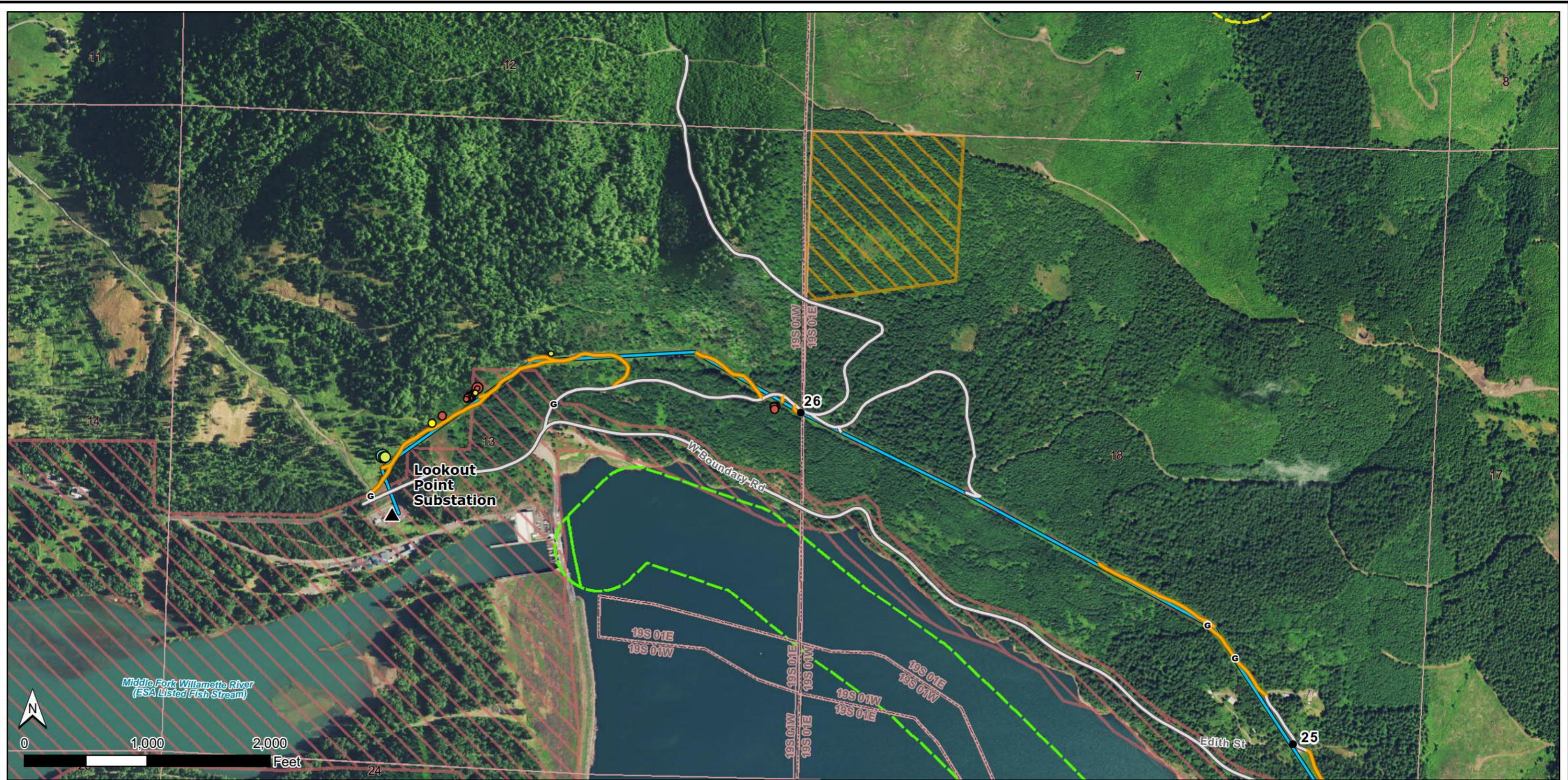
Trees to be Removed

- BM, 2-9in
- BM, 10-14in
- DF, 2-9in
- DF, 10-14in
- DF, 15-20in
- DF, 21-28in
- DF, 29-48in
- GF, 10-14in

- GF, 15-20in
- IC, 15-20in
- IC, 21-28in
- IC, 29-48in
- PM, 2-9in
- PM, 10-14in
- RC, 10-14in
- RC, 15-20in
- WH, 15-20in

USFS Riparian Classification

- Riparian Class 1



Hills Creek - Lookout Point Transmission Line Rebuild Project

Lane County, OR

October 2016

Bonneville
POWER ADMINISTRATION



— Hills Creek - Lookout Point
Transmission Line

● BPA Transmission Tower
(First of Mile)

▲ BPA Substation

▨ Bureau of Land Management

▨ Corps of Engineers

BPA Planned Access Roads

— Improvement

— Existing (no road work)

— Acquire Road Easement

○ Gate

Trees to be Removed

● BM, 2-9in

● BM, 15-20in

● CW, 2-9in

● CW, 10-14in

● CW, 15-20in

● DF, 10-14in

● IC, 15-20in

● IC, 21-28in

USFS Riparian Classification

▨ Riparian Class 1

▨ Riparian Class 2

Changes to Appendix E – Wildlife Data Tables

A new table has been added to Appendix E as presented on the following page. This table comes from the Biological Assessment prepared for BPA's consultation with USFWS and summarizes preliminary effect findings for ESA-listed species known to occur within Lane County. Pursuant to Section 7(c) of the ESA, the Biological Assessment addressed effects to the Northern spotted owl and Bull trout.

Table E-3. ESA-Listed Threatened, Endangered, and Candidate Species known to occur within Lane County, Oregon

Species (Scientific name)	Federal Status	Likely to occur within Project Area?	Critical Habitat within Project Area?	Preliminary Finding
Gray wolf (<i>Canis lupus</i>)	Endangered; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Streaked horned lark (<i>Eremophila alpestris strigata</i>)	Threatened; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Willamette daisy (<i>Erigeron decumbens</i> var. <i>decumbens</i>)	Endangered; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Taylor's checkerspot butterfly (<i>Euphydryas editha taylori</i>)	Endangered; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Fender's blue butterfly (<i>Icaricia icarioides fenderi</i>)	Endangered; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Bradshaw's desert-parsley (<i>Lomatium bradshawii</i>)	Endangered	No	No	No Effect to species
Kincaid's Lupine (<i>Lupinus sulphureus</i> ssp. <i>Kincaidii</i>)	Threatened; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Canada lynx (<i>Lynx canadensis</i>)	Threatened; Critical habitat designated	No	No	No Effect to species; No effect to critical habitat
Fisher (<i>Martes pennanti</i>)	Proposed threatened	No	None Proposed at this time.	Not likely to jeopardize continued existence or adversely modify proposed critical habitat
Oregon spotted frog (<i>Rana pretiosa</i>)	Threatened	No	No	No effect to species; No effect to proposed critical habitat
Bull Trout (<i>Salvelinus confluentus</i>)	Threatened	Yes	Yes	May affect, not likely to adversely affect species; may affect, not likely to adversely affect critical habitat
Northern spotted owl (<i>Strix occidentalis caurina</i>)	Threatened; Critical habitat designated	Yes	Yes	May affect, not likely to adversely affect species; may affect, not likely to adversely affect critical habitat

Sources: U.S. Fish and Wildlife Service (USFWS 2014b), Oregon Biodiversity Information Center (ORBIC 2015), U.S. Forest Service (USFS 2014d, USFS 2014g).

Comments Received on Draft EA and BPA’s Responses

In order to solicit comments on the draft EA, the EA or a notice of its availability was e-mailed or mailed to over 100 entities—individuals, organizations, tribes, and government agencies. Approximately 60 of the recipients were adjacent landowners. In addition, BPA posted the draft EA on the project website. The comment period ran from August 10, 2016 through September 19, 2016.

BPA received comments from nine entities in writing through letters, comment forms, and the website. Each comment submittal was assigned an identifying number that corresponds to the order it was received. Breaks in the number sequence resulted when comments were deleted because they were submitted in error or had inappropriate content (such as SPAM). 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

Comment Number	Comment Author / Affiliation
HCLP16 0001	Keppler/Lane County Public Works
HCLP16 0002	Maupin
HCLP16 0004	Heiken/Oregon Wild
HCLP16 0005	Chapman
HCLP16 0006	Harding
HCLP16 0007	Pace
HCLP16 0008	Burbank/Oregon Department of Transportation
HCLP16 0009	Gamble/Oregon Department of Transportation
HCLP16 0011	Burleson

Note: Comments HCLP16 0003 and 0010 received by BPA were not related to the scope of the project; therefore these comments are not included.

Comment HCLP16 0001 Keppler/Lane County Public Works

Lane County Public Works staff have reviewed the Draft EA for the proposed Hills Creek-Lookout Point Rebuild Project. Lane County Right of Way Permits are required for construction activities within County Roads and rights of way. Table 2-5, Mitigation Measures for Proposed Action, should be revised to include a bullet item "Coordinate with Lane County Public Works to obtain any Right-of-Way Permits that may be required, if any, for project activities, including hauling, within County Roads and right-of-way. <http://www.lanecounty.org/Departments/PW/Pages/rowpermits.aspx>" under the Land Use, Recreation and Transportation section.

Response to Comment HCLP16 0001

As requested, Table 2-5 in Section 2.6 of the EA has been revised to include the Lane County right of way permits required for construction activities within Lane County roads and rights-of-way. In addition, these permits have been added to Table 2-6.

Comment HCLP16 0002 Maupin

I have these other comments:

*I have no problem with the Hills Creek - Lookout Point Transmission Line Rebuild. Waiting for a longer date/time would cost more.
Good Luck !!*

Response to Comment HCLP16 0002

Thank you for your comments.

Comment HCLP16 0004 Heiken/Oregon Wild



8 Sept 2016

TO: BPA and Willamette National Forest

Submitted Via: <https://www.bpa.gov/applications/publiccomments/CommentEntry.aspx?ID=290>

Subject: Hills Creek-Lookout Point Transmission Line Rebuild —comments

Dear USFS and BPA:

Please accept the following comments from Oregon Wild concerning the Hills Creek-Lookout Point Transmission Line Rebuild,

<https://www.bpa.gov/efw/Analysis/NEPADocuments/Pages/Hills-Creek-Lookout-Point.aspx>.

Oregon Wild represents over 15,000 members and supporters who share our mission to protect and restore Oregon's wildlands, wildlife, and water as an enduring legacy. Our goal is to protect areas that remain intact while striving to restore areas that have been degraded. This can be accomplished by moving over-represented ecosystem elements (such as logged and roaded areas) toward characteristics that are currently under-represented (such as roadless areas and complex old forest).

Bonneville Power Administration (BPA) is proposing to rebuild its 26-mile long, 115 kilovolt (kV), wood-pole Hills Creek-Lookout Point transmission line generally located between Lowell and Oakridge, in Lane County, Oregon.

0004-1

We urge the agencies to minimize the foot print of this project by avoiding and minimizing new access roads as much as possible. Existing access roads should be maintained to address road drainage and erosion concerns. Steps should be taken to avoid OHV use on access roads and throughout the transmission line rights-of-way.

0004-2

We also urge the agencies to address the spread of weeds which is often associated with transmission line rights-of-way. The sight of bright yellow Scot's Broom at the base of utility poles is visible for miles. This significantly degrades the view of natural vistas in this area. Existing weeds should be removed. Future weeds should be prevented and/or eliminated as necessary.

0004-3

If any powerpoles are relocated, the new locations should avoid sensitive sites such as wetlands, natural meadows, rock outcrops, mature and old forests, riparian areas, talus, etc.

www.oregonwild.org

Eugene | 541.344.0675
PO Box 11648
Eugene, OR 97440

Portland | 503.283.6343
5825 N Greeley Ave
Portland, Oregon 97217

Bend | 541.382.2616
2445 NE Division St, Ste 303
Bend, OR 97701

Enterprise | 541.886.0212
P.O. Box 48
Enterprise, OR 97828

0004-3
continued

When powerpole sites are related, the abandoned sites should be left in good condition by decompacting soils, eliminating weeds, and establishing desired native vegetation.

0004-4

The clearings under transmission lines should be managed for wildlife that prefer complex early seral vegetation communities. Diverse native vegetation and some dead wood should be encouraged.

Sincerely,



Doug Heiken
dh@oregonwild.org

Responses to Comment HCLP16 0004

0004-1

Section 2.2.9 of the EA describes the proposed access road improvements, including gates and measures to address drainage and erosion; Table 2-1 (Section 2.2) of the EA includes a summary of road improvements. As described in Section 2.2.9, only about 0.1 mile of new access roads would be constructed; all other access roads used for the project would be existing roads – some in their current condition and others with planned improvements. BPA’s road standards include water bars, drain dips, and cross drain culverts to manage surface water runoff. To limit unauthorized access of off highway vehicles (OHV), BPA proposes to install, repair, or replace 51 gates on its access road system.

0004-2

Section 2.2.13 of the EA describes BPA’s ongoing vegetation maintenance activities, including invasive plant control. As described in Section 3.3.2 of the EA, BPA conducted invasive weed surveys along the transmission line and access roads and acknowledges the potential spread of invasive weeds due to ground disturbing construction activities; Table B-2 in Appendix B of the EA lists the invasive weed species occurring along the line or access road and the general location where they were found. Table 2-5 (Section 2.6) of the EA lists the measures that would be taken to help prevent weed infestations, such a pre- and post- construction weed treatments, inspection or cleaning of construction vehicles, as well as revegetating disturbed areas.

0004-3

For the most part, wood poles would be replaced in the same location in which they currently stand. Only five transmission line structures would be in new locations—these would be in the realignment sections of line miles two and three, as described in Sections 2.2.2 and 2.2.3 of the EA. The new structure locations avoid sensitive areas, such as wetlands, natural meadows, rock outcrops, mature

and old forests, riparian areas, and talus. As described in Section 2.2.9, abandoned segments of BPA right-of-way and abandoned access roads would be rehabilitated and revegetated in coordination with the Forest Service.

0004-4

As described in Section 2.2.11 of the EA, trees identified for removal would be directionally felled away from access roads and left on-site, adding coarse woody debris to the forest floor. All areas disturbed during construction would be reseeded as appropriate, and the Forest Service would provide a seed source for revegetating disturbed areas on Forest Service land. Effects of tree removal and revegetation is provided in Section 3.3.2 of the EA.

BPA has a Memorandum of Understanding with the Oregon Department of Agriculture, Oregon Hunters Association, Corps, and Forest Service regarding cooperative management of vegetation along a segment of the Hills Creek-Lookout Point transmission line located on the north shore of the Lookout Point Reservoir. Text has been added to Section 3.3.1 of the EA describing this Memorandum of Understanding. In addition, text describing right-of-way clearing and revegetation in the realigned segments of line miles two and three where the transmission line has also been added to Section 3.3.2, along with a mitigation measure added to Table 2-5 in Section 2.6 of the EA.

Comment HCLP16 0005 Chapman

I need more information about:

What kind of (or amount of) site prep will be done?

I have these other comments:

Get 'er done! First it was 2015, then 16, then 17 now 18. Just do it.

Response to Comment HCLP16 0005

Site preparation for the project would be limited to access road improvements, vegetation removal, mobilization of equipment, and other construction activities described in Section 2.2 of the EA.

Comment HCLP16 0006 Harding

I would like to know why BPA has decided to hold water back at Bonneville dam during the peak Chinook salmon migration?

Response to Comment HCLP16 0006

Bonneville Dam is owned and operated by the U.S. Army Corps of Engineers (Corps). The dam is a type known as a “run of the river” dam which has minimal capacity to store water relative to the amount of water passing through the river. Thus the Corps is unable to “hold back” significant quantities of water at any time of year. Flow augmentation used to support juvenile salmon migration typically ends in August every year, a time when river flows are naturally low and receding due to dry summer conditions. If you would like additional information regarding operation of the Bonneville Dam and other federal dams on the river you can find that information at the Corps of Engineers Technical Management team [website \(http://www.nwd-wc.usace.army.mil/tmt/\)](http://www.nwd-wc.usace.army.mil/tmt/).

Comment HCLP16 0007 Pace

Canis lupus, listed as endangered in the western 2/3 of Oregon, which includes the entirety of the proposed project, and there are areas in the vicinity of Oakridge that are estimated wolf use areas by FWS. BPA should start by assessing inconsistencies between the project as proposed and ODFW's updated Wolf Conservation and Management Plan, which is available online at http://www.dfw.state.or.us/Wolves/wolf_program_updates.asp. Your analysis should consider, e.g., impacts of access roads on wolves and potential wolf habitat. But it should not stop there. You should also look at issues like the impact of vegetation management on wolf survival and recovery. To a lesser extent, I think you also have the same problem but to a lesser degree with Lynx canadensis. So far as I know, a recovery plan for Canada lynx has not been promulgated. However, the area of potential lynx habitat includes areas that are adjacent to and/or nearby the eastern end of the proposed project. You may have similar concerns with impacts on potential range that should be addressed for Pekania pennanti, which is a species of concern. Thankfully, I don't believe you have a problem with pygmy rabbits. That's the mammals. There are fish and plants, of course.

Response to Comment HCLP16 0007

As described in Table 2-6 (Section 2.7) of the EA, BPA has consulted with the U.S. Fish and Wildlife Service (USFWS), Forest Service, and Oregon Department of Fish and Wildlife (ODFW) for potential effects to threatened and endangered species, including gray wolves (*Canis lupis*), Canada lynx (*Lynx canadensis*), and Pacific fisher (*Pekania pennanti*). BPA's analysis determined that the project would have no effect on these species, and BPA received concurrence from USFWS on the Biological Assessment that was prepared. A new table, Table E-3, has been added to Appendix E of the EA. This table comes from the BA BPA submitted to the USFWS and summarizes effect findings for all ESA-listed species known to occur within Lane County.

BPA also evaluated effects to the Pacific fisher through the preparation of a Biological Evaluation (BE), which was submitted to the Forest Service for review. Effects to the Pacific fisher are summarized in Section 3.6.2 of the EA.

Comment HCLP16 0008 Burbank/Oregon Department of Transportation

To whom it may concern, ODOT has reviewed the notice for Hills Creek-lookout point Transmission Line Rebuild (Doe/ea-1967) if new approaches to the state right of way are required an application for road approach to the state highway system will be required. Additionally, if the applicant anticipates work within the state highway right-of-way, they will need to contact Jeff Prociw at (541) 726-2526 in the ODOT District 5 Maintenance Office to discuss the type of work and to obtain any necessary permits for work within the state highway right-of-way. If vehicles are to be over-sized or over weight please contact Motor Carrier for appropriate permits. Please provide a map of any currently used or potentially used state highway access for our review associated with the project. If you have any questions please feel free to contact me. Thank you, Brennan Burbank, P.E. Acting Development Review Coordinator | ODOT Region 2 455 Airport Road SE, Bldg. B | Salem, Oregon 97301 (503) 986-2825 | Cell: (503) 798-8195 | Brennan.Burbank@odot.state.or.us

Response to Comment HCLP16 0008

Table 2-5 and Table 2-6 have been revised in the EA to include coordination with Oregon Department of Transportation (ODOT) to obtain necessary permits for any new approaches to state right-of-way, for work within the state highway right-of-way, or for use of oversized or overweight vehicles.

Comment HCLP16 0009 Gamble/Oregon Department of Transportation

ODOT District 5 Permits Department requires applicable District Permits to be obtained prior to working in the right of way (ROW).

Response to Comment HCLP16 0009

Please see Response to Comment HCLP16 0008.

Comment HCLP16 0011 Burleson

Please have your studies look at: COMMENTS

I have owned the 19 acre property (Tus 195 R least - Sec 19) jointly with C. Lundley for over fifty years. The property is managed as a forest. Your agency has offered to purchase new access road easements. We reject

I need more information about:

the easement request due to concern that upgrades will encourage trespass and result of in removal (additional) trees and vegetation. The BPA easement at this property is only 55 feet with

I have these other comments:

option to remove danger trees. Our strong concern is that is BPA & Company upgrading the line will be indiscriminate in tree and vegetation removal resulting in site degradation.

Response to Comment HCLP16 0011

As described in Section 2.2.11 of the EA, trees identified for removal include only those that would have the potential to fall, grow into, or grow too close to the conductors which can cause a flashover or line outage. Additionally, removal of low growing vegetation associated with structure replacements and access road improvements would be limited to the minimum necessary to safely perform the work and accommodate the equipment used during construction. Vegetation removal is further addressed in Section 3.3.2 of the EA and mitigation measures are identified in Table 2-5 (Section 2.6).

Regarding your comment about encouraging trespass onto your property, BPA proposes installing or repairing gates on existing roads leading into your property. If you have additional site specific questions regarding BPA's proposed actions on your property please contact BPA's local realty specialist at (541) 988-7432.