

**Bonneville Power Administration's
Hooper Springs Transmission Project
Record of Decision
March 2015**

Decision

Bonneville Power Administration (BPA) has decided to construct and operate the Hooper Springs Transmission Project in Caribou County, Idaho. As described in the Hooper Springs Transmission Project Final Environmental Impact Statement (DOE/EIS-0451, January 2015), this project consists of: (1) a new 138/115-kilovolt (kV) Hooper Springs Substation that will be located near the city of Soda Springs, Idaho; (2) a new, approximately 24-mile-long, double-circuit 115-kV transmission line that will extend generally north then east from the Hooper Springs Substation to a new BPA connection facility that will connect the new line to Lower Valley Energy's (LVE) existing transmission system in northeastern Caribou County; (3) a new, approximately 0.2-mile-long, single-circuit 138-kV transmission line that will extend generally south from the Hooper Springs Substation to PacifiCorp's existing Threemile Knoll Substation to connect the new line to the regional transmission grid; and (4) required ancillary facilities such as access roads. From among the alternatives considered in the final EIS, BPA has decided to build the South Alternative's Option 3A (Option 3A). This option was identified in the final EIS as the preferred alternative for the transmission line route.

Background

BPA is a federal agency in the Pacific Northwest that owns and operates about three-fourths of the high-voltage transmission lines in its service territory. Among other things, BPA is responsible for marketing and transmitting electrical power to utility, industrial, and other customers in the Pacific Northwest. LVE and Fall River Electric Cooperative (FREC) are BPA customers who purchase all, or almost all, of the electric power required to serve their electrical loads in eastern Idaho, northwestern Wyoming, and southwestern Montana from BPA. BPA has an obligation to serve LVE and FREC loads under existing contracts in addition to an obligation to adhere to reliability criteria established by the North American Electric Reliability Corporation and Western Electricity Coordinating Council.

BPA needs to address current voltage stability and reliability concerns related to the southern portion of LVE's transmission system. LVE's system experiences extreme peaks in electrical load during winter, when temperatures can drop to -50 degrees Fahrenheit (°F) and electricity is needed for heat. If LVE's one existing transmission line that serves the southern portion of LVE's system were to lose service due to weather or other events, voltage instability could occur and LVE and FREC customers, including residential customers, could lose power and heat. Such an outage also could cause low voltage conditions at existing substations in the vicinity, which could cause brown outs and lead to voltage instability elsewhere in the system, leading potentially to additional outages. The transmission project will provide increased reliability to the southern portion of LVE's transmission system by providing transmission reinforcement to avoid loss of LVE's entire load during peak winter conditions. The project also will provide

needed redundancy in the transmission system in southeastern Idaho and northwestern Wyoming.

BPA also needs to address ongoing electricity use (load) growth in southeastern Idaho and the Jackson Hole valley area in northwestern Wyoming. Electricity use in these areas has been growing at about 3 percent per year with historic winter peak load levels in the SE Idaho area increasing by approximately 1.7 percent per year since January 2007. While BPA has upgraded and improved several of its existing transmission lines in southeastern Idaho, this transmission project will ensure that the transmission system can adequately handle all expected load growth in the area.

The Federal Columbia River Transmission Act directs BPA to construct improvements, additions, and replacements to its transmission system that the BPA Administrator determines are necessary to provide service to BPA's customers and to maintain electrical stability and reliability (16 U.S.C. § 838b). Construction of the Hooper Springs Transmission Project is needed to ensure that BPA can continue to provide stable and reliable transmission service in southeastern Idaho and northwestern Wyoming.

The Selected Alternative

As indicated above, BPA has decided to construct the proposed project and has selected one of the South Alternative's options (Option 3A) considered in the final EIS. Option 3A will include construction and operation of the Hooper Springs Substation, about 24 miles of double-circuit 115-kV transmission line, the BPA connection facility to connect this new line to LVE's transmission system, about 0.2 miles of single-circuit 138-kV transmission line, and ancillary facilities such as access roads. The following describes the selected alternative and option in more detail.

The Hooper Springs Substation will be located about 3 miles directly north of the city of Soda Springs along Threemile Knoll Road. This substation will be located on a 10-acre parcel within a fenced 5.8-acre facility. The substation will be constructed as a 138/115-kV substation, meaning that it will include a transformer capable of converting 138 kV electricity to 115 kV electricity. This transformer will allow electricity to flow between the single-circuit 138-kV transmission line and the double-circuit 115-kV transmission line that will be connected to the Hooper Springs Substation. The substation also will include power circuit breakers, switches, bus tubing and pedestals, a control house and conduit, substation dead-end structures, grounding mat, substation rock surfacing, and a stormwater retention system.

The double-circuit 115-kV transmission line will begin at the Hooper Springs Substation and head northeast for one mile before turning north for about 5.5 miles to China Hat Road. At China Hat Road, the line will turn east and parallel China Hat Road for about 1 mile, cross Idaho State Highway 34 (Highway 34), and then turn north. The line will then travel north for about 2 miles to Blackfoot River Road before turning east and generally following Blackfoot River Road for about 11 miles to the Blackfoot River Narrows. At the Narrows, the line will cross the river before travelling northeast for about 4 miles to its point of connection with the existing LVE line.

For the first approximately 18 miles from the Hooper Springs Substation to just northwest of the Narrows, the 115-kV transmission line will cross private land exclusively. From just northwest of the Narrows to the Narrows, the line will cross lands managed by the Caribou-Targhee National Forest (C-TNF) and the U.S. Bureau of Land Management (BLM). From the Narrows to the BPA connection facility at the east end of the line, the line will cross one private parcel, C-TNF lands, lands within the Blackfoot River Wildlife Management Area (Blackfoot River WMA) that are managed by the Idaho Department of Fish and Game (IDFG), and one other private parcel.

BPA will acquire 100-foot-wide right-of-way for the length of the 115-kV line. Approximately 174 double-circuit 115-kV steel structures will be installed in this right-of-way, with an average span length between structures of 730 feet. The new structures will range in height from about 55 to 120 feet. The conductor and overhead ground wire for the new transmission lines will be placed on the structures, and counterpoise (which takes any lightning charge from the overhead ground wire and dissipates it into the earth) will be buried in the ground at each structure.

The BPA connection facility will be located about two miles southeast of the intersection of Blackfoot River Road and Diamond Creek Road. This connection facility will be constructed within the rights-of-way of the new 115-kV transmission line and LVE's existing transmission line. The connection facility will consist of overhead line disconnect switches that will connect the new 115-kV line to the existing LVE line. One structure on the existing LVE line will be removed and replaced with two steel poles with the switches mounted on them. An approximately 400-foot by 100-foot area will be used for installation of the disconnect switches.

The single-circuit 138-kV transmission line will extend south from the Hooper Springs Substation for 0.2 miles to PacifiCorp's existing Threemile Knoll Substation. This 138-kV line will connect the Hooper Springs Substation and the 115-kV line to the regional transmission grid. BPA will acquire 125-foot-wide right-of-way for the new 138-kV line. Two wood, H-frame structures will be installed in this right-of-way, with a span of approximately 400 feet between the two structures. These structures will be 80 to 85 feet tall. Conductor, overhead ground wire, and counterpoise will be the same as described for the 115-kV line. A fiber optic cable also will be installed along the 138-kV transmission line.

For access roads associated with the project, BPA will acquire 50-foot-wide right-of-way for new and reconstructed access roads, and 20-foot-wide right-of-way for improved roads. About 14 miles of new access roads will be constructed and about 2.4 miles of existing access roads will be improved or reconstructed.

Where the rights-of-way for the 115-kV line and new access roads cross forested lands, BPA will clear all tall-growing vegetation within the rights-of-way. At the request of the C-TNF, BPA will also clear all merchantable timber, leaving smaller trees and shrubs within a 250-foot-wide area along the length of transmission line where the line crosses C-TNF land. However, only the 100-foot transmission line right-of-way will be managed for low growing species during operation of the transmission line.

Other Alternatives Considered in Detail

In addition, BPA considered in detail a North Alternative with two route options and a South Alternative with four additional options (Options 1, 2, 3, and 4). BPA also considered a No Action Alternative. The following further describes these alternatives and options.

North Alternative

The North Alternative would have been an approximately 33-mile-long, single-circuit 115-kV transmission line extending from the Hooper Springs Substation generally north and then east to the existing LVE Lanes Creek Substation. The North Alternative would have included the new Hooper Springs Substation and 0.2-mile, single-circuit 138-kV transmission line from Hooper Springs Substation to the Threemile Knoll Substation. New 115-kV substation facilities within the boundaries of LVE's existing Lanes Creek Substation also would have been constructed.

The North Alternative would have started at the new Hooper Springs Substation and headed generally northeast and north for about 6 miles to China Hat Road. Parallel to China Hat Road, the route would have travelled east about 1 mile, crossed Highway 34, and then turned north. The line would have continued for about another 10 miles generally north-northeast to a point near the unincorporated community of Henry, Idaho along the eastern side of the Blackfoot Reservoir, making two 90-degree turns along the way. From Henry, the line would have crossed Highway 34 and turned in a more northeasterly direction and continued for approximately 8 miles to a point about 1 mile west of the unincorporated community of Wayan, Idaho. From that point, the line would have continued generally east for about 8 miles, crossing Highway 34 twice more before reaching LVE's existing Lanes Creek Substation.

Long Valley Road Option—The Long Valley Road Option would have moved a portion of the North Alternative corridor off state of Idaho lands and increased the length of the transmission line by approximately 0.6 mile.

North Highland Option—The North Highland Option would have moved a 2.2-mile-long portion of the North Alternative corridor on to primarily C-TNF lands. This option would have been the same length as the portion of line replaced along the North Alternative.

South Alternative

The South Alternative would have begun at the new Hooper Springs Substation and headed northeast for about 4 miles across Highway 34 near Conda Road before heading north through Conda for about 7 miles to Blackfoot River Road. The line would then have travelled in generally an easterly direction along Blackfoot River Road for about 8 miles to the Narrows. The line would have crossed the Blackfoot River at the Narrows and continued east and northeast to the connection facility with LVE's line.

Options 1 and 2—Options 1 and 2 would have followed the same general route as the South Alternative with one to two minor deviations near Conda and at the Blackfoot River Narrows. Option 1 would have been about 23 miles long and Option 2 would have been about 22 miles long.

Option 3—Option 3 would have followed a route similar to the first part of Option 3A west of Highway 34 before turning and rejoining the same general corridor as the South Alternative east of Highway 34. Option 3 would have been about 24 miles long.

Option 4—Option 4 would have followed the same route as Option 3 for about 4.5 miles before turning east across Highway 34 to connect back with the South Alternative corridor within the Blackfoot Bridge Mine area. Option 4 would have been about 23 miles long.

No Action Alternative

Under the No Action Alternative, BPA would not construct the project. The No Action Alternative would not cause impacts to the natural environment (land uses, vegetation, wildlife, visual resources, etc.) that the construction and operation of the transmission line will have. BPA thus considers the No Action Alternative to be the environmentally preferred alternative.

Rationale for Decision

BPA has analyzed the environmental impacts of the South and North alternatives, their route options, and the No Action Alternative, and has considered public comments received on the draft EIS and supplemental draft EIS. In making its decision, BPA also considered how well the alternatives would meet project purposes (i.e., objectives) identified in the final EIS:

- Maintain reliability of BPA’s transmission system at BPA and industry standards.
- Meet BPA’s contractual and statutory obligations.
- Minimize project costs.
- Minimize impacts to the natural and human environment.

Generally, both the South and North alternatives and their options meet these objectives. The No Action Alternative, on the other hand, would not meet all of the objectives, primarily because it would not address system reliability issues in the area. Furthermore, the No Action Alternative would not meet the need identified in the final EIS. BPA believes that, overall and on balance, implementation of Option 3A would best meet the project objectives.

Maintain System Reliability

Both the North and South alternatives and their options increase the reliability of the transmission system in southeastern Idaho and northwestern Wyoming by providing an additional transmission line for power should there be an interruption in the operation of one of the other transmission lines in the area or within PacifiCorps’ Goshen Substation near Goshen, Idaho. One of the primary issues in the southeastern Idaho service area related to reliability is that the entire load is currently served from Goshen Substation. The two main source lines into the area are also in the same utility right-of-way for more than 20 miles. Both of these factors leave the region susceptible to loss of the entire load if a single event such as a brush fire or a lightning strike were to occur. The new transmission line will provide a second source line into the area that will be able to support a portion of the load during a catastrophic event.

The No Action Alternative, in contrast, would not meet the objective of maintaining system reliability. Without the new line, BPA and its customers would remain vulnerable to loss of load due to unforeseen events at the Goshen Substation or in the right-of-way for the two main source lines. Further, BPA would expect that voltage stability and reliability problems in this area of the system to continue. Finally, without action by BPA, the growing energy requirements of southeastern Idaho and the Jackson Hole valley area of Wyoming may not be met.

While all alternatives would increase system reliability, certain of these alternatives provide a greater probability that BPA will be able to consistently ensure reliability of the transmission line (and hence the system) in the long term. These alternatives are Option 3A as well as the North Alternative with its route options, which either entirely or almost entirely avoid current or planned mining areas that could be developed in the future and present reliability risks to a transmission line in these areas. In contrast, the South Alternative and Options 1, 2, 3, and 4 would all locate the transmission line in the active Conda and Blackfoot Bridge Mine areas and/or the future Husky-North Dry Ridge Mine area, which would present maintenance and reliability issues as more fully described below.

Conda Mine Area

- **Active mining**—The routes for the South Alternative and Option 1 pass through an active mining area. Placing a transmission line within an active mining area would mean that access to the line is not available at all times, since the haul road would likely be actively used. BPA requires year-round access to its structures and lines in the event of an emergency. Additionally, placement of a transmission line in an active mine area would present problems during maintenance and emergency situations that would compromise the overall system reliability.
- **Possible soil contamination**—Regarding the Conda Mine Study Area, BPA seeks to avoid construction, operation, and maintenance of a transmission line in areas of known contamination and to avoid direct contact with waste dumps, seeps, or mine pits. For this reason, Options 3 and 3A were proposed because they avoided the Conda Mine Study Area.
- **Safety**—The safety of not only the mine workers but also of the transmission line maintenance workers could be impacted if the two activities are being conducted at the same time.
- **Limited space for the transmission line**—There are approximately 170 feet between a large settling pond at Conda and the railroad tracks south of Conda Road. This leaves insufficient room to route a transmission line, including placement of access roads.
- **Railroad crossings**—The transmission line would cross the railroad twice in this area. Access to the transmission line also would be difficult if the railroad is in use when line maintenance needs to occur, potentially compromising system reliability.

Blackfoot Bridge Mine Area

- **Blackfoot Bridge Mine**—The mine is active with excavation occurring throughout the area. Structures in the 138-kV line that cross through the Blackfoot Bridge Mine have already had

excavation occur around their bases. As noted above, placing a transmission line within an active mine area does not meet the purpose of maintaining system reliability.

- **Fish Pond area between the haul road and the railroad**—Routing constraints through this area are similar to the constraints associated with the Conda Mine Area. The South Alternative would cross through an area that is about 200-feet wide between the haul road and the railroad, which leaves insufficient room to route a transmission line, including placement of access roads.
- **Triple-circuit transmission line**—To use the South Alternative or Options 1, 2, or 4, BPA would be required to construct a triple-circuit line (two 115-kV circuits for BPA and one 138-kV circuit for Rocky Mountain Power). Structures would likely be 130 to 180 feet tall (proposed structures for the Option 3A would be 55 to 120 feet tall depending on location). Furthermore, Rocky Mountain Power has indicated that there is not sufficient room for an entirely new line in this area.
- **Monsanto Haul Road**—This haul road has many restrictions on use. If the line was routed along the haul road and BPA proposed to use portions of the road to access the line, conflicts in the use of the road would occur. Presently the haul road is closed to external use with 24-hour notice required for use. This would not allow year-round access to the BPA transmission line, especially if there was an emergency.

Husky-North Dry Ridge Mine Area

- **Surface versus Subsurface Uses**— The Husky-North Dry Ridge deposit is governed by a lease issued in 1983 by the federal government giving the lessee exclusive rights to recover the phosphate resource within the lease area. As required under current mining laws, surface uses, such as a transmission line, cannot interfere with the lessee's ability to fully extract the ore within the lease area. The South Alternative and Options 1, 2, 3, and 4 would cross not only the Husky-North Dry Ridge Mine lease area, but also the already identified phosphate mine pit within the lease area. The BLM, tasked with implementing mining laws, would be expected not to recommend that the C-TNF or the State of Idaho issue special use permits for the South Alternative and Options 1, 2, 3, and 4 because of this conflict. While Option 3A, will cross the lease area, it will not cross the phosphate mine pit within the lease area. Mitigation has been identified and adopted (see below) that avoids the potential for future conflict if mining activities are expanded within the lease area.
- **Mining Haul Road Use**—Included in the mine operational area would be a haul road along both sides of the mine. Transmission structures between the haul road and the mine edge would likely not be allowed because of potential conflicts. In addition, transmission line access roads would interfere with the haul road. As described above, difficulties in accessing the line during mine activities and haul road use make maintenance needs or emergency activities difficult, potentially compromising system reliability.
- **Mine Pit Activities**—Placement of conductor over the mine pit would limit the lessee's ability to use certain types of equipment because they could come in contact with the

conductor or at least be within an unsafe distance from the energized line. As above, the transmission line cannot interfere with the subsurface use.

Meet Contractual and Statutory Obligations

The North and South alternatives and their options, in contrast to the No Action Alternative, equally allow BPA to meet its statutory and contractual obligations. While BPA has no express statutory obligation to build the new transmission line, the new line will help BPA further its statutory mandates that direct BPA to construct appropriate additions to the transmission system that are necessary to provide service to BPA's customers and to maintain system stability and reliability.

Minimize Costs

Option 3A will cost about \$65 million. This is a reasonable cost for the construction of 24 miles of double-circuit 115-kV transmission line, 0.2 miles of single-circuit 138-kV transmission line, a 138/115-kV substation, a connection facility, and ancillary facilities such as access roads. The cost for Option 3A is less than the costs for the North Alternative and its options (about \$74 million each) and about the same as the costs for the South Alternative and each of its other options. Because the transmission project would not be built under the No Action Alternative, the cost for Option 3A is more than the cost for the No Action Alternative.

Minimize Impacts to the Natural and Human Environment

In designing each of the alternatives and their route options, BPA attempted to minimize potential environmental impacts where possible. BPA also identified mitigation measures in the EIS that would be applicable to both alternatives and their options and that would further minimize or avoid potential environmental impacts. On balance, however, BPA believes Option 3A best achieves the objective of minimizing impacts to the environment.

Option 3A will have the least amount of temporary and permanent ground disturbance compared to the North and South alternatives. While Option 3A will be about one mile longer than the South Alternative and other options, it will be about nine miles shorter than the North Alternative and its options. Option 3A will have the least amount of structures and fewest miles of new access road construction compared to both alternatives and all other options. Option 3A will require about 14 miles of new access roads as compared to about 22 miles of access road required for the North Alternative and its options and 23 miles for the South Alternative and Options 1, 2, and 4. Option 3 would have required about the same amount of access roads as Option 3A. Similar miles of existing road improvement or reconstruction including temporary roads will be required for Option 3A as compared to the South Alternative and Options 1, 2, 3, and 4; however, Option 3A will require about 8 less miles of access road improvement or reconstruction compared to the North Alternative and its options.

Option 3A will cross slightly more acres of private land than the South Alternative and Options 1 and 2 and slightly less than Options 3 and 4 and the North Alternative and its options. Option 3A will cross less than half of the acres of federal land as compared to the North and South alternatives. The number of acres of state land crossed by Option 3A are about 19 acres as

compared to the North Alternative and the North Alternative with the North Highland Option (both 54 acres) and the South Alternative and Option 2 (both 12 acres). Options 1, 3, and 4 of the South Alternative and the Long Valley Road Option of the North Alternative would not have crossed state lands.

Unlike the other alternatives, Option 3A will cross the Blackfoot River WMA. Under this option, an approximately 1.3-mile long segment of the 115-kV transmission line at the eastern end of the line will be located within the southernmost portion of the Blackfoot River WMA, close to the WMA's southeastern boundary. BPA recognizes the Blackfoot River WMA as important public lands managed for recreational activities and as wildlife habitat and understands the concerns from crossing a portion of the WMA. Many different routes were investigated by BPA to avoid crossing the Blackfoot River WMA while still meeting the project's purposes and need. BPA also worked extensively with IDFG and the C-TNF to site the Option 3A right-of-way, access roads, and structures to minimize intrusion onto and impacts to the Blackfoot River WMA and C-TNF lands.

While the South Alternative and its other route options all avoid crossing the Blackfoot River WMA, these routes would have crossed the planned Husky-North Dry Ridge Mine and a portion of the North Maybe Mine Investigation Area. As discussed above, locating the transmission line in the future Husky-North Dry Ridge Mine area presents significant challenges to fully meeting that purpose and need for the project. In the North Maybe Mine Investigation Area, the South Alternative and route Options 1, 2, 3, and 4 would have crossed East Mill Creek downgradient of the East Mill Dump area and within the Investigation Area. While Option 3A will cross into the very northern edge of the Investigation Area, it does not cross East Mill Creek. The Investigation Area has been delineated as either containing mine-related contamination or as an area where there is a potential for contaminated soil, surface water, groundwater, sediment, or vegetation and is currently undergoing investigation under the Comprehensive Environmental Response, Compensation, and Liability Act, or CERCLA.

Impacts to land use on the Blackfoot River WMA will be moderate (although short term) during construction and low to moderate during operation of the line. While the line will have no direct impact on fish or fish habitat, use of the Blackfoot River WMA for fishing or other recreational uses will likely be impacted by placement of the line within the WMA. Fish and wildlife recreational users typically seek a remote or secluded outdoor experience, which could be diminished by placement of the line within the southern edge of the WMA in the viewshed of the Blackfoot River. Additionally, tree removal for the construction of access roads and transmission line right-of-way within the Blackfoot River WMA will decrease the amount of forested area used for wildlife habitat.

Option 3A will have less temporary and permanent impact on lands used for agriculture than the North Alternative and options and about the same impact as the South Alternative and options. BPA has requested input from individual landowners on the placement of structures and roads on their properties, and will continue to work toward siting structures at edges of fields where possible and locating access roads where usable or desirable for both BPA and the landowner. Impacts to grazing from Option 3A will primarily be temporary, less than the North Alternative and slightly greater than the South Alternative. Option 3A will require the least amount of timber

clearing as compared to the North and South alternatives and other options. Additionally, Option 3A completely avoids the Grays Lake Wildlife Refuge area and the Gravel Creek Special Emphasis Area (a 160-acre parcel managed by the C-TNF as mitigation for wetland impacts from highway reconstruction) as compared to the North Alternative and options. Although surface uses such as a transmission line cannot unreasonably interfere with mining uses, Option 3A will cross through less mining areas than the South Alternative and its other options (the North Alternative and options do not cross any mining areas).

Option 3A has similar potential to impact visual resources as the North Alternative and its options, and South Alternative's Options 3 and 4 in the first nine miles north of the Hooper Springs Substation along the Highway 34 (Pioneer Historic Byway). The transmission line will be visible to travelers and residents traveling along Highway 34 in this area. For the entire length of Option 3A, few residences are located along the corridor as compared to the North Alternative. Option 3A completely avoids the Wayan area where impacts to visual resources would have been moderate to high associated with construction and operation of the proposed transmission line because it would have create a new element in a natural/pastoral setting.

Option 3A will be visible within portions of the Blackfoot River WMA although structural features will be indistinct at a distance of nearly 1.5 miles and greater, and visibility will be intermittent where the line drops behind forested areas. Overall, impacts to visual resources within the WMA are considered to be moderate because recreational visitors near the transmission line will experience views of the line and associated structures that will create a visual contrast to the surrounding natural landscape.

Option 3A will have less impact to native vegetation communities than the North and South alternatives and options. As discussed above, impacts to agricultural vegetation communities from Option 3A will be less than the North Alternative and about the same as the South Alternative.

Option 3A has less potential to impact soils than the North Alternative and its options because the option is about nine miles shorter; impacts will be about the same as the South Alternative and its options because they are about the same length. Impacts to prime farmland soils will be greater under Option 3A as compared to both the North and South alternatives, although impacts to hydric soils will about half of the impact that would have been caused by the North Alternative and slightly less than the South Alternative.

Option 3A will impact about the same amount of wetland areas as compared to the North and South alternatives and options except Option 4. Option 4 would have crossed the Woodall Springs wetland area potentially impacting additional wetland areas.

Option 3A will impact less wildlife habitat than the North and South alternatives and their options. Slightly less aspen-dominated wildlife habitat will be cleared during construction of Option 3A as compared to the South Alternative and its other options. Almost three times less aspen-dominated wildlife habitat will be cleared for Option 3A as compared to the North Alternative and its options. Similarly, almost three times less conifer-dominated wildlife habitat will cleared for Option 3A as compared to the North and South alternatives and their options.

Option 3A will impact approximately 20 acres of wildlife habitat in the Blackfoot River WMA. When the amount of acres within the transmission right-of-way is compared to the total amount of acres within the WMA (1,720 acres), sufficient amounts of vegetation diversity will remain to provide varied wildlife habitat and serve the mission of the WMA. The Option 3A right-of-way is located along the WMA's southern border and is more than 0.5 mile from the Blackfoot River. Areas of the WMA with cutthroat trout and high quality fish habitat will not be impacted by the transmission project.

That portion of Option 3A that crosses the southern portion of the Blackfoot River WMA also represents suitable habitat for big game including elk and mule deer, and is designated by BLM as non-critical big game winter range habitat. Short-term impacts to big game habitat on the WMA associated with Option 3A will include temporary vegetation removal or disturbance in non-forested habitats; however, these areas are expected to recover quickly. Long-term impacts to big game habitat within the WMA will be associated with tree removal for the construction of access roads and transmission line right-of-way. Similar to the South and North alternatives, fragmentation of forested habitat will decrease cover for big game during sensitive wintering and calving periods, and will affect movement onto and through portions of the WMA.

While Option 3A will create a collision risk for avian species, the risk is lower as compared to the North Alternative because Option 3A mostly avoids the Blackfoot Reservoir. Collision risk as compared to the South Alternative and its other options would be about the same.

Option 3A will impact less sagebrush habitat potentially used by grouse than the North and South alternatives. Possible impacts to sagebrush habitat from Option 3A will not occur within areas defined by the C-TNF and BLM as "preliminary general habitat" or "preliminary priority habitat" for the greater sage-grouse.

Option 3A has less potential to impact cultural resources than the North Alternative and its other options and about the same as the South Alternative and its other options. The North Alternative and its options would cross through the town of Henry where two historic properties are located and could cross over a portion of the Lander Trail. Historic properties eligible for inclusion in the National Register of Historic Places were not identified within the Option 3A corridor. Nonetheless, at the request of the Idaho State Historic Preservation Office (SHPO), BPA is working with the Idaho SHPO to further assess possible effects to potential historic properties along Option 3A, between transmission line miles 9 and 24. Construction will not begin between line miles 9 and 24 until this work is concluded.

Under Option 3A, there is less chance of disturbing mining contaminants than the South Alternative and other options because the route avoids all mining areas except Wooley Valley Mine.

Option 3A will have less impacts to air quality and lower greenhouse gas emissions as compared to the North Alternative because Option 3A is shorter; impacts as compared to the South Alternative and its options would be about the same.

All of the alternatives and route options would have had similar low impacts to water resources, fish, socioeconomics, transportation, and noise. Implementation of mitigation measures for Option 3A will lessen impacts to these resources.

Mitigation

All the mitigation measures described in the draft EIS, the supplemental draft EIS and updated in the final EIS have been adopted. A complete list of these measures is in the attached Mitigation Action Plan. BPA will be responsible for the execution of all mitigation measures.

Public Availability

This ROD will be available to all interested parties and affected persons and agencies. It is being sent to all stakeholders who requested a copy. Copies of the Hooper Springs Transmission Project draft EIS, supplemental draft EIS, and final EIS, and additional copies of this ROD are available from BPA's Public Information Center, P.O. Box 3621, Portland, Oregon, 97208-3621. Copies of these documents may also be obtained by using BPA's nationwide toll-free document request line: 1-800-622-4520, or by accessing BPA's project Web site:

http://efw.bpa.gov/environmental_services/Document_Library/HooperSprings/

Issued in Portland, Oregon.

/s/ Elliot Mainzer

March 16, 2015

Elliot Mainzer

Date

Administrator and

Chief Executive Officer

Mitigation Action Plan for the Hooper Springs Transmission Project

Mitigation Measures	Time of Implementation
Land Use	
<ul style="list-style-type: none"> Plan and conduct construction activities to minimize temporary disturbance, displacement of crops, and interference with agricultural activities. 	Prior to and during construction
<ul style="list-style-type: none"> Install barriers, gates, and postings at appropriate access points and, at the landowner's request, to minimize or eliminate unauthorized use of access roads. 	After construction
<ul style="list-style-type: none"> Limit ground-disturbing activities to structure sites, access roads, staging areas, and the proposed substation site. As needed, stake or flag water resources, wetlands, or other sensitive areas prior to construction to avoid impacts. 	Prior to and during construction
<ul style="list-style-type: none"> Restrict public access to permanent access roads to reduce increased human impacts and to maximize big game use of the project corridor. 	After construction
<ul style="list-style-type: none"> Develop the project consistent with applicable state and federal resource management standards set forth in the appropriate management plans. 	During design and construction
<ul style="list-style-type: none"> Decommission temporary roads according to the requirements and Best Management Practices (BMPs) of the appropriate land management agency or landowner. 	After construction
<ul style="list-style-type: none"> Remove topsoil from cropland in a manner that will allow it to be reused after construction. 	During construction
<ul style="list-style-type: none"> Compensate landowners for damage to property or crops, as appropriate. 	After construction
<ul style="list-style-type: none"> Compensate landowners for reconfiguration of irrigation systems due to placement of project facilities. 	After construction
<ul style="list-style-type: none"> Compensate landowners at fair market value for any new land rights acquired for ROW or access road easements. 	Prior to, during , and after construction
<ul style="list-style-type: none"> Provide a schedule of construction activities, including blasting, to all landowners who could be affected by construction.. 	Prior to and during construction
<ul style="list-style-type: none"> Consult with the Farm Service Agency to avoid and mitigate impacts to lands enrolled in the USDA Conservation Reserve Program (CRP). Avoid access road construction over CRP lands to the extent practical. 	Prior to and during construction
<ul style="list-style-type: none"> Coordinate with mine owners along Option 3A for the placement of towers and roads within proposed mining areas. 	Prior to and during construction
<ul style="list-style-type: none"> Develop an agreement with Agrium or their successors in which BPA would move the transmission line, at BPA's expense, where it crosses Agrium's mining leases or mine-related facilities if there is a conflict between the transmission line and future ore extraction. This would help ensure that the ultimate phosphate recovery can be achieved. 	Prior to construction
<ul style="list-style-type: none"> Use BMPs to limit erosion and the spread of invasive and noxious weeds. 	During and after construction

Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> Restore compacted cropland soils as close as possible to pre-construction conditions using tillage. Break up compacted soils where necessary by ripping, tilling, or scarifying before seeding. 	After construction
Recreation	
<ul style="list-style-type: none"> Install barriers, gates, and postings at appropriate access points, and at the landowner's request, to minimize or eliminate unauthorized use of access roads. 	After construction
<ul style="list-style-type: none"> Provide a schedule of construction activities, including blasting, to all landowners who could be affected by construction. 	Prior to and during construction
Visual Resources	
<ul style="list-style-type: none"> Develop irregular ROW edges (feathering) on C-TNF lands to break up the visual pattern, as practicable. Feathering would occur outside of the 100-foot ROW but within the 250-foot cleared area on C-TNF lands only. 	During construction
<ul style="list-style-type: none"> Utilize non-specular (non-reflective) finish on transmission lines, insulators, and other hardware to reduce reflection. 	During construction
<ul style="list-style-type: none"> Implement construction site maintenance and clean-up. Keep construction areas free of debris. 	During construction
<ul style="list-style-type: none"> Leave plants shorter than 4 feet undisturbed within the 100-foot-wide ROW where they would not interfere with the safe operation of the transmission line to help reduce the effect of the cleared ROW on visual resources. 	During and after construction
Vegetation	
<ul style="list-style-type: none"> Use appropriate seed mixes, application rates, and seeding dates to revegetate disturbed areas following completion of construction activities. 	After construction
<ul style="list-style-type: none"> Use BMPs to limit erosion and the spread of invasive and noxious weeds. 	Prior to and during construction
<ul style="list-style-type: none"> Restore compacted cropland soils as close as possible to pre-construction conditions using tillage. Break up compacted soils where necessary by ripping, tilling, or scarifying before seeding. 	After construction
<ul style="list-style-type: none"> Monitor reseeded areas for adequate growth and implement contingency measures as necessary. 	After construction
<ul style="list-style-type: none"> Identify and treat invasive and noxious weeds on ROW, access roads, and other disturbed areas during routine post-construction ROW vegetation management. 	After construction
<ul style="list-style-type: none"> Consult with USFWS concerning any ESA-listed plant species identified in the project corridor during follow-up surveys, and implement any mitigation measures (such as feasible and appropriate avoidance measures) identified as a result of these consultations. 	After construction
<ul style="list-style-type: none"> Develop appropriate avoidance measures if other special status plant species are identified during follow-up surveys. 	After construction

Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> Identify invasive and noxious weed populations for construction crews so these populations can be avoided when possible. Cooperate with private, county, state, and federal landowners to reduce the introduction and spread of invasive and noxious weeds, including conducting a pre-construction weed survey and locating vehicle wash or blow stations as appropriate. 	Prior to and during construction
<ul style="list-style-type: none"> Cooperate with private, county, state, and federal landowners to treat noxious weeds along access roads that would be used to bring construction equipment into the project corridor to reduce the introduction and spread of noxious weeds. 	During construction
<ul style="list-style-type: none"> Follow the guidelines in the noxious weed strategies used by land managers on state- and federally-managed land. Seed all disturbed areas as soon as possible with noxious weed-free seed (as certified by the state) to stabilize the sites following completion of construction activities. On C-TNF, use a seed mixture approved by the appropriate forest officer. On BLM lands, use a seed mixture approved by the BLM botanist. On state-owned lands, use a seed mixture approved by the district biologist. 	During and after construction
<ul style="list-style-type: none"> Save topsoil removed for structure and temporary spur road construction and use on-site for restoration activities to promote regrowth from the native seed bank in the topsoil, where possible. 	During and after construction
<ul style="list-style-type: none"> Use weed-free mulches for erosion control during construction and restoration activities. 	During and after construction
<ul style="list-style-type: none"> Clean equipment using wash or blow stations before entering project areas, as needed. 	During construction
<ul style="list-style-type: none"> Apply herbicides according to the BPA Transmission System Vegetation Management Program EIS (DOE/EIS-0285) and ROD (July 29, 2000) and label recommendations to ensure protection of surface water, ecological integrity, and public health and safety. 	During and after construction
<ul style="list-style-type: none"> Avoid snag and large tree removal to the extent possible. 	During construction
<ul style="list-style-type: none"> Retain existing low-growing vegetation where possible to prevent sediment movement off site. 	During construction
<ul style="list-style-type: none"> Encourage workers to cut or crush vegetation in-place, rather than blade, in temporary disturbance areas in order to maximize the ability of plant roots to keep soil intact and prevent sediment movement off-site. 	During construction
<ul style="list-style-type: none"> Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance where practicable. 	During construction
<ul style="list-style-type: none"> Leave erosion and sediment control devices in place until all disturbed sites are revegetated and erosion potential has returned to pre-project conditions. 	After construction
<ul style="list-style-type: none"> Limit ground-disturbing activities to structure sites, access roads, staging areas, and the proposed substation site. 	During construction
<ul style="list-style-type: none"> Minimize the ground-disturbance footprint of the Project, particularly in sensitive areas such as stream crossings and wetlands, and stream and wetland buffers and Aquatic Influence Zones (AIZs). 	During construction
<ul style="list-style-type: none"> Leave plants shorter than 4 feet undisturbed within the 100-foot-wide ROWs 	During and after

Mitigation Measures	Time of Implementation
where they would not interfere with the safe operation of the transmission line.	construction
<ul style="list-style-type: none"> • Design temporary and permanent access roads to control runoff and prevent erosion. 	Prior to construction
<ul style="list-style-type: none"> • Minimize the project ground-disturbance footprint; particularly in sensitive areas. 	During construction
<ul style="list-style-type: none"> • Consult with the appropriate state or federal land management agency (C-TNF, BLM, or IDFG) concerning any special status species. 	Prior to construction
<ul style="list-style-type: none"> • Avoid manipulating or altering sagebrush stands that are suitable as grouse nesting. 	During construction
<ul style="list-style-type: none"> • Seed disturbed areas within big game winter ranges with preferred big game forage. 	After construction
<ul style="list-style-type: none"> • Identify wetlands and other sensitive areas prior to initiating construction. 	Prior to construction
<ul style="list-style-type: none"> • Limit road improvements to the minimum amount necessary. 	During construction
<ul style="list-style-type: none"> • Decommission temporary roads according to the requirements and BMPs of the appropriate land management agency or landowner. 	After construction
<ul style="list-style-type: none"> • Prepare and implement Spill Prevention and Response Procedures. 	Prior to and during construction
<ul style="list-style-type: none"> • Initiate discussions with local fire districts and work with the districts and other appropriate entities to develop fire and emergency response plans. 	Prior to construction
Geology and Soils	
<ul style="list-style-type: none"> • Use BMPs to limit erosion and the spread of invasive and noxious weeds. 	During and after construction
<ul style="list-style-type: none"> • Remove topsoil from cropland soils in a manner that will allow it to be reused after construction. 	During construction
<ul style="list-style-type: none"> • Restore compacted cropland soils as close as possible to pre-construction conditions using tillage. Break up compacted soils where necessary by ripping, tilling, or scarifying before seeding. 	After construction
<ul style="list-style-type: none"> • Follow all applicable soil and water conservation measures listed in Forest Service Handbook 2509.22 - Soil and Water Conservation Practices Handbook (R-1/R-4 Amendment No. 1, effective 05/88), on C-TNF managed lands, as determined through coordination with the C-TNF. 	During construction
<ul style="list-style-type: none"> • Locate structures or access roads outside of previously active slides, bedrock hollows, or other geologic hazard areas, where possible. 	During design and construction
<ul style="list-style-type: none"> • Minimize construction on steep or unstable slopes where possible. 	During construction
<ul style="list-style-type: none"> • Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to control erosion and sedimentation. 	Prior to and During construction
<ul style="list-style-type: none"> • Monitor erosion control BMPs during construction to ensure proper function. 	During construction
<ul style="list-style-type: none"> • Install sediment barriers and other suitable erosion and runoff control devices prior to ground-disturbing activities at construction sites to minimize off-site 	Prior to and during

Mitigation Measures	Time of Implementation
sediment movement where the potential exists for construction activities to impact surface water or wetlands.	construction
<ul style="list-style-type: none"> • Limit grubbing to the area around structure sites to reduce the impact to the roots of low-lying vegetation so that they can resprout. 	During construction
<ul style="list-style-type: none"> • Design temporary and permanent access roads to control runoff and prevent erosion by using low grades, outsloping, intercepting dips, water bars, or ditch-outs, or a combination of these methods. 	Prior to construction
<ul style="list-style-type: none"> • Surface all permanent access roads with rock to help prevent erosion and rutting of road surfaces and to support vehicle traffic. 	During and after construction
<ul style="list-style-type: none"> • Limit the amount of time soils are left exposed. Use BMPs on exposed piles of soil to reduce erosion potential from rain or wind. 	During construction
<ul style="list-style-type: none"> • Prepare a Fugitive Dust Control Plan to control windblown dust, include measures to develop and implement a dust control plan. 	Prior to construction
<ul style="list-style-type: none"> • Use appropriate seed mixes; application rates, methods, and timing to revegetate disturbed areas. 	After construction
<ul style="list-style-type: none"> • Monitor reseeded areas for adequate growth and implement contingency measures as necessary. 	After construction
<ul style="list-style-type: none"> • Save topsoil removed for structure and temporary spur road construction and use on-site for restoration activities, where possible. 	During construction
<ul style="list-style-type: none"> • Retain existing low-growing vegetation where possible. 	During construction
<ul style="list-style-type: none"> • Leave erosion and sediment control devices in place until all disturbed sites are revegetated and erosion potential has returned to pre-project conditions. 	After construction
<ul style="list-style-type: none"> • Encourage workers to cut or crush vegetation in-place, rather than blade, in temporary disturbance areas. 	During construction
<ul style="list-style-type: none"> • Decommission temporary roads according to the requirements and BMPs of the appropriate land management agency. 	During and after construction
<ul style="list-style-type: none"> • Locate staging areas in previously disturbed or graveled areas where practicable. 	During construction
<ul style="list-style-type: none"> • Maintain erosion controls near waterbodies. 	During and after construction
<ul style="list-style-type: none"> • Minimize ground-disturbing activities, particularly in sensitive habitats. 	During construction
<ul style="list-style-type: none"> • Limit road improvements to the minimum amount necessary. 	During design and construction
<ul style="list-style-type: none"> • Avoid excavation in areas of identified contaminants. 	During construction
<ul style="list-style-type: none"> • Prepare and implement Spill Prevention and Response Procedures. 	Prior to and during construction
<ul style="list-style-type: none"> • Ensure construction vehicles travel at low speeds on access roads and at construction sites to minimize dust. 	During construction
<ul style="list-style-type: none"> • Use local rock sources for road construction where practicable. 	During construction

Mitigation Measures	Time of Implementation
Water Resources, Wetlands and Floodplains	
<ul style="list-style-type: none"> • Use BMPs to limit erosion and the spread of invasive and noxious weeds. 	During and after construction
<ul style="list-style-type: none"> • Obtain all required permits with approved wetland delineations and compensatory mitigation plans prior to construction, and implement required wetland compensation in accordance with these plans and permits. 	Prior to construction
<ul style="list-style-type: none"> • Maintain erosion controls near waterbodies. 	During and after construction
<ul style="list-style-type: none"> • Minimize the number of access road stream crossings during project planning. 	Prior to construction
<ul style="list-style-type: none"> • Minimize the project ground-disturbance footprint, particularly in sensitive areas such as stream crossings and wetlands, and stream and wetland buffers and AIZs. 	During design and construction
<ul style="list-style-type: none"> • Cease project construction near stream courses under high flow conditions, except for efforts to avoid or minimize resource damage. 	During construction
<ul style="list-style-type: none"> • Locate refueling and servicing operations outside of AIZs. Use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles. 	During construction
<ul style="list-style-type: none"> • Limit ground-disturbing activities to structure sites, access roads, staging areas, and the proposed substation site. 	During construction
<ul style="list-style-type: none"> • Apply herbicides according to the BPA Transmission System Vegetation Management Program EIS and ROD and label recommendations. 	During and after construction
<ul style="list-style-type: none"> • Retain existing low-growing vegetation where possible. 	During construction
<ul style="list-style-type: none"> • Leave erosion and sediment control devices in place until all disturbed sites are revegetated and erosion potential has returned to pre-project conditions. 	After construction
<ul style="list-style-type: none"> • Decommission temporary roads according to the requirements and BMPs of the appropriate land management agency or landowner. 	After construction
<ul style="list-style-type: none"> • Develop and implement erosion and sediment control plans. 	During construction
<ul style="list-style-type: none"> • Design temporary and permanent access roads to control runoff and prevent erosion. 	Prior to construction
<ul style="list-style-type: none"> • Install sediment barriers and other suitable erosion and runoff control devices. 	Prior to and during construction
<ul style="list-style-type: none"> • Surface all permanent access roads with rock. 	During construction
<ul style="list-style-type: none"> • Limit the amount of time soils are left exposed. 	During construction
<ul style="list-style-type: none"> • Identify wetlands and other sensitive areas prior to initiating construction. 	Prior to construction
<ul style="list-style-type: none"> • Limit road improvements to the minimum amount necessary. 	During design and construction
<ul style="list-style-type: none"> • Prepare and implement Spill Prevention and Response Procedures. 	Prior to and during construction
<ul style="list-style-type: none"> • Provide spill prevention kits at designated locations on the project site. 	During construction

Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> Inspect equipment daily for potential leaks. 	During construction
Wildlife	
<ul style="list-style-type: none"> Consult with the appropriate state or federal land management agency (C-TNF, BLM, or IDFG) concerning special status species that have already been identified or that may be identified during follow up surveys, and implement any mitigation measures (such as feasible and appropriate avoidance measures) identified as a result of these consultations. 	Prior to and during construction
<ul style="list-style-type: none"> Minimize ground-disturbing activities, particularly in sensitive habitats. 	During construction
<ul style="list-style-type: none"> Install visibility enhancement devices, in compliance with the most recent Avian Power Line Interaction Committee (APLIC) and Avian Protection Plan (APP) guidance, on the overhead ground wires to reduce the risk of collision in areas that have been determined by the avian risk model to bear a high risk of increased avian collisions (See Appendix H). 	During and after construction
<ul style="list-style-type: none"> Conduct nesting bird pre-construction surveys prior to tree removal. 	Prior to construction
<ul style="list-style-type: none"> Conduct pre-construction surveys for sage and Columbian sharp-tailed grouse leks in sagebrush habitats. 	Prior to construction
<ul style="list-style-type: none"> Prohibit construction activity within 10 miles of an active greater sage-grouse lek and within 2 miles of active Columbian sharp-tailed grouse leks between the end of March and mid-May, when possible. 	During construction
<ul style="list-style-type: none"> Avoid manipulating or altering sagebrush stands with tall, relatively thick sagebrush that are suitable as grouse nesting habitat during the nesting period (May to June). 	During construction
<ul style="list-style-type: none"> Consult with the C-TNF, BLM, and IDFG regarding construction and access within big game winter range habitat between November 15 and April 15. Within big game winter ranges, seed disturbed areas with preferred big game forage species, as recommended by the C-TNF, BLM, and IDFG. 	Prior to, during, and after construction
<ul style="list-style-type: none"> Limit construction between Dry Ridge and Upper Valley within the Blackfoot River WMA during the elk and mule deer calving and fawning period and avian breeding and nesting from April 15 to July 1. 	During construction
<ul style="list-style-type: none"> Identify wetlands and other sensitive areas prior to initiating construction so that construction workers avoid unintentional impacts to wildlife habitat. 	Prior to construction
<ul style="list-style-type: none"> Minimize the amount of permanent access roads necessary for the Project to minimize the potential for wildlife collisions. 	During design and construction
<ul style="list-style-type: none"> Limit ground-disturbing activities to structure sites, access roads, staging areas, and the proposed substation site. 	During construction
<ul style="list-style-type: none"> Restrict public access to permanent access roads. 	During and after construction
<ul style="list-style-type: none"> Leave plants shorter than 4 feet undisturbed within the 100-foot-wide ROW where they would not interfere with the safe operation of the transmission line. 	During and after construction
<ul style="list-style-type: none"> Use appropriate seed mixes, application rates, methods, and timing to revegetate disturbed areas. 	After construction

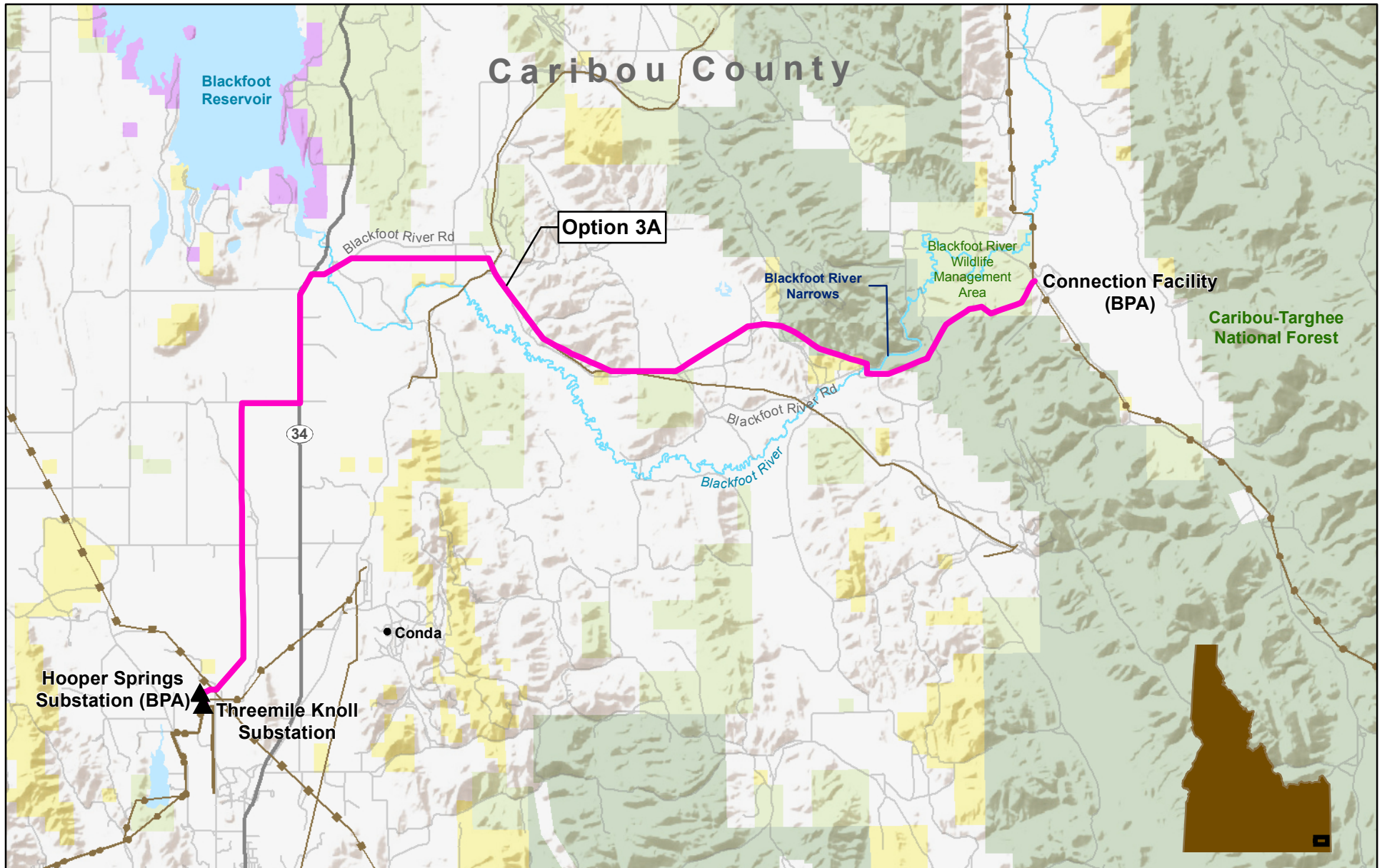
Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> • Use BMPs to limit erosion and the spread of invasive and noxious weeds. 	During and after construction
<ul style="list-style-type: none"> • Save topsoil removed for structure and temporary spur road construction and use on-site for restoration activities where possible. 	During construction
<ul style="list-style-type: none"> • Apply herbicides according to the BPA Transmission System Vegetation Management Program EIS and ROD and label recommendations. 	During and after construction
<ul style="list-style-type: none"> • Avoid snag and large tree removal to the extent possible. 	During construction
<ul style="list-style-type: none"> • Decommission temporary roads according to the requirements and BMPs of the appropriate land management agency. 	After construction
<ul style="list-style-type: none"> • Limit road improvements to the minimum amount necessary. 	During design and construction
<ul style="list-style-type: none"> • Conduct noise-generating construction activities only during normal daytime hours, i.e., between 7:00 a.m. and 7:00 p.m. to the extent possible. 	During construction
<ul style="list-style-type: none"> • Initiate discussions with local fire districts and work with the districts and other appropriate entities to develop fire and emergency response plans. 	Prior to and during construction
<ul style="list-style-type: none"> • Ensure that all equipment has standard sound control devices. 	Prior to and during construction
Fish	
<ul style="list-style-type: none"> • Apply herbicides according to the BPA Transmission System Vegetation Management Program EIS and ROD, and label recommendations. 	During and after construction
<ul style="list-style-type: none"> • Retain existing low-growing vegetation where possible. 	During construction
<ul style="list-style-type: none"> • Use erosion control BMPs and leave erosion and sediment control devices in place. 	During and after construction
<ul style="list-style-type: none"> • Decommission temporary roads according to the requirements and BMPs of the appropriate land management agency. 	After construction
<ul style="list-style-type: none"> • Develop and implement a SWPPP. 	Prior to and during construction
<ul style="list-style-type: none"> • Design temporary and permanent access roads to control runoff and prevent erosion, and surface permanent roads with rock. 	During design and construction
<ul style="list-style-type: none"> • Install sediment barriers and other suitable erosion and runoff control devices. 	Prior to and during construction
<ul style="list-style-type: none"> • Maintain erosion controls near waterbodies. 	During and after construction
<ul style="list-style-type: none"> • Minimize the number of access road stream crossings. 	During design and construction
<ul style="list-style-type: none"> • Minimize the ground-disturbance footprint of the Project, particularly in sensitive areas such as stream crossings and wetlands, and stream and wetland buffers and AIZs. 	During design and construction

Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> • Cease project construction near stream courses under high flow conditions. 	During construction
<ul style="list-style-type: none"> • Locate refueling and servicing operations outside of AIZs. Use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles. 	During construction
<ul style="list-style-type: none"> • Consult with the appropriate federal or state land management agency (C-TNF, BLM, or IDFG) concerning any special status species. 	Prior to construction
<ul style="list-style-type: none"> • Limit road improvement disturbance width to the minimum amount necessary. 	During design and construction
<ul style="list-style-type: none"> • Improve existing roads on BLM, BIA, and C-TNF lands according to applicable agency standards. 	During design and construction
<ul style="list-style-type: none"> • Prepare and implement Spill Prevention and Response Procedures. 	Prior to and during construction
Cultural Resources	
<ul style="list-style-type: none"> • Site transmission structures and access roads to avoid known cultural resource sites and limit ground disturbance. 	During design and construction
<ul style="list-style-type: none"> • Complete cultural resource surveys for portions of the alternatives or route options if BPA decides to construct a route for which cultural resource surveys have not been conducted along the entire route. Consult with Idaho State Historic Preservation Office (SHPO) concerning appropriate actions prior to any ground-disturbing activities. 	Prior to construction
<ul style="list-style-type: none"> • Prepare an Inadvertent Discovery Plan that details crew member responsibilities for reporting if cultural resources are encountered during construction. This plan should include directives to stop work immediately and notify interested parties including appropriate BPA personnel; affected tribes, C-TNF, BIA, and BLM staff (as appropriate); the Idaho SHPO, and local law enforcement officials (if appropriate). 	Prior to construction
<ul style="list-style-type: none"> • Prepare a mitigation plan to protect sites if final placement of project facilities results in unavoidable adverse impacts to a significant cultural resource. 	Prior to construction
<ul style="list-style-type: none"> • Provide cultural resource monitors, as necessary, to observe ground-disturbing activities in areas of previously documented cultural sites. 	During construction
<ul style="list-style-type: none"> • Limit ground-disturbing activities to structure sites, access roads, staging areas, and the proposed substation sites (see Section 3.1.4, Land Use). 	During design and construction
Socioeconomics	
<ul style="list-style-type: none"> • Plan and conduct construction activities to minimize temporary disturbance, displacement of crops, and interference with agricultural activities. 	Prior to and during construction
<ul style="list-style-type: none"> • Compensate landowners for any damage to crops or property during construction or operation and maintenance activities, as appropriate. . 	After construction
<ul style="list-style-type: none"> • Compensate landowners for reconfiguration of irrigation systems due to placement of project facilities. 	After construction
<ul style="list-style-type: none"> • Compensate landowners at fair market value for any new land rights acquired for ROW or access road easements. 	Prior to, during, and after construction

Mitigation Measures	Time of Implementation
<ul style="list-style-type: none"> • Use local rock sources for road construction where practicable. 	During construction
Transportation	
<ul style="list-style-type: none"> • Install barriers, gates, and postings at appropriate access points, and at the landowner's request, to minimize or eliminate unauthorized use of access roads. 	After construction
<ul style="list-style-type: none"> • Limit road improvements to the minimum amount necessary to safely move equipment, materials, and personnel to and from construction areas. 	During construction
<ul style="list-style-type: none"> • Improve existing roads on BLM, BIA, and C-TNF lands according to applicable agency standards. 	During construction
<ul style="list-style-type: none"> • Develop a traffic control plan (which includes circulation, safety, management, signage, and detours, if necessary) that considers roadway conditions, wear on roads and bridges, stream crossings, traffic control, post-construction repair, reclamation, and access control. 	Prior to construction
<ul style="list-style-type: none"> • Comply with all county, state, and federal traffic management and road design requirements. 	Prior to and during construction
<ul style="list-style-type: none"> • Limit the use of local, county, USFS, BIA, and BLM roads for construction traffic to roads necessary for access to staging areas and work sites. 	During construction
<ul style="list-style-type: none"> • Schedule heavy and over-sized truck trips outside of peak periods. 	During construction
<ul style="list-style-type: none"> • Store construction materials only in designated staging areas. 	During construction
<ul style="list-style-type: none"> • Restore public roadways to preconstruction conditions upon completion of project construction activities. 	After construction
<ul style="list-style-type: none"> • Surface all permanent access roads with rock. 	During construction
Noise	
<ul style="list-style-type: none"> • Provide a schedule of construction activities, including blasting, to all landowners who could be affected by construction. 	Prior to and during construction
<ul style="list-style-type: none"> • Ensure that all equipment has standard sound control devices. 	Prior to and during construction
<ul style="list-style-type: none"> • Use blasting mats to reduce noise levels. 	During construction
<ul style="list-style-type: none"> • Conduct noise-generating construction activities only during normal daytime hours, i.e., between 7:00 a.m. and 7:00 p.m., to the extent possible. 	During construction
<ul style="list-style-type: none"> • Schedule heavy and over-sized truck trips outside of peak morning and evening commute hours. 	During construction
Public Health and Safety	
<ul style="list-style-type: none"> • Avoid excavation in areas of identified contaminants. 	During construction
<ul style="list-style-type: none"> • Conduct soil sampling in areas likely to be contaminated by mining waste containing selenium and other hazardous substances, where necessary, to ensure proper management and handling of excavated soils and for worker health and safety. Consult with mining companies and USFS prior to any sampling. 	Prior to construction
<ul style="list-style-type: none"> • Prepare and implement Spill Prevention and Response Procedures to avoid and 	Prior to and during

Mitigation Measures	Time of Implementation
contain accidental spills; include notification assessment, security, clean-up, and reporting requirements. The contractor would be required to follow the Spill Prevention and Response Procedures and immediately notify the proper authorities in the event of a hazardous material or petroleum spill.	construction
<ul style="list-style-type: none"> • Provide spill prevention kits at designated locations on the project site and where hazardous materials are stored. 	During construction
<ul style="list-style-type: none"> • Inspect equipment daily for leaks. 	During construction
<ul style="list-style-type: none"> • Initiate discussions with local fire districts prior to construction and work with the districts and other appropriate emergency response entities to develop appropriate fire and emergency response plans. 	Prior to construction
<ul style="list-style-type: none"> • Construct and operate the new transmission line according to the National Electric Safety Code. 	During and after construction
<ul style="list-style-type: none"> • Restore reception quality if radio or television interference occurs as a result of constructing the transmission line so that reception is as good as or better than before the interference. 	During construction
<ul style="list-style-type: none"> • Install barriers, gates, and postings at appropriate access points. 	During and after construction
<ul style="list-style-type: none"> • Apply herbicides according to the BPA Transmission System Vegetation Management Program EIS and ROD and label recommendations. 	During and after construction
<ul style="list-style-type: none"> • Design temporary and permanent access roads to control runoff and prevent erosion. 	Prior to construction
<ul style="list-style-type: none"> • Cease project construction near stream courses under high flow conditions. 	During construction
<ul style="list-style-type: none"> • Locate refueling and servicing operations outside of AIZs. Use pumps, funnels, absorbent pads, and drip pans when fueling or servicing vehicles. 	During construction
Air Quality	
<ul style="list-style-type: none"> • Ensure construction vehicles travel at low speeds on access roads and at construction sites to minimize dust. 	During construction
<ul style="list-style-type: none"> • Do not burn during construction activities. 	During construction
<ul style="list-style-type: none"> • Shut down idling construction equipment, if feasible. 	During construction
<ul style="list-style-type: none"> • Locate staging areas as close to construction sites as practicable to minimize driving distances between staging areas and construction sites. 	During construction
<ul style="list-style-type: none"> • Recycle or salvage non-hazardous construction and demolition debris where practicable. 	During construction
<ul style="list-style-type: none"> • Use local rock sources for road construction where practicable. 	During construction
<ul style="list-style-type: none"> • Prepare a Fugitive Dust Control Plan. 	Prior to construction
<ul style="list-style-type: none"> • Use appropriate seed mixes; application rates, methods, and timing to revegetate disturbed areas. 	After construction
<ul style="list-style-type: none"> • Limit the time soils are left exposed. 	During construction

Mitigation Measures	Time of Implementation
Greenhouse Gases	
<ul style="list-style-type: none"> • Shut down idling construction equipment, if feasible. 	During construction
<ul style="list-style-type: none"> • Locate staging areas as close to construction sites as practicable to minimize driving distances between staging areas and construction sites. 	During construction
<ul style="list-style-type: none"> • Locate staging areas in previously disturbed or graveled areas to minimize soil and vegetation disturbance where practicable. 	During construction
<ul style="list-style-type: none"> • Encourage the use of the proper size of equipment for the job to maximize energy efficiency. 	During construction
<ul style="list-style-type: none"> • Encourage the use of alternative fuels for generators at construction sites, such as propane or solar, or use electrical power where practicable. 	During construction
<ul style="list-style-type: none"> • Recycle or salvage non-hazardous construction and demolition debris where practicable. 	During construction
<ul style="list-style-type: none"> • Use local rock sources for road construction where practicable. 	During construction



▲ Substation	Land Ownership	— Local Road
● City	■ Caribou-Targhee National Forest	— State Route
— Option 3A	■ Bureau of Land Management	Existing Transmission Lines
	■ Bureau of Indian Affairs	— 46 kV
	■ State Land	● 138 kV
	■ Private Land	■ 345 kV

Coordinate System: NAD 1983 State Plane Idaho East (feet)
 Projection: Transverse Mercator
 Datum: North American 1983

Hooper Springs Transmission Project