This document is the Final Environmental Assessment (EA) for the proposed Kalispell-Kerr 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-1961, dated February 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 www.bpa.gov/goto/KalispellKerr.

Summary

BPA proposes to rebuild its Kalispell-Kerr transmission line, which runs from Kalispell to Polson, Montana. The existing 41-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 February 1, 2016; the comment period ran until March 1, 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 Cover Page

The Draft EA issuance date on the cover of the Draft EA has been revised as follows to provide the correct issuance date:

February 2016

Changes to Chapter 2—Proposed Action and Alternatives

2.1 Existing Transmission Line

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

(Representative photographs are presented in Section 3.5, Wildlife and Section 3.8, Visual Quality.)

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

The existing transmission line is made-up of 359 wood-pole structures, which are mostly two-pole wood-pole H-frame structures, with some three-pole wood structures and two-pole steel structures.

The third sentence of the third paragraph of Section 2.1 has been revised from the Draft EA as follows:

The transmission line has three conductors (electrical wires) and stretches of overhead ground wire for the first 0.5 mile out from each substation it passes through (Kalispell, Elmo, and Kerr substations) to protect substation equipment from lightning strikes.

2.2 Proposed Action

The first sentence in the first bullet of Section 2.2 has been revised from the Draft EA as follows:

Removal and replacement of all 354 of the existing 359 wood-pole transmission line structures (including components such as cross-arms, insulators, dampers, and guy wires).
Section 2.2.1 Transmission Line Structures

The following rows in Table 2.2-1 have been revised from the Draft EA as follows:

Table 2.2-1. Quantity of Required Elements for Proposed Action Activities

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access Road Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Gates (new/replaced)</td>
<td>77 81/28</td>
</tr>
<tr>
<td><strong>Vegetation Removal</strong></td>
<td></td>
</tr>
<tr>
<td>Removal of trees inside transmission line right-of-way</td>
<td>Estimated up to 750 135</td>
</tr>
<tr>
<td>Removal of trees outside (adjacent) transmission line right-of-way</td>
<td>Estimated up to 200 165</td>
</tr>
<tr>
<td>Removal of trees along access roads</td>
<td>Estimated up to 400 1,150</td>
</tr>
<tr>
<td><strong>Access Road Activities</strong></td>
<td></td>
</tr>
<tr>
<td>Culverts (new/repair or replaced)</td>
<td>21/8 9</td>
</tr>
</tbody>
</table>

Section 2.2.2 Conductors, Optical Ground Wire, and Counterpoise

**Optical Ground Wire and Counterpoise**

The second sentence of the fourth paragraph under this subsection has been revised from the Draft EA as follows:

Counterpoise would be installed in trenches approximately between 12 to 30 inches deep and 24 12 inches wide and vary in length from 15 to 100 feet (Figure 2.2-1).

Section 2.2.4 Access Roads

The first sentence of the fifth paragraph of Section 2.2.4 has been revised from the Draft EA as follows:

As a component of access road construction and improvements, 21 new culverts would be installed and 8 9 existing culverts repaired or replaced to manage stormwater runoff and, in one two locations, possibly provide fish passage.

The third sentence of the sixth paragraph of Section 2.2.4 has been revised from the Draft EA as follows:

Twenty-eight existing gates would be replaced as part of the Proposed Action, and 77 81 new gates would be installed.

2.2.5 Vegetation Removal

The first and second sentences of the second paragraph of Section 2.2.5 have been revised from the Draft EA as follows:

About 130 acres of low growing vegetation (grasses, low-shrubs, small saplings, and agricultural crops) would be disturbed or cleared for construction activities, and about
2,250 1,450 trees would be removed. Trees to be cut would include 750 135 corridor trees, 200 165 danger trees, and 1,300 1,150 trees for access road work (Table 2.2-2).

The seventh sentence of the second paragraph of Section 2.2.5 has been revised from the Draft EA as follows:

The 1,300 1,150 trees that would be removed for the access road work would be for new road construction, existing road reconstruction or improvement, or to provide sufficient clearance for construction equipment.

Table 2.2-2 has been revised from the Draft EA as follows:

<table>
<thead>
<tr>
<th>Proposed Activity</th>
<th>Estimated Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal of trees outside of, or within the unoccupied portions of the transmission line right-of-way ^a^ b</td>
<td>950 300</td>
</tr>
<tr>
<td>U.S. Forest Service Swan Lake Ranger District</td>
<td>10</td>
</tr>
<tr>
<td>Flathead Indian Reservation</td>
<td>550 85</td>
</tr>
<tr>
<td>Non-federal lands</td>
<td>440 205</td>
</tr>
<tr>
<td>Removal of other trees along access roads ^a^ c</td>
<td>1,300 1,150</td>
</tr>
<tr>
<td>U.S. Forest Service Swan Lake Ranger District</td>
<td>550 500</td>
</tr>
<tr>
<td>Flathead Indian Reservation</td>
<td>220 200</td>
</tr>
<tr>
<td>Non-federal lands</td>
<td>530 450</td>
</tr>
</tbody>
</table>

^a^ Approximately 90% of all trees identified area 18-inch diameter at breast height (dbh) or smaller.

^b^ The trees to be removed along the transmission line right-of-way include 95 83% conifer and 5 17% deciduous.

^c^ The trees to be removed for access road construction include 98 90% conifer and 2 10% deciduous.

### 2.5 Comparison of Alternatives

The following row in Table 2.5-1 has been revised from the Draft EA as follows:

Table 2.5-1. Comparison of the Proposed Action and No Action Alternative by Purposes

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Proposed Action</th>
<th>No Action Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate cost-</td>
<td>Total costs would be about $24,000,000 to $29,000,000 million.</td>
<td>The No Action Alternative would not require the expenditure of funds to rebuild the</td>
</tr>
<tr>
<td>effectiveness</td>
<td></td>
<td>transmission line at this time. Repairs would require an ongoing outlay of funds to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>replace failed structures, rebuild roads, and replace and re-string failed conductors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The rate of maintenance spending would likely increase as aging structures fail at</td>
</tr>
<tr>
<td></td>
<td></td>
<td>increasing rates. An as-needed approach would likely increase the cost associated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with multiple mobilizations and would likely be less cost efficient, when compared to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the Proposed Action.</td>
</tr>
</tbody>
</table>
The following rows in Table 2.5-2 have been revised from the Draft EA as follows:

**Table 0.5-2. Comparison of the Environmental Impacts by Alternative**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Anticipated Level of Impact</th>
<th>Potential Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geology and Soils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Action</td>
<td>Low to Moderate</td>
<td>• 60 acres of total permanent soil disturbance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 35 acres of permanent disturbance in areas of severe erosion potential.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2,250 1,450 trees removed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Disturbance would be dispersed throughout right-of-way and would not occur in one area or all at one time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Permanent and temporary erosion control measures would be implemented.</td>
</tr>
<tr>
<td><strong>Vegetation</strong></td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Proposed Action</td>
<td>Low</td>
<td>• 55 acres of permanent impacts on vegetation, 70% within grasslands.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 2,250 1,450 trees removed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Vegetation removal and changes in plant cover.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Soil compaction and disturbance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased potential for spread of invasive plants.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Low potential for special status plants to be impacted due to lack of suitable habitat.</td>
</tr>
<tr>
<td><strong>Wetlands and Floodplains</strong></td>
<td>Low for wetlands Negligible to Low for floodplains</td>
<td>• Less than 1 acre of wetland and floodplain habitat filled for road construction</td>
</tr>
<tr>
<td>Proposed Action</td>
<td>Low for wetlands Negligible to Low for floodplains</td>
<td>• Disturbance of wetlands and temporary disruption of wetland functions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Soil compaction and crushing of wetland vegetation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tree removal in floodplains.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Potential for accidental chemical spills and PCP leaching from wood poles.</td>
</tr>
<tr>
<td><strong>Socioeconomics and Public Services</strong></td>
<td>Negligible Low to no for population Low to no for economic characteristics No impacts for environmental justice populations Low for public services</td>
<td>• Temporary, small increase in population, stimulation of the economy, demand for lodging.</td>
</tr>
<tr>
<td>Proposed Action</td>
<td>Negligible Low to no for population Low to no for economic characteristics No impacts for environmental justice populations Low for public services</td>
<td>• No environmental justice populations in project area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• BPA would compensate landowners for economic loss associated with agriculture and forestry.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No long-term changes to property values.</td>
</tr>
</tbody>
</table>
### Changes to Chapter 3—Affected Environment, Environmental Consequences, and Mitigation Measures

#### 3.2 Land Ownership, Use, Recreation, and Transportation

##### 3.2.1 Affected Environment

**Land Use**

The first sentence in the first paragraph of the Land Use sub-section (page 3-2) has been revised from the Draft EA as follows:

"Land uses crossed by the transmission line and access road rights-of-way include agriculture, forestry, open space, and residential, and limited areas of light industrial and commercial (Figure 3.2-2)."

##### 3.2.2 Environmental Consequences—Proposed Action

**Forestry**

The second sentence in the first paragraph of this subsection (page 3-10) has been revised from the Draft EA as follows:

"Approximately 1,088 trees would be removed adjacent to the transmission line right-of-way (danger trees) and along access roads within forestry lands."

**Undeveloped Open Space**

The fifth sentence in the first paragraph of this subsection (page 3-11) has been revised from the Draft EA as follows:

"Approximately 240 trees would be removed as part of structure replacement and access road work in areas of open space."
3.2.3 Mitigation Measures

The following mitigation measures in Section 3.2.3 have been revised from the Draft EA as follows:

- **LAND-2**: Provide a construction schedule to all potentially affected landowners along the right-of-way and post this schedule in affected recreational areas.
- **LAND-8**: Compensate landowners for the value of commercial crops or property damaged by construction activities as appropriate.
- **LAND-89**: Coordinate with local agencies to avoid construction activities that could conflict with their own construction activities.
- **LAND-910**: Restore compacted cropland soils as close as possible to pre-construction conditions. Break up compacted soils in non-cropland where necessary by ripping, tilling, or scarifying before seeding.

3.3 Geology and Soils

3.3.2 Environmental Consequences-Proposed Action

The first sentence in the fourth paragraph of the Geology and Soils sub-section (page 3-16) has been revised from the Draft EA as follows:

A total of about 2,250 1,450 trees would be removed as part of transmission replacement and access road construction activities, which could affect soil stability and increase the potential for erosion and landslides.

3.3.3 Mitigation Measures

The following mitigation measure in Section 3.3.3 has been revised from the Draft EA as follows:

- **GEO-67**: Retain existing low-growing vegetation where possible, and minimize the use of clearing/grubbing to preserve the roots of these plants.
- **GEO-78**: Reseed disturbed areas with native grasses and forbs (or landowner-requested species, as appropriate), using appropriate seed mixes, application rates, methods, and timing for the site conditions as soon as practicable following the completion of construction. Monitor revegetation and site restoration work for adequate growth; implement contingency measures as necessary.
- **GEO-89**: Leave erosion and sediment control devices in place until all disturbed sites are revegetated and erosion potential has returned to pre-construction conditions.
- **GEO-910**: Locate materials storage and temporary staging areas in flat, previously disturbed or graveled sites outside of sensitive areas to minimize soil and vegetation disturbance, where practicable.
- **GEO-1041**: Use containment vessels, absorbent materials, or other removable impervious materials to contain leaching of preservatives and hazardous material leaks.
3.4 Vegetation

3.4.2 Environmental Consequences—Proposed Action

General Vegetation

The third sentence of the first paragraph in the General Vegetation sub-section has been revised from the Draft EA as follows:

Construction of the Proposed Action would result in 54.6 acres of permanent impacts associated with the loss of vegetation (Table 3.4-4).

The third paragraph in the General Vegetation sub-section has been revised from the Draft EA as follows:

The removal of an estimated 2,250 trees would affect the plant communities in which they are located by increasing light within the understory, possibly resulting in small, localized changes in species composition, depending on what shrubs or seeds are present in the affected area. Nearly half (54.70 percent) of the total number of trees that would be removed are 6 to less than 12 inches dbh. In conifer forests, trees of this size are typically 16 to 30 years old. Mature trees, which are typically between 31 and 80 years old with 13 to 18 inch dbh, account for 34.20 percent of the total number of trees that would be removed. The remaining 10 percent of trees to be removed are between 19 to 37 inches dbh, with an average dbh of 22 inches.

Special-Status Plant Species

The Special-Status Plant Species sub-section has been revised from the Draft EA as follows:

Four of the 9 special-status plant species with the potential to occur within the transmission line and access road rights-of-way grow in wetland and riparian vegetation communities. The Proposed Action would temporarily disturb 2.2 acres and permanently remove 0.3 acre of wetland and riparian vegetation. Most of the temporary disturbance would be associated with temporary access road work in a large wetland near line mile 26. To replace structures in these locations, wood mats or other measures (e.g., low ground pressure equipment) would be utilized; these measures would crush vegetation but not result in a permanent change to the habitat. Although wetland and riparian habitat would be disturbed, it is unlikely that special-status plant species would be affected by the Proposed Action because none were observed during the wetland delineation or invasive weed field surveys. Additionally the one documented occurrence of wedge-leaf saltbush near Big Arm has not been observed in more than 20 years (MTNHP 2014) and is unlikely to be affected by the Proposed Action. The native campion species that was found during the June 2014 surveys is outside of all work areas and would be avoided. BPA also performed surveys for Spalding’s campion in July 2016 using information on potential additional suitable habitat identified through discussions with the MNHP (pers. comm., Pipp 2016). No Spalding’s campion were
identified during the surveys. Therefore, impacts on special-status plant species would be low to no.

BPA prepared a Biological Assessment (BA) to evaluate the effects of the Proposed Action on ESA-listed species and critical habitats. The BA recommended a determination of “may affect, not likely to adversely affect” for Spalding’s campion. Further information on the informal consultation process is included in Section 4.2.1.

3.4.3 Mitigation Measures

The following mitigation measures in Section 3.4.3 have been revised from the Draft EA as follows:

- **VEG-10**: Implement measures to minimize the spread of noxious weeds in agricultural lands and areas of intact native vegetation (e.g., line miles 27 and 28), including cleaning of vehicles before entering construction areas, and installation and use of weed wash/blow stations at selected locations within the project area, and application of herbicides to control occurrences of Priority 1B weed species (rush skeletonweed).

- **VEG-11**: Identify noxious weed infestations with fencing, flagging, or stakes at construction sites in agricultural lands and native vegetation locations, and avoid these areas as much as practicable during construction.

3.5 Wildlife

3.5.1 Affected Environment

Montana Wildlife Species of Concern

The fourth sentence of this sub-section has been revised from the Draft EA as follows:

Based on this search, Montana wildlife species of concern that have a moderate potential to occur in the transmission line and access road rights-of-way include the following: the western toad (*Anaxyrus boreas*), bald eagle (*Haliaeetus leucocephalus*), Clark’s nutcracker (*Nucifraga columbiana*), great blue heron (*Ardea herodias*), hoary bat (*Lasiurus cinereus*), long-billed curlew (*Numenius americanus*), and veery (*Catharus fuscescens*; a bird in the thrush family).
The following row in Table 3.5-2 has been revised from the Draft EA as follows:

<table>
<thead>
<tr>
<th>Common Name Scientific Name</th>
<th>USFWS Status</th>
<th>U.S. Forest Service Status</th>
<th>Montana Status a</th>
<th>Habitat Association</th>
<th>Potential for Occurrence in the Project Area b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoary Bat Lasiurus cinereus</td>
<td></td>
<td>G5/S3</td>
<td></td>
<td>Summer resident of forested habitats. Typically forages over water near forested areas; habitats used range from coniferous forests to riparian habitats.</td>
<td>Low. Moderate. Most forests crossed by the line are not in close association with water. Marginal amount of fragmented riparian habitat is present along the Flathead River, Ashley Creek, and West Fork Dayton Creek.</td>
</tr>
</tbody>
</table>

**ESA-listed Wildlife Species**

**Grizzly Bear**

The fifth sentence of this sub-section (page 3-35) has been revised from the Draft EA as follows:

However, current information suggests that the grizzly bear population on the Flathead National Forest and the Northern Continental Divide Ecosystem is expanding its range outside of the recovery zone and has a population that exceeds recovery plan levels (Kendall et al. 2009; U.S. Forest Service 2002, 2012b).

**Meltwater Lednian Stonefly**

The last sentence of this sub-section has been deleted from the Draft EA as follows:

The Final EA will include results from informal consultation under Section 7 of the ESA with the USFWS on grizzly bear and Canada lynx.

**3.5.2 Environmental Consequences— Proposed Action**

**Montana Wildlife Species of Concern**

**Veery**

The first sentence of the second paragraph in this sub-section has been revised from the Draft EA as follows:

The Proposed Action is anticipated to **permanently** impact no more than 0.2 acres of riparian deciduous forest forested wetland (Table. 3.4-4).

**ESA-Listed Wildlife**

The following paragraph was added directly under the “ESA-Listed Wildlife” subheading:
BP A prepared a Biological Assessment (BA) to evaluate the effects of the Proposed Action on ESA-listed species and critical habitats. The BA recommended a determination of “may affect, not likely to adversely affect” for grizzly bear and Canada lynx. Further information on the informal consultation process is included in Section 4.2.1.

**Canada Lynx**

The second sentence of the third paragraph in this sub-section has been revised from the Draft EA as follows:

Approximately 2,250 1,450 trees would be removed from the edges of the existing right-of-way and access roads, which is these areas are generally devoid of the dense, multi-layered coniferous forest habitat that Canada lynx prefer.

### 3.5.3 Mitigation Measures

The following mitigation measures in Section 3.5.3 have been revised from the Draft EA as follows:

- **WILD-4**: For all species other than bald eagles, if tree vegetation removal occurs during the nesting season (March 15–August 31), conduct nesting bird pre-construction surveys prior to tree vegetation removal and avoid removal of trees vegetation with active nests until fledging has been completed.

- **WILD-5**: Conduct pre-construction assessment with construction contractor to identify opportunities to avoid snag and large tree removal to the extent possible.

- **WILD-7**: Where not a hazard to other resources (recreational users, roads, structures, etc.) and the trees would will not re-sprout, top, trim, or girdle danger trees to create snags where practicable.

### 3.6 Wetlands and Floodplains

#### 3.6.2 Environmental Consequences—Proposed Action

**Wetlands**

The fourth and fifth sentences of the first paragraph in the Wetlands sub-section have been revised from the Draft EA as follows:

Four of the 10 structures replaced within wetlands would be placed in 4-foot diameter vertical corrugated metal pipe backfilled with crushed rock, resulting in approximately 12.5 square feet of permanent impacts per pole (or 25 square feet per structure). There would be a for a total of less than 0.1 acre of permanent impacts distributed across seven wetlands as a result of all structure replacement.

The second sentence of the third paragraph (pg 3-47) of this sub-section has been removed the Draft EA as follows:

No new culverts would be placed in wetlands.
The first sentence of the sixth paragraph (pg 3-48) of this sub-section has been revised from the Draft EA as follows:

All temporary disturbance areas in wetlands would be reseeded with an appropriate native seed mix and BPA would monitor these areas for adequate growth and implement contingency measures as necessary.

The last sentence of the second paragraph in the Floodplains sub-section has been revised from the Draft EA as follows:

Construction work areas and temporary access roads could result in some vegetation disturbance; however, the effect on vegetation and its role in floodplain function would be **negligible low**.

### 3.6.3 Mitigation Measures

The following mitigation measure in Section 3.6.3 has been revised from the Draft EA as follows:

- **WET-6**: Revegetate all temporary disturbance areas within wetlands with native an **appropriate** seed mix. Monitor revegetation and site restoration work for adequate growth; implement contingency measures as necessary.

### 3.7 Water Resources and Fish

#### 3.7.1 Affected Environment

**Surface Water and Water Quality**

*Ashley Creek*

The citation in the last sentence of the second paragraph of this sub-section has been revised from the Draft EA as follows:

Alterations in stream-side vegetation cover and pollutants (chlorophyll-a, nitrate/nitrite, nitrogen, and phosphorous) from irrigated crop production, municipal point sources, and municipal separate storm sewer systems are the probable causes and sources of impairment in this segment of Ashley Creek (MTDEQ 2013-2012).
3.7.2 Environmental Consequences—Proposed Action

Streams and Water Quality

The following rows in Table 3.7-1 have been revised from the Draft EA as follows:

Table 3.7-1. Permanent and Temporary Impacts within 100 feet of Streams

<table>
<thead>
<tr>
<th>Stream</th>
<th>Fish Presence</th>
<th>Permanent Disturbance (acres)</th>
<th>Temporary Disturbance (acres)</th>
<th>Number of New or Repaired/Replaced Stream Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ronan Creek</td>
<td>Bull trout, Brook trout</td>
<td>0.0 0.1</td>
<td>0.6</td>
<td>0 1 replacement culvert</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>2.8 2.9</td>
<td>8.7</td>
<td>Culverts: 1 new, 3 replaced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Fords: 1 new, 1 repaired</td>
</tr>
</tbody>
</table>

The first sentence of the third paragraph in the Streams and Water Quality sub-section has been revised from the Draft EA as follows:

The Proposed Action includes the installation of 21 new culverts, repair of one culvert, and replacement of 2 8 culverts. One new culvert would be installed in a tributary to Flathead Lake, one culvert would be replaced in a tributary to Stoner Creek, one culvert would be replaced on Ronan Creek, and two culverts would be replaced in tributaries to Middle Fork Dayton Creek.

Fish

The second sentence of the third paragraph in the Common Fish sub-section (pg. 3-57) has been revised from the Draft EA as follows:

One culvert would be replaced in an unnamed tributary to Stone Creek, and another in Ronan Creek, both of which is a are fish-bearing streams but does not support any fish that are a Species of Concern or ESA-listed.

The fifth paragraph in the Common Fish sub-section (pg. 3-57) has been revised from the Draft EA as follows:

Overall, because one two culvert replacements would occur within known fish-bearing streams, work would be distributed throughout the project area and not be concentrated near any one stream, culverts would be designed to maintain current stream hydraulic characteristics and mitigation measures would be implemented, impacts on common fish species would be low, and primarily a result of the possible temporary minor input of sediment to streams from adjacent upland construction.

The first paragraph in the ESA-listed Fish sub-section (pg. 3-57) has been revised from the Draft EA as follows:

There would be 0.6 acre of temporary disturbance associated with direction of travel routes within 100 feet of Ronan Creek, which also supports bull trout.
3.9  Air Quality and Climate Change

3.9.2 Environmental Consequences–Proposed Action

Greenhouse Gases

*Tree Sequestration Reduction*

The first sentence of the second paragraph in this sub-section has been revised from the Draft EA as follows:

Rebuilding the transmission line could require the removal of an estimated 180 acres of trees for new structures, access road work, and danger tree removal (Refer to Table 3.2.4).

The first and second sentences of the third paragraph in this sub-section have been revised from the Draft EA as follows:

The estimated 180 acres of trees, if not removed, would have sequestered approximately 5,000 metric tons of carbon dioxide equivalent at full maturity (Appendix A). This quantity would have sequestered the quantity of carbon dioxide equivalent generated by 1,053 passenger vehicles in 1 year (EPA 2016 Appendix A).

3.10  Socioeconomics and Public Services

3.10.2 Environmental Consequences–Proposed Action

Population and Community Character

The last sentence of this sub-section has been revised from the Draft EA as follows:

Given that the Proposed Action is not expected to cause any permanent changes in population, it would have negligible low to no impacts on population in the project area.

3.10.3 Mitigation Measures

The first paragraph of this sub-section has been revised from the Draft EA as follows:

In addition to the following mitigation measure proposed to reduce or eliminate impacts on socioeconomic and public service resources from the Proposed Action, BPA would implement measures LAND-4 (Schedule Construction), LAND-5 (Limit Construction), LAND-6 (Coordinate with Landowners), and LAND-78 (Compensate Landowners).

3.11  Cultural Resources

3.11.1 Affected Environment

Cultural Resource Investigation

The second sentence of the sixth paragraph (pg 3-78) has been revised from the Draft EA as follows:
Although rock cairns can be associated with past events or persons of importance to Native American tribes, little is known about function of this rock feature.

### 3.11.2 Environmental Consequences – Proposed Action

The last sentence of the first paragraph of this sub-section has been revised from the Draft EA as follows:

BPA has submitted a determination of no adverse effect to the Montana SHPO for concurrence continues to work with the CSKT on cultural resource management within the project area (see Section 4.6).

The first sentence of the third paragraph of this sub-section has been revised from the Draft EA as follows:

The five linear rock wall features, four historic debris/trash scatters springboard-notched cut tree stumps, prehistoric isolate (stone tool), and rock cairn identified during the surveys are located in areas that would not be affected by construction activities. Therefore, there would be no effect to these resources. Four of the five linear rock wall features, are located in areas that would not be affected by construction activities. The fifth rock wall would be affected by improvement of a road segment; however, the feature is likely not eligible for inclusion in the National Register of Historic Places.

The last two sentences of the third paragraph of this sub-section have been revised from the Draft EA as follows:

This combined with the inadvertent discovery requirements implemented during construction would result in negligible to low to no impacts to cultural resources. Therefore, impacts to cultural resources would be expected to be negligible to low to no.

### 3.12 Noise, Public Health, and Safety

#### 3.12.3 Mitigation Measures

The following mitigation measure in Section 3.12.3 has been revised from the Draft EA as follows:

- **NPHS-6**: Install barrier wraps on structures within wetlands, within 50 feet of wetlands and streams, and within floodplains.

### 3.13 Cumulative Impact Analysis

#### 3.13.2 Cumulative Impacts

Geology and Soils

The fourth sentence of the second paragraph of this sub-section has been revised from the Draft EA as follows:

The Proposed Action would remove approximately 2,250 - 1,450 trees, the majority of which would be associated with access road construction, within this stretch the transmission line.
Changes to Chapter 4—Consultation, Review, and Permit Requirements

4.2 Vegetation, Fish, and Wildlife

4.2.1 Endangered Species Act

The third paragraph in Section 4.2.1 (page 4-1) has been revised from the Draft EA as follows:

BPA conducted informal consultation with the USFWS for the Proposed Action and BPA is prepared a biological assessment BA to address potential impacts on listed fish, wildlife, and plant species. The species addressed in the BA include Canada lynx, grizzly bear, bull trout, Spalding’s campion, yellow-billed cuckoo, and water howellia. Proposed and Two candidate species (meltwater lednian stonefly and whitebark pine) were will also be addressed in the biological assessment BA. As a result of the consultation process, the USFWS will likely prepare a Biological Opinion. The BA recommended a finding of “no effect” for bull trout, yellow-billed cuckoo, water howellia, whitebark pine, and meltwater lednian stonefly and a finding of “may affect, not likely to adversely affect” for Canada lynx, grizzly bear, and Spalding’s campion. The USFWS issued a letter of concurrence to BPA on February 11, 2014, for the findings presented in the BA (USFWS 2016).

4.3 Water Quality, Wetlands, and Floodplains Protection

The third sentence of the fifth paragraph in Section 4.3 (page 4-3) has been revised from the Draft EA as follows:

BPA has submitted a CWA 404 Nationwide Permit application for the would obtain the required permits for this Proposed Action to the Corps.

4.6 Cultural and Historic Resources

The third sentence of the fourth paragraph in Section 4.6 (page 4-7) has been revised from the Draft EA as follows:

Field surveys of the entire APE planned for were conducted in the summer of 2015 would to verify the records search and identify undocumented resources.

Changes to Chapter 7—References

7.1 Printed References

The following references have been added or deleted from the Draft EA as follows:


Changes to Appendix A—Assumptions Used to Calculate Greenhouse Gas Emissions and Detailed Results

Assumptions

Construction

The third bullet included in the assumptions for construction was changes as follows from the Draft EA:
The round-trip distance to the project area is the distance from Kalispell, Montana to the Hills Creek Kerr Substation and back (about 120 miles round trip)\(^1\).

**Tree Sequestration Reduction**

The first sentence of the second paragraph of this sub-section was revised as follows from the Draft EA:

The analysis assumes that approximately \(10\) acres of land would be permanently cleared of trees and converted to an area where trees would not be allowed to regrow.

**Detailed Results**

**Construction Emissions**

The second sentence of this sub-section was revised as follows from the Draft EA:

Construction of the Proposed Action would result in an estimated 8,841.6 4,845.2 metric tons of CO\(_2\)e\(^1\) emissions.

Table A.1 was revised as follows from the Draft EA:

<table>
<thead>
<tr>
<th>Estimated GHG Emissions of Construction Activities</th>
<th>(\text{CO}_2) (metric tons)(^1)</th>
<th>(\text{CH}_4) (CO(_2)e) (metric tons)(^2)</th>
<th>(\text{N}_2\text{O}) (CO(_2)e) (metric tons)(^2)</th>
<th>Total CO(_2)e (metric tons)(^3)</th>
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</thead>
<tbody>
<tr>
<td>Peak construction transportation</td>
<td>452.8</td>
<td>296.7</td>
<td>1,773.2</td>
<td>2,522.7</td>
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<tr>
<td>Off-peak construction transportation</td>
<td>56.6</td>
<td>37.1</td>
<td>221.7</td>
<td>315.3</td>
</tr>
<tr>
<td>BPA employee transportation</td>
<td>1.1</td>
<td>0.7</td>
<td>4.4</td>
<td>6.3</td>
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<tr>
<td>Helicopter operation</td>
<td>105.6</td>
<td>1.9</td>
<td>0.4</td>
<td>107.9</td>
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<tr>
<td>Peak construction: equipment operation</td>
<td>1,252.3</td>
<td>1.3</td>
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<td>1,262.0</td>
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<tr>
<td>Off-peak construction: equipment operation</td>
<td>626.1</td>
<td>0.7</td>
<td>4.2</td>
<td>631.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong>(^3)</td>
<td>2,494.6</td>
<td>338.3</td>
<td>2,012.3</td>
<td>4,845.2</td>
</tr>
</tbody>
</table>

\(^1\) CO\(_2\) emission factors calculated from The Climate Registry (2014).

\(^2\) \(\text{CH}_4\) and \(\text{N}_2\text{O}\) emissions have been converted into units of equivalent carbon dioxide (CO\(_2\)e) using the IPCC global warming potential (GWP) factors of 25 GWP for CH\(_4\) and 298 GWP for N\(_2\text{O}\) (The Climate Registry 2014).

\(^3\) The sum of the individual entries may not sum to the total depicted due to rounding.

\(^4\) This value was rounded to 4,900 5,000 metric tons in Chapter 3 of the environmental assessment.

**Tree Sequestration Reduction**

This sub-section was revised from the Draft EA as follows:

BPA estimates that approximately \(10\) acres of trees need to be removed for the Proposed Action. If those trees were to be allowed to reach full maturity, the area would provide approximately 1,000 2,600 metric tons of CO\(_2\)e\(^1\).
References

The following reference was added to the list of references in Appendix A:

Comments Received on Draft EA and BPA’s Responses

In order to solicit comments on the Draft EA, a notice of its availability or a copy of the Draft EA itself was e-mailed or mailed to 392 individuals, organizations, tribes, and government agencies. Approximately half (197) of the recipients were adjacent landowners. In addition, BPA posted the Draft EA on the project website. The comment period ran from February 1 through March 1, 2016, and eight comment letters were received.

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

Table 1. Draft EA Comment Submittals

<table>
<thead>
<tr>
<th>Comment Number</th>
<th>Comment Author / Affiliation</th>
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<tbody>
<tr>
<td>KKTLR16 0001</td>
<td>Wisseman</td>
</tr>
<tr>
<td>KKTLR16 0002</td>
<td>McDonald</td>
</tr>
<tr>
<td>KKTLR16 0003¹</td>
<td>Auld</td>
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<tr>
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<td>Wood</td>
</tr>
<tr>
<td>KKTLR16 0008</td>
<td>Ambrose</td>
</tr>
<tr>
<td>KKTLR16 0009</td>
<td>Flathead Audubon Society</td>
</tr>
</tbody>
</table>

¹Note that comment number 0004 received by BPA was a duplicate of comment 0003. Therefore, comment 0004 is not included.
Response to Comment KKTLR16 0001 Wisseman

As described in Section 2.2.1 (Transmission Line Structures) and Figure 2.2-1 (Existing and Proposed Wood-Pole Structures) of the EA, BPA would rebuild the transmission line with new wood-pole structures similar in appearance to the existing structures.

Response to Comment KKTLR16 0002 McDonald

BPA follows industry standards and implements a thorough quality-assurance and quality-control program to ensure public safety and electric reliability on its transmission lines and other physical assets.

BPA adheres to all prevailing wage requirements set by U.S. Department of Labor through the Construction Wage Rate Requirements Statute (formerly referred to as the Davis Bacon Act). Under these requirements, contractors and subcontractors under contract with federal agencies such as BPA must pay their laborers and mechanics no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area.

As described in Section 3.5.2 (Wildlife: Environmental Consequences-Proposed Action) of the EA, effects to wildlife would be low because: (1) most of the species are highly mobile and would avoid temporary construction disturbance, (2) incidental mortality would not affect regional populations, (3) habitat changes would be minimal when compared to the available habitat adjacent to the transmission right-of-way and access roads, (4) the spread of noxious weeds would be minimized though mitigation measures, and (5) for avian species, installation of bird flight diverters would reduce the risk of collision with conductors and overhead ground wire.
Comment KKTLR16 0003 Auld

Dear Sir/Madam,

This in regards of the Kalispell-Kerr Transmission Line Rebuild Project. BPA Transmission Power line enters into the Confederated Salish and Kootenai Tribes Flathead Indian Reservation from the Northside. My concern is that it makes several impacts on our Reservation. Here is just a few listed:

- Landscape impact: Ksanka Oral History
- Legend landscape and visual
- Ksanka Community
- Visual from Traditional view
- Road

This is just a few on this list to start discussions. I would like to have these addressed in the draft environmental assessment with the Ksanka ‘Aqlsmaknik Community if BPA decides to proceed with their rebuild project.

Francis Auld
Ksanka Community Member

cc:
Vernon Samuel Finley, Chairman, CSKT
Daniel Stiffarm, Kootenai Culture Committee, Director
Kevin Askan, CSKT Tribal Preservation

Response to Comment KKTLR16 0003 Auld

Sections 1.3 (Public Involvement and Issue Summary) and 4.6 (Cultural and Historic Resources) of the EA describe BPA’s consultation with the Montana SHPO and the Confederated Salish and Kootenai Tribes under Section 106 of the NHPA. In addition, Section 3.11 of the EA discusses potential impacts of the proposed project on archaeological resources that have been identified or could occur in the project vicinity. BPA continues to work with consulting parties to assess effects on historic properties and will document the agreed-upon mitigation in a Memorandum of Agreement.

Comment KKTLR16 0005 Fields

I have a few comments. In regards to spraying of noxious weeds, please do selective spraying of individual plants or infestations to leave non-target plants alone. Endeavor to reseed spray areas to inhibit noxious weed reinestation. Reseed or mulch all machine-disturbed areas and utilize cut timber as mulch or limbed cast on the ground. If possible, leave downhill trees at the edges of the right away uncut to soften the visual impact of the right of way.
Response to Comment KKTLR16 0005 Fields

As part of its ongoing vegetation management practices, BPA has entered into contracts with Flathead and Lake Counties to conduct weed control (selective herbicide application) along the Kalispell-Kerr transmission line right-of-way (ROW).

Section 3.4.3 (Vegetation: Mitigation Measures) of the EA includes mitigation measures that address revegetation of areas disturbed by construction activities.

As described in Section 3.5.3 (Wildlife: Mitigation Measures) of the EA, BPA would leave cut trees in place where such practice is acceptable to the landowner and does not pose a fire risk.

Comment KKTLR16 0006 Malson Gray

Please have your studies look at:

GATE INSTALATION....

Prior to installing a new gate between our property and our neighboring property; BPA facilitate in moving and reimburse expenses, of replacing the current north/south fence realigning it to meet the correct property boundaries per the Certificate of Survey dated October 9, 1997

I need more information about:

LION MOUNTIAN SUBSTATION – Forest Hill Rd, Kalispell, 59901 ...

Is it currently planned that Lion Mountain Substation is to be one of BPA’s main staging areas throughout the completion of transmission line rebuild project?

After completion of this transmission line rebuild project, what are BPA’s Beautification Plans for Lion Mountain Substation.

I have these other comments:

Lion Mountain Substation sits directly across from our drive way and front yard!!! Our home and property have been vastly devalued both financially and emotionally by BPA’s projects. At present we continue waiting for BPA’s reply and acknowledgement of their ‘Good Neighbor – Beautification Plans’ for Lion Mountain Substation once the Kalispell-Kerr Transmission Line Rebuild Project has been completed.

Regards,

February 24, 2016

Response to Comment KKTLR16 0006 Malson Gray

BPA only identifies property lines and does not, in the course of its work, address any issues,
such as fence line adjustments, that may arise between landowners. Issues such as this must be addressed between the affected landowners. All property lines shown on the BPA’s maps indicate its survey results only, as BPA is required to address land rights with the legal owner of record.

0006-2
As stated in Section 2.2.3 (Temporary Staging Areas, Tensioning Sites, and Guard Structures) of the EA, BPA has not yet determined the locations of the temporary staging areas necessary to construct the Kalispell-Kerr transmission line. However, BPA currently has no plan to use the Lion Mountain Substation as a staging area for this project.

0006-3
Lion Mountain Substation is owned and operated by Flathead Electric Cooperative. If you have questions regarding their “Good Neighbor – Beautification Plans,” BPA recommends that you contact Flathead Electric Cooperative at (406) 751-4483.

Comment KKTLR16 0007 Wood

Response to Comment KKTLR16 0007 Wood

0007-1
As described in Section 3.4.3 (Vegetation: Mitigation Measures) of the EA, BPA would implement measures to minimize the spread of weeds throughout the project area. These measures include identifying known weed populations to ensure construction workers avoid them, cleaning vehicles before they enter the construction areas, using weed free straw and mulch for erosion control, and treating areas of Priority 1B weed species (rush skeletonweed).
As part of its ongoing vegetation management practices, BPA has entered into contracts with Flathead and Lake Counties to conduct weed control through the use of selective herbicide application along the Kalispell-Kerr transmission line right-of-way. However, for the counties to conduct weed control within the right-of-way, they must receive a request from the underlying landowner. BPA's local Natural Resource Specialist has been notified of your desire to have weed control performed on your property and has notified the appropriate county of your request so they may send you the necessary information and obtain your authorization. If you have any other questions regarding vegetation management and weed control along the right-of-way across your property, please contact BPA's local Natural Resource Specialist at (406) 751-7813.

When BPA acquired the transmission line easement for the existing line right-of-way, BPA provided landowners with just compensation for the right-of-way across their lands, as well as for the ability to remove trees adjacent to the right-of-way that could threaten the safety and reliability of the line as needed. As such, BPA's transmission-line easement grants it the right to remove any tree that could violate the Minimum Vegetation Clearance Distance; please also see the response to comment 0007-3 below. However, BPA's existing and proposed access road easements located outside the transmission line ROW do not include the right to remove trees. Therefore, BPA would pay the landowner for the fair market value of those trees removed along the proposed access roads.

As described in Sections 2.1.2 (Ongoing Vegetation Management) and 2.2.5 (Vegetation Removal) of the EA, BPA needs to keep vegetation a safe distance from the transmission line and along access roads. This includes Danger Trees, which are trees located outside the transmission line right-of-way that have the potential to violate Minimum Vegetation Clearance Distances by falling into, bending into, or growing into the conductor, or coming close enough to cause flashover of current from the conductor.

BPA has further refined design and tree removal estimates; the number of trees identified in the Draft EA has been reduced. Table 2.2-2 (Summary of Tree Removal) has been revised to reflect an estimated tree removal of 1,450 trees, which is about 35% less than originally stated in the Draft EA. Please also note that approximately 90% of all trees identified are 18-inch diameter at breast height (dbh) or smaller.

In addition, BPA continues to strive to reduce trees identified for removal and has revised mitigation measure WILD-5 to require a preconstruction assessment with the construction contractor to identify opportunities to further reduce the tree removal along the access roads.

Sections 2.2.4 (Access Roads) and 3.3.3 (Geology and Soils: Mitigation Measures) of the EA discuss BPA's proposed access road improvements that would include drain dips, cross drain culverts, and roadway ditches to manage stormwater runoff.

Section 3.3.3 of the EA includes mitigation measures to minimize soil compaction (GEO-3) and erosion caused by vegetation removal (GEO-6, GEO-7).
Section 3.12.3 of the EA (Noise, Public Health and Safety: Mitigation Measures) includes mitigation measures that address disposal of existing wood poles and other hazardous materials.

Section 3.2.3 of the EA (Land Ownership, Use, Recreation, and Transportation: Mitigation Measures) discusses providing the construction schedule to affected landowners.

Comment KKTLR16 0008 Ambrose

I have these other comments:

Access Road improvement — if any grading is done to the existing road bed, there is need for future eradication of spotted knapweed and Canadian thistle. These weeds love fresh dirt and will spread prolifically.

Response to Comment KKTLR16 0008 Ambrose

Please refer to response to comment KKTLR16 0005. Additionally, BPA has revised mitigation measure VEG-10 to include use of herbicides to treat known infestations of Priority 1B weed species (rush skeletonweed).
Comment KKTLR16 0009 Flathead Audubon Society

Bonneville Power Administration
Public Affairs - DKE-7
P.O. Box 14428
Portland, OR 97291-1442

Draft Environmental Assessment

February 21, 2016

Dear Sirs:

We have reviewed the Draft Environmental Assessment for the Kalispell-Kerr Transmission Line Rebuild (DOE/EA-1961) and submit the following comments.

0009-1  The lack of bird electrocution potential is a relief to hear although bird strikes remain a hazard with power transmission lines. The installation of “bird flight diverters” as described should help reduce the number of bird strikes.

0009-2  The project as described will entail working in and around numerous wetlands. Numerous “best management practices” (BMP’s) are described to minimize effects on these wetlands, however, the phrase “avoid….where possible” is commonly used which indicates that the BMP’s can be avoided and therefore effects to wetlands will occur. Not implementing wetland related BMP’s will result in effects and those effects are not adequately addressed in the Draft EA. We encourage you to more strongly protect the wetlands (not just avoid when possible) especially around the Veery habitats (such as in the Dayton Creek drainage) and perhaps even restore the Veery habitats.

0009-3  As with wetlands, we encourage you to vigorously implement the BMP’s for roads to minimize adverse effects to soils and reduce soil erosion.

0009-4  It appears there are many measures (BMP’s) relating to weeds to minimize further spread due to reconstruction activities but nothing related to control of existing weed populations along the right-of-way. We encourage you to actively control existing weeds.

0009-5  On page 3-34 the description of Hoary Bat indicates that there is a low potential for occurrence due to lack of documented occurrence. It is highly likely that Hoary Bats do frequently occur in and near the project area due to their high mobility and widespread
Response to Comment KKTLR16 0009 Flathead Audubon Society

0009-1

Comment noted.

0009-2

BPA is strongly committed to minimizing the effects its projects have on the natural environment and has incorporated numerous avoidance and minimization measures, where possible, into the Proposed Action. Therefore, the permanent and temporary wetland impacts identified in the Draft EA would remain if BPA implements the Proposed Action. Examples of specific avoidance and minimization measures include relocating one structure out of a wetland in line-mile 3 and utilizing temporary access in-lieu of a permanent road in a wetland in line-mile 26.

Veeries generally inhabit deciduous riparian forests. By incorporating avoidance and minimization measures into the Proposed Action, permanent and temporary impacts to this habitat would total about 0.2 acre (see Table 3.4-4 Structure Replacement and Access Road Impacts on Vegetation) of the 3.5 acres present within the project area.

0009-3

As discussed in the EA, BPA would implement several measures that would serve to minimize impacts to veery habitat, including minimizing construction footprints (mitigation measure VEG-4), avoiding tree removal until fledging is complete (WILD-4), and staking avoidance areas to limit vegetation disturbance (VEG-1). Because potential impacts to veery from the proposed project would be extremely minimal as discussed in Chapter 3.5 of the EA, restoration of veery habitat as part of the project is not necessary.

0009-4

As discussed in Sections 2.2.4 (Access Roads) and 3.3.3 (Geology and Soils: Mitigation Measures) of the EA, BPA's proposed access road improvements include drain dips, cross drain culverts, and roadway ditches to manage stormwater runoff.
Please refer to response to comment 0007-1.

The hoary bat’s potential for occurrence in the Project Area in Table 3.5-2 of the EA (Wildlife Species of Concern Documented Within 5 Miles of the Project Area and Potential Occurrence in the Project Area) has been changed from “low” to “moderate” for as suggested because of their high mobility and widespread occurrence around the state. However, even if hoary bats may be prevalent in the area, effects to them would still remain low because the species is highly mobile and would avoid temporary construction disturbance. Additionally, any incidental mortality would not affect regional populations, and habitat changes that may result from the Proposed Action would be minimal when compared to the available habitat adjacent to the transmission right-of-way and access roads.