Proposed Action: Jones Canyon-Santiam No. 1 230-kV Corridor Heli-feller Danger Tree Removal

TFBV Project No.: 4977

Project Manager: Jennifer Strombom, TFBV-Chemawa

Location: Marion and Linn counties, Oregon

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.3 Routine Maintenance

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to remove the tops from approximately 3,100 danger trees that pose a potential risk of impacting BPA's Jones Canyon-Santiam No. 1 230-kilovolt (kV) transmission line. BPA's Jones Canyon-Santiam No. 1 230-kilovolt (kV) transmission line corridor was impacted by the 2020 Beachie Creek and Lionshead wildfire complexes. Due to the remote nature, grade of terrain, and absence of stable ground cover, crews were unable to safely access the identified trees on the ground during BPA's post fire danger tree removal work that occurred during the fall of 2020. In order to remain compliant with Western Electricity Coordinating Council (WECC) transmission reliability standards, BPA developed a plan to identify and manage burned and/or destabilized trees that currently have height and location attributes that pose a potential risk of impacting the transmission line conductors and structures if the trees were to structurally fail and fall over.

Areas that were not addressed during the previous danger tree removal project were surveyed using aerial light detection and ranging (LiDAR) techniques. The resulting data was used to develop a list of danger trees located in steep, forested terrain and areas difficult to access by vehicle or on foot. The list includes trees along the Jones Canyon-Santiam No. 1 right-of-way (ROW) from structure 121/2 through 137/5 that were potentially burned and/or destabilized by fire activity (See Table 1). The identified trees are tall enough to pose a direct threat of falling into the energized transmission line conductors and infrastructure, and are typically located within 200 feet of the ROW.

BPA proposes to top trees using a helicopter-slung saw device (heli-feller), cutting the main stems below the height where they would impact the conductors and infrastructure, or up to 30 inches diameter (the cutting limit of the heli-feller saw). Trees would be cut into 4 to 6-foot sections with debris falling to the ground near the existing trunk. All debris would be left onsite. BPA's vegetation management crews would verify danger tree locations and stability during cutting operations, ensuring that only valid danger trees are topped.
Helicopter crews would operate in the vicinity of the transmission line ROW for 8 hours a day, and landing/re-fueling would be performed 6 to 7 times per day. The approximate tree topping rate is between 350-500 trees per day and the entire project work is estimated to occur over a 10-day period, weather and visibility permitting. The proposed project would occur from June 2021 through February 2022. In addition to the helicopter crew, ground-based safety spotters would be used to ensure public safety and remove debris along any ROW access roads. No work would occur within 50 feet of high-traffic roads. Ground crews would access the project area using the existing access road network with pickup trucks and hike in on foot where needed.

Table 1 – Identified Danger Tree Counts & Locations

<table>
<thead>
<tr>
<th>Mile/Structure</th>
<th>Approximate tree count</th>
</tr>
</thead>
<tbody>
<tr>
<td>120/5 – 123/1</td>
<td>328</td>
</tr>
<tr>
<td>128/1 – 131/3</td>
<td>816</td>
</tr>
<tr>
<td>131/3 - 137/1</td>
<td>1,915</td>
</tr>
<tr>
<td>Total</td>
<td>3,059</td>
</tr>
</tbody>
</table>

The helicopter staging and refueling area would be located within the existing helicopter landing zone located in the gravel parking lot along the North access road of the Detroit Dam, which is owned and operated by the US Army Corps of Engineers. The re-fueling pad would utilize matting to cover the gravel surface directly below the refueling ports of the aircraft and fuel storage. Helicopter flight paths would follow north Santiam highway and NF road 46 to ingress and egress project areas. No other staging areas would be needed. Ground crews’ vehicles would remain on existing ROWs, established access roads, and structure sites.

Findings: In accordance with Section 1021.410(b) of the Department of Energy’s (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996, 76 FR 63764, Nov. 14, 2011), BPA has determined that the proposed action:

1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.

/s/ Nicholas Johnson
Nicholas Johnson
Environmental Protection Specialist
Concur:

/s/ Katey C. Grange        June 7, 2021
Katey C. Grange Date
NEPA Compliance Officer

Attachment(s): Environmental Checklist
Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

**Proposed Action:** Jones Canyon-Santiam No. 1 230-kV Corridor Heli-feller Danger Tree Removal

**Project Site Description**

The project is located within both Marion and Linn counties in Oregon. The project is located along the Jones Canyon-Santiam No. 1 230-kV transmission line corridor near the Detroit reservoir. The project area runs east to west through the perimeters of the 2020 Beachie Creek and Lionshead wildfire complexes. The area is characterized by substantial topographic expression and is heavily forested except for the existing cleared ROW. The proposed heli-feller tree topping operation areas would be located along the transmission line corridor between miles and structures: 121/2 to 123/1; 128/1 to 135/1; and 136/2 to 137/5. This corridor also includes the Detroit-Santiam No 1 230 kV and the de-energized McNary-Santiam No 1 230 kV transmission lines. The corridor crosses the Willamette National Forest starting in the east and exits on the western boundary near the Detroit Dam. The project also crosses US Army Corps of Engineers property, Oregon Department of Forestry lands, private timber plantations, and some smaller private parcels.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No

   **Explanation:** Nearly all of the ROW for the proposed tree trimming is located in steep terrain to the north or south of Detroit Lake and its environs. The presence of cultural resources is unlikely due to the steep terrain. Proposed actions were found to have no potential to cause effects to historic properties consistent with 36 CFR 800.3(a)(1).

2. **Geology and Soils**

   Potential for Significance: No

   **Explanation:** No planned ground disturbance would occur within the proposed project actions.

3. **Plants (including Federal/state special-status species and habitats)**

   Potential for Significance: No

   **Explanation:** No special-status species present. Approximately 3,100 trees would be trimmed. These are typical plant species within the timber area.

4. **Wildlife (including Federal/state special-status species and habitats)**

   Potential for Significance: No with Conditions
Explanation: The project would have no substantial impacts to non-special-status wildlife species and their habitat. The project would have the potential for minor disruptions to wildlife associated with helicopter flight and tree cutting operations, which may cause disturbed wildlife to move to adjacent habitat during the work periods. However, the overall project is relatively short in duration and each location would be only worked for 1-2 days before moving to other locations. The project area between mile/structure 128/1 through 131/3 contains trees that are both in close proximity and located within known Northern spotted owl (*Strix occidentalis caurina*) critical habitat and potential suitable habitat. The project area is not within 1 mile of any known nest patches. The proposed project timeline would occur during both critical breeding and late season breeding periods.

BPA and the US Fish and Wildlife Service discussed means to minimize potential impacts to the Northern spotted owl. It is suspected that Northern spotted owls are not in the vicinity of proposed work due to the general burn attributes of the stand and the project area’s location in close proximity to the edges of defined habitat. However, in order to minimize the potential for disturbance and/or disruption, it was determined that the approximate 816 trees located between mile/structure 128/1 and 131/3 should be trimmed outside the breeding period of March 1 through September 30. Trimming operations would occur in the areas outside of potential spotted owl habitat first between June and September and then trimming operations would be conducted within the vicinity of spotted owl habitat areas after September 30.

The initial areas worked prior to September 30 would follow the impact avoidance and minimization measures highlighted in the notes below. Based on the consultation and project timeline, the USFWS concurred on May 04, 2021, that activities proposed by this project would be covered under the existing emergency consultation from September 25, 2020 following the wildfires. BPA would adhere to section 7(a)(2) and 7(d) obligations during emergency consultations per Chapter 8 of the section 7 Consultation Handbook. No other special-status species or habitats are present throughout the project area.

Notes:

- Heli-feller crews would receive updated maps and would avoid delineated Northern spotted owl critical habitat, known nest patches and suitable habitat during initial work iterations prior to September 30.

- Heli-feller use in the project area would not take place within 0.25-miles of a known nest patch.

- Heli-feller use in the project area, within, and between 50 and 110 yards from suitable Northern spotted owl habitat (according to updated US Forest Service data), would be not be conducted within the Northern spotted owl critical breeding season (March 1-July 15).

- Heli-feller use in the project area, within, and less than 50 yards from suitable Northern spotted owl habitat, would be not be conducted within the northern spotted owl breeding season (March 1-September 30).

- Flight paths would follow Oregon Highway 22 or the ROW corridor when flying between the staging area and daily work areas. Aircrews would work to avoid flying over suitable habitat prior to September 30. If the need arises to fly over suitable habitat prior, crews would do so at an altitude greater than 500 feet above the ground.

- Planned work would be during daylight hours, approximately, between 9am and 5pm, avoiding active flight times of Northern spotted owl activity.
5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No

Explanation: No work would occur in floodplains. Debris would not be felled directly into waterways. Helicopter re-fueling operations would have a spill kit on site prior to any refueling operations. Refueling areas would utilize best management practices to mitigate the inadvertent release of fuel onto the ground during re-fueling.

6. Wetlands

Potential for Significance: No

Explanation: Project location is within steep terrain and is not located within known wetland areas.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: No ground disturbance proposed. Refueling would not occur on bare earth or porous surfaces.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Land use would remain the same. Project actions are consistent with vegetation management objectives and agreements with underlying landowners, which promote safe and reliable energy transmission.

9. Visual Quality

Potential for Significance: No

Explanation: Project actions would occur near the existing cleared ROW that were impacted by wildfires. The project would focus on burnt areas with dead and unstable trees being trimmed. No planned trimming of stable and green trees would occur.

10. Air Quality

Potential for Significance: No

Explanation: Some dust would occur with tree trimming actions and helicopter operations. Dust creation would be small and isolated to small areas in short duration.

11. Noise

Potential for Significance: No

Explanation: Project would have noise associated with the small helicopter and saw apparatus. Operating hours for the project would occur between 9am and 5pm. The project would be relatively short in duration, only operating within each area for 2-3 days before moving to other defined areas.
12. Human Health and Safety

Potential for Significance: No

Explanation: Daily safety briefings would be held prior to work being conducted with detailed accident response plans being discussed in the advent of an unforeseen emergency. Aviation operations would be conducted per all published regulations. Ground crews would be certified to operate any required machinery. Safety observers would be on the ground and in direct communication with helicopter crews during tree trimming operations. Ground crews would ensure the area is clear of the general public prior to felling tops of trees within the project area. The US Forest Service would post bulletins near any nearby high use areas to notify the general public during the project occurrence.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: BPA has been coordinating with the US Forest Service, US Corps of Army Engineers and Oregon Department of Forestry for access and approval for trimming danger trees, which are not located within the existing transmission ROW easements located on their parcels and/or that are not covered under pre-existing vegetation management
agreements. Further, BPA would send out land owner notification letters to all adjacent property owners with a general project description and contact information for the BPA project manager several weeks prior to the project beginning. The project manager would address any access issues or general questions that could arise as a result of those letters. BPA's vegetation management group is coordinating with the reality group to confirm rights to any trees within the project area that are not located within the ROW corridor easement on private landowners parcels prior to any trimming. The helicopter operations would be approved with the US Corps of Army Engineers prior to beginning the project. Additionally, the BPA project manager and Detroit Ranger district recreation staff would be in contact during operations to notify the general public prior to and during operation days.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed: /s/ Nicholas Johnson  June 7, 2021
Nicholas Johnson, ECT
Environmental Protection Specialist