**Proposed Action:** Jones Canyon-Santiam No. Heli-Feller Danger Tree Project – Areas H1, H2, H3, and H4

**PP&A No.:** 4771

**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 utilize a helicopter-slung saw/grapple device (“heli-feller”) to remove the tops of approximately 3,650 fire-damaged danger trees (Table 1) in inaccessible locations along the 230-kilovolt (kV) double-circuit Jones Canyon-Santiam No. 1 transmission line corridor from structure 120/5 to 131/3, and along the entire 3-mile-long 13.8-kV double-circuit Big Cliff-Detroit PH 1&2 No. 1 and No. 2 transmission line corridor.

To remain compliant with Western Electricity Coordinating Council (WECC) transmission reliability standards, BPA would remove the tops of trees that were burned or otherwise destabilized by the 2020 Beachie Creek and Lionshead wildfire complexes. The trees are located in areas of steep terrain, are difficult and unsafe to access by vehicle or on foot, and have height and location attributes that pose a potential risk of impacting the transmission line and structures if they were to become structurally or physically unstable. The project would target dead and unstable trees in burned areas. No “topping” of stable green trees would occur.

**Table 1 – Identified Danger Tree Counts & Locations**

<table>
<thead>
<tr>
<th>Area</th>
<th>Corridor/Mile/Structure</th>
<th>Approximate Tree Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Jones Canyon-Santiam No. 1, 120/5 – 123/1</td>
<td>1,139</td>
</tr>
<tr>
<td>H2</td>
<td>Jones Canyon-Santiam No. 1, 128/1 – 131/3</td>
<td>810</td>
</tr>
<tr>
<td>H3</td>
<td>Jones Canyon-Santiam No. 1, 123/1 - 123/3</td>
<td>326</td>
</tr>
<tr>
<td>H4</td>
<td>Big Cliff-Detroit PH 1&amp;2 No. 1 and No. 2, 1/1 – 3/5</td>
<td>1,373</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,648</strong></td>
</tr>
</tbody>
</table>

The tree topping would be done using a type III helicopter equipped with a heli-feller which removes four- to six-foot sections of selected trees from the top down, until the remainder of the tree is no longer at risk of potentially impacting the transmission line and structures. BPA’s
vegetation management crews would verify danger tree locations and stability during cutting operations, ensuring only valid danger trees are topped. Debris would fall to the ground near the existing trunk and left to naturally decompose.

Helicopter crews would operate in the vicinity of the transmission line right-of-way for about 8 hours a day and landing/re-fueling would be performed 6 to 7 times per day. The approximate tree topping rate is between 100 to 150 trees per day and would be performed over a period of 24 to 37 days (contiguous or non-contiguous), weather and visibility permitting. The proposed project would occur from December 2021 through February 2023. In addition to the helicopter flight crew, ground based safety spotters would be used to ensure public safety and remove debris along any right-of-way 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. A lot near the base of Detroit Dam is proposed for staging, fueling, and other pre- and post-flight operations.

**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/ Oden Jahn  
Oden W. Jahn  
Natural Resource Specialist

Concur:

/s/ Katey Grange  
Katey C. Grange  
Date: December 9, 2021  
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 Project – Areas H1, H2, H3, and H4

**Project Site Description**

The project is located along the 230-kV Jones Canyon-Santiam No. 1 and 13.8-kV Big Cliff-Detroit PH 1&2 No. 1 and No. 2 transmission line corridors along the Detroit and Big Cliff Reservoirs and the lower Breitenbush River in Marion and Linn counties in Oregon. The project area runs east to west through the perimeters of the 2020 Beachie Creek and Lionshead wildfire complexes. The area is characterized by significant topographic expression and is heavily forested except for the existing cleared right-of-way. In addition to the waterbodies mentioned above, the project area crosses several small perennial, intermittent and ephemeral creeks. The proposed heli-feller tree topping operation areas would be located along the transmission line corridor between miles and structures of the Jones Canyon-Santiam No. 1 transmission line corridor: 120/5 to 123/3 and 128/1 to 131/3. Heli-feller tree topping is also proposed for the entire 3-mile-long Big Cliff-Detroit PH 1&2 No. 1 and No. 2 transmission line corridor. The Jones Canyon-Santiam No. 1 corridor primarily crosses the United States Forest Service (USFS) - Willamette National Forest (WNF) east of Detroit Dam, with a small portion crossing Oregon Department of Forestry lands. The Big Cliff-Detroit PH 1&2 No. 1 and No. 2 crosses US Army Corps of Engineers (USACE) property.

The helicopter staging and refueling area would be located within a previously-utilized helicopter landing zone which is located in the gravel parking lot along the North access road of the Detroit Dam, and owned and operated by the US Army Corps of Engineers. When working east of Detroit Dam, 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.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No

   **Explanation:** The 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:** Project activities are not expected to result in soil disturbances.

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

   Potential for Significance: No with Conditions
Explanation: Project activities are not expected to result in vegetation disturbances beyond the extent of the trees' canopy. The approximately 3,650 trees proposed to be "topped" are typical plant species within the project area. There are no special-status species or habitats that are known to occur within the project area.

Notes: The Project Manager would be responsible for implementing the following conservation measure for this project:
- Vehicles and equipment must be cleaned prior to mobilizing to the project area, and as needed during the performance of the work, to reduce the spread of invasive species.

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

Potential for Significance: No with Conditions

Explanation: The project area, while damaged by wildfire activity, contains patches of forest that were unaffected or minorly affected by the fires. Thus, there are fire-damaged trees located in and adjacent to potential habitat for birds, mammals, insects and other wildlife. Project impacts to wildlife are expected to be temporary and transitory, and the project would occur at a time that would minimize impacts to nesting birds. Project impacts to wildlife habitat are expected to be insignificant due to the temporary or permanent availability of equivalent, or better, quality habitat in accessible areas adjacent to the project area. Known and potential northern spotted owl (*Strix occidentalis caurina*) suitable habitat, and Designated Critical Habitat are present in and adjacent to the project area. BPA determined that the proposed project may affect, but is not likely to adversely affect northern spotted owl and its Critical Habitat. The US Fish and Wildlife Service concurred with this determination in a letter dated December 6, 2021. No other threatened, endangered, or special-status wildlife species or habitat are known to occur within the project area.

Notes: The Project Manager would be responsible for implementing the following conservation measures for this project:
- Heli-feller use in the action area would be not be conducted within the northern spotted owl critical breeding season (March 1-July 15).
- Heli-feller use in the action 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 Highway 22 or the ROW corridor. When flying between the staging area and work areas, the helicopter would fly over suitable habitat at an altitude greater than 500 ft. above the ground.
- Work hours would be during daylight hours, approximately between 9am and 5pm.
- To minimize the risk of attracting predators to activity areas, all garbage (especially food products) would be contained or removed daily from the vicinity of any activity that occurs within the action area.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No with Conditions

Explanation: Water bodies would be noted on maps and materials provided to the contractor performing the heli-feller work. Debris would not be placed directly into waterways. Project activities are not expected to impair the physical or biological functions of fish-bearing or non-fish-bearing water bodies or floodplains in the project area. The helicopter staging and refueling area would be located within a previously-utilized helicopter landing zone which is located in the gravel parking lot along the North access road of the Detroit Dam, and owned and operated by the US Army Corps of Engineers.
Notes: The Project Manager would be responsible for implementing the following measures for this project:

- Debris must not enter or impact waterways.
- At least one spill kit must be readily available on site prior to any refueling operations. Spill kits must be stocked and sized appropriately to respond to the types of spills that could occur.
- Pumps, funnels, sorbents, or other spill prevention methods must be utilized when dispensing or transferring fuel to mitigate the inadvertent release of fuel onto the ground during re-fueling.

6. Wetlands

Potential for Significance: No

Explanation: Project location is generally within steep terrain, and is not located within known wetland areas. Project activities are not expected to impair the physical or biological functions of wetlands that may be in the project area.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Project activities are not expected to impact groundwater or aquifers.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Land use would remain the same. Noise generated by project activities may disturb nearby recreationists, but would be temporary and would not reduce recreational opportunities in the area. 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 target dead and unstable trees in burned areas. No “topping” of stable green trees would occur.

10. Air Quality

Potential for Significance: No

Explanation: Some dust would occur with helicopter operations. Dust creation would be isolated to small areas and in short duration. Exhaust from equipment may temporarily reduce air quality in the immediate project area.

11. Noise

Potential for Significance: No

Explanation: Project would have noise associated with the small helicopter and heli-feller apparatus. Operating hours for the project would occur between 9am and 5pm. The noise may be a nuisance to recreationists and other forest users during high-use times of year, such as summer
and early fall; however, the project would be relatively short in duration, only operating within each area for approximately ten days before moving to other defined areas.

12. Human Health and Safety

Potential for Significance: No with Conditions

Explanation: The proposed work is necessary to ensure ongoing safe and reliable operation of the transmission line and to maintain power delivery in the region. Potential human health and safety risks from heli-feller operations would be minimized by implementing the measures below.

Notes: The Project Manager would be responsible for implementing the following measures for this project:

- Ensure that the heli-feller contractor develops and implements a site-specific health and safety plan to address any hazards during the proposed work.
- 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 in direct communication with helicopter crews during tree trimming operations, and would ensure the area is clear of the general public prior to trimming trees within the project area.
- Coordinate with USFS-WNF to ensure that adequate notifications are posted for recreationists and other forest users prior to, and during, project performance.

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.
Landowner Notification, Involvement, or Coordination

Description: BPA has coordinated with the underlying land managers and owners. Further, BPA would perform additional notification and coordination with the USFS-WNF, USACE, Oregon Department of Forestry, and any other landowners prior to starting work. 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 USACE prior to beginning the project. The BPA Project Manager would be responsible for the above activities, as well as working with USFS-WNF Detroit Ranger District recreation staff 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/ Oden Jahn     Date: December 9, 2021
Natural Resource Specialist – EPI-4