DATE: August 16, 2018

REPLY TO ATTN OF: EPR-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-690

TO: Jacob Grinolds
Natural Resource Specialist – TFBV-SNOHOMISH

Proposed Action: Vegetation Management along the Monroe-Custer No. 1 Corridor, Monroe-Custer No. 2 Corridor, Sedro Wooley-Bellingham No. 1 Corridor, and the Murray-Custer No. 1 Corridor.

Pollution Prevention and Abatement Project No.: 4013

Location: Skagit, Snohomish, and Whatcom counties, Washington

Proposed by: Bonneville Power Administration (BPA)

Description of the Proposal: BPA proposes to clear unwanted vegetation along and adjacent to the transmission line corridors and access roads along a portion of the 500 kV Monroe-Custer No. 1 transmission line corridor from structures 37/1-37/5, 39/3-39/4, 39/5-41/2, 41/3-42/3, 50/3-50/6, 54/2-57/1, 60/2-60/4, 61/4-62/2, 78/5-79/3, 80/1-81/1, 84/2-85/2, 85/4-86/3; a portion of the 500 kV Monroe-Custer No. 2 transmission line corridor from structures 47/2-47/5, 48/4-49/3, 50/1-50/2, 51/1-52/1, 52/4-58/2; and a portion of the 230 kV Murray-Custer No. 1 transmission line corridor from structure 25/7 to structure 26/2. The right-of-way (ROW) corridor in the proposed project area measures 150-575 feet in width and crosses approximately 20 miles of terrain through rural residential, small-scale agricultural, private timber, and Washington Department of Natural Resources land.

To comply with Western Electricity Coordinating Council (WECC) standards, BPA proposes to manage vegetation with the goal of removing tall-growing vegetation that is currently or will soon become a hazard to the transmission line (a hazard is defined as one or more branches, tops, and/or whole trees that could fall or grow into the minimum safety zone of the transmission line(s) causing an electrical arc, relay and/or outage). The overall goal of BPA is to establish low-growing plant communities along the ROW to control the development of potentially threatening vegetation. Land use for the project area consists of private and public forest, agricultural, and rural residential.

A combination of selective and nonselective vegetation control methods that may include hand cutting and herbicidal treatment would be used to perform the work. Herbicides would be selectively applied using spot treatment (stump or stubble treatment, basal treatment, and/or spot foliar), or localized treatments (broadcast application and cut stubble treatments) with chemicals approved in BPA’s Vegetation Management EIS, to ensure that the roots are killed preventing new sprouts and selectively eliminating vegetation that interferes with the operation and
maintenance of transmission infrastructure. Approximately 689 acres of ROW, 14 structure sites, and 636 feet of access roads would be treated between August 2018 and September 2018. To prevent trees from coming into contact with the energized conductors, BPA proposes to remove approximately 32 trees that have been identified along the ROW fringe. Other tree clearing activities would include side-limbing approximately 11 trees. Debris would be disposed of using on-site chip, lop and scatter, or mulching techniques. All onsite debris would be scattered along the ROW.

**Analysis:** A Vegetation Control Prescription & Checklist was developed for this corridor that incorporates the requirements identified in BPA’s Transmission System Vegetation Management Program FEIS (DOE/EIS-0285, May 2000) and Record of Decision (August 23, 2000). The following summarizes natural resources occurring in the project area along with applicable mitigation measures outlined in the Vegetation Control Prescription & Checklist.

**Water Resources:** Water bodies (streams, rivers, lakes, wetlands) occurring in the project area are noted in the Vegetation Control Prescription. As conservation and avoidance measures, only spot and localized treatment with Garlon 3A (Triclopyr TEA) would be used within a 100-foot buffer up to the water’s edge of any stream containing threatened or endangered species. Trees in riparian zones would be selectively cut to include only those that will grow into the minimum approach distances of the conductor at maximum sag; other trees would be left in place or topped to preserved shade. Shrubs that are less than 10-feet-high would not be cut where ground to conductor clearance allows. No ground-disturbing vegetation management methods would be implemented, thus eliminating the risk for soil erosion and sedimentation near the streams. For location information, see the Vegetation Control Prescription.

**Endangered Species Act and Magnuson-Stevens Act:** Pursuant to its obligations under the Endangered Species Act (ESA), BPA has made a determination of whether its proposed project would have any effects on any listed species. A species list was obtained for federally-listed, proposed, and candidate species potentially occurring within the project boundaries from the United States Fish and Wildlife Service (USFWS). Based on the ESA review conducted, BPA made a determination that the project would have “No Effect” for all ESA-listed species and designated critical habitat under USFWS’ jurisdiction, except marbled murrelet, Oregon spotted frog and critical habitat, bull trout and critical habitat, and Dolly Varden. USFWS agreed with these findings in a Biological Opinion (#01EWF00-2018-F-0790) dated 08/10/2018. Impact avoidance and minimization measures, agreed upon between BPA and USFWS during consultation, are noted in the Vegetation Control Prescription and include:

**Marbled Murrelet**
- When possible, all work between Monroe-Custer No. 1 structures 67/7 and 68/4 would occur between September 24 and March 31. If that is not possible, work could occur between April 1 and September 23 using dawn/dusk restrictions (two hours after sunrise and two hours prior to sunset). Work would be scheduled as late in the breeding season as possible.

**Oregon Spotted Frog**
- BPA would not mow or use mechanized equipment in standing water in Oregon spotted frog (OSF) suitable habitat in identified potential habitat. BPA, therefore, could mow these areas any time of year when the ground is dry. “Standing water” is defined as water...
of any depth that is connected to wetlands, creeks, etc. This does not include isolated puddles and potholes. “OSF suitable habitat” is defined as ephemeral or permanent bodies of fresh water including natural or manmade ponds, springs, lakes, slow-moving streams, wetlands, pools, canals, or ditches. OSF suitable habitat occurs outside of the designated critical habitat boundaries. “OSF potential habitat” is a buffer around mapped aquatic features that indicates that suitable habitat could be present and occupied by OSF. OSF potential habitat was provided to BPA by the Service in a shapefile, and is meant to inform those carrying out the proposed action that they should be looking for suitable habitat. OSF potential habitat occurs outside of the designated critical habitat boundaries.

- Vehicles, other than ATVs and UTVs, used to access the project area, would stay on established access roads and routes of travel.
- Spot and localized treatments (stump treatment, basal treatment, and/or low-volume foliar) would be used to minimize application to non-target plants.
- BPA-approved herbicides, Triclopyr TEA and BEE (Garlon 3A and Garlon 4, respectively), would be used within project areas with potential sensitive terrestrial species. Only Triclopyr TEA (Garlon 3A) would be used between the water’s edge and 100 feet of wetlands and waterbodies providing suitable Oregon spotted frog habitat (35 feet for non-sensitive wetlands and waterbodies). Herbicide application to standing water is prohibited.
- Herbicides would be mixed according to label instruction and applied by an individual certified through BPA’s pesticide applicator certification plan (BPA, 2000b).
- All equipment that would be used off of existing roads and routes of travel would be cleaned prior to entering ROW to reduce the potential spread or introduction of noxious weeds or other exotic species.
- Except for inspections, all work occurring in standing water in suitable habitat in potential habitat for OSF would occur between July 1 and October 15.
- If encroaching hazardous vegetation needing management is discovered within permanent waters that are known or assumed to provide habitat to OSF, and the hazardous vegetation must be removed outside of the dry season (July 1 and October 15). BPA would contact USFWS to discuss methods and mitigations that would be implemented to remove the hazard.
- Except for inspections, no work would occur during or immediately after a major precipitation event (>0.50 inches).
- BPA would work with the Service to identify road segments in the right-of-way that are seasonally flooded, suitable for OSF, and where a limitation on road use would effectively reduce the potential for driving over OSF in all life stages. Those identified road segments would not be driven over when flooded unless on-foot access is not sufficient for meeting the need for inspection and maintenance.
- BPA will contact the Samish Indian Nation's Natural Resources Department (360-293-6404; https://www.samishtribe.nsn.us/departments/environment) before beginning any vegetation management under and/or near the section of the Monroe-Custer No.2 Transmission Line where the Samish Indian Nation is conducting a long-term research project to support Oregon spotted frog recovery near Mills Creek (between river miles 21 and 23). This coordination will ensure that accidental destruction or manipulation of study plots and equipment and any conflicts in timing of activities will be avoided.
- Prior to conducting in-water work in identified drainages for the Skagit River-Frontal Skagit Bay, Finney Creek-Skagit River, Samish River, and South Fork Nooksack River
Watersheds containing Oregon spotted frogs, clothing or equipment or materials must be disinfected if they were last used in a watershed that does not contain Oregon spotted frog (See Disinfection Procedures, below). These drainages include the following:

- Woods Creek-Skykomish River
- Quilceda Creek-Frontal Possession Sound
- Skagit River-Frontal Skagit Bay
- Finney Creek-Skagit River
- Samish River
- South Fork Nooksack River
- Whatcom Creek-Frontal Bellingham Bay
- Nooksack River-Frontal Bellingham
- California Creek-Frontal Semiahmoo Bay

Disinfection Procedures
Disinfection procedures must be implemented when entering or leaving the above-identified drainages. Disinfection must be performed regardless of where the clothing or equipment was last used, including adjacent drainages also containing OSF. “In-water work” refers to when boots or other equipment enter standing water in suitable habitat in potential habitat. This requirement does not apply to vehicles that remained on existing roads and routes of travel.

All personnel entering ponds and wetlands are required to follow disinfection techniques for the control of chytrid fungus (*Batrachochytrium dendrobatidis*), ranavirus, and other potentially unknown diseases or parasites. For this specific consultation covering BPA’s Monroe-Custer No. 1, Monroe Custer No. 2, Monroe-Snohomish No. 2, Monroe-Snohomish No. 2, Chief Joseph-Snohomish No. 3, Chief Joseph-Snohomish No. 4, Murray-Custer No. 1, and Sedro Wooley-Bellingham No. 1 transmission line easement, personnel must disinfect equipment prior to entering a water body in the above watershed drainages. These drainage boundaries may change if new OSF occupied locations are discovered. Disinfection is not necessary between sites if sites are within the same drainage. If moving between drainages, disinfect equipment while at the site of exposure.

1. All field equipment must be cleaned of organic matter (dirt, mud, vegetation). Equipment includes all materials that may have contact with the water body, including waders and boots. (A stiff scrub brush is very helpful.)

2. All disinfection and rinsing must be done away from all water bodies.

3. All field equipment must be disinfected with a 10% liquid chlorine bleach (be sure bleach has a 6% concentration of sodium hypochlorite)* solution or with a anti-fungal/anti-bacterial solution approved by USFWS. The preferred method is to submerge equipment in a tub or sturdy plastic bag filled with the bleach solution; however, spray application may be used IF all surfaces are generously saturated, including all crevasses such as under wader ankle protectors. Sprayed or dipped equipment must remain wet with bleach solution for at least 3-5 minutes and then be thoroughly rinsed with clean water. (If a scrub brush is used for removing organic material, remember to disinfect it between sites).
The Service will continue to update the BPA with the most effective and efficient protocols as new information and protocols become available.

* Bleach breaks down rapidly. Do not use an expired bleach bottle or one that has been open for more than one month. Fresh bleach solution should be mixed at the beginning of each field day to retain potency.

*This protocol was adapted from disinfection procedures established in the US National Park Service’s 2014 Equipment Decontamination Protocol for Field Staff in Sequoia and Kings Canyon National Parks and the Washington Department of Fish and Wildlife’s Oregon spotted frog egg mass survey protocol.*

**Bull Trout and Dolly Varden**

Bonneville Power Administration has a programmatic biological opinion with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service for ESA-listed anadromous fish species and Essential Fish Habitat (as defined by the Magnuson-Stevens Act) titled *Endangered Species Act Section 7 Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Standard Local Operating Procedures for Endangered Species to Administer Maintenance or Rebuild Projects for Transmission Line and Road Access Actions Authorized or Carried Out by the Bonneville Power Administration in Oregon, Washington, and Idaho* (SLOPES PBO) (WCR-2014-1600, September 22, 2016). It was determined that by complying with the project design criteria listed within the SLOPES PBO, potential effects to bull trout and Dolly Varden would be consistent with those evaluated and addressed in the SLOPES PBO. The following conservation measures are used on all BPA vegetation management projects, and will reduce the potential effects to bull trout and Dolly Varden:

- All water bodies (streams, rivers, lakes, wetlands) occurring in the project area will be noted in the Vegetation Control Prescription.
- All vegetation removal will be restricted to aboveground only so that root systems are left intact, thus eliminating the risk for soil erosion and sedimentation near the streams.
- When possible, shrubs and herbaceous material less than 10 feet in height, excluding noxious weeds such as scotch broom, will be left untouched.
- Trees will be selectively cut to include only those that will grow into the minimum approach distances of the conductor at maximum sag. Other trees would be left in place, where possible, to preserve shade conditions.
- On slopes greater than 20%, there will be no use of equipment with the potential for ground disturbance (i.e. mowers).
- If it is necessary to manage vegetation within riparian areas and/or near ESA/EFH streams, ponds, wetlands, or other sensitive water resources, only hand cutting and treatment with Triclopyr TEA (Garlon 3A) will be used in spot and localized applications between the water’s edge and 100 feet on either side of the resource. Use of practically non-toxic to slightly toxic herbicides, other than Triclopyr TEA (Garlon 3A), between the water’s edge and three feet from the water’s edge is not permitted.
- All forms of vegetation management, including herbicide application, mowing, tree removal, and cut, lop, scatter techniques would not exceed 1% of the total acres of riparian habitat within a 6th field Hydrologic Unit Code per year.
BPA conducted a review of ESA-listed species and Essential Fish Habitat (as defined by the Magnuson-Stevens Act), under the jurisdiction of the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS). The proposed vegetation management activities are within the scope of activities and action area evaluated in the Endangered Species Act Section 7 Programmatic Conference and Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Standard Local Operating Procedures for Endangered Species to Administer Maintenance or Rebuild Projects for Transmission Line and Road Access Actions Authorized or Carried Out by the Bonneville Power Administration in Oregon, Washington, and Idaho (SLOPES PBO) (WCR-2014-1600, September 22, 2016). Streams in the project area with documented presence of ESA-listed fish, designated as critical habitat for one or more species, and/or identified as Essential Fish Habitat (EFH) have been noted in the vegetation control prescription. It was determined that, by complying with the project design criteria listed within the SLOPES PBO, potential effects to ESA-listed anadromous salmonids and EFH would be consistent with those evaluated and addressed in the SLOPES PBO.

**Cultural Resources:** The proposed vegetation management actions do not result in ground disturbance to the physical environment, so the action is not one that typically has the potential to affect historic and/or cultural resources. If a site is discovered during the course of vegetation control, work would be stopped in the vicinity and the BPA Environmental Specialist and the BPA archeologist would be contacted.

**Re-Vegetation:** Existing naturalized grasses and woody shrubs are present on the entire ROW and are expected to naturally seed into the areas that would have lightly-disturbed soil predominantly located on the ROW roads.

**Monitoring:** The entire project would be inspected during the work period of August 2018 to September 2018. A vendor scorecard of inspection results would be used to document formal inspections and will be filed with the contracting officer.
Findings:
This Supplement Analysis finds that: (1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; (2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Jonnel Deacon
Jonnel Deacon
Physical Scientist Scientist

CONCUR: /s/ Stacy L. Mason          DATE: August 16, 2018
     Stacy L. Mason
     NEPA Compliance Officer

References:
Vegetation Management Prescription and Checklist
Effects Determination