

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: March 19, 2003

REPLY TO  
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-132 (Big Eddy-Ostrander #1))

TO: Libby Johnson  
Natural Resource Specialist - TFR/THE DALLES

**Proposed Action:** Vegetation Management for portion of the Big Eddy - Ostrander #1 500 kV transmission line located from tower structure 31/2 to 39/3.

**Location:** Project location is in BPA Redmond Region in Hood River County, Oregon.

**Proposed by:** Bonneville Power Administration (BPA).

**Description of the Proposal:** BPA proposes to clear targeted vegetation within the Right-of-Ways along access roads and around towers that may impede the operation and maintenance of the subject transmission lines. See Section 1.4 of the attached checklists for a complete description of the proposed action.

**Analysis:** Please see the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

## **Planning Steps:**

### ***1. Identify facility and the vegetation management need.***

Work will take place along a portion of the Big Eddy - Ostrander #1 500 kV transmission line. The project extends between towers 31/2 and 39/3 having an easement width of 425 feet. The ROW is located in Hood River County, Oregon in the BPA Redmond Region.

Tall growing vegetation of the types listed in Section 1.2 of the attached checklist are present in the ROW and will soon pose a hazard to the lines. Project involves clearing tall growing vegetation and treatment of the associated stumps and re-spouts with approved herbicides to ensure that the roots are killed.

Vegetation on access roads and around tower sites that impede the operation and maintenance of the transmission line will also be cleared and/or treated.

Every two years, the USFS lands will need to be manually cut as the area is wet and untreated hardwoods proliferate. Private lands (Longview Fibre) will need spot treatment every 2-3 years.

## **2. *Identify surrounding land use and landowners/managers and any mitigation.***

The subject corridor passes through the Mt. Hood National Forest managed by the USFS and industrial forestlands owned by Longview Fibre.

Libby Johnson from BPA held discussions with Steve Hansen of Longview Fibre and was given verbal approval to cut and treat the ROW that traverses through Longview's land. Only tall growing conifer and hardwood will be basal and/or stump treated and scotch broom foliar sprayed.

Libby Johnson also met with Diana Bambe and her staff of the Mt. Hood National Forest, Hood River Ranger District to discuss mitigation measures required by the USFS in addition to those found in the EIS. On USFS lands, only cutting with chain saws and/or mowers will be allowed. The USFS requires BPA to only cut down to a 40' ground to conductor height in the riparian areas to maintain shade for sensitive fish habitat and temperature.

A letter was sent to Bobby Brunoe of the Warm Springs Confederated Tribes to determine the potential presence of traditional-use plants or other cultural resources and to determine the desired level of Tribal involvement in planning efforts. Restrictions or mitigation measures such as seasonal constraints for vegetation control, avoidance of certain areas, or using methods that do not affect non-target plants may be required and included in the contract.

## **3. *Identify natural resources and any mitigation.***

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work. The following cites resources found along with applicable mitigation measures:

### **Riparian Habitat:**

Includes all wetlands, streams, creeks and ponds meeting the definition of riparian habitat. Riparian areas were identified which may include essential fish habitat. See Section 3.1 of the attached checklist for a complete listing of identified water resources.

### **Riparian Habitat Mitigation:**

- No herbicides will be used in riparian areas located on USFS land. The USFS requires BPA to only cut down to a 40' ground to conductor height in the riparian areas to maintain shade for sensitive fish habitat and temperature.
- On privately owned land, only aquatic approved herbicides, Rodeo (glyphosate), may be used within 100 ft of the waters edge for spot stump application.

### **T & E Species:**

Section 3.3 of the attached checklist presents any Threatened or Endangered Species identified in the area of the proposed work. The ROW crosses streams containing listed anadromous fish. In addition, the southern most segment of ROW for the proposed work is adjacent to Spotted Owl Critical Habitat.

### **T & E Species Mitigation:**

- **Listed Anadromous Fish:** According to USFS requirements, on target vegetation within 40 ft of the conductor and within 300 ft slope distance of either side of the stream channel will be cut. No herbicides will be used on USFS lands. On private lands, only spot treatment with Rodeo (glyphosate) will be used on cut stumps within the 300 ft buffer. By following these mitigation measures, the proposed work will have no effect on Listed Anadromous Fish or their essential habitat
- **Spotted Owl Critical Habitat:** Seasonal restriction of no vegetation management activities within 0.25 mile of Spotted Owl critical habitat between March 1 and June 30, unless the owls are shown not to be nesting. No herbicides will be used in this area. By following these mitigation measures, the proposed work will have no effect on Spotted Owl Critical Habitat.

### **Cultural Resources:**

A letter was sent to Bobbie Brunoe of the Confederated Tribes of Warm Springs Department of Natural Resources detailing work activities on the ROW and to determine the potential presence of traditional-use plants or other cultural resources and to determine the level of Tribal involvement in planning efforts. There are no known cultural resources within the project area.

### **Cultural Resources Mitigation:**

If a site is discovered during the course of vegetation control, work will be stopped in the vicinity and the local tribe will be contacted as well as the BPA Environmental Specialist.

### **Spanned Canyons:**

Includes areas in the corridor with a greater than 125 ft vertical distance between the ground surface and transmission lines. Removal is periodically required of individual trees that could encroach into the transmission corridor danger zone. Encroaching trees will be cut down to 40 ft from conductors. Spot treatment will be applied on cut stumps. No ground disturbing mechanical equipment will be used on slopes over 20%.

#### ***4. Determine vegetation control and debris disposal methods.***

Vegetation will be removed using manual, mechanical, and chemical methods.

Contractor is required to control scotch broom on private (Longview Fibre) lands and along access roads. On Longview Fibre lands, scotch broom will be treated with a foliar application of an approved herbicide and applied according to label requirements.

Herbicide and surfactant/adjuvant will be approved by COTR prior to application. All buffers will be maintained according to buffer table in EIS. Scotch broom will not be controlled by herbicide on USFS lands.

Contractor will use an approved herbicide and surfactant and follow label requirements for foliar, basal or cut stump treat on target vegetation on private (Longview Fibre) lands. If Garlon 4 is used, herbicide will be applied no closer than 100 ft to any intermittent or perennial stream or wetland. Rodeo will be used within the 100 ft wide stream buffer on cut stump treatments in approved locations.

Hood River County Weed Dept. is contracted to manage noxious weeds on USFS lands through biological, mechanical, or hand pulling. Some scotch broom may be mowed along access roads if practicable.

Debris will either be disposed on-site or trucked off-site using either chip, lop and scatter, or mulch techniques as described in Section 5 of the attached checklists.

**5. *Determine revegetation methods, if necessary.***

No ground disturbance or exposed soil is expected during the duration of this project. However, if soil disturbance occurs during the project, the area will be reseeded.

**6. *Determine monitoring needs.***

Right-of-way will be visited during operations and late summer after contractor has completed work to determine if target vegetation was cut and treated effectively, whether desired results were achieved for riparian as well as non-riparian areas and if mitigation measures were appropriately utilized and effective.

**7. Prepare appropriate environmental documentation.**

**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. This Supplement Analysis also finds the proposed actions will not affect threatened or endangered species. Therefore, no further NEPA or ESA documentation is required.

/s/ Aaron Shurtliff

Aaron Shurtliff  
Physical Scientist

CONCUR: /s/ Thomas C. McKinney  
Thomas C. McKinney  
NEPA Compliance Officer

DATE: 03/24/2003

Attachment

cc:

L. Croff – KEC-4  
T. McKinney – KEC-4  
C. Leiter – KEP-4  
J. Meyer – KEP-4  
F. Wallasavage – KEP/CELILO  
P. Key – LC-7  
D. Hollen – TF/DOB-1  
G. Parks – TFR/REDMOND  
R. Fouse – TFR/REDMOND  
W. Banker – TFRK/THE DALLES  
Environmental File – KEC-4  
Official File – KEP (EQ-14)

# 1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

## 1.1 Describe Right-of-way.

See Handbook — [List of Right-of-way Components](#) for checkboxes and the requirements for the components [Rights-of-way](#)

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Big Eddy-Ostr Big Eddy-Trout Big Eddy-Chem Big Eddy-McGI 1 & 2 31/2-39/3	39 miles 500kV Other 230 kV lines w/in corridor	425' wide	7

- ☐ Right-of-Way – clearing in right-of-way
- ☐ Transmission Structures – clearing around
- ☐ Access Road clearing - approximate miles – 7

Work shall commence May 2003 and completed by July 2003.

### Rights-of-way Requirements

Control all tall-growing species that are now or would be a hazard to the line.

Cut stumps are not to be taller than 4 – 6 in.

Control all tree and brush species within about 50 ft. of transmission structures. Cut stumps are not to be taller than 2 – 4 in.

Pull all debris and slash out of the 50-ft. area around transmission structures.

### Access roads Requirements

Control all vegetation except grasses, to enable safe driving.

The access road is to be 14' wide with a 15-ft.- high clearance. Limbs should not hang down into the access road.

Cut stumps are not to be taller than 2 – 4 in. in the roadbed.

Cut stumps horizontal to the ground to prevent personal injuries and tire puncture.

Trim limbs back as flush to the trunk as possible when trees are rooted outside of the access road.

Pull all debris back from the access road as prescribed.

## 1.2 Describe the vegetation needing management.

See handbook — [List of Vegetation Types, Density, Noxious Weeds](#) for checkboxes and requirements.

Doug fir, wild cherry, alder, maple, & willows – low to medium

Noxious weeds – Scotch Broom & knapweed. Contractor is required to control scotch broom on Longview Fibre lands and along access roads.

On Longview Fibre lands, scotch broom will be treated with a foliar application of an approved herbicide and applied according to label requirements. Herbicide and surfactant/adjutant will be approved by COTR prior to application. All buffers will be maintained according to buffer table in EIS.

Scotch broom will not be controlled by herbicide on USFS lands. Hood River County Weed Dept. is contracted to manage noxious weeds on USFS lands through biological, mechanical, or hand pulling. Some scotch broom may be mowed along access roads if practicable.

**1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.** See Handbook — [Promoting Low Growing Plants](#) for requirements and checkboxes.

Bonneville's overall goal is to have low-growing plant communities along the rights-of-way to control the development of potentially threatening vegetation. In some areas where the line is w/in 40' or less distance to ground, this is not possible. Herbicide treatment applies only to Longview Fibre land

Tall-growing vegetation that is currently or will soon be a hazard to the line will be removed.

Cut-stump or follow-up herbicide treatments on resprouting-type species will be carried out to ensure that the roots are killed.

Vegetation that will grow tall will be selectively eliminated *before* it reaches a height or density to begin competing with low-growing species.

Desirable low-growing plants will not be disturbed. Only selective vegetation control methods that have little potential to harm non-target vegetation will be used.

**1.4 Describe overall management scheme/schedule.**

See Handbook.

**Initial entry** – This project is a maintenance entry. On Longview Fibre lands, only tall growing conifer and hardwood will be basal and/or stump treated and scotch broom foliar sprayed. This area was cut/treated in 2001. On USFS lands, only cutting with chain saws and/or mowers will be allowed. The USFS requires BPA to cut to a 40' ground to conductor height in the riparian areas to maintain shade for sensitive fish habitat and temperature.

**Subsequent entries** – Every two years, the USFS lands will need to be manually cut as the area is wet and untreated hardwoods proliferate. Longview Fibre lands will need spot treatment every 2-3 years.

**Future cycles** - Same as subsequent entry.

**2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS**

**2.1 List the types of landowners and land uses along your corridor.**

See Handbook — [List of Landowners/Managers/Uses](#) for a checkbox list.

Longview Fibre – Industrial Forest lands

USFS – MT. Hood National Forest. Landownership is checkerboard from 31/2 to 39/3 between Longview Fibre and USFS. USFS are managed for timber production.

**2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., doorhanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.**

See Handbook — Methods for Notification and Requesting Information for requirements.

Longview Fibre – discussed the project with Steve Hansen, Longview manager. Steve verbally gave me approval to cut and treat the ROW that traverses thru Longview’s land.

USFS – Plan to meet w/Ranger & staff on 3/4/03.

Confederated Tribes of Warm Springs – Letter to Dept. of Natural Res. detailing work activities on the ROW. Letter will address specific land-use or environmental resources along the corridor that need consideration, including appropriate mitigation measures identified in this EIS.

Notification letter will ask the Tribe about traditional-use plants. Any recommended mitigation will be identified on maps, included in the contract, and monitored.

**2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.**

See handbook — [Requirements and Guidance for Various Landowners/Uses](#) for requirements and guidance, also [Agricultural](#), [Residential/Commercial](#), [Tribal Reservations](#), [FS-managed lands](#), [BLM –managed lands](#), [Other federal lands](#), [State/ Local Lands](#).

**For all lands:**

Prevent the spread of noxious weeds by cleaning seeds from equipment before entering cropland.

If on grazing lands and there is potential for pine needle poisoning, do not lop and scatter pine tree vegetative debris—machine-chip or haul debris off-site.

If using herbicides on grazing lands, comply with grazing restrictions as required per herbicide label.

If using herbicides near crops for consumption, comply with pesticide-free buffer zones, if any, as per label instructions.

For rights-of-way adjacent to agricultural fields, observe appropriate buffer zones necessary to ensure that no drift will affect crops.

**Forest Service:**

Discuss the project w/USFS representatives and address specific land-use or environmental resources along the corridor that need consideration, including appropriate mitigation measures identified in this EIS. Any recommended mitigation will be identified on maps, included in the contract, and monitored.

See handbook — [Landowner Agreements](#) for requirements.



**2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.**

See handbook — [Landowner Agreements](#) for requirements.

Span		T&E Species	Methods, cutting
To	From		
31/2	39/3	USFS portions of ROW identified on TLM plan/profiles.	Within riparian areas as described by the USFS, cut tall growing w/in 40' of the ground & lines only.

**2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure’s to take due to the informal use.**

See handbook — [Casual Informal Use of Right-of-way](#) for requirements.

Hunters/recreationists may occasionally use the row. The planned entry is not expected to affect their use.

**2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.**

See handbook — [Other Potentially Affected Publics](#) for requirements and suggestions.

Confederated Tribes of Warm Springs – Letter to Dept. of Natural Res. Will send a letter to Bobby Brunoe, Warm Springs Confederated Tribes to determine the potential presence of traditional-use plants or other cultural resources and to determine the desired level of Tribal involvement in planning efforts. Restrictions or mitigation measures such as seasonal constraints for vegetation control, avoidance of certain areas, or using methods that do not affect non-target plants may be required and included in the contract.

**3. IDENTIFY NATURAL RESOURCES**

**3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.**

See Handbook — [Water Resources](#) for requirements for working near water resources including buffer zones.

**General requirements:**

Leave vegetation intact, where possible.

Any discharge of material (displaced soils, and in certain circumstances, vegetation debris) within a water of the U.S. may be subject to U.S. Army Corps of Engineers regulations under the Clean Water Act.

Do not permit debris from tree falling, cutting, or disposal to fall into or be placed in any watercourse, spring, pond, lake, or reservoir, unless there is approval from the appropriate authorities for stream habitat projects.

For all methods using machinery or vehicles (i.e. chainsaws, trucks, graders) keep the equipment in good operating condition to eliminate oil or fuel spills.

Do not wash equipment or vehicles at a stream.

Span		Waterbody	T&E?	Method	Herbicide	Application Technique	Buffer
To	From						
31/2	31/3	Perennial stream	No	Cut Individual trees if w/in 40' of lines	None		USFS Riparian Buffer Requirements
32/2	32/3	Intermittent & perennial streams	No	Cut Individual trees if w/in 40' of lines	None		USFS Riparian Buffer Requirements
33/1	33/2	Intermittent stream	No	Cut	None		USFS Riparian Buffer Requirements
33/2	34/3	Intermittent & perennial streams & wetlands	No	Cut tall growing w/in 40' of the ground & lines only	None		USFS Riparian Buffer Requirements
34/3	35/4	Intermittent & perennial streams & wetlands	No	Cut/treat tall growing	Aquatic approved herbicide only.	Spot Spray stumps only.	Between 100' and water's edge. Longview Fibre lands.
35/4	36/3	Intermittent & perennial streams (Ladd Cr.) & wetlands	Yes	Cut tall growing w/in 40' of the ground & lines only	None		USFS Riparian Buffer Requirements
36/4	38/3	Intermittent & perennial streams (McGee & Elk Cr.) & wetlands	Yes	Cut/treat tall growing w/in 40' of the ground & lines only	Aquatic approved herbicide only.	Spot Spray stumps only.	Between 100' and water's edge. Longview Fibre lands
38/3	39/3	Intermittent & perennial streams (Eagle Cr.) & wetlands	Yes	Cut all growing w/in 40' of the ground & lines only	None		USFS Riparian Buffer Requirements

**3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).**

See Handbook — [Herbicide Use Near Irrigation, Wells or Springs](#) for buffers and herbicide restrictions.

None identified.

**3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.**

See Handbook — [Determining Threatened or Endangered Plant or Animal Species](#) for requirements and determining presence.

Span		T&E Species	Method/mitigation or avoidance measures
To	From		
36/2	36/3	ESA Listed Fish (Ladd Creek)	According to USFS requirements, on target vegetation w/in 40' of the conductor & w/in 300 ft. slope distance of either side of stream channel will be cut. No herbicides. Minimal # of trees to be cut in this area w/this mtce application. Likely not to affect sensitive habitat or ESA listed fish.
37/1	37/2	ESA Listed Fish (McGee and Elk Creeks)	Target vegetation w/in 40' of the conductor & w/in 300 ft. slope distance of either side of stream channel will be cut. Spot treatment with Rodeo on cut stumps w/in the 300 ft. buffer. Minimal # of trees to be cut in this area w/this mtce application. Likely not to affect sensitive habitat or ESA listed fish.
38/3	38/4	ESA Listed Fish (Elk Creek)	According to USFS requirements, on target vegetation w/in 40' of the conductor & w/in 300 ft. slope distance of either side of stream channel will be cut. No herbicides. Minimal # of trees to be cut in this area w/this mtce application. Likely not to affect sensitive habitat or ESA listed fish.
39/1	39/2	ESA Listed Fish (Eagle Creek)	According to USFS requirements, on target vegetation w/in 40' of the conductor & w/in 300 ft. slope distance of either side of stream channel will be cut. No herbicides. Minimal # of trees to be cut in this area w/this mtce application. Likely not to affect sensitive habitat or ESA listed fish.
39/3 - 310	39/3+ 875	ESA Spotted Owl Critical Habitat Area #138	Small portion of the SE corner of habitat area within .25 mile of 39/3. No work activities to occur from 3/1-6/30. No herbicide prescribed for this area. Likely not to affect critical habitat.

**3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.**

See Handbook — **Protecting Other Species** for requirements.

**None identified.** Where possible and appropriate, leave brush piles for small animal habitats. Where possible and appropriate, top and leave tall dead trees (snags) in place for wildlife habitat.

**3.5 List any visually sensitive areas and the measures to be taken at these areas.**

See Handbook — **Visual Sensitive Areas** for requirements.

None identified.

**3.6 List areas with cultural resources and the measures to be taken in those areas.**

See Handbook – **Cultural Resources** for requirements.

None identified. No soil disturbing activities planned.

**3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.**

See Handbook – **Steep/Unstable Slopes** for requirements.

Do not use ground (soil)-disturbing mechanical equipment to clear on slopes over 20%. Perform mechanical clearing when the ground is dry enough to sustain heavy equipment.

**3.8 List areas of spanned canyons and the type of cutting needed.**

See Handbook – **Spanned Canyons** for requirements.

Do not use ground (soil)-disturbing mechanical equipment to clear on slopes over 20%.

Avoid using granular or total vegetation management (non-selective) herbicides on slopes over 10%.

Do not use herbicides with a high potential for surface runoff.

Perform mechanical clearing when the ground is dry enough to sustain heavy equipment.

Reseed or replant seedlings on slopes with potential erosion problems and/or take other erosion control measures as necessary.

Span		Methods, cutting
To	From	
31/2	31/3	Cut only individual trees within 40' of conductors. Spot treatment on stumps – Longview Fibre lands. No ground disturbance anticipated.

## **4. DETERMINE VEGETATION CONTROL METHODS**

### **4.1 List Methods that will be used in areas not previously addressed in steps above.**

See Handbook — **Manual, Mechanical, Biological, Herbicides-spot, Herbicides-localized, Herbicides-broadcast, and Herbicides- aerial** for requirements for each of the methods.

#### **Below are requirements for the various vegetation control methods.**

For all methods using machinery or vehicles (i.e. chainsaws, trucks, graders), keep the equipment in good operating condition to eliminate oil or fuel spills or excess exhaust.

Do not wash equipment or vehicles at a stream.

#### **Manual Requirements:**

Manual control methods include the following: pulling weeds; cutting with shears, clippers, chainsaws, brush saws, or axes; and girdling by cutting a ring around the trunk of the tree.

When crews are working during the fire season (defined by the fire protection district with jurisdiction in the area), each crew shall have the proper fire-suppression tools and materials, as required by the responsible fire control agency.

Equip power-cutting tools with approved spark arresters.

Cut conifers below the lowest live limb to eliminate the continued growth of lateral branches. If planning follow-up herbicide stump treatment, apply herbicides as soon as possible after cutting. (If herbicide is not applied soon after the vegetation has been cut, it may be best to wait until resprouting has occurred and then spray by foliar technique.)

For safety, cut all brush stumps flat where possible. (Angular cuts leave a sharp point that could cause injuries if fallen upon.)

For cutting trees close to "live" power lines, use only qualified personnel.

#### **Mechanical Requirements:**

Mechanical methods include the use of chopper/shredders, walking brush controllers, mowers, feller-buncher machines, roller-choppers, and blading.

Do not use ground-disturbing mechanical equipment to clear on slopes over 20%.

Perform soil-disturbing or heavy mechanical clearing when the ground is sufficiently dry to sustain heavy equipment and excessive rutting will not occur.

Use measures to control the spread of noxious weeds.

Do not use ground-disturbing mechanical methods in areas with T&E plant species unless determined appropriate through consultations.

Do not use ground-disturbing mechanical methods in areas with cultural resources unless determined appropriate through consultations.

Do not use ground-disturbing mechanical methods in riparian areas.

#### **Herbicides Requirements:**

Follow product label directions, as required by FIFRA, including "mandatory" statements (such as registered uses, maximum use rates, application restrictions, worker safety standards, restricted entry intervals, environmental hazards, weather restrictions, and equipment cleaning).

Follow all product label “advisory” statements (such as techniques for mixing, applying and cleaning within the mandatory requirements, recommendations for protection clothing, guidelines for differing soil types, etc). Always have a copy of the herbicide label and Material Safety Data Sheets (MSDS) at work sites during all mixing and applications. Ensure that all herbicide applications are conducted in the presence of a licensed applicator valid for the state where the work is located. Keep records of each application, including the active ingredient, formulation, application rate, date, time, location, etc. Records must be available to state and Federal inspectors, and may need to be supplied to landowners (e.g. Forest Service and WA DNR).

Ensure the use of EPA-approved herbicides that have been reviewed by Bonneville for effectiveness and environmental considerations. Never leave herbicides or equipment unattended in unrestricted access areas. *Before application*, thoroughly review the right-of-way to identify and mark, if necessary, the buffer requirements.

Protect drinking water sources by following all buffer zone restrictions.

Observe restricted entry intervals specified by the herbicide label and post public warning signs where required.

**Spot Stump Application Requirements:**

A spot application is treatment of individual plant(s) with the least amount of chemicals possible. Stump treatments are done by hand (spray bottle or canister) or by backpack.

*For spot treatment*, cut stumps flat, 15.2 – 20.3 cm (6 – 8 in.) above ground (except for access roads and around structures sites which should be 5 – 10 cm (2 – 4 in.) above ground) to facilitate treatment and reduce trip and fall hazards. Treatment should occur within 8 hours to prevent resprouting.

Directly spray the root collar area, sides of the stump, and/or the outer portion of the cut surface, including the cambium, until thoroughly wet, but not to the point of runoff. This would avoid, or minimize, deposition to surrounding surfaces.

Span		Methods
To	From	
34/3-850	35/4-500	<b>Except for spanned canyons or w/in water resources as described above,</b> Contractor will use an approved herbicide & surfactant and follow label requirements for foliar, basal or cut stump treat on target vegetation. If Garlon 4 is used, herbicide will be applied no closer than 100 feet to any intermittent or perennial stream or wetland. Rodeo will be used w/in the 100-foot wide stream buffer on cut stump treatments in approved locations. <b>Note: Applicable on Longview Fibre lands only.</b>
36/4-200	38/3+400	<b>Except for spanned canyons or w/in water resources as described above,</b> Contractor will use an approved herbicide & surfactant and follow label requirements for foliar, basal or cut stump treat on target vegetation. If Garlon 4 is used, herbicide will be applied no closer than 100 feet to any intermittent or perennial stream or wetland. Rodeo will be used w/in the 100-foot wide stream buffer on cut stump treatments in approved locations. <b>Note: Applicable on Longview Fibre lands only.</b>

## **5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION**

### **5.1 Describe the debris disposal methods to be used and any special considerations.**

See Handbook — **Debris disposal** for a checkbox list and requirements.

Lop and Scatter (Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.) Some mulching will occur where mowers can be used.

### **5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).**

See Handbook — **Reseeding/replanting** for requirements.

No ground disturbance or exposed soil expected.

### **5.3 If not using native seed/plants, describe why.**

No ground disturbance or exposed soil expected.

### **5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.**

NA

## **6. DETERMINE MONITORING NEEDS**

See handbook — **Monitoring** for requirements.

Right-of-way will be visited during operations and late summer after contractor has completed work to determine if target vegetation was cut and treated effectively, whether desired results were achieved for riparian as well as non-riparian areas and if mitigation measures were appropriately utilized and effective.

### **6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.**

Annually field verify results of previous veg. mgmt schemes and look for new alternatives for treatment, etc.

### **6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.**

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for the effectiveness of the vegetation management activities on the right-of-way and assess other resources that may have been adversely affected.

## **7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION**

See handbook — **Prepare Appropriate Environmental Documentation** for requirements.

Checklist and plan/profile maps will be submitted to environmental staff to ensure compliance with BPA's Veg. Mgmt. EIS. Upon approval, a Supplemental Analysis will be issued by BPA's NEPA compliance officer.

### **7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are “substantial”.**

No project impacts or work to be done other than what is disclosed in EIS.

### **7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.**

No further NEPA documentation needed.