

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: May 21, 2003

REPLY TO  
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-156- Paul to Olympia & Chehalis to Olympia Transmission Lines.

TO: James A. Jellison, Natural Resource Specialist

**Proposed Action:** Vegetation Management along the Paul Olympia 500 kV and Chehalis-Olympia 230kV transmission lines. Work is to be completed from structure 13/4 to 20/2 on the Paul Olympia line and structure 24/6 to 24/7 on the Chehalis to Olympia line. Right of way width varies from 97 feet to 150 feet.

**Location:** The project area is located in Lewis County, Washington between the cities of Chehalis to the South and Tumwater to the North.

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

**Description of the Proposal:** BPA proposes to remove vegetation in specified areas of the Right of way that has grown near minimum safety distances to the subject transmission line conductors and towers as outline by the National Electric Safety Code (NESC). Approximately 25 acres of right-of-way will be treated using selective and non-selective methods that include hand cutting and herbicide treatments. Tower sites will be treated using selective and non-selective methods that include hand cutting and herbicide treatments. See Section 1 of the attached checklist for a complete description of the proposal and specific areas to be managed.

**Analysis:** Please see the attached checklists for more detailed information about the following planning steps, including the resources present and a description of vegetation management measures. Applicable findings and Conservation and avoidance measures are discussed below.

## **Planning Steps:**

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

Approximately 25 acres of right of way associated with the Paul-Olympia and Chehalis-Olympia transmission lines will be managed. Vegetation in specified areas of the right of ways has grown near minimum safety distances to the subject transmission line conductors and towers as outline by the National Electric Safety Code (NESC). Vegetation management is required for unimpeded operation and reliability of the subject transmission lines.

**2. *Identify surrounding land use and landowners/managers and any Conservation and avoidance.***

The subject corridor traverses private, and Thurston County lands used for residential, rural residential, farming and grazing purposes. No other federal and no tribal lands are involved.

Landowners requiring notification are discussed in Section 2.3 and 2.4 of the attached checklist. Any remaining landowners will be contacted (letters, personal contact, door hangers, etc.) by BPA before and during the project. Any input received may be incorporated into the prescription/cut sheets.

**3. *Identify natural resources and any Conservation and avoidance.***

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work. The following outlines resources found along with applicable conservation and avoidance measures:

**Riparian Habitat:** Includes all wetlands, streams, and creeks meeting the definition of riparian habitat. Several areas were identified. See Section 3.1 of the checklists for a complete listing.

**Riparian Habitat (Wetlands) Conservation and avoidance:**

- Within 30.5 m (100 ft) of any of stream, wetland, or other water body vegetation will be left intact where possible and only selective hand cutting and approved herbicide treatments will be implemented.
- County or private lands, up to 30.5 m (100 ft.) of a stream, wetland, or other water body. Available: all manual, spot and localized herbicide treatments. Cut-stump (spot) and localized chemical treatments of Triclopyr BEE (Garlon 4A) may be used outside the 100 ft. buffer. On slopes less than 20% there will be no disturbance within 35ft. of the stream or wetland. On slopes greater than 20% there will be no disturbance within the buffer.
- Within 35ft. to edge of any stream, wetland, or other water body only cut-stump and localized or spot chemical treatments using practically non-toxic to slightly toxic formulations of triclopyr TEA (Garlon 3A). Moderately toxic to very highly toxic herbicides (to aquatic species) or those herbicides containing a groundwater or surface water label advisory will not be used in this zone.

**T & E Species:**

Review of BPA T2View databases on May 8, 2003 showed no T & E species in the project area.

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

Vegetation will be removed using manual and chemical methods. Debris will be disposed onsite using either chip, lop and scatter, or mulch techniques as described in Section 5 of the attached checklists.

**5. *Determine re-vegetation methods, if necessary.***

Native grasses and low growing species are present in the areas of the right-of-way. These populations will seed into the areas lightly disturbed by vegetation management. BPA expects 2-3 vehicles of the brush contractor will be present on the site.

Re-vegetation needs will be determined onsite. Any areas identified with limited ground cover will be replanted with native plant species and or approved grass mixtures.

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

The project will be inspected during the work period, and again in early summer to determine vegetation management effectiveness and revegetation needs. The line will be patrolled annually after treatment to monitor the effectiveness of the treatment measures.

**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/ Greg P. Tippetts  
 Greg P. Tippetts  
 Physical Scientist (Environmental)

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

DATE: 05/23/2003

Attachment

cc:

L. Croff – KEC-4  
 T. McKinney – KEC-4  
 C. Leiter – KEP-4  
 J. Meyer – KEP-4  
 G. Tippetts – KEPR/Olympia  
 P. Key – LC-7  
 J. Hilliard – T-DITT2  
 D. Hollen – TF/DOB-1  
 D. Krauss – TFO/Olympia  
 S. Martin – TFO/Olympia  
 G. Westling – TFOF/Olympia  
 Environmental File – KEC-4  
 Official File – KEP-4 (EQ-14)

**Vegetation Management Checklist**  
**Paul - Olympia**

# 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](#), [Access Roads](#), [Switch Platforms](#), [Danger Trees](#), and [Microwave Beam paths](#).

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Paul-Olympia No. 1	500Kv 500Kv	300'	0.5
Paul-Satsop No. 2			

### Right Of Way:

#### Right-of-Way – clearing in right-of-way

A combination of mulching the easement because of the Scotch broom and the cut, lop and scatter of tall growing species will be utilized to treat hazardous vegetation and this will be followed up with herbicide treatment.

#### Transmission Structures – clearing around

All structures will be cut to 30 feet from the center of the pole and/or from each leg of the steel towers and the stumps will be treated with herbicide.

#### Access Road clearing - approximate miles 0.0 miles

All access roads will mulched due to the encroachment of Scotch broom and stubble treat the stumps.

#### Reclaim (“C”) Trees

I have not identified any reclaim trees to be cut.

#### Danger Trees

I have not identified any danger trees to be cut.

## 1.2 Describe the vegetation needing management.

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

### Vegetation Types:

Douglas Fir

True Fir

Hemlock

Alder

Maple

Willows

Cottonwood

Wild Cherry

Noxious Weeds - Scotch Broom

Blackberries

**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 — for requirements and checkboxes.

Cut stump or follow-up herbicide treatments on sprouting-types 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.

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

See Handbook - [Overall Management Scheme/Schedule](#).

**Initial entry** – All tall growing vegetation will be cut and chemically treat the stumps to prevent grow-in trees. Access, right-of-way roads and structure sites are to be cut and treated.

**Subsequent entries** – A follow-up chemical foliar treatment is scheduled to begin in the early summer of 2003.

**Future cycles** – Every 4 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

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

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

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

Landowners/Managers/Uses:

Resident Rural Property Owners

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

See Handbook — [Methods for Notification and Requesting Information](#) for requirements.

Olympia will send letters to the property owners about 2 weeks prior to cutting the brush. Door to door contact will be made where it is warranted.

**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 [Residential/Commercial](#), [Agricultural](#), [Tribal Reservations](#), [FS-managed lands](#), [BLM –managed lands](#), [Other federal lands](#), [State/ Local Lands](#).

N/A

**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.

N/A

**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.

N/A

**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.

I have contacted the tribe near Rochester, Washington. They are not aware of any cultural sites.

**3. IDENTIFY NATURAL RESOURCES**

See Handbook — [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.

Span		Water body	T&E	Method	Herbicide	Application Technique	Buffer	Other
From	To							
13/4+ 0	1398	Wetlands	No	Cut Stump	Garlon 3A herbicide	Spot treat 35' of buff.	35' from waters edge	Selective Cutting
20/2+ 250	700	Pond/Wtld	No	Cut Stump	Garlon 3A herbicide	Spot treat 35' of buff.	35' from waters edge	Selective Cutting

**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.

N/A

**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 — [T&E Plant or Animal Species](#) for requirements and determining presence.

N/A

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

See Handbook — [Protecting Other Species](#) for requirements.

N/A

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

See Handbook — [Visual Sensitive Areas](#) for requirements.

N/A

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

See Handbook – [Cultural Resources](#) for requirements.

Span		Describe sensitivity	Method/mitigation measures
From	To		
13/4	14/3	Cultural Sites	Chehalis tribe, Cultural Resource Manager is not aware of any cultural sites on this transmission corridor. 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.
20/2	20/3		

**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.

N/A

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

See Handbook – [Spanned Canyons](#) for requirements.

N/A

**4. DETERMINE VEGETATION CONTROL METHODS**

See Handbook — [Methods](#)

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

See Handbook — [Manual](#), [Mechanical](#), [Biological](#), and [Herbicides](#) for requirements for each of the methods.

Span		Methods, including herbicide active ingredient, trade name, application technique
From	To	
13/4	14/3	For non-sensitive areas (spans) cut stump/basal treatment with 25% Garlon 4 and 75% Forest Crop Oil (FCO). 50/50 Accord or Garlon 3A/Water for stump treatment in the riparian zones; Stubble treat structure sites and the right-of-way roads with 90% Water, 6% FCO, 3% Garlon 4 and 1% Tordon 22 K. Follow-up herbicide treatment: foliar application with 3-5% Garlon 3A herbicide, remainder % water. Foliar treat Scotch broom with Garlon 3A.
20/2	20/3	

**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.

**Debris Disposal:**

**Chip** (Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site.

Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.)

**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.)

**Mulch** (Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.)

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

See Handbook — [Reseeding/replanting](#) for requirements.

N/A

Native grasses are present on the entire right-of-way that will seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and Black Berries are present.

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

N/A

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

Monitoring of the success of the brush-cutting program will begin the spring in which evaluation of soil erosion as a result of the brush-cutting program will be made. If grass seeding is necessary, native grass seed will be applied.

**6. DETERMINE MONITORING NEEDS**

See handbook — [Monitoring](#) for requirements.

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

Monitoring of the effectiveness of the herbicide treatment will begin in the spring and follow up treatment of cut stump/basal or foliar treatment of target vegetation. The stump/basal mixture of the product is 25% Garlon 4 and 75% FCO and 90+% water, 3-5% Garlon 3A and when it is necessary Depo-RTU is added to the mix to retard drift.

**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. BPA's vegetation maintenance activities may increase the public use of the right-of-way due to increased accessibility to the easement that may cause additional damage to the natural resources.

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

See handbook — [Prepare Appropriate Environmental Documentation](#) for requirements. . Also prepare Supplement Analysis — [Supplement Analysis](#)— for signature.

### **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”.**

All proposed brush cutting and chemical treatment activities on this corridor is noted in the EIS.

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