

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: July 19, 2002

REPLY TO  
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-95) Chehalis-Olympia No.1 and Chehalis-Centralia No. 2

TO: James A. Jellison – TFO/Olympia  
Natural Resource Specialist

**Proposed Action:** Vegetation management along the Chehalis-Olympia No. 1 and Chehalis-Centralia No. 2, 230kV transmission line. The project area is located within Lewis and Thurston Counties, Washington.

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

**Description of the Proposal:** BPA proposes to remove unwanted vegetation along the right-of-way, access roads and around tower structures along the subject transmission line corridor. The right-of-way will be treated using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Approximately 29 miles of access roads and corridor will be treated. Vegetation management is required for unimpeded operation and maintenance of the subject transmission line. See Section 1 of the attached checklist for a complete description of the proposal.

**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.***

Unwanted vegetation will be removed and/or controlled using selective and nonselective methods that will include hand cutting, mowing, and chemical treatment. All methods of chemical treatment will be used (except aerial) dependent on site conditions/restrictions. This proposal covers approximately 525 acres of land.

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

The subject corridor traverses BPA fee-owned, private, and state lands used for residential, farming, forestry, and special uses (WDFW Scatter Creek Wildlife Area). No other federal and no tribal lands are involved.

Other landowners requiring notification or under tree and brush agreements are shown in Section 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 will be incorporated into the prescription/cut sheets.

### 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 resources found along with applicable mitigation measures:

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

**Riparian Habitat Mitigation:**

- County or private lands, within 30.5 m (100 ft.) of a stream or open water. Available: all manual, spot and localized herbicide, and biological treatments, except grazing. 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 50 ft. to edge of surface water only cut-stump and localized chemical treatments using practically non-toxic to slightly toxic formulations of glyphosate, imazapyr, and metsulfuron-methyl (Escort). 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.

**Wildlife Habitat:** Includes lands between towers 18/2 through 20/4 on the Chehalis-Olympia No. 1. This area has been set aside for wildlife viewing by the State of Washington. It is known as the Scatter Creek Wildlife Area.

**Wildlife Habitat Mitigation:** WDFW was contacted for any concerns, requests, and/or mitigation measures as follows:

- No Scotch broom treatment between 18/2 to 18/4+350 AH to protect desirable plant species used by butterflies.
- Do not cut oak regeneration from 18/4+350 to 18/8+650 AH. WDFW to maintain.
- BPA to maintain tall growing plant species and Scotch broom from 18/9 through 20/4.

**Drinking Water Supply:** Four water wells and a no spray zone were identified. See Section 3.2 for a complete listing.

**Drinking Water Supply Mitigation:**

- Spring Development and Water Wells: No chemical application within a 100-foot radius of spring development or well head.
- No Spray Zone: No chemical application within identified area.

**Terrestrial Species (Bald Eagle):** A Bald Eagle nesting area was found through BPA GIS and the Washington DNR Natural Heritage between towers 4/2 through 4/6. In a telephone conversation with Washington State Department of Fish and Wildlife (record of conversation attached), the state has confirmed an eagle nest with two pre-fledglings. This proposal was measured at a closet distance of 500 feet from the nest. WDFW confirmed that since the bald eagle's T&E status was downgraded to "Threatened", WDFW no longer imposes timing restrictions during nesting unless the nest is within 400 feet of any disturbance.

**Terrestrial Species Mitigation (Bald Eagle):**

- None required.

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

Vegetation will be removed using manual, mechanical, 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 checklist.

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

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 blackberries are present.

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

The entire project will be inspected during the work period, and, the line will be patrolled annually after treatment to monitor the effectiveness of the treatment measures. Environmental monitoring to ensure sound application practices will be determined in the future as outlined in the BPA/NMFS/USFWS Biological Assessment currently being prepared.

**7. Prepare appropriate environmental documentation.**

**Findings:** This Supplement Analysis finds that the proposed actions are substantially consistent with 1) the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD; 2) BPA Interim Guidance on Threatened and Endangered Fish Species; and, 3) 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 have no effect the threatened specie, bald eagle, since the project area is outside the WDFW managed buffer of 400 feet. Therefore, no further NEPA or ESA documentation is required.

/s/ Mark W. Hermeston  
 Mark W. Hermeston  
 Environmental Scientist (Environmental)  
 Licensed Hydrogeologist (WA 663)

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

DATE: 07/25/2002

Attachment

cc:

L. Croff – KEC-4  
 T. McKinney – KEC-4  
 P. Key – LC-7  
 M. Hermeston – KEP-4  
 J. Meyer – KEP-4  
 J. Sharpe – KEPR-4  
 M. Martin – KEPR/Covington  
 M. Johnson – TF/DOB-1  
 O. Albro – TFO/Olympia  
 D. Krauss – TFO/Olympia  
 G. Westling – TFO/Olympia  
 Environmental File – KEC  
 Official File – KEP-4 (EQ-14)

# Vegetation Management Checklist

# 1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

## 1.1 Describe Right-of-way.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Chehalis-Olympia No. 1 & Chehalis-Centralia No.	29 mi., 230Kv	Variable	29 mi.

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.

Right Of Way:

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

Transmission Structures – clearing around

Access Road clearing - approximate miles – 3.63 mi.

Reclaim (“C”) Trees

## 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. A follow-up chemical treatment to begin in the late summer of 2002.

**Subsequent entries** – Every 4-5 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.

**Future cycles** – Same as above.

## **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:

Residential

Rural

Grazing lands

Industrial Forest lands

Washington State DNR

**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.

Span		Landowner/use	Specific measures to be applied
To	From		
18/2	18/4+350	WDFW	Do not spray Scotch broom.
18/4+350	18/8+650	WDFW	Do not cut or treat oak regeneration. WDFW to maintain.
18/9	20/4	WDFW	BPA will maintain all tall-growing plants and noxious weeds.
26/4+150	26/3+450	Robert Turcotte	Tree & Brush Agreement LU#86027
27/5	27/1+600	Wash. State- Forestry Tree Nursery	Contr. 14-03-001-13471
27/8+300	27/6+347		Contr. 14-03-001-13471
27/6	27/5+0	Dave Dethlefs	Trees and Landscaping

**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.

See above.



**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.

18/2 to 20/4 is used as a State Wildlife Area, with foot trails. See 2.4, above.

**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 newly established Chehalis tribe near Rochester. 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
To	From							
2/1	1/14	Wetlands	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
585	2/10+515	Ck. No name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
200	3/6+130	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
385	4/1+315	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
250	5/1+100	Chehalis Rv.	Yes	Cut Stump	Garlon 3A	Spot	100	Selective Cutting
250	6/2+125	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	100	Selective Cutting
280	7/2+215	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	100	Selective Cutting

835	7/8+765	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
550	10/5+160	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
385	11/1+315	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
535	11/4+465	Ck. No-name	Yes	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
900	12/4+0	Lincoln Ck. & Wetld	Yes	Skip				
800	13/8+300	Chehalis Rv.	Yes	Skip				
200	14/4+100	Ck. No-name	No	Cut Stump	Garlon 3A	Spot	100	Selective Cutting
485	16/2+415	Scatter Ck.	No	Cut Stump	Garlon 3A	Spot	100	Selective Cutting
600	18/8+500	Scatter Ck.	No	Skip				
750	20/4+150	Wetlds.	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
75	20/5+0	Wetlds.	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
300	21/3+100	Wetlds.	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
400	21/4+350	Pond	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
285	23/5+215	Beaver CK.	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
25/1 600	24/3+200 24/3+550	Wetlds. & No name ck.	No	Skip				

220	26/1+150	Drain ditch	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
335	27/1+265	Salmon Ck.	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
	Che-Cent #2							
470	11/3+400	Ck. No Name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
670	11/4+600	Ck. No Name	No	Cut Stump	Garlon 3A	Spot	Waters Edge	Selective Cutting
1315	11/6+400	Chehalis Rv.	Yes	Cut Stump	Garlon 3A	Spot	100'	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.

Span		Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
To	From				
	6/2+550	Well	Garlon 3A	164'	
425	6/9+300	No spray zone	Skip		
250	16/6+250	2 Wells-25' Lt/Rt of Centerline	Skip		
150	22/6+150	Well	Skip		

**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.

Span		T&E Species	Method/mitigation or avoidance measures
To	From		
4/6+0	4/2+0	Bald Eagle	None, if operations stay within ROW boundaries.

**3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species. See Handbook — Protecting Other Species for requirements.**

Span		Species	Measures
To	From		
4/6	4/2	Bald Eagle	No seasonal restrictions apply if operations are greater than 400 feet from nest site.

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

See Handbook — Visual Sensitive Areas for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
		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
To	From		
			Chehalis tribe does not know of any cultural sites on this transmission corridor.

**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.

Span		Describe sensitivity	Method/mitigation measures
To	From		
		N/A	

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

See Handbook – Spanned Canyons for requirements.

Span		Methods, cutting
To	From	
		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
To	From	
1/1	43/3	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 treatment-foliar application of the above chemicals as noted under stubble treatment, except FCO. Foliar treat Scotch broom.

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

See Handbook — Reseeding/replanting for requirements.

Span		Reason for Reseed/plant	Type of Seed or Plants	Native?
To	From			
		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 mixture of the product is 25% Garlon 4 and 75% FCO or 90% water, 3% Garlon 4 with Depo-RTU drift retardant. There is virtually no drift that occurs with this mixture.

**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 effective mitigation measures.

**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 are 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.**

No