# memorandum

# **Bonneville Power Administration**

DATE: December 5, 2002

REPLY TO

ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS

(DOE/EIS-0285/SA-114) (Chehalis-Raymond #1, ADNO 8114)

то: Jim Jellison - TFO/Olympia Natural Resource Specialist

**Proposed Action:** Vegetation Management for portion of the Chehalis-Raymond #1 115 kV transmission line

**Location:** Project location is within Lewis and Pacific counties, Washington and is within the Olympia Region.

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

<u>Description of the Proposal</u>: 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.

<u>Analysis</u>: 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 Chehalis-Raymond #1 115 kV transmission line. The project extends between towers 4/1 and 45/12 having an easement width of 100 feet between towers 4/1 and 43/9 and between towers 44/9 and 44/12. The easement width between towers 43/10 and 44/8 is 25 feet. The ROW is located in Lewis and Pacific counties, Washington in the Olympia 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.

A follow-up chemical foliar treatment is scheduled to begin in the spring of 2003. Control methods and requirements, as outlined in Section 3.1 and 3.3 of the attached Vegetation Management Checklist, will be employed to mitigate any environmental effects to natural resources or to Threatened or Endangered species habitat. Evaluation of soil erosion as a result of brush cutting will also be made at this time. If grass seeding is necessary, native seed will be applied. The vegetation management program is designed to provide a 3-4 year maintenance free interval after the follow-up treatment.

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

The subject corridor traverses a mixture of residential, urban, rural, and agricultural lands. It includes private and public lands.

A letter will be sent by mail to notify landowners in proximity to the project transmission lines about 2 weeks prior to the vegetation control activities. Door-to-door contact may also be employed to notify landowners, if warranted.

#### 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, creeks and ponds meeting the definition of riparian habitat. See Section 3.1 of the checklists for a complete listing of identified water resources.

#### **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 or spot chemical treatments using practically non-toxic to slightly toxic formulations of glyphosate, triclopyr (TEA) formulation, 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. Triclopyr (Garlon 4) may be used only more than 100 ft. from streams or water.

#### **Protected Watershed:**

Protected watersheds were identified near line 17/1, between 29/2 and 29/4, and near 41/4. See Section 3.2 of the attached Checklist for a detailed listing.

# **Protected Watershed Mitigation:**

• Protected watershed is in a skip area; no herbicides will be applied, only selective cutting.

## T & E Species:

Section 3.3 of the attached checklist presents any Threatened or Endangered Species identified in the area of the proposed work.

# **T & E Species Mitigation:**

- Marbled Murelet: Seasonal restrictions of no noise greater than ambient, i.e. chainsaws, within 0.25 mile of known habitat or occupancy during core breeding season from April 1 to August 5; and no motorized equipment will be used within 0.25 mile of known habitat or occupancy within 2 hours after sunrise or within 2 hours before sunset during the late breeding season from August 6 to September 15.
- **Bald Eagle:** Seasonal restrictions of no chainsaw activity from January 1 to August 5. The bald eagle zone is in a skip area; pasture land.

#### **Cultural Resources:**

No known cultural resources are present.

#### **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.

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

Vegetation will be removed using manual, mechanical, and chemical methods. For non-sensitive areas, a mixture of 25% Garlon 4 and 75% Forest Crop Oil (FCO) will be used for stump treatment. In riparian zones, a 50/50 mixture of Accord or Garlon 3A with water will be used for stump treatment. Structure sites and ROW roads will be stubble treated with 90% water, 6% FCO, 3% Garlon 4, and 1% Tordon 22K.

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.

Re-vegetation is not necessary for this project. Reseeding will occur naturally in any areas that are lightly disturbed.

# 6. Determine monitoring needs.

Monitoring of the effectiveness of the herbicide treatment will begin Spring 2003. The line crew and Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

## 7. Prepare appropriate environmental documentation.

<u>Findings:</u> 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/ Aaron Shurtliff	
Aaron Shurtliff	
Physical Scientist	

CONCUR: /s/ Thomas C. McKinney

Thomas C. McKinney

NEPA Compliance Officer

DATE: 12/12/2002

## Attachment

cc:

L. Croff – KEC-4

T. McKinney – KEC

M. Hermeston – KEP-4

J. Meyer – KEP-4

J. Sharpe – KEPR-4

Greg Tippets – KEPR/Olympia

P. Key - LC-7

D. Hollen TF/DOB-1

Daniel Krauss – TFO/OLYMPIA

Shawn Martin – TFO/OLYMPIA

Darrell Underwood – TFOK/CHEHALIS

Environmental File – KEC-4

Official File – KEP (EQ-14)

# **Vegetation Management Checklist**

02/27/01

#### 1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

# 1.1 Describe Right-of-way.

See Handbook — <u>List of Right-of-way Components</u> for checkboxes and the requirements for the components <u>Rights-of-way</u>, <u>Access Roads</u>, <u>Switch Platforms</u>, <u>Danger Trees</u>, and <u>Microwave Beam paths</u>

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Chehalis-Raymond ADNO 8114	41mi(4/1 to 45/12) 1-115Kv	100	41 mi.

# **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 35 feet from the center of the pole and from each leg of the steel towers and the stumps will be treated with herbicide.

## Access Road clearing - approximate miles -5.71 miles

All access roads will mulched due to the encroachment of Scotch broom and stubble treat the stumps or foliar treatment of the sprouts in the spring.

# Reclaim ("C") Trees

Refer to the prescription cut sheets that notes the location of the draws and the edge of the rightof-ways where reclamation activities will be occurring. All most the entire corridor, trees will need to be cut along both edges of the easement

#### **Danger Trees**

No danger trees will be cut at this entry. This line will need to be surveyed soon for danger trees; I saw many locations of trees that meet the criteria of the danger trees.

#### 1.2 Describe the vegetation needing management.

See handbook — <u>List of Vegetation Types</u>, <u>Density</u>, <u>Noxious Weeds</u> 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 spring of 2003.

**Future cycles** – Every 3-4 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 — <u>Landowners/Managers/Uses</u> for requirements, and <u>List of Landowners/Managers/Uses</u> for a checkbox list.

Landowners/Managers/Uses: Resident Rural Property Owners Timber Managed Lands DNR Managed Lands

# 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 — <u>Requirements and Guidance for Various Landowners/Uses</u> for requirements and guidance, also <u>Residential/Commercial</u>, <u>Agricultural</u>, <u>Tribal Reservations</u>, <u>FS-managed lands</u>, <u>BLM -managed lands</u>, <u>Other federal lands</u>, <u>State/ Local Lands</u>.

Sp	an	Landowner/use	Specific measures to be applied		
From	То	Zundo Wilei, use	specific measures to be applied		
24/10+300	25/1+470	Private owner	Trees are in compliance with Xmas tree agreement.		
37/9+0	479	Private owner	I need to contacted property owner that the trees are out of compliance.		

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 — <u>Landowner Agreements</u> for requirements.

I will be contacting Private owner regarding the Xmas trees that are out of compliance and a letter will also be sent to them.

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 — <u>Casual Informal Use of Right-of-way</u> for requirements.

41/3 + 400 to 4//4 + 500, a motorcycle racetrack appears to be an unofficial use of the easement. I will be researching for a land use permit for such use of the easement.

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 Richard Bellon, Archeologist with the Chehalis 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 — <u>Water Resources</u> for requirements for working near water resources including buffer zones.

Span		Water body	T&E Method		Herbicide	Application	Buffer	Other
From	To					Technique		
5/2+ 465	535	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
5/8+ 565	635	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
7/1+ 265	335	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
7/3+ 365	435	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
9/4+ 0	250	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
9/8+ 265	335	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
10/11+556	800	No name creek	No	Skip				Selective Cutting
12/4+ 565	665	No name creek	No	Cut Stump	Garlon 3A	Spot	35'to Waters edge	Selective Cutting
16/1+ 465	535	No name creek	No	Skip	Garlon 3A	Spot	Waters edge	Selective Cutting
16/2+ 465	535	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
16/3+ 235	310	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
17/7+ 450	570	Sand creek Wtlds.	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
17/10+500	570	Stowe creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
18/2+465	535	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting

18/4+415	485	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
18/7+400	650	Pond	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
19/3+0	300	Chehalis River	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
20/4+750	965	McCormick creek	No	Skip	Garlon 3A	Spot	Waters edge	Selective Cutting
20/5+0	150	McCormick creek	No	Skip	Garlon 3A	Spot	Waters edge	Selective Cutting
20/5+215	285	McCormick creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
21/8+565	635	Walville creek	No	Cut Stump	Garlon 3A	Spot	100' buffer	Selective Cutting
22/4+565	635	Rock creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
22/9+465	535	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
23/4+700	900	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
24/2+115	185	Rock creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
24/10+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
25/3+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
25/9+ 395	460	Fern creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
25/10+0	605	Fern creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
26/1+0	200	Fern creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
26/3+365	435	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
27/4+235	305	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting

27/9+620	690	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
28/1+250	350	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
28/2+165	235	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
28/4+365	435	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
29/10+590	660	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
30/2+ 410	490	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
30/5+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
32/4+735	810	Walker creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
33/1+565	635	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
33/6+465	535	Green creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
33/8+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
34/6+1565	1635	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
35/2+315	385	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
35/3+665	735	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
35/7+390	460	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
36/5+640	710	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
36/8+240	310	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
37/8+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting

37/8+531	601	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
38/9+0	150	Mill creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
39/8+665	735	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
40/3+0	500	No name creek Wtlds.	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
40/7+765	860	Whitcomb creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
41/2+265	450	Wilson creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
41/3+0	350	Fairchild creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
41/4+690	760	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
42/6+35	105	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
43/3+0	300	No name creek Wtlds.	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
43/8+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
44/4+65	135	No name creek	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
45/11+0	100	Pond	No	Cut Stump	Garlon 3A	Spot	Waters edge	Selective Cutting
45/12+0	125	Butte creek	No	Cut Stump	Garlon 3A	Spot	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 — <u>Herbicide Use Near Irrigation</u>, <u>Wells or Springs</u> for buffers and herbicide restrictions.

Sp	an	Well/irrigation/or	Hernicide		Other
From	То	spring	TIOI MICIAE	Buffer	notes/measures
17/1+300	940	Water Shed	Skip Area		
29/2+300	29/4+25	Water Shed	No herbicide treatment	No need for a buffer	Selective Cutting Only
41/4+ 800	41/	Water Shed	No herbicide treatment	No need for a buffer	Selective Cutting Only

# 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 — <u>T&E Plant or Animal Species</u> for requirements and determining presence.

Sp	an	Species	Measures
From	То	Species	Wicasui Cs
11/1	11/6	Bald Eagle	Seasonal restrictions of no chainsaw activity from January 1 to August
			5. The eagle zone is in a skip area (pasture land).
21/6	22/1	Marbled Murrlet	Seasonal restrictions of not producing noise greater than ambient within
		0.25 mile of known habitat or occupancy during core breeding season	
			from April 1 to August 5; and no motorized equipment will be used
			within 0.25 mile of known habitat or occupancy within 2 hours after
			sunrise or within 2 hours before sunset during the late breeding season
			from August 6 to September 15.
23/8	24/1	Marbled Murrlet	Same seasonal restrictions as for structure 23/8 to 24/1
24/4	24/9	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1
27/4	30/5	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1
32/6	33/6	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1
34/6	35/4	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1
37/3	37/4	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1
37/7	38/5	Marbled Murrlet	Same seasonal restrictions as for structure. 23/8 to 24/1

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 – <u>Cultural Resources</u> for requirements.

Sp	an	Describe	Method/mitigation measures	
From	To	sensitivity	Method/intugation measures	
34/2	60/2	Cultural Sites	Chehalis tribe, Richard Bellon, Archeologist 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.	

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

See Handbook – <u>Steep/Unstable Slopes</u> 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.

See attached prescription cut sheets.

Span		Methods, including herbicide active ingredient, trade name, application technique
From	To	ivicinous, including herbicide active ingredient, trade name, application technique
4/1	45/12	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 — **<u>Debris disposal</u>** 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.

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 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 better accessibility. The may cause damage to the natural resources.

## 7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — <u>Prepare Appropriate Environmental Documentation</u> for requirements. . Also prepare Supplement Analysis <u>Supplement Analysis</u> 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