DOE F 1325.8 e Electronic Form Approved by CGIR - 01/20/95
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United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: January 27, 2003

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-SA 118, Holcomb – Naselle 115 kV.

TO: James A. Jellison – TFO/Olympia

Proposed Action: Vegetation Management along the Holcomb Naselle 115kV transmission line corridor from structure 1/1 through structure 21/10. Right of way width averages 100 feet.

Location: The project area is located in Pacific County, 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. Approximately 21 miles of right-of-way will be treated using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Approximately 1.0 miles of access road will be cleared using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Tower sites will be treated 30 feet from center of poles and or tower legs using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Vegetation management is required for unimpeded operation and maintenance of the subject transmission line. See Section 1of the attached checklist for a complete description of the proposal.

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

Planning Steps:

1. Identify facility and the vegetation management need.

Unwanted vegetation, reclaim trees and danger trees will be removed and/or controlled using selective and nonselective methods that will include hand cutting, mowing, and herbicidal treatment. All methods of herbicide treatment will be used (except aerial) dependent on site conditions/restrictions. This proposal covers approximately 252 acres of land between towers 1/1 through 21/10 on the Holcomb Naselle 115kV transmission line. The entire width of the corridor needs to be managed.

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

The subject corridor traverses private farming, timber, and public DNR managed lands in Pacific County. No other federal and no tribal lands are involved.

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 cites resources found along with applicable mitigation measures:

Riparian and Essential Fish Habitat:

Includes all wetlands, streams, and creeks meeting the definition of riparian habitat or essential fish habitat. Several riparian areas were identified which may include essential fish habitat. By following the below mitigation measures there will be no effect on essentional fish habitat. See Section 3.1 of the checklists for a complete listing of areas and mitigation methods.

Riparian and Essential Fish 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 30.5 m (100 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 surface waters.

T & E Species:

- **Marbled Murrlet**: The corridor crosses critical habitat units WA-05-a, Wa-05-b, WA-05-d, and Wa-056-h and other individual sightings have been reported at various locations of the transmission corridor. See section 3.3 of the checklist for more detailed information.

  Mitigation: During the core-breeding season, April 1st - August 5th, do not carry out maintenance activities that produce noise above ambient noise levels, within 0.25 miles of any known marbled murrlet habitat or occupancy. During the late breeding season, August 6th – September 15th, do not carry out maintenance activities using motorized equipment within 0.25 miles of any known marbled murrlet habitat or occupancy within two hours after sunrise or within two hours before sunset.

If any tree needing removal is greater than 32 inches in diameter at breast height and has suitable nest characteristics, initiate formal consultation with the USFWS. By following these measures there will be no effect on marbled murrelet.

- **Bald Eagles**: BPA's T2View database shows Bald Eagle nests are probable within .5 miles of the transmission corridor from towers 15/1 to 16/1. See section 3.4 of the checklist for more detailed information.

  Mitigation: No chainsaw work or other activities producing noise above the normal ambient level will be performed in the area during the protected nesting season, Jan 1st – August 5th, and therefore will have no effect on any potential bald eagles. Vegetation management as described in the checklist for the affected area will occur after August 5th.

Cultural resources:

Richard Bellon, Archeologist Resource Manager for the Chehalis tribe is not aware of any cultural resources in the transmission corridor. Should any cultural resources be discovered during vegetation management control work will be stopped in the vicinity and the tribe will be contacted. See section 3.6 of the checklist for additional information.

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 Sections 4 & 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 that will be managed. These populations 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*(see checklist) the structure sites and right-of-way roads where Scotch Broom and blackberries are present.

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

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 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* DATE: 01/29/2003
Thomas C. McKinney
NEPA Compliance Officer

Attachment

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
J. Meyer – KEP-4
M. Hermeston – KEP-4
J. Sharpe – KEPR-4
P. Key – LC-7
D. Hollen – TF/DOB-1
D. Krauss – TFO/Olympia
S. Martin – TFO/Olympia
F. Underwood – TFOK/Chehalis
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)

Gtippetts:gt:4722:1/27/2003 (KEP-KEPR/OLYMPIA-W:\EP\2002 & 2003 FILES\EQ\EQ-14\FEIS-0285-SA-118-Holcomb Naselle.doc)

Vegetation Management Checklist

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
Holcomb-Naselle ADNO 8118	21mi (1/1 to 21/10) 1-115Kv	100	21 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 30 feet from the center of the pole or from each leg of the steel towers and the stumps will be treated with herbicide.

Access Road clearing - approximate miles – 1.0 mile
All access roads will be mulched due to the encroachment of Scotch broom and the stumps will be treated. Foliar treatment will be applied in the spring for the new sprouts.

Reclaim ("C") Trees
Refer to the prescription cut sheets that notes the location of the draws and the edge of the right-of-ways where reclamation activities will be occurring. An occasional span has been identified where "C" trees will need to be cut along both edges of the easement

Danger Trees
No danger trees will be cut at this entry. This danger trees were cut on this easement in 2000.

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 the stumps chemically treated 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 — **Landowners/Managers/Uses** for requirements, and **List of Landowners/Managers/Uses** for a checkbox list.

Landowners/Managers/Uses

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 — **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 Richard Bellon the Archeologist with the Chehalis tribe near Rochester, Washington. They are not aware of any cultural sites in the project area.

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							
1/1+ 235	305	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35'to creek	Selective Cutting
1/3+ 150	350	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
2/3+ 450	600	Willapa River	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
4/3+ 175	245	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
4/4+ 190	260	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
4/4+ 415	480	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
4/7+ 535	610	Trap creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting

5/4+ 215	285	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/4+ 665	735	No name creek	No	Skip	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/5+ 135	285	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/5+ 565	635	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/6+ 390	460	No name creek.	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/8+ 515	585	No name creek.	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
5/8+ 665	735	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
6/1+ 465	585	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
6/1+ 665	735	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
6/2+ 765	835	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
6/3+ 715	785	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
6/5+39 0	460	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
7/6+ 215	285	No name creek /Wtlds	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
7/7+ 0	400	No name creek /Wtlds	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
7/8+ 165	335	No name creek /Pond	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
8/1+290	360	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
8/6+935	1005	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
9/2+ 815	885	Alder creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting

10/1+150	300	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
10/2+565	635	Alder creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
10/3+465	535	Alder creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
10/3+750	820	Alder creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
11/1+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
11/3+515	585	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
11/3+665	735	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
11/7+800	1100	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
12/1+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
12/1+390	460	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
12/5+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
12/7+150	400	Naselle River	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
13/5+635	705	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
13/6+715	785	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
14/2+365	435	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
14/3+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
14/6+115	200	Naselle River	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
16/1+315	450	N. F. Naselle River	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting

16/2+215	315	N. F. Naselle River	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
16/2+490	560	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
16/3+290	360	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
17/3+365	435	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
17/3+865	935	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
19/1+35	105	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
19/1+435	505	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
19/2+165	235	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
19/3+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
19/4+290	360	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/3+165	235	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/5+390	460	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/6+115	185	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/6+365	435	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/7+165	235	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
20/9+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
21/2+315	385	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting
21/3+135	205	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35’ to creek	Selective Cutting

21/3+415	485	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
21/7+360	600	No name creek/Pond	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	Selective Cutting
21/8+ 35	105	No name creek	No	Cut Stump	Garlon 3A	Spot treat w/in buffer	35' to creek	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.

Span		T&E Species	Method/mitigation or avoidance measures
From	To		
1/2	2/2	Marbled Murrlet	Seasonal restrictions of no activity that produces noise above the normal ambient level from April 1 to August 5 and from August 6 to Sept 15, no chainsaw activities 2 hours after sunrise and before sun set.
2/8	7/1	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2
11/5	11/5	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2
12/8	14/1	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2
15/8	15/8	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2
16/5	16/5	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2
18/5	20/9	Marbled Murrlet	Same seasonal restrictions as for str. 1/2 to 2/2

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
From	To		
15/1	16/1	Bald Eagle	Seasonal restrictions of no activity that produces noise above the normal ambient level from January 1 to August 5.

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		
1/1	21/10	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 – **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.

See attached prescription cut sheets.

Span		Methods, Including herbicide active ingredient, trade name, application technique
From	To	
1/1	21/10	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 for FCO is omitted and Garlon 3A replaces Garlon 4. 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.

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 Blackberries 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, 3-5% Garlon 3A with Depo-RTU drift retardant under windy conditions.

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 — **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