Bonneville Power Administration

memorandum

DATE: April 19, 2002

REPLY TO

ATTN OF: KEP

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

(DOE/EIS-0285/SA-59)

To: James Jellison - TFO/Olympia Natural Resource Specialist

Proposed Action: Vegetation Management along the Chehalis Covington/ Raver Paul / Paul Alston 230 and 500 kV Transmission line Corridor ROW 48/2 to 70/6 and 1/1 to 13/4. The proposed work will be accomplished in the indicated sections of the transmission line corridor with a corridor width of 250 to 442 feet.

Location: The ROW is located in Thurston County, WA, being in the Olympia Region.

Proposed by: Bonneville Power Administration (BPA).

<u>Description of the Proposed Action</u>: BPA proposes to clear unwanted vegetation in the rights-of-ways and around tower structures that may impede the operation and maintenance of the subject transmission lines and access roads, including Reclaim and Danger Trees. BPA plans to conduct vegetation control with the goal of removing tall growing vegetation that is currently or will soon be a hazard to the transmission line. BPA's overall goal is to have low-growing plant communities along the rights-of-way to control the development of potentially threatening vegetation. All work will be executed in accordance with the National Electrical Safety Code and BPA standards. Danger and "C" trees and chemical treatment contract work is scheduled to begin April 29, 2002.

<u>Analysis:</u> This project meets the standards and guidelines for the Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) and Record of Decision (ROD). The Planning steps are described in the attached checklist. See checklist.

Vegetation herbicide treatments on sprouting-types of species ensure that the roots are killed.
 Prevention of resprouts encourages low-growing plant communities to establish themselves and flourish on the right-of-way.

- Chehalis Tribe has known cultural sites in the vicinity of the southern half of the Chehalis-Covington transmission line according to Richard Bellon, Chehalis Tribal culture site specialist. Richard is aware of BPA's brush cutting practices on the right-of-way. He is more concerned if BPA's brush cutting activities lead to soil disturbances off of the right-of-way roads from dozing and digging from heavy equipment like a crawler tractor. If cultural sites were identified, Richard requests that BPA contact him so a survey of the site can be made and registered with the State of Washington.
- A cultural representative of the Nisqually Tribe commented that there are known cultural sites in the vicinity of the north half of the Chehalis-Covington Corridor. His comments were similar to Richard Bellon of the Chehalis Tribe.
- Water resources (streams, rivers, wetlands and a well) will be protected with 100-foot buffers (165 foot buffer for the well) combined with the spot application of 50/50 Accord or Garlon 3A/Water for stump treatment in the riparian zones immediately out side the buffers.
- No 'in stream' work is to take place without prior consultation with the appropriate government agencies and permits are in place.
- Herbicides will be applied by licensed applicators following manufacturers' label instructions and BPA's management prescriptions.
- Reseeding /replanting regimes have not been planned at this time. Low growing aggressive native vegetation within the Right Of Way can naturally dominate with the elimination of tall growing vegetation.
- Beginning in the spring, 2002 the brush cutting and herbicide application program will be monitored for soil erosion and follow-up treatment, and if necessary a native grass-reseeding program will be implemented.

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/ Greg Tippetts
Greg Tippetts

Physical Scientist – KEPR-4

CONCUR: /s/ Thomas C. McKinney DATE: 04/26/2002

Thomas C. McKinney NEPA Compliance Officer

Attachments

cc:

L. Croff – KEC-4

T. McKinney –KEC-4

M. Hermeston – KEP-4

J. Sharpe – KEPR-4

P. Key – LC-7

M.Johnson – TF/DOB-1

D. Krauss – TFO/Olympia

S. Martin – TFO/Olympia

G Westling – TFOF/Olympia

M. Martin – KEPR/Covington

Environmental File - KEC

Official File – KEP-4 (EQ-14)

 $Gtippetts:gt:3351:4/22/02 \; (KEPR-KEPR-W:\EP\2002 \; FILES\EQ\EQ-14\FEIS-0285-SA-59-Raver \; Paul \; Paul \; Raver.doc)$

ADDENDUM TO THE STATEMENT OF WORK & TREATMENT ZONES

Raver-Paul and Paul-Alston Corr. 48/2 to 70/6 and 1/1 to 13/4

GENERAL

The following right-of-ways consist of many age classes of tall trees that will grow tall, including but not limited to conifers, big leaf maple, willow, cascara, and alder. Rocky Mountain Maple, Willow, Cascara and Wild Filbert will be considered as target species only if it exceeds 10 feet high where the ground to conductor clearance is less than 45'. The Contractor will make efforts, to leave the low growing vegetation on the right-of-way.

Before work begins, the Contractor will locate and mark all known riparian areas. .

This project will include treatments to control the target vegetation. The Contractor can enter the right-of-way more than once during the control season to meet the control level required. The control season will start April 29, 2002 and end June 14, 2002. All Billing will be submitted to the COTR for processing and approval.

- 1. The Contractor will control all trees and brush that will grow tall (target vegetation) which are greater than 1 foot tall in the right-of-way as designated by the details of this contract. Riparian areas should be cut as noted. The Contractor will cut the entire width of the right-of-way.
 - a) Cut conifers below the lowest limb. This will eliminate the necessity of stump treatment, for conifers will not re-sprout when cut below the lowest limbs. All Stumps will be cut flat
 - b) Cut deciduous trees and brush flat at about 6" to 8" above the ground line.
- 2. The Contractor will make the best effort to control target vegetation greater than 1 foot in height. Trees and brush in this height class that are visible will be controlled. Target vegetation that is hidden by desirable species will not be counted in the final evaluation by BPA.
- 3. Hand tools and chainsaws are permitted. Mulching machines will be confined to the structure sites, access and right-of-way roads.

- 4. No cut vegetation will be removed from the right-of-way.
- 5. Pacific yew (Taxus brevifolia) may be cut. But at least one entire whorl of live branches must be left attached to the stump.
- 6. Cutting, removal, or damaging threatened, endangered, or sensitive plants are not permitted.
- 7. Permitted activities shall be immediately halted should an undocumented cultural resource site or threatened, endangered, or sensitive plant/wildlife species is discovered.
- 8. All woody vegetation within 30 feet of the steel tower legs or from the center hub of wooden towers that would inhibit safe access or maintenance work on a tower will be controlled. Vegetation such as blackberries, briars, poison oak, poison ivy, and other species, which by size or density may hinder routine inspection and maintenance, work or make it more hazardous. Stumps will not exceed 2 inched in height and all debris and slash will be pulled out of the control area.
- 9. Access roads shall have all vegetation except grasses controlled so that stumps do not exceed 2 inches height in the roadbed and 4 inches in height off of the roadbed. The control area is 25 feet wide (5 feet horizontal on the cut and fill slope) and fifteen feet high. Limbs will be trimmed back flush to the trunk as possible when trees are rooted outside of the control area.
- 10. Fuel accumulation will be treated by one or more of the following methods:

<u>Lope and Scatter</u>. Tree branches shall be cut from at least two sides of the entire main stem to allow the stem to lie flat on the ground. The main stems and branches shall be cut into 5-foot lengths or less. The objective is to get the bole of the tree flat on the ground with all branches removed by axe or saw. For safety, the limbs should be cut as close to the bole of the tree as possible. Limbs should be scattered and laid flat on the ground. Do not create concentrations. Do not dispose off the Right-of-Way.

<u>Pile slash concentrations</u>. When the brush concentration are relatively continuous over one acre and that exceeds 36 inches deep so that the continuity of fuels is broken up. Concentrate slash in areas where there is little or no low growing vegetation that would assist in preventing the establishment of conifers and tall growing hardwoods.

11. Management Zones

Zone: NR (Non-Riparian)

These are areas of the right-of-way that are upland sites and are not wetlands or riparian areas. These areas are to be treated as stated in the General Requirements

RIP (Riparian)

- 1. The Contractor will control all trees and brush that will grow tall (target vegetation) which are greater than 1 foot tall in the right-of-way as stated on the General requirements. In addition the contractor consider the following.
 - A. Riparian areas are defined as follows:
 - Aa. Fish bearing streams- 300 feet slope distance on either side of a stream measured from the edge the active stream channel.
 - Bb. Permanently flowing non-fish bearing streams- 150 feet slope distance on either side of a stream measured from the edge the active stream channel.
 - Cc. Seasonally flowing or intermittent streams and wetlands less than one acre-100 feet slope distance on either side of a stream or wetland measured from the edge the active stream channel or edge of a wetland.
 - Dd. Lakes and natural ponds- 300 feet slope distance form the edge of water.
 - B. In addition, vegetation cut within a riparian area shall be treated as follows
 - Aa. Larger diameter trees (greater than 10 inches diameter at Breast Height (DBH) felled within riparian areas will be felled across (i.e. to span) the stream. However, in no case should a tree be felled across the stream within the right-of-way unless approved by the COTR.
 - Bb. Other trees that need to be felled should be felled uphill and, or parallel to the stream or water body.
 - Cc. Slash piles shall not be located within 50 feet slope distance of the stream.
 - Dd. No trees shall be felled across stream course in any area where there is obvious stream instability.

SINGLE TREE CUTTING ZONES (STC)

Any areas in the corridor with greater than 38.1 m (125 ft.) vertical distance between the ground surface and transmission lines. Here, removal is periodically required only of individual trees (single tree cuts) that could encroach into the transmission corridor danger zone.

TRANSITION ZONES (TR)

In areas adjacent to STC zones the following treatment will be required. In the area were the conductor clearance is from 70 feet to 125 feet tall growing trees will be controlled in the following manner.

- 1. Conifers over 15 feet tall will be cut for clearance.
- 2. Hardwood trees over 30 feet tall will be cut for clearance.
- 3. Hardwood trees less than 30 feet tall will be left untreated

. EVALUATION

1. The contractor is expected to achieve the following level of control of target species.

Tree height class	% control
0-5 feet tall	100 %
5-10 feet tall	100 %
10 feet tall +	100 %

If the Contractor achieves this level of control he will receive 100% of the contract payment after evaluation. If it is less than the above criterion then the contractor is expected to re-treat the area until the control level is obtained.

2. In addition, a visual and performance inspection will be made. Criteria will include the Contractors ability to perform according to the specifications, ability to safely perform the work, and a visual inspection of the control work.

Treatment Zones

Zones	
RIP	Lands with Riparian areas, Hand Cutting Methods only, approved herbicide treatment. See Detailed Specifications for treatment prescriptions. Accord/Garlon 3 for cut stump treatment from 100 to 200' of stream bank for ESA listed creeks. Non-ESA listed creeks, Accord/Garlon 3A will begin 35' from the stream bank.
NR	Lands without riparian habitats. Hand Cutting Methods on R/W spans and mulching machine permitted on access/R/W roads and structures sites. See Detailed Specifications for treatment prescriptions. Garlon 4, Tordon 22K and Forest Crop Oil/Activator 90 for cut stump/basal or foliar treatment beyond 200' of stream banks.
STC	Any areas in the corridor with greater than 38.1 m (125 ft.) vertical distance between the ground surface and transmission lines. Here, removal is periodically required only of individual trees (single tree cuts) that could encroach into the transmission corridor danger zone. No herbicide.

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- Covington/Raver- Paul/Paul-Alston 1/2	1/1 to 31/3; 230 & 500Kv	250 & 442	31

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>.

Right Of Way:

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

Transmission Structures - clearing around

Access Road clearing - approximate miles – 0.5 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

Alder

Wild Cherry

Noxious Weeds - Scotch broom

Blackberries

Density:

Low (50 stems or less/ per acre)

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 trees and brush to be cut and chemically treated. Access, right-of-way roads and structure sites are to be cut and treated. The danger trees will be cut that are adjacent to the Chehalis-Covington and Raver-Paul No. 1 lines. The brush contract work is to begin approximate May 1, 2002. Follow-up chemical treatment to begin in the late spring 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 — <u>Landowners/Managers/Uses</u> for requirements, and <u>List of Landowners/Managers/Uses</u> for a checkbox list.

Landowners/Managers/Uses:

Residential

Rural

Grazing lands

Industrial Forest 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 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/landuse 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>.

Span		Landowner/use	Specific measures to be applied
То	From		
4/5+500	4/5+100	Mary Ellen Yarian	Xmas Trees Agreement
5/2+600	5/2+400		Xmas Tree Agreement
30/6+900	30/6+925		Trees & Brush Agreement

1	

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.

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.

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.

Chehalis Tribe has known cultural sites in the vicinity of the southern half of the Chehalis-Covington transmission line according to Richard Bellon, Chehalis Tribal culture site specialist. Richard is aware of BPA's brush cutting practices on the right-of-way. He is more concerned if BPA's brush cutting activity leads to soil disturbances off of the right-of-way roads from dozing and digging from heavy equipment like a crawler tractor. If cultural sites were identified, Richard requests that BPA contact him so a survey of the site can be made and registered with the State of Washington.

Cultural representative of the Nisqually Tribe has known cultural sites in the vicinity of the north half of the Chehalis-Covington Corridor. His comments were similar to Richard Bellon of the Chehalis Tribe.

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		Waterbody	T&	Method	Herbicide	Application	Buffer	Other
То	From		E?			Technique		
1/1+ 800	1/1 +7 00	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen
2/1+ 150	2/1+0	Newaukum River Pond-G Pit	Yes No	Hand/Sel Hand/Sel	No herb. Garlon 3A/Accord	No appl. Spot appl.	100' 35'	away from creek 'Trees fallen

2/4	2/3	No Name	No	Hand/Sel	Garlon	Spot appl.	35'	fallen
4/1+	4/1+9	Cr.			3A/Accord	Spot appl.	35'	away from
970	00	No Name	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	creek.
5/3 +60 0	5/3+5 25 6/4+1	No Name & Pond	No	Hand/Sel	Garlon	Spot appl.	35'	Trees fallen en away from
6/4+ 199 2	850			Hand/Sel	3A/Accord			creek
7/3+ 600	7/3+4 00	Mantz Cr.	Yes	Hand/Sel	No Appl.	No appl.	100'	fallen away
8/4+ 435	8/4+3 65	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl	100'	from creek
9/2+	9/2+3							Trees fallen
435	65	No Name Cr.	No	Llorod/Col	Garlon	No appl.	100'	away from
	40/0	Thompson		Hand/Sel	3A/Accord	Spot appl.	100'	creek.
16/3 +20 00	16/3+ 1900	Creek	Yes	Skip	Garlon 3A/Accord	Spot appl.	100'	Trees fallen
00	16/4+				Garlon 3A/Accord		100'	away from creek.
16/4 +80 0	400	Skookumc huck River	Yes	Hand/Sel	Garlon 3A/Accord	Spot appl.	100'	Trees fallen away
18/1 +61 0	18/1+ 545	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	from creek.
	18/1+		NI.					Trees
18/1 +93 5	865	No Name	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	fallen away from creek.
18/2 +73 5	18/2+ 665	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen
18/3 +43 5	18/3+ 365	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	away from creek.
	<u> </u>							

18/4 +68 5	18/4+ 615	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen away from creek.
19/1 +53 5	465	Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen away
19/3	19/3+ 865	No Name Cr.			Garlon	Spot appl.	35'	from creek.
+93 5			No	Hand/Sel	3A/Accord			Trees fallen
20/1 +58 5	20/1+ 515	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	away from creek.
20/3 +61 0	20/3+ 540	No name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen away from creek.
20/3 +10 85	20/3+ 1015	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot Appl.	35'	Trees fallen away from
21/2 +33 5	21/2+ 265	No Name Cr.	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	creek. Trees
22/3 +85	22/3+ 650	DeShutes River	Yes	Hand/Sel	Garlon 3A/Accord	Spot appl.	100'	away from creek.
0 24/3	24/1	Scattered Ponds & Wetlands			Garlon 3A/Accord		35'	Trees fallen away from
27/2	27/2	on easement. Swamp-	No	Hand/Sel	<i>5.</i> (7100010	Spot appl.		creek. Trees fallen
27/3	28/2+ 1100	Skip Zone	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	away from creek.
28/3	28/3	Wetlands	No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees fallen away

+20 0		Wetlands						from creek.
30/1	30/1+ 565		No	Hand/Sel	Garlon 3A/Accord	Spot appl.	35'	Trees
+63 5	300	Yelm Cr.			Garlon			fallen
31/3	31/3+		No	Hand/Sel	3A/Accord	Spot appl.	35'	away from
+43	330	Nisqually River			No Appl.			creek.
0			Yes	Skip		No appl.	100'	

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		
То	From	Spring			110t00/1110u0u100		
28/1+ 550	28/1 +550	Well	No herbicide	165	Skip-Area		

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
То	From		
		No listed T&E Species on the 2TView	

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

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

Spai	า	Species	Measures
То	From		
		N/A	

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

See Handbook — $\underline{ \mbox{Visual Sensitive Areas}} \mbox{ for requirements.}$

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

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

See Handbook – $\underline{\text{Cultural Resources}}$ for requirements.

Span		Describe sensitivity	Method/mitigation measures					
То	From							
		No known sites						

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					
То	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
То	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
То	Fro	
	m	

31/3+ 1/1 430	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% Forrest
	Crop Oil (FCO), 3% Garlon 4 and 1% Tordon 22 K. Follow-up chemical treatment, foliar application of the above chemicals as noted under stubble treatment, except for FCO.

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?		
То	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 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 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 cut stump mixture of the product is 25% Garlon 4 and 75% Forest Crop Oil (FCO), the foliar mixture is 90% water, 3% Garlon 3, Gleen surfactant and 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 — <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 the Chehalis-Covington Corridor transmission lines 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.

Yes, supplement analysis.

BONNEVILLE POWER ADMINISTRATION RIGHT-OF WAY MAINTENANCE VEGETATION CONTROL PRESCRIPTION

CONTRACTOR: _	
TASK ORDER NO.:	

LINE NAME	ADNO	Right of Way Width	Percent Total
CHEHALIS - COVINGTON 230KV (Reference Line) (1/1 to 31/3)	8108		
RAVER - PAUL 500KV (From 68/3 to 48/2)	8150		
CHEHALIS - CENTRALIA #1 69KV (From 1/1 to 6/6)& PP&L 230Kv 1/2 to Tap	8104		
PAUL - ALLSTON #1 500KV (From 1/1 to 13/3)	8142		
PAUL - ALLSTON #2 500KV (From 1/1 to 13/3)	8144		

TASK ORDER INFORMATION
DATE COMPLETED:
CONTRACTOR'S SIGNATURE
INSPECTOR'S SIGNATURE

GENERAL INSTRUCTIONS: Cut, Lop and Scatter (C, L & S), Cut and Chip (C & C)/Mulch or as indicated in the Control

Prescription. Only cut Vine Maple, Willow, Cascara, Wild Filbert and etc. as indicated below or generally cut brush when it is 10' and taller where the ground to conductor clearance is less than 50' at maxim sag. Apply herbicide to freshly cut stumps within 15 minutes for best results. Non ESA listed creeks, a 35' from the stream bank, there will be no herbicide application.

ESA listed creeks, the first 100' from stream banks, no herbicide application, then 100 to 200' apply Accord/Garlon 3A. When 200' from the stream bank, Garlon 4 can then be applied.

Right-of-way roads that can provide for a pathway to the creek, 200 to 400 ' from the creek channel, then Tordon 22k herbicide which is used in conjuction with Garlon 4 for stubble application will be restricted.

L	LOCATION (1)		LOCATION		LOCATION (1)		(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	
STR. NO	. FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site			
Sub	0	100	350.0	100	0.8	NR	0.8						C,L&S- 75' BOL str 1/1					
1/1	0	350	350.0	350	2.8	NR	2.8				3.00	2.8	Foliar treat Sbroom in the - Pole Yard		1/4,1/5,1/6			
1/1	350	650	350.0	300	2.4	NR	2.4					2.4	C,L,S - Stump Treat - Sparse Veg., Dense Sbroom		1/2			
1/1	650	850	350.0	200	1.6	RIP	1.6					1.6	C,L,S - Stump Treat - Sparse VEG., Dense Sbroom; No Name Creek					
1/1	850	1176	350.0	326	2.6	NR	2.6					2.6	C,L,S - Stump Treat - Sparse Veg., Dense					
13/3	350	800	150.0	450	1.5	NR	1.0		0.20				P-A#2 Line : C, L&S-0 to 300' AH, C&C- Reclaim 35 to 75' Rt edge of R/W from 300 to					
13/3	0	500	150.0	500	1.7	RIP/NR	1.7						P-A#1 Line: C,L&S No Name creek 350' AH					

1/2	0	675	442.5	675	6.9	NR	6.9				1.00	6.9	C,L,S - Stump Treat - Sparse, Dense Sbroom	CC1 1/2 PAGE 2 of 14
1/3	0	450	442.5	450	4.6	NR	2.5				4.00		C,L,S - Stump Treat - Sparse, RR Xing	1/3,1/9,1 9 /4,13/2; 05/20/2002
1/3	450	1300	442.5	850	8.6	NR	0.0				1.00		Skip-Pasture	CCO 1/3
1/4	0	1260	442.5	1260	12.8	NR	0.0	3.00					C,L&S:3 12-15' DF along fence line.	
TOTAL	FOR	PAGE	1		46.4		22.30	3.00	0.20	0.00	9.00	16.30		

Note: The structures that are not noted to be cut in the prescription cut sheet, shall be cut and the stumps chemically treated, the debris

left where it was cut due to lite fuel load. Foliar treat all visible Scotch broom from structure 1/1 to 22/2.

L	OCATION	J	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					46.4		22.3	3.0	0.2	0.0	9.0	16.3			
2/1	0	150	442.5	150	1.5	RIP			0.20				Top to 15' ht. & Chip trees along Newaukum River- FSA listed *		
2/1	150	1200	442.5	1050	10.7	NR		1.00					Pasture-C&C 1 -15' ht. clump of BLM		
2/2	0	150	442.5	150	1.5	NR	0.10				2.00		C,L,S - Stump Treat -W. Cherries Sparse - Cut along fence line between C-Cov/P-A#2 line. Skip		CCO2/2, PA2 12/3
2/2	150	990	442.5	840	8.5	NR	1.30				2.00		C,L,S - 150-600' AH Skip field, Under P-A#2, cut		CCO2/8, PA2 12/3
212	130	770	442.3	040	0.5	IVIX	1.30				2.00		BLM and 800-900 Rt of C/L of C-Cov to Rt edge of C,L,S - Stump Treat - Sparse - Gravel Pit** 1.0 Ac.		CCO2/6, PAZ 12/3
2/3	0	950	442.5	950	9.7	RIP/NR	8.70				5.00		deduction for pasture and gravel pit. Water ponds in pit. no herb.		CCO2/3, CC1-2/10 & 11, PA1 12&13
2/4	0	941	442.5	941	9.6	NR					1.00		SKIP - Field		2/4
2/5	0	400	442.5	400	4.1	NR							SKIP - Field & Freeway		
2/5	400	759	442.5	359	3.6	NR	3.60				1.00	3.6	C,L&S-Sbroom, Small Pond under PA1 line.		CC1 2/16
3/1	0	100	442.5	100	1.0	NR	1.00				1.00	1.0			CCO 3/1
3/1	100	1050	442.5	950	9.7	NR			0.20				C&C fence line diangle across R/W, W. Cherries. Cut Str CC1-3/3 - Skip rest of span		
													Cut Str CC1-3/3 - Skip rest of span Cut trees along fence-PUD line is close under the C- C#1 line; Lt edge of R/W, Reclaim trees of P-A #2		
													line and sprouts of trees from the C/L 100' BOL and		
3/2	0	900	442.5	900	9.1	NR	0.80				1.00		200' AH of 11/2; Cut around pond 300 to 400' AH		PA2-11/3
3/3	0	975	442.5	975	9.9	NR							SKIP - Field		

3/4	0	1200	442.5	1200	12.2	NR							SKIP - Field	PAGE 3 of 14
3/5	0	600	442.5	600	6.1	NR	0.10	1.00			5.00		Cut & Chip 1-Ash tree along Jqckson Hwy; C,L&S under the C-C line 100' BOL from Hwy.	DATE: 05/20/2002 3/5,3/18,4/1,11/1,11/1
3/5	600	900	442.5	300	3.0	NR	3.00				5.00		C,L&S	3/5,3/18,4/1,11/1,11/1
3/5	900	1175	442.5	275	2.8	NR					5.00		Skip-Pasture	3/5,3/18,4/1,11/1,11/1
4/1	0	700	442.5	700	7.1	NR					2.00		Structures only - SKIP - Pasture	CC1 4/3 & 4/4
4/1	700	1350	442.5	650	6.6	RIP/NR	6.60				5.00		C,L&S-Do not cut fruit trees; No Name creek diangle across the R/W, no herbicide 100' from stream.	CC1 4/3 & 4/4,10/5,10/5,4/1
4/2	0	950	442.5	950	9.7	NR					2.00		C,L,S and Stump Treat	CC1 4/6 & 4/7
4/3	0	1395	442.5	1395	14.2	NR	14.20				3.00	7.1	C,L,S - Sparse - AR - DO NOT CUT Fruit trees; Sbroom 700 to 4/4	CCO-4/3, CC1-4/8 & 9
4/4	0	600	442.5	600	6.1	NR							SKIP - Pasture	
4/4	600	1155	442.5	555	5.6	NR	5.60				2.00	5.6	C,L,S and Stump Treat- Sca. Sbroom	C-C 4/15 & 16
4/5	0	1300	442.5	1300	13.2	NR	7.60				5.00		DO NOT CUT XMAS TREES- 100 to 500' AH under C-Cov & P-A #2 line and deduct grassland 400 to 4/5 from Lt of C/L of C-Cov edge R/W.	C-C 4/5, 5/2, 5/3 10/1,10/1
5/1	0	900	442.5	900	9.1	NR							SKIP - P/O Mulched this span.	
TOTAL	FOR	PAGE	1 & 2		221.0		74.90	5.00	0.60	0.00	56.00	33.60		

NOTES: *2/1 - Call (360) 748-1918 before cutting

**2/3 - Do Not Cut around small pond under PA2 line, 0 to 100' AH of C-Cov str.!

L	OCATION	I	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					221.0		74.9	5.0	0.6	0.0	56.0	33.6			
5/2	0	850	442.5	850	8.6	NR	8.10				5.00	4.0	SKIP - T&B 400 to 600' AH under P-A #2 line. Sbroom 450 to 850' AH. Cut structures ONLY		PA2-9/1, 9/1, CC1-5/6, 5/7, 5/2
5/3	0	600	442.5	600	6.1	RIP/NR	6.10				5.00		C,L,S and Stump Treat, Cold Cr. Buffer 500 to 600' AH.		CCO-5/3, PA1&2-9/3, CC1-5/9,5/10
5/3	600	1175	442.5	575	5.8	NR							SKIP		
5/3	1175	1375	442.5	200	2.0	NR	2.00					2.0	C,L&S- Stump treat-Sat. Sbroom.		

5/4	0	1100	442.5	1100	11.2	NR	11.20				4.00	11.2	C,L,S and Stump Treat-Sca. Sbroom.		CC1-5/13,14,1 PAG E 4 of 14
5/5	0	875	442.5	875	8.9	NR	8.90				2.00	8.9	C,L,S and Stump Treat-Scat. Sbroom.		CC1-6/1 DATE: 05/20/2002
6/1	0	875	442.5	875	8.9	NR	8.90				1.00	8.9	C,L,S and Stump Treat-Scat. Sbroom.		CC1-6/3
6/2	0	1125	425.0	1125	11.0	NR	11.00						C,L,S and Stump Treat		
6/3	0	530	425.0	530	5.2	NR	5.20					1.0	C,L,S and Stump Treat -Sca. Sbroom, 100' BOL of		
6/4	0	450	425.0	450	4.4	NR	4.40				3.00		C,L,S		CCO-6/4, PA1&2-8/1
													SKIP-Pasture, P/O to cut Cedar and DF trees in		
													pasture under P-A#2 line. C&C if it is accessible-		
6/4	450	1850	425.0	1400	13.7	NR		2.00					2 Cedars between C-Cov & P-A #1 line, east of		
								2.00					fence line. C,L&S-No herbicide near 7/4 P-A #1, pond/No		
6/4	1850	1992	425.0	142	1.4	RIP/NR	1.40						Name creek		
7/1	0	1679	425.0	1679	16.4	NR	16.40					2.9	C,L,S-Sbroom 300' BOL of 7/2.		
7/2	0	1350	425.0	1350	13.2	NR	13.20						C,L,S -Sbroom 100' AH 7/2. No Herb near - DO		
IIZ	U	1330	423.0	1330	13.2	INIX	13.20						NOT CUT fruit trees C,L,S -span escept, C&C:Reclaim Lt edge of the		
7/3	0	400	425.0	400	3.9	NR	3.80		0.10			1.0	R/W between Reinke Rd. and lane to the south.		
.,,	Ů	.00			0.7		0.00		01.10				C&C- No Herb - Under P-A#1, cut Red Alder		
7/3	400	600	425.0	200	2.0	RIP		2.00	0.25				greater than 10' ht. Mantz Cr. ESA Listed, no		
									0.23				herb.: C&C 3-70' DF under P-A#2 line.		
7/3	600	1100	425.0	500	4.9	NR		1.00					Skip- Pasture , C&C 1-70' DF under P-A#2 line.		
7/3	1100	2150	425.0	1050	10.2	NR						0.3	C,L&S-stump treat. Sbrrom near 7/1 P-A#2		
7/4	0	700	425.0	700	6.8	NR	6.80						C,L,S		
8/1	0	850	400.0	850	7.8	NR	7.80						C,L,S and Stump Treat (C-CE-AR-3)		
8/2	0	1314	400.0	1314	12.1	NR	12.10						C,L,S and Stump Treat		
0/0	_	001	100.0	001	7.5	ND	0.20					1.0	C,L,S and Stump Treat, Sbroom 100' BOL of 8/3,		
8/3	0	821	400.0	821	7.5	NR	8.30					1.0	under C-Cov C,L,S and Stump Treat - selectively cut trees >30'		
													ht. along No Name creek 400' AH. Sbroom 300'		
8/4	0	1765	400.0	1765	16.2	RIP/NR	16.20			0.30		2.9	ROL of 9/1 Mulch PA-AR-6-1 & 6-2 C,L,S and Stump Treat, Sbroom sparse to dense	500′	
9/1	0	1300	400.0	1300	11.9	NR	11.90					7.5	under P-A#2 and C-Cov lines. No Name creek		
													under P-A#1 line C,L,S and Stump Treat - DO NOT apply herbicide		
0/2	_	1170	400.0	1170	10.7	DID/NID	10.70					2.0	along No Name creek 400' AH, diangle across the		
9/2	U	1170	400.0	1170	10.7	RIP/NR	10.70					2.0	R/W. Sca. Sbroom in span.		
OTAL	FOR	PAGE	1 to 3		431.8		249.30	10.00	0.95	0.30	76.00	87.15			

DATE: 05/20/2002

L	OCATION	N	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO.	FROM	ТО	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					431.8		249.3	10.0	1.0	0.3	76.0	87.2			
9/3	0	200	400.0	200	1.8	NR	1.80				1.00		C,L,S-Stump Treat- DO NOT CUT fruit trees		5/3
9/3	200	1200	400.0	1000	9.2	RIP							SKIP - Pasture, Hanaford Creek 300' AH.		
9/3	1200	2180	400.0	980	9.0	NR	9.00						C,L,S and Stump Trea		
9/4	0	1000	425.0	1000	9.8	NR	9.80					1.00	C,L,S and Stump Treat - Sparse; Sb patch 200' AH and 200' BOL of str along A/R.		
10/1	0	772	425.0	772	7.5	NR	7.50					0.10	C,L,S and Stump Treat; Sb near str 10/1.		
10/2	0	1228	425.0	1228	12.0	NR	12.00					0.10	C,L,S and Stump Treat; Sb patch midspan.		
10/3	0	2050	425.0	2050	20.0	NR	20.00					0.10	C,L,S and Stump Treat; Sb patch 150'BOL.		
10/4	0	900	425.0	900	8.8	NR	8.80					0.50	C,L,S and Stump Treat; Sb along A/R and spurs		
11/1	0	1100	425.0	1100	10.7	NR	10.70						C,L,S and Stump Treat		
11/2	0	800	425.0	800	7.8	NR	7.80					1.50			
11/3	0	1770	300.0	1770	12.2	NR	12.20					0.10	C,L,S and Stump Treat; Sb patch near 11/3. Reclaim Lt/Rt edge of the R/W, clearance is not		
11/4	0	925	300.0	925	6.4	NR	6.40						C,L,S and Stump Treat		
11/5	0	600	300.0	600	4.1	NR	4.10						C,L,S and Stump Treat		
11/5	600	1695	300.0	1095	7.5	NR							SKIP		
12/1	0	1710	300.0	1710	11.8	NR							SKIP - Mining - Field - Settling Pond		
12/2	0	1220	300.0	1220	8.4	NR	8.40						C,L,S and Stump Treat		
12/3	0	2200	300.0	2200	15.2	NR	15.20					0.50	C,L,S and $Stump\ Treat;\ Sb\ midspan\ under\ R-P\ line.$		
12/4	0	2200	300.0	2200	15.2	NR	15.20						C,L,S and Stump Treat		
13/1	0	700	300.0	700	4.8	NR	4.80						C,L,S and Stump Treat		
13/2	0	975	300.0	975	6.7	NR	6.70						C,L,S and Stump Treat		
13/3	0	1125	300.0	1125	7.7	NR	7.70						C,L,S and Stump Treat		

	TOTAL FOR PAGE 1 to 4	628.4	0.0	417.4	10.0	1.0	0.3	77.0	91.1					
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*11/2 - Goes into Centralia Tap. Paul-Allston 1&2 - 3/4 turn to Paul Substation. Raver-Paul 68/3 joins Chehalis-Covington

DATE: 05/20/2002

Contractor must attend a mining safety class provided by the Altavista, when cutting brush from str. 11/3 to 600'AH 13/4..

L	OCATION	J	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					628.4		417.4	10.0	1.0	0.3	77.0	91.1	Paul-Allston 1&2 and Raver-Paul 68/3to70/6 & PP&L line Only		
3/3	0	635	512.5	635	7.5	NR	7.50					5.0	C,L,S and Stump Treat; Sb cover 3/4 of span area.		
3/2	0	575	512.5	575	6.8	NR	6.80					0.2	C,L,S and Stump Treat , Sparse*; Sb A/R under A-P #1 line.		
3/1	0	1350	512.5	1350	15.9	NR	15.90					0.2	C,L,S and Stump Treat; Sb along A/R		
2/6	0	850	512.5	850	10.0	NR	10.00					0.2	C,L,S and Stump Treat; Sb along A/R		
2/5	0	1200	512.5	1200	14.1	NR	14.10					1.0	C,L,S and Stump Treat; Sb along A/R and spurs.		
2/4	0	491	512.5	491	5.8	NR	5.80					1.0	C,L,S and Stump Treat; Sb along A/R and spurs.		
2/3	0	977	512.5	977	11.5	NR	11.50					1.5	C,L,S and Stump Treat; Sb along A/R and spurs.		
2/2	0	825	512.5	825	9.7	NR	9.70					1.5	C,L,S and Stump Treat; Sb along A/R and spurs.		
2/1	0	1475	512.5	1475	17.4	NR	17.40					2.0	C,L,S and Stump Treat; Sb 100'AB str and .25 patch west of draw and A/R east of draw.		
1/5	0	650	512.5	650	7.6	NR	7.60					2.3	C,L,S and Stump Treat; Sb 100' AH & BOL of str's.		
1/4	0	700	512.5	700	8.2	NR	8.20						C,L,S and Stump Treat		
1/4	700	1275	387.5	575	5.1	NR	5.10					0.2	C,L,S and Stump Treat		
1/3	0	1035	387.5	1035	9.2	NR	9.20					0.2	C,L,S and Stump Treat; Sb along A/R.		
1/2	0	1258	387.5	1258	11.2	NR	11.20					1.3	C,L,S and Stump Treat; Sb 75' AH & BOL of str's and patch midspan along A/R. C,L,S and Stump Treat; Sb from str to 100'AH and along		
1/1	0	877	387.5	877	7.8	NR	7.80					1.0	C,L,S and Stump Treat; Sb from str to 100'AH and along A/R.		
Sub	0	200	387.5	200	1.8	NR	1.80					1.8	C,L,S and Stump Treat ; Sb in span.		
1/2	0	820	125.0	820	2.4	NR	2.40						PP&L Transmission Line: C,L,S and Stump Treat		
1/3	0	410	125.0	410	1.2	NR	1.20						C,L,S and Stump Treat		
1/4	0	885	125.0	885	2.5	NR	2.50						C,L,S and Stump Treat		

1/5	0	760	125.0	760	2.2	NR	2.20						C,L,S and Stump Treat	PAGE 7 of 14
1/6	0	505	125.0	505	1.4	NR	1.40						C,L,S and Stump Treat	DATE: 05/20/2002
1/7	0	850	125.0	850	2.4	NR	2.40						C,L,S and Stump Treat	
					0.0	NR						7.5	Foliar treat Sbroom around Paul Substation and to the east of RR tracks toward Steam Plant. Sb mulched last year.	
TOTAL	FOR	PAGE	1 to 5		790.1		579.10	10.00	0.95	0.30	77.00	117.95		

NOTES: *3/2 - No rock on AR to structure - If wet conditions, may not be able to drive to structure

Str 1/1 to 1/4 plastic pipe on the surface of the ground, do no drive over or break, part of the cooling system of the Steam Plant.

L	OCATION	N	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					790.1		579.1	10.0	1.0	0.3	77.0	118.0			
13/4	0	450	300.0	450	3.1	NR	3.10						C,L,S and Stump Treat		
13/4	450	1900	300.0	1450	10.0	NR							SKIP - Field		
14/1	0	1125	300.0	1125	7.7	NR		4.00					Top Fruit trees to 15' ht., chip debris; Skip- Pasture		
14/2	0	300	300.0	300	2.1	NR							DO NOT CUT Fruit Trees		
14/2	300	775	300.0	475	3.3	NR	3.30						C,L,S & Stump Treat		
14/3	0	100	300.0	100	0.7	NR	0.70						C,L,S and Stump Treat		
14/3	100	400	300.0	300	2.1	NR	2.10						C,L,S - Swamp - No Herbicide		
14/3	400	1350	300.0	950	6.5	NR	6.50						C,L,S and Stump Treat		
14/4	0	1600	300.0	1600	11.0	NR	11.00						C,L,S and Stump Treat		
15/1	0	725	300.0	725	5.0	NR	5.00						C,L,S and Stump Treat		
15/2	0	1375	300.0	1375	9.5	NR	9.50						C,L,S and Stump Treat		
15/3	0	700	300.0	700	4.8	NR	4.80						C,L,S and Stump Treat		
15/4	0	1525	300.0	1525	10.5	NR	10.50						C,L,S and Stump Treat		

15/5	0	1750	300.0	1750	12.1	NR	12.10						C,L,S and Stump Treat	PAGE 8 of 14
16/1	0	635	300.0	635	4.4	NR	4.40						C,L,S and Stump Treat	DATE: 05/20/2002
16/2	0	440	300.0	440	3.0	NR	3.00						C,L,S and Stump Treat	
16/3	0	100	300.0	100	0.7	NR	0.70						C,L,S and Stump Treat *	
16/3	100	2000	300.0	1900	13.1	RIP							SKIP -Wetland & Thompson Creek-ESA listed creek	
16/3	2000	2384	300.0	384	2.6	NR	2.60						C,L,S and Stump Treat*	
16/4	0	400	300.0	400	2.8	NR	2.80						C,L,S/stump treat	
16/4	400	800	300.0	400	2.8	RIP	2.80						C,L&S- Skookumchuck River, ESA listed ; Selectively cut trees whose tops are within 50' of conductor at max sag. No herbicide	
16/4	800	1716	300.0	916	6.3	NR	6.30						C,L,S/stump treat	
17/1	0	1050	300.0	1050	7.2	NR							SKIP - Field	
TOTAL	FOR	PAGE	1 to 6		921.3		670.30	14.00	0.95	0.30	77.00	117.95		

L	OCATION	V	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO.	FROM	ТО	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					921.3		670.3	14.0	1.0	0.3	77.0	118.0			
17/2	0	1000	300.0	1000	6.9	NR							SKIP - field - CUT STRUCTURES ONLY		
17/2	1000	1325	300.0	325	2.2	NR	2.20						C,L,S and Stump Treat		
17/3	0	50	300.0	50	0.3	NR	0.30						C,L,S and Stump Treat		
17/3	50	650	300.0	600	4.1	NR							SKIP - Swamp - Wildlife Refuge		
17/3	650	1925	300.0	1275	8.8	NR	8.80						C,L&S-stump treat		
17/4	0	700	300.0	700	4.8	NR	4.80						C,L,S and Stump Treat		
18/1	0	1800	300.0	1800	12.4	RIP/NR	12.40						C,L,S and Stump Treat, No Name creeks 575 & 900' AH		

18/2	0	1025	300.0	1025	7.1	RIP/NR	7.10						C,L,S and Stump Treat, No Name creek 700' AH	PAGE 9 of 14
18/3	0	1025	300.0	1025	7.1	RIP/NR	7.10						C,L,S and Stump Treat, No Name creek 400' AH.	DATE: 05/20/2002
18/4	0	950	300.0	950	6.5	RIP/NR	6.50						AH. C,L,S and Stump Treat, No Name creek 650' AH. C,L,S and Stump Treat, No Name creek 500'	
19/1	0	1470	300.0	1470	10.1	RIP/NR	10.10						C,L,S and Stump Treat, No Name creek 500'	
19/2	0	880	300.0	880	6.1	NR	6.10						C,L,S and Stump Treat	
19/3	0	1950	300.0	1950	13.4	RIP/NR	13.40						C,L,S and Stump Treat, No Name creek 900' AH.	
19/4	0	1100	300.0	1100	7.6	NR	7.60						C,L,S and Stump Treat	
20/1	0	960	300.0	960	6.6	RIP/NR	6.60						C,L,S and Stump Treat, No Name creek 550' AH.	
20/2	0	1533	300.0	1533	10.6	NR							C,L,S and Stump Treat	
20/3	0	2000	300.0	2000	13.8	RIP/NR						0.7	C,L,S and Stump Treat, No Name creeks 575 & 1050' AH. Foliar treat Sb from str 20/3 to 100' AH.	
20/4	0	700	300.0	700	4.8	NR							C,L,S and Stump Treat	
20/5	0	850	300.0	850	5.9	NR	5.90						C,L,S and Stump Treat	
21/1	0	1100	300.0	1100	7.6	NR	7.60						C,L,S and Stump Treat	
21/2	0	1000		1000	6.9	RIP/NR	6.90						C,L,S and Stump Treat, No Name creek 300' AH.	
TOTAL	FOR	PAGE	1 to 7		1074.8		783.70	14.00	0.95	0.30	77.00	118.65		

L	OCATION	N	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO	. FROM	ТО	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					1074.8		783.7	14.0	1.0	0.3	77.0	118.7			
21/3	0	996	300.0	996	6.9	NR	6.90						C,L,S and Stump Treat		
21/4	0	825	300.0	825	5.7	NR	5.70			_			C,L,S and Stump Treat		

22/1	0	1087	300.0	1087	7.5	NR	7.50						C,L,S and Stump Treat		PAGE 10 of 14
22/2	0	1533	300.0	1533	10.6	NR	10.60						C,L,S and Stump Treat*		DATE: 05/20/2002
22/3	0	650	300.0	650	4.5	NR	4.50						C,L,S and Stump Treat		
22/3	650	850	300.0	200	1.4	RIP	1.40						C,L,S and Stump Treat; DeShutes River, ESA listed		
22/3	850	1533	300.0	683	4.7	NR	4.70						C,L,S and Stump Treat		
22/4	0	400	300.0	400	2.8	NR	2.80						C,L,S and Stump Treat		
22/4	400	950	300.0	550	3.8	NR							C,L,S and Stump Treat		
23/1	0	1100	300.0	1100	7.6	NR		1.00					SKIP - Field - C&C:1 Fir mid span		
23/2	0	1200	300.0	1200	8.3	NR							SKIP - Field		
23/3	0	1025	262.5	1025	6.2	NR							SKIP - Field **		
23/4	0	600	262.5	600	3.6	NR							SKIP - Field - Soil Screening Site		
23/4	600	900	262.5	300	1.8	NR	1.80						C,L&S		
23/4	900	1155	262.5	255	1.5	NR							SKIP - Field - Soil Screening Site		
23/5	0	900	262.5	900	5.4	NR							SKIP - Field		
23/5	900	1170	262.5	270	1.6	NR	1.60						C,L&S		
24/1	0	700	262.5	700	4.2	RIP	4.20						C,L,S and Stump Treat, no herbicide-ponds and		
24/2	0	800	262.5	800	4.8	RIP	4.80						wetlands C,L,S and Stump Treat, no herbicide-ponds and		
24/3	0	850	262.5	850	5.1	RIP	5.10						wetlands C,L,S and Stump Treat, no herbicide-ponds and wetlands		
24/4	0	900	262.5	900	5.4	NR	0.50	5.00		0.10	1.00		C,L,S and Stump Wetlands Reclaim 5 trees Lt/Rt edge of R/W. Cut 75' BOL of	100	24/4
24/5	0	950	262.5	950	5.7	NR	1.00	0.00		0.20			C,L,S and Stump Treat 0 to 100' AH and 575 to 700' under the C-Cov line and R/W Road 100 to 400'	300	- " -
24/6	0	500	262.5	500	3.0	NR				0.20			C,L,S and Stump Treat		
24/6	500	890	262.5	390	2.4	NR	1.20						C,L,S and Stump Treat under the C-Cov line		
25/1	0	1460	262.5	1460	8.8	NR	3.00	12.00					C,L,S and Stump Treat 0 to 300' and 800 to 1000'		
25/2	0	975	262.5	975	5.9	NR	3.80	12.00					AH 150' R/W Road Reclaim 12 trees Lt edge of C,L&S-stump treat 400 to 975' AH.		
			1 to 8	713	1203.9	IVIX	854.80	32.00	0.95	0.60	78.00	118.65			

NOTE: *22/2 - Weyerhaeuser Gate #805 - need key - (Off Vail Loop Road); Do not cut Scotch broom from 22/3 to 31/3.

^{**}Starting at 23/3 to 29/1 Right-of-Way width will be changed.

^{**}Chehalis-Covington side will be 62.5 feet from middle conductor and Raver-Paul will be 75 feet from middle conductor

^{***24/5 -} Watch abandoned tires on Raver-Paul side!

L	OCATION	I	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					1203.9		854.8	32.0	1.0	0.6	78.0	118.7			
25/3	0	1425	262.5	1425	8.6	NR		12.00					C,L,S -Reclaim 12 trees Lt edge of the R/W, root rot.		
25/4	0	750	262.5	750	4.5	NR							Skip-Pasture		
26/1	0	925	262.5	925	5.6	NR							Skip-Pasture		
26/2	0	350	262.5	350	2.1	NR	2.10						C,L,S and Stump Treat		
26/2	350	1025	262.5	675	4.1	NR							Skip-Pasture		
26/3	0	1250	262.5	1250	7.5	NR							Skip-Pasture		
26/4	0	1030	262.5	1030	6.2	NR							SKIP - Field		
26/5	0	1270	262.5	1270	7.7	NR							SKIP - Field		
27/1	0	1280	262.5	1280	7.7	NR							Skip		
27/2	0	1170	262.5	1170	7.1	RIP							Skip- NO HERB BY SWAMP *		
27/3	0	1100	262.5	1100	6.6	NR				0.60	1.00		C,L,S and Stump Treat-R/W roads.		52/3
27/4	0	1050	262.5	1050	6.3	NR	0.10	2.00					C,L,S and Stump Treat-75' AH along fence line under C-Cov. Reclaim 2 trees 1 Lt, dead snag, 1 Rt. Cottonwood near 52/1.		
27/5	0	900	262.5	900	5.4	NR							Skip-Pasture/RR tracks		
28/1	0	1100	262.5	1100	6.6	NR							P/O to cut 3 trees near residence Rt edge of R/W - NO HERB by Well midspan		
28/2	0	1350	262.5	1350	8.1	RIP/NR	8.10				1.00		C,L,S and Stump Treat, no herbicide-wetlands 1100 to 1350' AH. Skip-Pasture and brush. Wetlands 0 to 250'		RP-51/3
28/3	0	1200	262.5	1200	7.2	RIP/NR							ДН		
28/4	0	1050	262.5	1050	6.3	NR							Skip-		
28/5	0	1000	262.5	1000	6.0	NR							Skip-brush		
29/1	0	1325	262.5	1325	8.0	NR							Skip-Pasture		
29/2	0	695	250.0	695	4.0	NR	4.00						C,L,S and Stump Treat		
29/3	0	700	250.0	700	4.0	NR	4.00						C,L,S and Stump Treat, AR, Irrigation Canal**		
29/3	700	1550	250.0	850	4.9	NR							Skip Grassland		

29/4	0	1225	250.0	1225	7.0	NR							P/O to top 4-6 trees near residence Rt edge of R/W16512 109th Lane SE	PAGE 12 of 14
TOTAL	FOR	PAGE	1 to 9		1345.5		873.10	46.00	0.95	1.20	80.00	118.65		

L	OCATION	N	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO	FROM	ТО	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					1345.5		873.1	46.0	1.0	1.2	80.0	118.7			
30/1	0	950	250.0	950	5.5	RIP/NR	1.00						C,L&S- 400 to 700' AH under R-P line, cut trees to ground level previously topped, Yelm Cr. 565 to 635' AH. no herb SKIP - Field; (C&C, stump treat bush south of		
30/2	0	850	250.0	850	4.9	NR			0.20				SKIP - Field; (C&C, stump treat bush south of Grove Road)		
30/3	0	850	250.0	850	4.9	NR							SKIP - Field		
30/4	0	700	250.0	700	4.0	NR		5.00					SKIP - Field; C&C-4 -15' trees at str 30/4 and 1 40' DF 75' SH Lt edge of R/W, located between lines and house.		
30/5	0	800	250.0	800	4.6	NR							Skip-Pasture		
30/6	0	1150	250.0	1150	6.6	NR							Skip-Pasture, P/O to cut row of trees 800' AH along fence line, 925' AH Application for T&B Agreement row of DE trees. T need to work with P/O regarding 4 topped trees to		
31/1	0	1000	250.0	1000	5.7	NR							30' ht. Robert Williams, 9845 Bridge Rd. Yelm, WA		
31/2	0	1400	250.0	1400	8.0	NR					1.00		Skip		CCO-31/2
31/3	0	430	250.0	430	2.5	RIP/NR							Skip- Swamp, no herbicides, Nisqually River-ESA listed*		
													END OF PROJECT		

												PAGE 13 of 14 DATE: 05/20/2002
TOTAL	FOR	PAGE	1 to 10	1392.2	874.10	51.00	1.15	1.20	81.00	118.65		

L	OCATION	I	(1)	(2)	(3)	Treatment	C, L & S	# Trees	C & C	Off R/W	Cut #	Treat Acres	CONTROL PRESCRIPTION	Cut AR	Cut Str
STR. NO.	FROM	TO	WIDTH	LENGTH	ACRES	Zone	ACRES	Cut	ACRES	AR Acres	of Str's	Scotchbroom	(REMARKS)	Feet	Site
TOTAL					1392.2		874.1	51.0	1.2	1.2	81.0	118.7			
				0	0.0										
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TOTAL	FOR	PAGE	1 to 11		1392.2	874.10	51.00	1.15	1.20	81.00	118.65			