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United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: September 5, 2001

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-28)

TO: James Jellison - TFO/Olympia
Natural Resource Specialist

Proposed Action: Vegetation Management along the Port Angeles - Sappo No.1 Transmission Line ROW, from struture 1/1 to structure 42/10.

Location: The ROW is located in Clallum County, WA, all in the Olympia Region.

Proposed by: Bonneville Power Administration (BPA), Olympia Region.

Description of the Proposed Action: 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 line. 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.

Analysis: This project meets the standards and guidelines for the Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) and Record of Decision (ROD).

Planning Steps

1. Identify facility and the vegetation management need.

The work involved will be to clear tall growing vegetation that is currently or will soon pose a hazard to the lines; treat the associated stumps and re-sprouts with herbicides, mow and treat access roads and structure sites. All work will take place in existing rights-of-ways.

Also, all off right-of-way trees that are potentially unstable and will fall within a minimum distance or into the zone where the conductors swing will be removed. The width of the ROW is 100 feet. All work will be accomplished by selective vegetation control methods to assure that there is little potential harm to non-target vegetation and to low-growing plants. The work will provide system reliability.

The vegetation control is designed to provide a 3 year maintenance free interval. The overall vegetation management scheme will be to initially clear and remove all trees using cut, lop and scatter and basal treatment or cut and chip methods as shown on the vegetation control prescription sheets.

Future cycles of work will involve the treatments used in the previous phases of work.

2. Identify surrounding land use and landowners/managers.

The subject corridor traverses generally mountainous terrain. The transmission line crosses both residential and rural properties, grazing land, industrial forsest land, and the Olympia National Forest and Department of Natural Resource lands. During routine patrols, tall encroaching trees and vegetation issues are identified and marked. If a danger or reclaim tree is identified as a potential threat to the integrity of the transmission line, appropriate action to remove the tree is taken. There are no landowner agreements.

3. Identify natural resources.

Water wells, spring, riparian, riparian T&E, potential Marbled Murrelet and Northern Spotted Owl habitat have been identified. Steep, moderately and level terrian have been identified in the areas of the proposed work. These areas have been tentatively identified during patrols and by using existing data sources. The Project Manager will positively identify the habitats as work progresses along the corridors. No other T&E/wildlife issues, visually sensitive areas, cultural resources or other natural resource issues have been identified along the other work corridor.

- Riparian and water supply wells. Refer to the attached vegetation checklist for location. All buffers as outlined in the vegetation FEIS are in effect.
- Riparian T&E areas:
    - Elwa River. All buffers as outlined in the Vegetation FEIS are in effect.
- Marbled Murrelet Critical Habitat areas from structures 4/7 to 5/7, 6/4 to 7/3, 8/3 to 9/3, 11/8 to 13/4, 16/2 to 18/2, 26/2 to 26/3, 28/3 to 33/6 and 37/3 to 38/1. Marbled Murrelet habitat has been identified to be within ¼ mile of the above listed spans. The below measures are appropriate for manual and mechanical tree removal and noise disturbance from all vegetation control activites. Herbicide use will require further consultation.
    - If a tree needing removal is greater than 80 cm (32 in.) in diameter at breast height and has suitable nest tree characteristics, initiate formal consultation with the USFWS.
    - During core breeding season, from April 1 – August 5, do not carry out maintenance activities, (e.g. chainsaw work) which produce noise above ambient levels within 0.25 miles of known marbled murrelet habitat or occupanacy.
    - During the late breeding season, from August 6 – September 15, do not carry out maintenance activities using motorized equipment within 0.25 miles of a marbled murrelet habitat or occupancy within two hours after sunrise and within two hours before sunset.
- Spotted Owl Critical Habitat between structures 25/5 to 37/4. Northern Spotted Owl habitat has been identified to be within ¼ mile of the above listed spans. The below measures are appropriate for manual and mechanical tree removal and noise disturbance from all vegetation control activites. Herbicide use will require further consultation.
    - Where opportunity exists, suspsend vegetation management activities within 0.25 miles of spotted owl critical habitat between March 1 and June 30, unless the owls are shown not to be nesting.
    - Examine any large trees (greater 11 in.) in diameter at breast height that need to be removed for evidence of spotted owls. If tree has evidence of owl nesting activity, conduct formal consultation with the USFWS.

- *In case of an emergency danger tree removal immediately examine the felled tree for evidence of owl nesting. If evidence is found, start emergency consultation with the USFWS, or, if the situation occurs during off-duty hours, conduct after-the-fact emergency consultation the next business day.*

- No culvert work and/or 'in stream' work is to take place without prior consultation with the appropriate government agencies and permits are in place.

See attached ROW vegetation checklist for treatment methods and planned herbicide use in all other non-critical areas.

Prior to the beginning of the work, the contractor will be provided with a set of the project maps, as well as with a list of management prescriptions from the Vegetation Management FEIS.

The herbicides used for vegetation management will be consistent with what is specified in the Vegetation Management FEIS.

4. Determine vegetation control and debris disposal methods.

Unwanted vegetation would be removed by employing cut-stump and follow-up stump treatment with Accord, Garlon 4. The chemical means would be employed to prevent resprouts from the cut stumps. Prevention of resprouts encourages low-growing plant communities to establish themselves and flourish on the right-of-way. This impact avoidance approach both maximizes the use of limited resources and minimizes environmental impacts. Herbicides will be applied by licensed applicators following manufacturers' label instructions and BPA's management prescriptions. The herbicide used will be consistent with Vegetation Management FEIS.

All riparian and riparian T & E buffer zones are in effect and will be strictly enforced as outlined in the Vegetation Management FEIS and as shown on attachment A and the attached vegetation checklist. Treatments on steep, moderate and level slopes will be consistent with the Vegetation Management FEIS and as shown on the attached checklist.

Work schedules as outline in the Vegetation Management FEIS is to be followed to accommodate the core and late breeding season of the Marbled Murrelet and Spotted Owl.

The contractor will receive a list of required mitigation measures (management prescriptions) to follow as well as a set of maps delineating the transmission line and potential sensitive resource areas. The contractor will follow manufacturers' label instructions when applying herbicides.

5. Determine revegetation methods, if necessary.

Reseeding /replanting regimes have not been planned at this time.

6. Determine monitoring needs.

An inspector will monitor the work being performed at the time of the initial work. Follow-up inspections will be preformed during line patrols by the line crew and within one year by the NRS. Additional required work would be identified at that time.

7. Prepare appropriate environmental documentation.

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, unless Potential Spotted Owl Habitat is removed.

/s/ Mark A. Martin
Mark A. Martin
Physical Scientist – KEPR/Covington

CONCUR: */s/ Thomas C. McKinney* DATE: *9/5/2001*
Thomas C. McKinney
NEPA Compliance Officer

Attachment A

Zones	Treatment Alternatives
Riparian	**RIPARIAN**: 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. No mechanical treatments. **Herbicides**: Within 100 ft. of a stream, only cut-stump and localized treatments using practically toxic or Slightly toxic formulations of glyphosate, imazapyr, and Escort can be used up to the waters edge. Highly Toxic and very highly toxic (to fish) herbicides will not be used in this zone. Triclopyr (Garlon 4) may be used only more than 200 ft. from streams or water.
Riparian T&E	**RIPARIAN SALMON**: BPA, county, or private lands, within 122 m (400 ft.) of a listed salmon stream. Available: all manual, spot and localized herbicide, and biological treatments, except grazing. No mechanical treatments. **Herbicides**: No herbicides within 200 feet from the water edge.. From 100 to 400 feet away for stream or water, Escort, clopyralid, imazapyr, practically toxic or Slightly toxic formulations of glyphosate, and triclopyr (Garlon 3A) can be used. Highly Toxic and very Highly toxic (to fish) herbicides will not be used in this zone. Glyphosate, and triclopyr (Garlon 3A) can be used. Highly Toxic and very Highly toxic (to fish) herbicides will not be used in this zone.
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. **Herbicides:** None.

Zones	Treatment Alternatives
SS	BPA Fee owned US Forest, State DNR, or private lands where a steep slope or visual resources precludes mechanical treatments. Available: all manual, mechanical treatments using track mowers on slopes up to 60%, mowing equipment such as the Spyder (trade name) can be used on slopes up to 90% - 100% and biological treatments, all access roads and structure sites may also be mowed. All herbicide treatments except for cut-stubble treatment following a mechanical treatment. **Herbicides:** glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments. In addition to the above herbicides, Escort, and clopyralid can be used spot foliar and broadcast treatments. 2,4-d amine can be added to the list to control noxious weed species.
LT	LEVEL TERRAIN: BPA, county, or private lands where the ROW is Fairly flat and level. There are minimal environmental and treatment restrictions. Available: all manual, mechanical (when conditions make it feasible), and biological treatments: all herbicide treatments spot, localized, and broadcast treatment including cut-stubble treatment following a mechanical treatment where suitable. **Herbicides:** glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments. In addition to the above herbicides, Escort, and clopyralid can be used spot foliar and Broadcast treatments. 2,4-d amine can be added to the list to control Noxious weed species.

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
Port Angeles-Sappho	43 miles, 115Kv	100	43

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

Right Of Way:
Right-of-Way – clearing in right-of-way
Transmission Structures – clearing around
Access Road clearing - approximate miles – Fill-in
Wood Poles - fire protection clearing
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
Maple
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 resprouting-type 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 – Cut all tall growing vegetation and stump treat or basal treat in the fall to comply with time constraints due to the Spotted Owl and the Marble Murrelett.

Subsequent entries – Late spring or early summer treatment of the spouts of hardwood trees.

Future cycles – Evaluate vegetation on the 3 years cycle, spot treat as needed.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.
See Handbook — **Landowners/Managers/Uses** for requirements, and **List of Landowners/Managers/Uses** for a checkbox list.

Landowners/Managers/Uses:

Residential

Rural

Grazing lands

Industrial Forest lands

Urban

Forest Service Olympia National Forest-Sole Duck R. D. and DNR Lands

Describe method for notifying right-of-way landowners and requesting information (i.e., doorhanger, 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 has a property owner database that identifies the names and address of all the property owners on the easement. Letters will be sent to the property owners to advise them of BPA's plans to cut hazardous vegetation on the right-of-way. 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 — **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.**.

Residential/Comercial:

The following landowners have responsibility for vegetation maintenance.

Span		Landowner	Agreement ID number (?)
From	To		
7/5 AH200	7/5 AH350	Charles Hanify	LU# 83023
10/6 AH450	10/7 AH350	David Reaume	LU#59899

Span		Landowner/use	Specific measures to be applied
From	To		
Fill-in	Fill-in	Fill-in	Fill-in

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 contact Mike McHenry, Lower Ellway Tribe regarding cultural sites. Mike was unaware of any sites on the Port Angeles-Sappho Transmission line. Dave Easeman, tribal liaison was also contacted so he can contact the tribes that may use the easement that crosses the USFS managed lands for cultural uses. Dave gave me the following names of the Hoh Tribe-David Hudson, Makah Tribe-Rebelah Monette and Ozet/Quillayute Tribe-Barb Bocek concerning cultural sites. They said the transmission line is not near any of their cultural sites which are located along the Pacific Ocean and the Straits of Juan De Fuca that is near their respective reservations.

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&E?	Method	Herbicide	Application Technique	Buffer	Other
From	To							
2/2	2/2	Peabody Cr.	No	Selective	Accord	Cut Stump	100-200'	
2/8	2/8	Valley Cr.	No	Selective	Accord	Cut Stump	100-200'	
3/2	3/2	Creek	No	Selective	Accord	Cut Stump	100-200'	
3/9	3/9	Tumwater Cr.	No			Skip		
5/7	5/7	Creek	No			Skip		
7/2	7/2	Creek	No	Selective	Accord	Cut Stump	100-200'	
8/3	8/3	Creek	Yes			Skip		
11/1	11/1	Private Pond	No	Selective	No treat	Cut Stump		
11/2	11/2	Private Pond	No	Selective	No treat	Cut Stump		
11/5	11/5	Private Pond	No	Selective	No treat	Cut Stump		
18/2	18/2	Field Cr.	No	Selective	Accord	Cut Stump	100-200'	
19/1	19/1	Creek	No	Selective	Accord	Cut Stump	100-200'	
20/8	20/8	Lyre River	No	Selective	Accord	Cut Stump	100-200'	
22/4	22/4	Susie Cr.	No	Selective	Accord	Cut Stump	100-200'	
24/3	24/3	Sadie Cr.	No	Selective	Accord	Cut Stump	100-200'	
24/6	24/6	Wetlands	No	Selective	Accord	Cut Stump	100-200'	
25/5	25/5	Creek	No			Skip		

Span		Waterbody	T&E?	Method	Herbicide	Application Technique	Buffer	Other
From	To							
26/2	26/2	East Twin Cr.	No	Selective	Accord	Cut Stump	100-200'	
27/4	27/4	West Twin Cr.	No	Selective	Accord	Cut Stump	100-200'	
28/3	28/3	Creek	No	Selective	Accord	Cut Stump	100-200'	
28/4	28/4	Creek	No	Selective	Accord	Cut Stump	100-200'	
29/6	29/6	Creek	No	Selective	Accord	Cut Stump	100-200'	
29/8	29/8	Creek	No			Skip		
30/2	30/2	Creek	No	Selective	Accord	Cut Stump	100-200'	
30/5	30/5	Swamp	No	Selective	Accord	Cut Stump	100-200'	
31/3	31/3	Creek	No	Selective	Accord	Cut Stump	100-200'	
32/5	32/5	Deep Creek	No			Skip		
32/7	32/7	Deep Creek	No	Selective	Accord	Cut Stump	100-200'	
34/3	34/3	Creek	No	Selective	Accord	Cut Stump	100-200'	
35/2	35/2	Creek	No	Selective	Accord	Cut Stump	100-200'	
35/7	35/7	Creek	No	Selective	Accord	Cut Stump	100-200'	
37/9	37/9	Bear Creek	No	Selective	Accord	Cut Stump	100-200'	
38/1	38/1	Bear Creek	No	Selective	Accord	Cut Stump	100-200'	
38/3	38/3	Creek	No	Selective	Accord	Cut Stump	100-200'	
39/7	39/7	Wetlands		Selective	Accord	Cut Stump	100-200'	
39/8	39/8	Wetlands		Selective	Accord	Cut Stump	100-200'	
39/9	39/9	Wetlands/Cr.	No	Selective	Accord	Cut Stump	100-200'	

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
From	To				
2/6	2/7	Well & Spring	Accord	100	100'AH, Well 50' from Lt. Edge of R/W & Spring 50' from Rt. Edge of R/W.
3/1	3/2	Well	Accord	100	75' BOL 3/2 & 60'from Lt. Edge of R/W
5/2	5/3	Well	Accord	100	350'AH, along Rt. Edge of R/W.
6/7	6/8	Well	Accord	100	250' AH, 10' inside Lt. Edge of R/W.
11/5	11/6	Well	Accord	100	100' BOL, 25' from Rt. Edge of R/W.
19/3	19/4	Well	Accord	100	100' BOL 19/4, 10' from Lt. Edge of R/W.

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		
25/5	36/9	Spotted Owl	No cutting activity during the seasonal restriction from March 1 to July 15.
28/2	33/2	Marble Murrelet	No cutting activity during the seasonal restriction from April 1 to September 1.

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		
25/5	40/4	Survey & Manage	The USFS has determined that surveys are not required due to right-of-way management objectives and individual trees being treated..

3.5 List any visually sensitive areas and the measures to be taken at these areas.
See Handbook — **Visual Sensitive Areas** for requirements.

Span		Describe sensitivity	Method/mitigation measures
From	To		
		None	

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		
			Avoidance of all known cultural 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
From	To		

Span		Describe sensitivity	Method/mitigation measures
From	To		
20/8	20/8	Steep slope	Hand cut veg. and selective applic. of the herbicide.
22/4	22/4	Steep slope	Hand cut veg. and selective applic. of the herbicide.
24/3	24/3	Steep slope	Hand cut veg. and selective applic. of the herbicide.
26/2	26/2	Steep slope	Hand cut veg. and selective applic. of the herbicide.
27/4	27/4	Steep slope	Hand cut veg. and selective applic. of the herbicide.
29/6	29/6	Steep slope	Hand cut veg. and selective applic. of the herbicide.
32/5	32/5	Steep slope	Hand cut veg. and selective applic. of the herbicide.
32/7	32/7	Steep slope	Hand cut veg. and selective applic. of the herbicide.
35/7	35/7	Steep slope	Hand cut veg. and selective applic. of the herbicide.
36/8	36/8	Steep slope	Hand cut veg. and selective applic. of the herbicide.
38/1	38/1	Steep slope	Hand cut veg. and selective applic. of the herbicide.

3.8 List areas of spanned canyons and the type of cutting needed.
See Handbook – **Spanned Canyons** for requirements.

Span		Methods, cutting
From	To	
2/8	2/8	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
20/8	20/8	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
22/4	22/4	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
26/2	26/2	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
27/4	27/4	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
27/5	27/5	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
28/3	28/3	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
28/4	28/4	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
29/6	29/6	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
32/7	32/7	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
34/3	34/3	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
35/7	35/7	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
36/8	36/8	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
38/1	38/1	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.
38/3	38/3	Selective cutting of trees whose tops are w/in 50' conductor at max. sag.

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**, **Herbicides** for requirements for each of the methods.

Span		**Methods,** including herbicide active ingredient, trade name, application technique
From	**To**	
1/1	43/1	For non-sensitive areas (spans) cut stump/basal treatment with 25% Garlon 4 and 75% Forest Crop Oil (FCO); 50/50 Accord/Water for stump treatment in riparian zones; Stubble treat structure sites and right-of-way roads with 90% Water, 6% FCO, 3% Garlon 4 and 1% Tordon 22 K.

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?**
From	**To**			
		Fill-in	Fill-in	Fill-in

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 inspectors 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.

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 treatment of target vegetation. The mixture of the product is 25% Garlon 4 and 75% FCO. There is virtually no drift that occurs with this mixture.

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for effective mitigation measures.

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — **Prepare Appropriate Environmental Documentation** for requirements. . Also prepare Supplement Analysis — **Supplement Analysis** — for signature.

7.1 Describe any potential project impacts or project work that are different than those disclosed in the Transmission System Vegetation Management Program EIS. Describe how those differences impact natural resources and if the differences are "substantial".

All proposed brush cutting and chemical treatment activities on the Port Angeles transmission line is noted in the EIS

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

No