

# memorandum

DATE: July 31, 2001

REPLY TO  
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-19)

TO: Donald F. Atkinson - TFN/Snohomish  
Natural Resource Specialist

**Proposed Action:** Vegetation Management along the Schulz - Raver No.1 and 2 between miles 48 and 60.

**Location:** The ROW is located in King County, WA, in the Snohomish Region.

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

**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. All work will be executed in accordance with the National Electrical Safety Code and BPA standards. 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.

**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 325-800 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 3-5 year maintenance free interval. The overall vegetation management scheme will be to initially clear and remove all trees using cut, lop and scatter methods.

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 mountainous terrain owned by Mt. Baker – Snoqualmie National Forest, Plum Creek Timber Company and the City of Tacoma. 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. Herbicides will not be applied on the Mt Baker – Snoqualmie National Forest.

*3. Identify natural resources.*

U.S. Forest Service riparian and T&E streams, riparian T&E streams and potential Marbled Murrelet and Spotted Owl habitat have been identified. Steep, moderately and level terrains 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.

See Attachment A for treatment zone methods and planned herbicide use in these 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 mulching, lop and scatter methods and some follow-up stump treatment with glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba. The chemical means would be employed to prevent sprouts from the cut stumps. Prevention of sprouts 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.

No herbicides will be applied on forest service land. 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. Treatments on steep, moderate and level slopes will be consistent with the Vegetation Management FEIS and as shown on Attachment A.

Work schedules as outline in the Vegetation Management FEIS and Attachment A is to be followed to accommodate the core and late breeding season of the Marbled Murrelet. If a tree needing removal is greater than 32" in diameter and has suitable nest tree characteristics, initiate formal consultation with U.S. Fish and Wildlife Service.

Where opportunity exists, suspend vegetation management activities within 0.4 km (0.25 mi.) of spotted owl critical habitat between March 1 and June 30, unless the owls are shown not to be nesting. Please refer to the Vegetation Management FEIS for more information regarding Danger Tree taking.

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 performed 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  
Thomas C. McKinney  
NEPA Compliance Officer

DATE: 8/01/01

## Attachment A

### Schultz – Raver No. 1 & 2

Span To From		Water Body	T&E?	Treatment Zone	Herbicide	Application Technique	Buffer	Other
48/1	48/1+ 805	Sunday Creek	Yes	<b>Riparian T&amp;E/FS</b>	See Below	See Below	See Below	
48/1 + 805	48/1 + 1233	Sunday Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	
48/2	48/3 + 415	Sunday Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	
48/4	49/2 + 1790	Sunday Creek	Yes	<b>Riparian T&amp;E/FS</b>	See Below	See Below	See Below	
49/2 + 1790	49/3 + 580	Sunday Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	
50/4 + 450	50/4 + 825	Sunday Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	
50/6 + 1140	51/1 + 330	Creek	No	<b>Riparian</b>	See Below	See Below	See Below	
51/4 + 190	51/4 + 610	Creek	No	<b>Riparian</b>	See Below	See Below	See Below	
54/1 + 645	54/1 + 1190	Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
54/2 + 1090	54/4 + 985	Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
55/1 + 710	55/1 + 1580	Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
56/2 + 720	56/2 + 1215	Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
57/4 + 75	57/4 + 1105	Smay Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
58/3 + 530	58/3 + 975	Creek	Yes	<b>Riparian T&amp;E</b>	See Below	See Below	See Below	Trib to Green River
59/1 + 630	59/1 + 1050	Creek	No	<b>Riparian</b>	See Below	See Below	See Below	
59/2 + 770	59/2 + 1290	Creek	No	<b>Riparian</b>	See Below	See Below	See Below	
60/1 + 440	60/2 + 100	Creek	No	<b>Riparian</b>	See Below	See Below	See Below	

Schultz – Raver No. 1 & 2

Span To From		Describe Sensitivity	Method/Mitigation Measures
48/1	48/4 + 1250	Steep Slope	<b>SS</b>
49/3	50/3	Steep Slope	<b>SS</b>
52/1	52/4	Steep Slope	<b>SS</b>
53/2	54/1 + 645	Steep Slope	<b>SS</b>
54/1 + 1190	55/1 + 750	Steep Slope	<b>SS</b>
55/1 + 1580	55/4 + 405	Steep Slope	<b>SS</b>
55/4 + 1115	56/1	Steep Slope	<b>SS</b>

Schultz – Raver No. 3 & 4

Span To From		Describe Sensitivity	Method/Mitigation Measures
54/5 + 2350	54/5 + 2736	Steep Slope	<b>SS</b>
55/2	55/2 + 520	Steep Slope	<b>SS</b>
55/2 + 1400	56/1 + 368	Steep Slope	<b>SS</b>

Schultz – Raver No. 1 & 2

Span To From		Methods, Cutting
54/1 + 645	54/1 + 1190	<b>STC</b>
55/1 + 750	55/1 + 1500	<b>STC</b>
55/4 + 405	55/4 + 1115	<b>STC</b>

Schultz – Raver No. 3 & 4

Span To From		Methods, Cutting
54/5 + 350	54/5 + 2350	<b>STC</b>
55/2 + 520	55/2 + 1400	<b>STC</b>

<b>Riparian FS</b>	<p>RIPARIAN: USFS lands, within 30.5 m (100 ft.) of a stream or open water. Available: Manual biological treatments, except grazing. No mechanical treatments.</p> <p>Herbicides: No herbicide treatments allowed on USFS lands.</p>
<b>Riparian T&amp;E FS</b>	<p>RIPARIAN SALMON: USFS lands, within 122m (400 ft.) of a listed salmon stream. Available: all manual and biological treatments, except grazing. No mechanical treatments.</p> <p>Herbicides: No herbicide treatments allowed on USFS lands.</p>
<b>Riparian</b>	<p>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.</p> <p>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.</p>
<b>Riparian T&amp;E</b>	<p>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.</p> <p>Herbicides: No herbicides within 200 ft. from the waters edge. From 100 to 400 ft. 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.</p>

Zones	Treatment Alternatives
<b>SS</b>	<p>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.</p> <p><b>Herbicides:</b> 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.</p>

Zones	Treatment Alternatives
STC	<p>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.</p> <p><b>Herbicides:</b> None.</p>
LT	<p>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.</p> <p><b>Herbicides:</b> 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.</p>
MS	<p>MODERATE SLOPE: BPA, county, or private lands where the ROW varies from flat to steep terrain with stable soils. Available: all manual, mechanical treatments using rubber tired mowers on slopes up to 20%, track mowers on slopes up to 60%, and specializes mowing equipment such as the Spyder (trade name) can be used on slopes up to 90% - 100% (when conditions make it feasible). All access roads and structure sites may also be mowed. Also available are biological treatments and all herbicide treatments spot, localized, and broadcast treatment including cut-stubble treatment following a mechanical treatment where suitable.</p> <p>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.</p>

Schultz – Raver No. 1 & 2

To	Span From	Threatened or Endangered Plant or Animal Species	Method/Mitigation Measures
48/1	50/3	Marbled Murrelet	See Below
51/4	57/2	Marbled Murrelet	See Below
<b>Marbled Murrelet</b>	During the core-breeding season of marbled murrelets, from April 1 – August 5, activities that produce noise above ambient levels will not occur within ¼ mile of potential suitable habitat of the marbled murrelet. During the late breeding season, from August 6 – September 15, activities utilizing motorized equipment within ¼ mile of marbled murrelet habitat will not occur within two hours after sunrise or within two hours before sunset.		

To	Span From	Threatened or Endangered Plant or Animal Species	Method/Mitigation Measures
48/3	48/5	Spotted Owl	See Below
Spotted Owl	<p>Where opportunity exists, suspend vegetation management activities within 0.4 km (0.25 mi.) of spotted owl critical habitat between March 1 and June 30, unless the owls are shown not to be nesting.</p> <p>Examine any large trees (greater than 20.3 cm [8 in.] in diameter at breast height east of the Cascades or 28 cm [11 in.] in diameter at breast height west of the Cascades) that need to be removed in spotted owl habitat for evidence of owls. If a tree has evidence of owl nesting activity, conduct formal consultation with the USFWS.</p> <p>In case of an emergency danger tree removal – a tree suddenly becoming an imminent threat to the line, posing a danger to life and property – immediately examine the felled tree for evidence of owl nesting. If such 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.</p>		