memorandum

Bonneville Power Administration

DATE: July 1, 2002

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA80 Rocky Reach – Maple Valley

то: Don Atkinson – TFN/Snohomish Bill Erickson – TFP/Walla Walla

<u>Proposed Action</u>: Vegetation Management for USDA Forest Service Lands Along the Rocky Reach – Maple Valley Transmission Line.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove unwanted vegetation along access roads and around tower structures on USDA Forest Service lands that may impede the operation and maintenance of the subject transmission line. See Section 1of the attached checklist for a complete description of the proposal.

<u>Analysis</u>: Please see the attached checklist for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

Access roads (only) and tower sites (only) will be treated using non-selective methods that include, hand cutting, and mowing of all vegetation that may impede the operation and maintenance of the transmission line. This proposal covers approximately 30 acres of land between towers 89/5 through 97/2 on the subject transmission line.

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

The subject corridor traverses residential, rural, grazing lands, industrial forestlands and Washington State DNR lands, however, this proposal covers only those lands administered by the USDA Forest Service. The Mt. Baker National Forest (FS) office was contacted. This SA will be attached to a Categorical Exclusion currently being prepared.

3. Identify natural resources and any mitigation.

Section 3 of the attached checklist identifies the natural resources present in the area of the proposed work. The following resources found along with applicable mitigation measures:

Plant Species (All): The project areas between towers 89/5 to 92/4, and, 97/1 to 97/2 are in or within ¹/4 mile of habitat suitable for endangered, threatened, proposed, or sensitive plant species. The proposed activities only occur within areas previously highly disturbed. These areas include existing access roads and tower sites. The FS has previously concluded that no sensitive plants or survey and manage species will occur in these areas (See FS Document *South End Road Maintenance and Bridge Closure Plant Biological Evaluation*, April 23, 2001).

Plant Species Mitigation: None, for the proposed activity of clearing unwanted vegetation from pre-existing, highly, disturbed area. If any vegetation management activities occur outside of these areas, a plant biological evaluation must be undertaken prior to the commencement of any work.

Terrestrial Species (Marbled Murrelet): The project areas between towers 89/5 to 92/4, and, 97/1 to 97/2 are in or within ¹/₄ mile of Marbled Murrelet Habitat Unit WA-10-C. While no murellet nests have been identified within the project area, the habitat must be protected.

Terrestrial Species Mitigation (Marbled Murrelet):

- If a tree needing removal is greater than 80 cm (32 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) that produce noise above ambient noise levels, within 0.4 km (0.25 mi.) of known marbled murrelet habitat or occupancy (based on marbled murrelet maps).
- During the late breeding season, from August 6 September 15, do not carry out maintenance activities using motorized equipment within 0.4 km (0.25 mi.) of marbled murrelet habitat or occupancy within two hours after sunrise or within two hours before sunset.
- If planning herbicide use in marbled murrelet habitat, further consultation is required.

Terrestrial Species (Spotted Owl): The project areas between towers 89/5 to 92/2 are in or within ¹/₄ mile of Spotted Owl Habitat Unit 166. While no owl nests have been identified within the project area, the habitat must be protected.

Terrestrial Species Mitigation (Spotted Owl):

- *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.
- Examine any large trees (greater than 8" diameter at breast height East of the Cascades or 11" 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.
- 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.
- If planning herbicide use in spotted owl habitat, further consultation is required.

Aquatic Species: None.

4. Determine vegetation control and debris disposal methods.

Vegetation will be removed using manual and/or mechanical methods. No herbicides will be used on this project. Debris will be disposed of using either chip, lop and scatter or mulch techniques as described in Section 5 of the attached checklist.

5. Determine revegetation methods, if necessary.

Re-vegetation needs will be determined onsite. The purpose of the project is to remove vegetation for vehicle access and to provide unencumbered access to tower sites. Any areas identified with limited ground cover will be replanted with the plant species identified in Section 5 of the attached checklist.

6. Determine monitoring needs.

The line will be patrolled annually after treatment to monitor the effectiveness of the treatment measures.

7. Prepare appropriate environmental documentation.

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Mark W. Hermeston Mark W. Hermeston Environmental Scientist (Environmental) Licensed Hydro geologist (WA 663)

CONCUR:<u>/s/ Thomas C. McKinney</u> Thomas C. McKinney NEPA Compliance Officer DATE:07/02/2002

Attachment

cc: L. Croff – KEC-4 T. McKinney – KEC-4 P. Key – LC-7 M. Hermeston – KEP-4 J. Meyer – KEP-4 J. Sharpe – KEPR-4 M. Martin – KEPR/Covington M. Johnson – TF/DOB-1 S. Davis – TFN/Snohomish L. Alvarez – TFN/Snohomish C. Pursiful – TFNK/Covington Environmental File – KEC Official File – KEP-4 (EQ-14)

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Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way. Rocky Reach-Maple Valley 89/2 to 98/1- Access Road Vegetation Management. US FOREST SERVICE LANDS ONLY

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Rocky Reach- Maple Valley	5 miles	150	30 acres potential Access Roads

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>.

<u>Access roads</u> and <u>Tower sites</u> will be treated using non-selective methods that include, hand cutting, and mowing. US Forest Service lands will be treated using hand cutting and mowing methods The approximate acres of Right-of-way roads is 30 acres. The Forest Service is currently managing a large percentage of the roads so the actual need for road treatment should be less than the total estimated acres.

Right Of Way:

Transmission Structures - 6 acres of clearing around 29 structures

Access Road clearing -up to 30 acres

Tower Clearing

Control all tree and brush species within 50 ft. of transmission structures. Cut stumps are not to be taller than 2 - 4 in.

Pull all debris and slash out of the 50-ft. area around transmission structures.

Access roads Requirements

Control all vegetation except grasses, to enable safe driving.

The access road is to be 14 to 25 ft. wide with a 15-ft.- high clearance. Limbs should not hang down into the access road.

Cut stumps are not to be taller than 2 - 4 in. in the roadbed.

Cut stumps horizontal to the ground to prevent personal injuries and tire puncture.

Trim limbs back as flush to the trunk as possible when trees are rooted outside of the access road.

Pull all debris back @ least 10 feet from the access road.

1.2 Describe the vegetation needing management.

See handbook — List of Vegetation Types, Density, Noxious Weeds for checkboxes and requirements.

Vegetation Types: Douglas Fir True Fir Alder Maple Popular High (250 + stems/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.

Not Promoting Low Growing Plant Communities because project only entails the clearing of roads and Tower site to facilitate maintenance

1.4 Describe overall management scheme/schedule. See Handbook - **Overall Management Scheme/Schedule**.

Description of the Proposed Action: BPA proposes to clear unwanted vegetation in the access roads 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 growing vegetation that is currently encumbering access to the transmission line.

The work will provide system reliability.

Initial entry -

Using hand cutting or mechanical means, BPA will complete brush management on the access roads and towers. Vegetation is currently encumbering the access roads and towers of the power lines. Areas may be replanted or reseeded with low-growing grasses if there is limited vegetation to re-establish the site.

Keep trucks and equipment on designated access roads so that they will not disturb desirable low-growing plants on the ROW. All work will take place in existing access roads. Slash and debris will be pulled at least 10 feet from the road surface and loped and scattered, or it will be mulched mechanically

Subsequent entry

The vegetation management program will be designed to provide a 3-8 year maintenance free interval. The overall vegetation management scheme will be to initially clear and remove all encumbering vegetation using a combination of manual, and mechanical treatments as outlined in the initial treatment

Future cycles -

Future cycles of work will involve Hand cutting and mechanical treatments. During routine patrols, the ROW will be examined for edge, tall growing trees, and danger trees with appropriate actions taken.

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.

2.2 US Forest Service lands. Snoqualmie Ranger District Don Maks 360 825-6585 See Handbook — <u>Methods for Notification and Requesting Information</u> for requirements.

Forest Service is the only landowner

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>.

Treatment Details			74/5+838	On ROW Access			Off ROW Access				
TWR	to	TWR	Owner	-	length width		Ac	length	Ac		
89/5+401		90/2+881	USFS		1500	25	0.9	2065	25	1.2	
90/5+543		91/2	USFS		1300	25	0.7		25	0.0	
91/2		91/5	USFS		4500	25	2.6	5	25	0.0	
91/2		92/4	USFS		4000	25	2.3		25	0.0	
92/4		93/1	USFS		1450	25	0.8	5	25	0.0	
93/1		93/5	USFS		4000	25	2.3	5	25	0.0	
93/5		94/1	USFS		1600	25	0.9	900	25	0.5	
94/1		94/2+331	USFS		1010	25	0.6		25	0.0	
94/3+210		95/3	USFS		2700	25	1.5		25	0.0	
95/3		97/1	USFS		5200	25	3.0	5890	25	3.4	
97/1		97/1+1624	USFS								
97/2+1441		97/4+31	USFS		500	25	0.3	175	25	0.1	
							23.4			30.3	

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.

The following landowners have responsibility for vegetation maintenance. "BPA has the responsibility for vegetation maintenance on all areas included in this project."

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.

 $See handbook - \underline{Casual \ Informal \ Use \ of \ Right-of-way} \ for \ requirements.$

Area Is Natural Forest. The area is used for hiking and recreation by various parties.

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 — <u>Other Potentially Affected Publics</u> for requirements and suggestions.

No Tribal land involved. BPA will check with the USFS if any tribes need to be contacted.

See Handbook - Natural Resources

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

See Handbook — <u>Water Resources</u> for requirements for working near water resources including buffer zones.

Treatment Details 74/		74/5+838		On ROW Access			Off ROW Access				
TWR	to	TWR	Owner	Constraint	length	width	Ac	length	th width Ac		Prescrip
91/2		91/5	USFS	CREEK	4500	25	2.6		25	0.0	Humpback C 91/2+
91/5		92/4	USFS	CREEK	4000	25	2.3		25	0.0	
92/4		93/1	USFS	CREEK	1450	25	0.8		25	0.0	
93/5		94/1	USFS	CREEK	1600	25	0.9	900	25	0.5	HANSON CR
94/3+210		95/3	USFS	CREEK	2700	25	1.5		25	0.0	
95/3		97/1	USFS	CREEK	5200	25	3.0	5890	25		Harris Cr 95/5 Rock Cr 96/2
97/1		97/1+1624	USFS	CREEK							
							26.4			43.0	

Streams and Wetlands USFS Lands/M. Murrelet

US Forest lands, within 30.5 m (100 ft.) of a stream and wetland areas. Available: all manual and biological treatments

Manual: Hand tools and chainsaws – Will be utilized within these areas around the tower sites and roads.

Mechanical: Can be used only on Access Roads and Tower sites. No ground disturbing activities that will cause bare soil or erosion within 100 feet from the stream.

Herbicide: NONE.

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.

None Planned

3.3 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.

None Planned

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.

Rocky Rea Project	ch N	laple Valley	#1 Road		-								
Treatment	Deta	ails	74/5+838		On RO	W Acce	SS	Off RO	W Acc	ess			
TWR	to	TWR	Owner	Constraint	length	width	Ac	length	width	Ac			
89/5+401		90/2+881	USFS	STEEP	1500	25	0.9	2065	25	1.2	M.	MURRELET	S. OWL
90/5+543		91/2	USFS	NONE	1300	25	0.7		25	0.0	M.	MURRELET	S. OWL
91/2		91/5	USFS	CREEK	4500	25	2.6		25	0.0	М.	MURRELET	S. OWL
91/2		92/4	USFS	CREEK	4000	25	2.3		25	0.0	М.	MURRELET	S. OWL
92/4		93/1	USFS	CREEK	1450	25	0.8		25	0.0	М.	MURRELET	S. OWL
97/1		97/1+1624	USFS	CREEK							M.	MURRELET	S. OWL
97/2+1441		97/4+31	USFS	STEEP	500	25	0.3	175	25	0.1	M.	MURRELET	S. OWL

S	pan	T&E Species	Method/mitigation or avoidance measures
То	From		
+1150	93/1 98/1	Marbled Murrelet	 If a tree needing removal is greater than 80 cm (32 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) that produce noise above ambient noise levels, within 0.4 km (0.25 mi.) of known marbled murrelet habitat or occupancy (based on marbled murrelet maps). During the late breeding season, from August 6 - September 15, do not carry out maintenance activities using motorized equipment within 0.4 km (0.25 mi.) of marbled murrelet habitat or occupancy within two hours after sunrise or within two hours before sunset. If planning herbicide use in marbled murrelet habitat, further consultation is required.

89/4 +1150	93/1	Spotted owl	• Where opportunity exists, <i>suspend vegetation</i> management activities within 0.4 km (0.25 mi.) of spotted owl critical habitat between March 1 and June 30, unless
97/1	98/1		the owls are shown not to be nesting.
			• Examine any large trees (greater than 8" diameter at breast height East of the Cascades or 11" 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.
			• 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.
			• <i>If planning herbicide use in spotted owl habitat</i> , further consultation is required.
			•

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

- **3.4** List any other measures to be taken for enhancing wildlife habitat or protecting species. See Handbook — <u>Protecting Other Species</u> for requirements.
- **3.5 List any visually sensitive areas and the measures to be taken at these areas.** See Handbook <u>Visual Sensitive Areas</u> for requirements.

N/A

3.6 List areas with cultural resources and the measures to be taken in those areas. See Handbook – <u>Cultural Resources</u> for requirements.

Soil disturbance will be minimal (less than 6 inches) and confined to access roads and tower sites. No know surveys have been completed. Any survey at this time would not be valuable since the sites have been disturbed in the past. If any sites are discovered, work will stop at the site and the site protected for cultural further review

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

Treatment Details		74/5+838	On ROW	Access	Off ROW Access					
TWR	to	TWR	Owner	Constraint	length	width	Ac	length	width	Ac
74/5+838		75/1	USFS	STEEP	0	25	0.0	0	25	0.0
78/1+1410		78/2	USFS	STEEP	400	25	0.2	0	25	0.0
81/4+1554		82/2+141	USFS	STEEP	100	25	0.1	3100	25	1.8
87/4		87/5+13	USFS	STEEP	100	25	0.1		25	0.0
89/5+401		90/2+881	USFS	STEEP	1500	25	0.9	2065	25	1.2
97/2+1441		97/4+31	USFS	STEEP	500	25	0.3	175	25	0.1
							2.8			6.4

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

TREATMENTS. STEEP SLOPES USFS LANDS AND M. MURRELT

Manual: Hand tools and chainsaws

Mechanical: Can be used on roads and towers, No Ground disturbing activities on slopes > 20%.

Herbicide: NONE

3.8 List areas of spanned canyons and the type of cutting needed. See Handbook – <u>Spanned Canyons</u> for requirements.

N/A

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — <u>Methods</u>

4.1 List Methods that will be used in areas not previously addressed in steps above. See Handbook — <u>Manual, Mechanical, Biological, Herbicides</u> for requirements for each of the methods.

Treatment	Deta	ails	74/5+838		On ROW	Access		Off RO	W Acce	ess
TWR	to	TWR	Owner	Constraint	length	width	Ac	length	width	Ac
93/1		93/5	USFS	NONE	4000	25	2.3		25	0.0
94/1		94/2+331	USFS	NONE	1010	25	0.6		25	0.0
94/3+210		95/3	USFS	NONE	2700	25	1.5		25	0.0

NO ENVIRONMENTAL CONSTRAINTS USFS LANDS

US Forest lands with no environmental constraints. Available: all manual, mechanical, biological, and treatments

Manual: Hand tools and chainsaws

Mechanical: Can be used on roads and towers, all areas suitable for mechanical treatment. No Ground disturbing activities on slopes over 20%

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations. See Handbook — <u>Debris disposal</u> for a checkbox list and requirements.

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.)
- ☑ Other Pull debris back 10 feet from road surface

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3). See Handbook — <u>Reseeding/replanting</u> for requirements.

Seed Mixture/Per USFS District approval	*Native	Reason for seeding
Suggested Seed mix for Erosion Control USFS LANDS Name % by wt. California Brome (Bromus carinatus) 30% Sheep fescue (Festuca ovina) 40% Blue wildrye (Elymus glaucus) 20% Canada bluegrass (Poa compressa) 10% Sickle-keeled lupine 5 oz./100# seed And/or Lupinus bicolor 5 oz./100# seed America vetch (Vicia Americana) 5 oz./100# seed	Yes	Re-seeding and Fertilization after noxious weed treatments has been shown to be effective in preventing the re- establishment of noxious weeds and which reduces the need for future herbicide applications

If Re-Seeding is needed Mixtures of the following grasses would be beneficial

5.3 If not using native seed/plants, describe why.

Native will be considered in all mixes.

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

Seeding should be completed when there is enough moisture to allow for 2 months of growth. Seeding can be completed any time of the year except for the hot summer months, or during the winter when the site is under snow

6. DETERMINE MONITORING NEEDS

See handbook — <u>Monitoring</u> for requirements.

6.1 Describe the follow-up/monitoring cycle that will be used to evaluate the effectiveness of the vegetation control methods used.

Site will be inspected during treatment. In addition routine patrols by BPA ground and aerial patrols

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

Routine patrols by BPA ground and aerial patrols

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — <u>Prepare Appropriate Environmental Documentation</u> for requirements.

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".

Effects are expected to be the same or less than the description provided 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.

Checklist will be forwarded to USFS for review (and they will determine and conduct any agency specific additional NEPA requirements. A supplemental analysis tiered to the BPA vegetation management EIS will be prepared to meet DOE NEPA requirements.)