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United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: June 4, 2003

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-SA-159) Raymond - Cosmopolis No.1

TO: James A. Jellison, TFO/Olympia

Proposed Action: Vegetation Management along the Raymond Cosmopolis No.1, 115kV transmission line corridor from structure 1 through structure 169. The right of way width averages 50 feet.

Location: The project area is located within Pacific and Grays Harbor Counties, Washington.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove unwanted vegetation that may pose a danger to the transmission line along the right-of-way and around tower structures along the subject transmission line corridor. Approximately 19 miles of right-of-way will be treated using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Tower sites with no restrictions will be treated 30 feet from center of poles and or tower legs using selective and non-selective methods that include hand cutting and herbicide treatments. Vegetation management is required for unimpeded operation and maintenance of the subject transmission line. See Section 1of the attached checklist for a complete description of the proposal.

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

Planning Steps:

1. Identify facility and the vegetation management need.

Unwanted vegetation will be removed and/or controlled using selective and nonselective methods that will include hand cutting and herbicidal treatment. All methods of herbicide treatment will be used (except aerial) dependent on site conditions/restrictions. This proposal covers approximately 109 acres of land between towers 1 through 169 on the Raymond Cosmopolis No.1, 115kV transmission line. The entire width of the corridor needs to be managed.

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

The subject corridor traverses rural residential, private timber, and public State of Washington Department of Natural Resources, managed lands in Pacific and Grays Harbor Counties. No other federal and no tribal lands are involved.

Landowners will be contacted (letters, personal contact, door hangers, etc.) by BPA before and during the project. The Washington State DNR Headquarters and Regional office have been notified of project activities. Any input received will be incorporated into the prescription/cut sheets.

3. Identify natural resources and any conservation and avoidance measures.

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

Riparian Habitat:
Includes all wetlands, streams, and creeks meeting the definition of riparian habitat. Several areas were identified. See Section 3.1 of the checklists for a complete listing and conservation and avoidance methods.

Riparian Habitat Conservation and avoidance measures:

- Within 30.5 m (100 ft) of any stream, wetland, or other water body vegetation will be left intact where possible and only selective hand cutting and spot spraying of approved herbicide will be implemented.
- County or private lands, up to 30.5 m (100 ft.) of any non Essential Fish Habitat (EFH) listed stream, wetland, or other water body. Available: all manual, spot and localized herbicide treatments. On slopes less than 20% there will be no disturbance within 35ft. of the stream or wetland. On slopes greater than 20% there will be no disturbance within the buffer.
- Within 35ft. to edge or high water mark of any non Essential Fish Habitat (EFH) listed stream, wetland, or other water body only cut-stump and localized or spot chemical treatments using practically non-toxic to slightly toxic formulations of triclopyr TEA (Garlon 3A). Moderately toxic to very highly toxic herbicides (to aquatic species) or those herbicides containing a groundwater or surface water label advisory will not be used in this zone.
- Outside 35 ft. of any of non Essential Fish Habitat (EFH) listed stream, wetland, or other water body cut-stump (spot) and localized chemical treatments of Triclopyr BEE (Garlon 4) may be used.

Essential Fish Habitat (EFH):

Several streams that cross the transmission line corridor are listed as Essential Fish Habitat for Chinook and Coho Salmon. See section 3.3 of the checklist for details. BPA submitted a no adverse effect determination "Essential Fish Habitat Assessment" (see Attachment B) to NOAA fisheries for concurrence on May 6th 2003. On May 21st 2003 Stephanie Ehinger with NOAA Fisheries indicated she had no comments and agreed the determination was valid. By following the conservation and avoidance measures listed below and in the above listed C&A Measures for riparian habitat the project will have a no adverse affect on listed anadramous fish species or their Essential Habitat.

Essential Fish Habitat (EFH) Conservation and avoidance measures:

- All conservation and avoidance measures listed under riparian habitat will be implemented. Along with the more protective measures listed below.
- No herbicides will be applied within 100 feet of the waters edge of any Essential Fish Habitat listed water bodies. Spot spraying of non-toxic to practically non-toxic (to aquatic species) herbicides may be applied 100-200 feet from the waters edge. Beyond 200 feet all vegetation management activities consistent with the Transmission System Vegetation Management Program Final EIS and ROD are available.

T & E Species:

A species list for a separate project along the Raymond Cosmopolis line rebuild project was received from the United States Fish and Wildlife Service (USFWS) on February 11th 2002 concerning listed, proposed, and candidate species potentially occurring within the project area. Approval to use this species list for the 2003 vegetation management project was given in a phone conversation on March 19th, 2003 between Greg Tippetts of BPA and Yvonne Dettlaff, USFWS project consultant for the line rebuild project.

The species list included:

Marbled Murrelet (*Brachyrampus marmoratus*)	Threatened
Bald Eagle (*Haliaeetus leucocephalus*)	Threatened
Northern Spotted Owl (*Strix occidentalis caurina*)	Threatened
Bull Trout (*Salvelinus confluentus*)	Threatened

ESA Species are addressed in the Endangered Species Act- Effects Determination for the Raymond Cosmopolis ROW Vegetation Management Maintenance project (attachment C). The Project was determined to have no effect on the above listed threatened species.

Cultural resources:

The seven local tribes are not aware of any cultural resources in the transmission corridor. Should any cultural resources be discovered during the vegetation management project, work will be stopped in the vicinity and the tribes, the regional environmental specialist, and the BPA archeologist will be contacted. No work will continue in the area until the site has been thoroughly evaluated and released. See section 3.6 of the checklist for additional information.

4. Determine vegetation control and debris disposal methods.

Vegetation will be removed using manual and chemical methods. Debris will be disposed onsite using either chip, lop and scatter, or mulch techniques as described in Sections 4 & 5 of the attached checklists.

5. Determine re-vegetation methods, if necessary.

Native low growing species are present in the areas of the right-of-way that will be managed. These populations will seed into the areas that may be lightly disturbed. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site.

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

6. Determine monitoring needs.

The entire project will be inspected during the work period, and the line will be patrolled annually after treatment to monitor the effectiveness of the treatment measures.

7. Prepare appropriate environmental documentation.

Findings: This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. This Supplement Analysis also finds the proposed actions will not affect threatened or endangered species. Therefore, no further NEPA or ESA documentation is required.

/s/ Greg P. Tippetts
Greg P. Tippetts
Physical Scientist (Environmental)

CONCUR */s/ Robert Beraud for* DATE: 06/06/2003
Thomas C. McKinney
NEPA Compliance Officer

Attachments

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
M. Mayer – KEC-4
K. St. Hilaire – KEC-4
S. Hugill – KEP-4
C. Leiter – KEP-4
J. Meyer – KEP-4
P. Key – LC-7
J. Hilliard Creecy – T-DITT2
D. Hollen – TF/DOB-1
D. Krauss – TFO/Olympia
S. Martin – TFO/Olympia
G. Westling – TFOF/Olympia
G. Beck – TNP-TPP-3
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)

Vegetation Management Checklist

1.1 Describe Right-of-way.

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

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Raymond-Cosmopolis No. 1 ADNO 8346	19 mi., 115Kv	50	19 mi.

Right Of Way:

Right-of-Way – clearing in right-of-way
A combination of mulching the easement because of the Scotch broom and the cut, lop and scatter of tall growing species will be utilized to treat hazardous vegetation and this will be followed up with a herbicide treatment.

Transmission Structures – clearing around
All structures will be cut to 30 feet from the center of the pole or to the edge of the easement and the stumps will be treated with herbicide.

Access Road clearing - approximate miles – 0.0 miles

1.2 Describe the vegetation needing management.

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

Vegetation Types:
Douglas Fir
True Fir
Hemlock
Alder
Maple
Willows
Cottonwood
Wild Cherry
Noxious Weeds - Scotch Broom
Blackberries

1.3 List measures you will take to help promote low-growing plant communities. If promoting low-growing plants is not appropriate for this project, explain why.

See Handbook — for requirements and checkboxes.

Cut stump or follow-up herbicide treatments on sprouting-types species will be carried out to ensure that the roots are killed. Vegetation that will grow tall will be selectively eliminated before it reaches a height or density to begin competing with low-growing species.

1.4 Describe overall management scheme/schedule.

See Handbook - **Overall Management Scheme/Schedule**.

Initial entry – All tall growing vegetation will be cut and the stumps chemically treated to prevent grow-in trees. Right-of-way roads and structure sites are to be cut and treated.

Subsequent entries – A follow-up chemical treatment to begin in the late spring of 2003.

Future cycles – Every 3-4 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

2.1 List the types of landowners and land uses along your corridor.

See Handbook — **Landowners/Managers/Uses** for requirements, and **List of Landowners/Managers/Uses** for a checkbox list.

Landowners/Managers/Uses:
Rural Residential Property
Private Timber Managed Lands by Weyerhaeuser, Champion and Fort Blakely
State of Washington

2.2 Describe method for notifying right-of-way landowners and requesting information (i.e., door hanger, letter, phone call, e-mail, and/or meeting). Develop landowner mail list, if appropriate.

See Handbook — **Methods for Notification and Requesting Information** for requirements.

Olympia will send letters to the property owners about 2 weeks prior to cutting the brush. Door to door contact will be made where it is warranted.

2.3 List the specific land owner/land use measures — determined from the handbook or through your consultations with the entities — that will be applied.

See handbook — **Requirements and Guidance for Various Landowners/Uses** for requirements and guidance, also **Residential/Commercial**, **Agricultural**, **Tribal Reservations**, **FS-managed lands**, **BLM –managed lands**, **Other federal lands**, **State/ Local Lands.**.

N/A

2.4 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — **Landowner Agreements** for requirements.

N/A

2.5 List any known casual informal use of the right-of-way by non-owner publics. List any constraints or measure's to take due to the informal use.

See handbook — **Casual Informal Use of Right-of-way** for requirements.

N/A

2.6 List other potentially affected people, agencies, or tribes (that are not landowners/managers) that need to be notified or coordinated with. Describe method of notification and coordination.

See handbook — **Other Potentially Affected Publics** for requirements and suggestions.

The 7 local tribes as noted in the BA have been contacted regarding their knowledge of any cultural sites on the Raymond-Cosmopolis easement. They are not aware of any cultural sites.

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.

EFH: Essential Fish Habitat as defined by the National Marine Fisheries Service.

Span		Waterbody	T&E EFH	Method	Herbicide	Application Technique	Buffer	Other
From	To							
4+95	517	Wetlands & Stream	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
5+265	335	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
6+175	245	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
6+250	597	Butte creek	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
7+0	53	Butte creek	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
7+175	245	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
7+245 Creek pa	508 Rallel line	No name creek-int	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
8+0	445	No name creek-int	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
9+0	610	No name creek-int	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
10+0	200	No name creek-int	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
12+100	500	No name creek	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
12+865	935	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
15+350	659	No name creek-per & Wet.	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip

16+0	400	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
17+240	335	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
18+65	135	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
20+75	575	Wtlds./ Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
20+500	1005	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
21+0	170	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
21+403	478	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
22+0	325	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
22+325	380	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
23+100	325	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
24+110	670	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
25+130	312	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
26+50	145	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
26+211	561	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
27+0	150	Smith Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
27+480	545	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
28+140	210	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
30+126	426	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip

31+0	451	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
32+0	280	No name creek-Per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
33+15	145	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
33 +350	743	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
34+0	523	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
35+0	461	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
36+100	500	No name creek-Per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
38+0	680	Wtlds	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
38+35	105	No name creek-int	No	Cut Stump	Garlon 3A	Spot	100’	Selective Cutting
39+0	90	Wtlds	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
39+315	480	Elkhorn Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
40+0	238	Elkhorn creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
40+238	405	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
41+450	500	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
42+0	350	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
42+350	465	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
43+15	85	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
43+25	365	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting

45+235	310	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
45+400	480	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
46+234	464	Wetlands	No	Skip	Skip	Skip	Skip	Skip
47+25	360	Wetlands	No	Skip	Skip	Skip	Skip	Skip
47+325	395	Ditch	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
48+25	175	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
48+350	420	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
50+85	485	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
51+458	478	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
52+0	380	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
54+165	235	No name creek (2)	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
56+65	135	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
57+85	155	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
59+265	335	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
59+656	1056	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
62+440	790	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
63+0	70	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
63+100	200	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
63+275	360	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting

64+0	75	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
64+384	484	Lower Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
65+0	300	Lower Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
66+200	500	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
67+0	450	Emergent Wtlds.	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
69+175	245	Wtlds.	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
70+100	334	Wtlds.	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
71+191	227	Wtlds.	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
71+227	391	Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
72+0	489	Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
73+0	424	Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
74+0	141	Salmon Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
75+315	385	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
77+105	175	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
79+126	436	No name creek per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
80+0	100	No name creek per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
81+0	100	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
81+100	300	No name creek	Yes	Cut Stump	Garlon 3A	Spot Treat 100-200'	100	Selective Cutting

82+165	435	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
82+750	950	No name creek	Yes	Cut Stump	Garlon 3A	Spot Treat 100-200'	100	Selective Cutting
84+250	663	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
85+286	936	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
86+100	500	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
87+50	450	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
87+550	620	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
88+250	320	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
90+0	410	Joe Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
91+0	761	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
92+0	504	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
93+0	250	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
93+295	365	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
95+0	400	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
97+110	510	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
97+611	686	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
98+0	325	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
100+110	510	No name creek-per	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip

100+630	700	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
101+240	310	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
104+3940	460	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
105 +65	135	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
110+447	847	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
111+315	385	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
111+460	530	Ditch	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
115+265	335	No name creek	No	Skip	Skip	Skip	Skip	Skip
117+215	285	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
120+150	1008	Wetlands & Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
123+210	600	Creek & Wetlands	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
124+0	140	Creek & Wetlands	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
127+296	521	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
128+0	175	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
128+225	475	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
129+115	185	No name creek-int	Yes	Cut Stump	Garlon 3A	Spot Treat 100-200'	100’	Selective Cutting
130+241	393	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
131+0	248	Little North River.	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip

132+275	630	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
133+165	565	Little North River.	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
135+170	370	No name creek	Yes	Cut Stump	Garlon 3A	Spot Treat 100-200'	100’	Selective Cutting
136+322	597	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
137+0	125	No name creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
137+285	355	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
140+10	60	Wetlands	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
141+0	471	L. North River	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
147+315	385	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
149+635	705	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
155+65	888	Mill Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
156+0	25	Mill Creek	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip
156+1120	1200	No name creek & Wtlds	Yes	Cut Stump	Garlon 3A	Spot Treat 100-200'	100’	Selective Cutting
160+230	300	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
161+190	260	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
162+90	160	No name creek	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
164+115	185	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35’ to creek	Selective Cutting
164+185	586	No name creek-int	Yes EFH	Skip	Skip	Skip	200’ Buffer	Skip

164+586	620	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
165+90	160	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting
166+50	450	No name creek	Yes EFH	Skip	Skip	Skip	200' Buffer	Skip
167+165	235	No name creek-int	No	Cut Stump	Garlon 3A	Spot Treat w/in buffer	35' to creek	Selective Cutting

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners maybe able to provide this info if requested).

See Handbook — **Herbicide Use Near Irrigation, Wells or Springs** for buffers and herbicide restrictions.

N/A

3.3 List below the areas that have Threatened or Endangered Plant or Animal Species and the name of the species, and any special measures that need to be taken due to their presence. Attach any BAs, T&E maps, or letters from US Fish and Wildlife.

See Handbook — **T&E Plant or Animal Species** for requirements and determining presence.

Span		T&E Species	Method/mitigation or avoidance measures
From	To		
1	10	Marbled Murrelet	No trees boarding the right of way easement will be felled, or side branches trimmed within this area. The trees will be managed in September following Marbled Murrelet consultation with USFWS tied to the Raymond Cosmopolis Transmission Line Rebuild project*.
14	24	Marbled Murrelet	Potential Habitat. As a BMP the same seasonal restrictions noted for str. 31 to 48 will be implemented.
31	48	Marbled Murrelet	Seasonal restrictions from 3/1/03 to 8/6/03, no chainsaw cutting activity. In addition, modified seasonal restriction from 8/6 to 9/15/03, there will be no chainsaw activity 2 hours after and before sunset.
58	81	Marbled Murrelet	Seasonal restrictions from 3/1/03 to 8/6/03, no chainsaw cutting activity. In addition, modified seasonal restriction from 8/6 to 9/15/03, there will be no chainsaw activity 2 hours after and before sunset.
94	108	Marbled Murrelet	Potential Habitat. As a BMP the same seasonal restrictions noted for str. 31 to 48 will be implemented.
114	120	Marbled Murrelet	Potential Habitat. As a BMP the same seasonal restrictions noted for str. 31 to 48 will be implemented.
140	156	Marbled Murrelet	Potential Habitat. As a BMP the same seasonal restrictions noted for str. 31 to 48 will be implemented.

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.
See Handbook — **Protecting Other Species** for requirements.

N/A

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

N/A

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

Span		Describe sensitivity	Method/mitigation measures
From	To		
1	169	Cultural Sites	The seven local tribes do not know of any cultural sites on this transmission corridor as reference in the Biological Assessment to cut danger trees. If site is discovered during the course of vegetation control, work will be stopped in the vicinity and the local tribe will be contacted as well as the BPA Environmental Specialist.

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.
See Handbook – **Steep/Unstable Slopes** for requirements.

N/A

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

N/A

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — **Methods**

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

See attached prescription cut sheets.

Span		**Methods,** including herbicide active ingredient, trade name, application technique
To	From	
1	169	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 non T&E listed creek riparian zones 35' from water and 100' buffer on no herbicide treatment for T&E listed creek; Stubble treat structure sites and the right-of-way roads with 90% Water, 6% FCO, 3-5% Garlon 4 and 1% Tordon 22 K. Follow-up treatment-foliar application of the above chemicals as noted under stubble treatment, except for FCO. Garlon 4 will be replaced by Garlon 3A for foliar treatment. Foliar treat Scotch broom.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

5.1 Describe the debris disposal methods to be used and any special considerations.

See Handbook — **Debris disposal** for a checkbox list and requirements.

Debris Disposal:

Chip:
(Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site. Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.)

Lop and Scatter:
(Branches of a fallen tree are cut off (lopped) by ax or chainsaw, so the tree trunk lies flat on the ground. The trunks are occasionally cut in 1-to-2-m (4-to-8-ft.) lengths. The cut branches and trunks are then scattered on the ground, laid flat, and left to decompose.)

Mulch:
(Mulching is a debris treatment that falls between chipping and lop-and-scatter. The debris is cut into 1-to-2-ft. lengths, scattered on the right-of-way and left to decompose. This method is used when terrain and conditions do not allow the use of mechanical chipping equipment.)

5.2 List areas of reseeding or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — **Reseeding/replanting** for requirements.

N/A

Native grasses are present on the entire right-of-way that will seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads. BPA expects 2-3 vehicles of the brush contractor and 1 contract inspector's vehicle will be present on the site. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and 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 of the success of the brush-cutting program will begin the spring in which evaluation of soil erosion as a result of the brush-cutting program will be made. If grass seeding is necessary, native grass seed will be applied.

6. DETERMINE MONITORING NEEDS

See handbook — **Monitoring** for requirements.

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

Monitoring of the effectiveness of the herbicide treatment will begin in the spring and follow up treatment of cut stump/basal or foliar treatment of target vegetation. The mixture of the product is 25% Garlon 4 and 75% FCO for stump treatment. The mixture of foliar treatment will be 90-95% water, 0.5 to 1.0 % Tordon 22K and 3-5% Garlon 3A with Depo-RTU drift retardant under windy conditions.

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

Annually patrol the transmission line by the line crew and the Natural Resource Specialist will periodically monitor the right-of-way for 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 this corridor 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