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(08-89)

United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: September 15, 2003

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-179- Carlton-Tillamook)

TO: Mark Newbill – TFE/Chemawa

Proposed Action: Vegetation Management for the Carlton-Tillamook 230 kV transmission line from Carlton Substation to Tillamook Substation.

Location: The project is located in the BPA Eugene Region, Yamhill and Tillamook Counties, Oregon.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove unwanted vegetation along the right-of-way, access roads, switch platforms, microwave beam paths, and around tower structures of the subject transmission line corridor that may impede the operation and maintenance of the identified transmission lines. 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: 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.***

   Work will take place along the Carlton Tillamook 230 kV transmission line rights-of-way for "on" right-of-way control and access road clearing of noxious weeds and tall growing species. The proposed treatment will be performed in designated areas along the ROW's with an easement width of 125 feet. See attached checklist and documents for exact locations of treatment within the corridor.

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

   The project corridor passes through a variety of land ownerships and land uses including; rural residential, private farmland, Oregon State Forest Land, BLM, McMinnville watershed, Tillamook Water and Port of Tillamook. Landowners requiring notification or under tree and brush agreements are shown in Section 2.4 of the attached checklist. Any remaining landowners will be contacted (letters, personal contact, door hangers, etc.) by BPA before and during the project. Any input received will be incorporated into the prescription/cut sheets.

No herbicide treatment will be made on the BLM, State Forest, McMinville or Tillamook Watersheds.

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:

Riparian Habitat:
Riparian habitat includes rivers, wetlands, streams, and creeks meeting the definition of riparian habitat. Many areas were identified for this project. Site-specific requirements for work around these resources, including buffers are contained in Section 3.1 of the attached checklist.

Irrigation sources, Wells, and Springs:
Several locations were identified in the project area. Site-specific requirements for working around these resources, including no herbicide applications, are contained in Section 3.2 of the attached checklist.

Threatened and Endangered Species/Essential Fish Habitat (EFH):
Anadromous fish and Marbled Murrelette were identified in the project area. A variety of conservation or avoidance measures were implemented to maintain a "no effect" determination on listed species and EFH. Measures include buffers from water resources, vegetation management techniques, timing of entry to critical areas, etc. For a complete listing see Section 3.3 in the attached checklist.

Visually Sensitive Areas:
Several areas were identified where the project crosses roadways. Vegetation management methods and mitigation measures were specifically developed for each area. The measures are summarized in Section 3.5 of the attached checklist.

Cultural Resources:
No known cultural resources are present through out the project area. The project does not include any ground disturbance areas. In the event that project activities unearth or discover any cultural/historic or prehistoric materials, work will cease immediately; and will not resume until a professional archaeologist has evaluated the site.

4. Determine vegetation control and debris disposal methods.

Herbicide application will be for spot/stump treatment of re-sprouting species and conducted using backpack sprayers containing 25% Garlon 4 and 75% web oil mix. These applications will occur in late summer to early fall after farm crops have been harvested. Appropriate buffers will be used in high urban populations and close proximity to farmland. Mechanical removal of vegetation will be accomplished using various methods with debris being scattered to prevent increased fire hazards. Chipping, lop and scatter, and mulching are the three methods that will be used for debris disposal (see Section 4 and 5).

Subsequent entry will occur in 9 months (following summer) to apply a foliar herbicide treatment. A contrator will use Garlon 4 (2 % in water mix) to broadcast spray over machine mowed areas. Backpack spray any individual target species (trees or noxious weeds) in hand cutting areas. NO Herbicide treatment will be made on the BLM, State Forest, McMinnville and Tillamook watersheds.

5. Determine revegetation methods, if necessary.

Re-vegetation is not necessary for this project. Reseeding will occur naturally in any areas that are lightly disturbed. In mowing areas, the mowers will cut slightly above grade. This prevents erosion and stimulates native grass.

6. Determine monitoring needs.

Monitoring will occur in the form of inspection while work is being done in the area. When convenient, subsequent monitoring will occur by the Natural Resource Specialist and TLM crew. Helicopter patrols (3 times/year) and working patrols (yearly) will also keep the NRS updated on problem areas.

Erosion potential will be monitored during each inspection. Growth rate and return of species along tower sites and access roads will be monitored to predict accessibility in the foreseeable future.

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/ Brett M. Sherer
Brett M. Sherer
Environmental Engineer

CONCUR:*Robert Beraud for* DATE:09/22/2003
Thomas C. McKinney
NEPA Compliance Officer

Attachment

cc:

L. Croff – KEC-4	T. McKinney – KEC-4	J. Meyer – KEP-4
J. Sharpe – KEPR-4	S. Barndt – KEPR-4	P. Key – LC-7
J. Hilliard Creecy – T-DITT2	D. Hollen – TF/DOB-1	A. Sundberg – TFE/Alvey
B. Tilley – TFE/Alvey	K. Barber – TFEK/Chemawa	Environmental File – KEC-4
Official File – KEP-4 (EQ-14)		

Bsherer:bs:4722:9/15/2003 (KEP-KEP-4-W:\EP\2002 & 2003 FILES\EQ\EQ-14\FEIS-0285-SA-179-CarltonTillamook.doc)

Vegetation Management Checklist

Eugene Region
Mark Newbill, NRS
Carlton-Tillamook Project
July 29, 2003

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

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
Carlton -Tillamook Yamhill & Tillamook Co.	42 miles and 230 Kv	125 feet	1/1 –41/5

The vegetation control method used on the Right-of-Way (ROW) will be hand cutting and machine mowing.

The project will include: Access roads, switch platforms, danger trees, and microwave beam paths.

1.2 Describe the vegetation needing management.

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

Vegetation type: Douglas fir, Hemlock, Cedar, Big leaf Maple, Red Alder, Cottonwood, Wild Cherry and Ash.

Med Density (50-250 stems per acre)

Noxious weeds: Blackberries and Scotch Broom.

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.

Removing small fir trees and hardwoods allows grass and small shrubs to expand. They shade out the undesirables and thus promote the LGPC. Removal of tall growing hardwoods from fencerows and edges of fields in rural farmland is another goal.

Areas in private or rural residence (backyard) we will work with landowners to create win – win tree situation. Planting the "right tree" in the "right place" can achieve this goal.

In forestry settings, removing noxious weeds from expanding is consistent with 2002 farm bill and Oregon Dept of Agriculture policies. Removing small conifers and hardwoods allows the establishment for other small growing plants to get established. Once they get going, it helps to reduce the number of invasive weeds and trees while increases feed & habitat for wildlife.

1.4 Describe overall management scheme/schedule.

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

Initial entry – In farmland, hand cutting or herbicides will be used to control brush (edges of fields / fence rows) and blackberries around the tower sites. Use of 25 % Garlon 4 stump treatment for hardwoods. In forested areas (BLM, State, and watersheds), hand cutting and machines will be used to clear tall growing tree species and unwanted brush / scotch broom. Project will begin in the fall to avoid problems with endangered species.

Subsequent entries – Return 9 months (following summer) to apply a foliar herbicide treatment. Use Garlon 4 (2 % in water mix) to broadcast spray over machine-mowed areas. Backpack spray any individual target species (trees or noxious weeds) in hand cutting areas. No Herbicide treatment will be made on the BLM, State Forest, McMinnville and Tillamook watersheds.

Future cycles – Try to achieve a 4-year vegetation control cycle.

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.

Rural Residential

Private Farmland

Oregon State Forest Land

BLM

McMinnville watershed

Tillamook watershed

Port of Tillamook (Blimp base)

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.

Every landowner is sent a Letter notifying them of the scope and timetable for the Project. Letters will be sent out 2 weeks prior to start date.

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.**.

None Known

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.

None Known

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.

None known

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.

None known

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?	Herbicide	Application Technique	Buffer
To	From					
2/8	3/1	Wetland PEMC	No	N/A	Hand cut only	35 ft
3/4	3/5	Wetland PEMC	No	N/A	Hand cut only	35 ft
3/7	4/1	Wetland PSSC	No	N/A	Hand cut only	35 ft
3/7	4/1	North Yamhill River	No	N/A	Hand cut only	35 ft
6/1	5/9	No Name	No	N/A	Hand cut only	35 ft
6/2	6/1	Panther Ck	Yes	N/A	Hand cut only	35 ft
7/5	7/4	Panther Ck.	Yes	N/A	Hand cut only	35 ft.
8/2	'7/5	Beaver Ck	No	N/A	Hand Cut only	35 ft.
8/6	8/5	Beaver Ck	No	N/A	Hand cut only	35 ft
8/8+250’	8\8	Un named Creek	No	N/A	Hand cut only	35 feet
8/9+200’	8\9	Un named Creek	No	N/A	Hand cut only	35 ft
9/2+470’	9\1	Un named Creek	No	N/A	Hand cut only	35 ft
9/6+275’	9\6	Un named Creek	No	N/A	Hand cut only	35 ft
9/7+200’	9\7	Un named Creek	No	N/A	Hand cut only	35 ft
10/7+175	10\7	Un named Creek	No	N/A	Hand cut only	35 ft
10/8+600	10\8	Un named Creek	No	N/A	Hand cut only	35 ft
10/9+125	10\9	Un named Creek	No	N/A	Hand cut only	35 ft
11/6	11/5	Haskins Creek	No	N/A	Hand cut only	35 ft
12/7+300	12\6	Un named Creek	No	N/A	Hand cut only	35 ft
12/8+200	12\8	Un named Creek	No	N/A	Hand cut only	35 ft
13/2+325	13/2+900	Un named Creek	No	N/A	Hand cut only	35 ft
14/6+125	14\6	Un named Creek	No	N/A	Hand cut only	35 ft

15/4+250	15/4+600	Un named Creek	No	N/A	Hand cut only	35 ft
16/4+320	16\4	Un named Creek	No	N/A	Hand cut only	35 ft
16/6+400	16/6+500	Un named Creek	No	N/A	Hand cut only	35 ft
16/6+600	16/6+750	Wetland	No	N/A	Hand cut only	35 ft
17/3	17/2	Haskins Creek	No	N/A	Hand cut only	35 ft
18/4+420	18\4	Un named Creek	No	N/A	Hand cut only	35 ft
18/5+300	18\5	Un named Creek	No	N/A	Hand cut only	35 ft
18/8+150	18\8	Un named Creek	No	N/A	Hand cut only	35 ft
20/7	21/1	E Fork Rock ck	Yes	N/A	Hand cut only	200 ft
22/5	22/6	E Fork Trask river	Yes	N/A	Hand cut only	200 ft
23/4	23/5	Miller Ck	Yes	N/A	Hand cut only	200 ft
24/1	24/2	Bales Ck	No	N/A	Hand cut only	200 ft
26/1	25/5	S fork Trask River	Yes	N/A	Hand cut only	200 ft
27/4	28/1	Bill Creek	No	N/A	Hand cut only	200 ft
33/3	33/2	Killam Ck	Yes	N/A	Hand cut only	35 ft
35/3	35/2	Mill Creek	Yes	N/A	Hand cut only	35 ft
37/1	36/3	Mill Creek ass.Wetlands **Project Complete**	Yes	N/A	Hand cut only	35 ft

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.

Herbicides will not be used near irrigation, wells or springs

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
To	From		
15/4	14/5	Marbled Murrelette	Project period is in the non-breading season and this will avoid disturbance
		Anadromous Fish	Buffers will be used. See table 3.1

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

Small shrubs and vine maple will be left for bird habitat

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

The line criss-crosses City Streets, County Roads, and US Highways. Trees will be topped or left if adequate clearance exists. All woody debris will be chipped back 50 feet from the blacktop. Locations of road crossings are listed below.

Span		Describe sensitivity	Method/mitigation measures
To	**From**		
2/2		Old McMinnville HWY	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
2/4	2/5	So Pacific RR	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
2/6		HWY 47	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
4/4	4/5	West Side RD	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
5/6		Fir Crest RD	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
8/2 & 11/1		Meadow Lake RD	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
11/5		Zimmermen Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
12/2		Kutch RD	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
37/1		Long Prairie Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
39/2		Fairview RD	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
39/3		Wilson River HWY #6	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.

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

None Known

Method/mitigation measures: No known cultural resources present. No ground-disturbing activity will occur. If evidence is found of cultural resource (artifacts, features, burial sites), work will cease immediately and appropriate authorities will be contacted.

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.

The project area is primarily flat (farmland mile 1 to mile 8 and then dairy land near Tillamook mile 37 – 42). The rest of the line is traveling over the coast mountain range. The towers are built from ridge to ridge and the landings are flat (created at the time of construction). The rest of the entire ROW from mile 8 to 36 has terrain over 10 % slope. These areas will be Hand Cut to minimize any potential erosion.

3.8 List areas of spanned canyons and the type of cutting needed.

See Handbook – **Spanned Canyons** for requirements.

During the last vegetation cycle many large trees encroaching the catinary (conductor) were removed from every canyon span. We have no plans to remove any more trees from canyons at this time or even the next 2 subsequent cycles. We have maintained a least a 50'- foot clearance with past efforts.

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.

Detailed cut sheet with specific span- by- span prescription has been developed for the project. (For additional information see Natural Resource Specialist).

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.

All limbs and woody debris generated from manual cutting will be chipped and hauled away from any sensitive site. That includes all street, road, highway, and railway crossings. In non-sensitive sites (forest land), standard cut, lop, and scatter methods will be used when hand cutting. Machine mowing mulches and grinds woody debris into small pieces.

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.

None planned, open sunlight and naturally disturbed areas enhance native grasses to flourish. Sufficient native plants already exist. In mowing areas, the mowers cut slightly above grade. This prevents erosion and stimulates existing grass. Seeding is not needed.

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.

N/A

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.

NRS will be on site 1 day per week during the project. After 6 months, NRS will make a site visit to evaluate control and plan follow-up treatments.

TLM makes annual ground patrol. BPA helicopters patrol 3 times a year.

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

If mitigation was put in place, on site visit will be conducted to monitor. Otherwise no mitigation is expected.

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".

None, Project is consistent with EIS.

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

None