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United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: March 10, 2003

REPLY TO ATTN OF: KEP/4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-130- Keeler-Tillamook)

TO: Mark Newbill
Natural Resource Specialist– TFE/Chemawa

Proposed Action: Vegetation Management for the Keeler Tillamook 115 kV transmission line from structure 1/7 through structure 58/2, and along adjacent portions of the Keeler-Forest Grove #2 115KV transmission line. In addition the project includes 11miles of the 115KV Timber Tap.

Location: The project is located in the BPA Eugene Region, Tillamook and Washington 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, 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 Tillamook-Keeler 115 kV transmission line rights-of-way (including Timber Tap) 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 ranging from 50 feet to 150 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 rural residential, farmland, light industrial/commercial, and Tillamook State Forest. 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.

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. Sit 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):

Northern Spotted Owls, Marbled Murrelett, Nelson's Sidalcea, and anadromous fish 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, and 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 Highway 6. 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. 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).

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 – KEP/4
Environmental Engineer

CONCUR: */s/ Thomas C. McKinney* DATE: 03/10/2003
Thomas C. McKinney
NEPA Compliance Officer

Attachment

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
C. Leiter – KEP-4
J. Meyer – KEP-4
S. Barndt – KEPR-4
P. Key – LC-7
D. Hollen – TF/DOB-1
B. Tilley – TFE/Alvey
T. Jones – TFE/Alvey
K. Barber – TFEK/Chemawa
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)

Bsherer:bs:4722:3/6/2003 (KEP-KEP/4-W:\EP\2002 & 2003 FILES\EQ\EQ-14\FEIS-0285-SA-130-KeelerTillamook.doc)

Vegetation Management Checklist

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
Keeler-Tillamook (Includes Keeler-Forest Grove #2) Includes the Timber tap	59 miles and 115 KV 11 miles and 115 kv 11miles 115 kv	150 ft first 11 miles. Then Keeler-Tillamook goes by itself. 100 feet with various Pole Line Easement 50ft) see D-Tail sheet 100 feet	58 miles (1/7–58/2) 11miles

Standard "on"-Right-of-way control by manual methods (350 acres) plus Access Road control (machine - 6 miles) or hand cut to control encroaching brush / Scotch Broom.

The project will include Switch platforms, Danger Trees, or 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, Cottonwood, Big leaf Maple, Ash, Red Alder

Medium 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 /stump treatment allows grass and small shrubs to expand.

1.4 Describe overall management scheme/schedule.

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

Initial entry – Go in and cut tall growing species, stump treat hardwoods. Late March to May, 2003. (See detail sheet)
No control will be made on the Timber tap at this time!

Subsequent entries – Return several months later to foliar spray resprouting species (June/July) with a 2% Garlon 3A in water mixture on the K-Till line.

The Timber tap line section has been cut and sprayed twice since 1997. It has achieved the LGPC. It is still under attack by S.broom. We will foliar spray for S. Broom and any other noxious weed. The treatment will be 2% Garlon 3A (June / July 2003).

Future cycles - Come back in 4 years to maintain small trees.

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.

Light Industrial / Commercial
Rural Residential
Farmland
Tillamook State Forest

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

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

Every landowner is sent a Letter notifying them of the scope and timetable for the Project. Letters have been sent out (3/3/03).

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.**.

Span		Landowner/use	Specific measures to be applied
To	From		
14/7	15/1	Ag	Do not cut Filbert Orchard
19/5+500	19/6+400	Ag	Do Not cut Filbert Orchard
22/2	22/3	Ag	Do not cut Filbert Orchard
23/8	34/1	Tillamook State Forest	Do not cut Noble fir under 10 feet (x-mass tree)

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.

See Above Table

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?	Method	Herbicide	Application Technique	Buffer	Other
To	From							
6/3+150	6/3+170	McKay Ck	N	Manual	None	N/A	N/A	1/7 to 22/8 with NOT use herb. , Exception 2/3, 2/4, and 14/3 (See D-tail sheet) Canyon
9/2+400	9/2+450	Dairy Ck	N	Manual	None	N/A	N/A	
13/3-30	13/3-60	Council CK	N	Manual	None	N/A	N/A	
22/7-300	22/7+650	Dorman Pond	N	Manual	None	N/A	N/A	
24/1+800	24/1+850	White CK	N	SKIP	None	N/A	N/A	
29/1		Wetland	Y	Hand cut	None	N/A	Min. 35 ft buffer	
30/4+500	30/5+550	Elliot Ck	Y	Manual	G4	Backpack		
32/3	34/1	S. Fk Wilson	Y	Manual	G4	Backpack	35 ft	
36/3	36/4		N	SKIP	None	N/A	35 ft	
36/5	55/1	Moore Ck	Y	Manual	G4	Backpack	N/A	
37/1+950	37/2	Wilson River	N	SKIP	None	N/A	35 ft	Canyon
37/5+800	37/6	Scotty Ck	Y	Manual	G4	Backpack	N/A	
39/7	39/8	N FK Wilson	Y	Manual	G4	Backpack	35 ft	Canyon
42/5			Y	Manual	G4	Backpack	35 ft	
43/13		Cedar Ck	Y	Manual	G4	Backpack	35 ft	
49/6+600	49/6+640	Wolf Crk	Y	Skip	N/A	N/A	35 ft	
52/1+700		Musial Ck	Y	Skip	N/A	N/A	N/A	
54/2+300	54/2+350	Zigzag Ck	Y	Skip	N/A	N/A	N/A	Canyon
		Hatchery CkL. N.fk Wilson					N/A	Canyon Canyon

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.

Herbicide <u>will not</u> (exceed 100 foot buffer) be used in farmland irrigation, ditches, wells or springs

Span		Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
To	From				
1/7	22/6	Irrigation/ farm land/ or ditches	No Herbicides used on the entire lower section except 2/3 to 2/4 (retired filbert orchard) & 14/3 +400 ft hardwoods	N/A	Only hand cutting

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		
29/1 53/1 53/1 51/1 5/1	55/1	Anadromous Fish OR HERT T&E #444 & #445 (Nelson's Sidalcea) 2 Marbled Murrelett Sites T & E 17637 (N. Spotted Owl) Spotted owl critical habitat T & E #17989 N. Spotted Owl	Avoidance and conservation will be taken - Refer to 3.1- Water Resources Avoid areas use a minimum of 35 foot buffers Avoid cutting during breeding season (April 1 to Aug 5 – follow timing restrictions) Avoid cutting during core breeding season (March 1 to July 1 – follow timing restrictions) Avoid cutting during core breeding season (March 1 to July 1- follow timing restrictions) Timber tap line Avoid spraying until after core breeding season (March 1 to July 1- follow timing restrictions)

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 will be left for bird habitat
Encouragement of grasses improves forage potential for big game

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 State HY #6. Trees will be topped or left if adequate clearance exists. All woody debris will be chipped back 50 feet from the blacktop. Location of road crossings are listed below.

Span		Describe sensitivity	Method/mitigation measures
To	From		
21/9		HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
22/6		HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
36/5		HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
40/1		HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
41/2		HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
44/7	45/3	HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
45/13	46/1	HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
46/3	46/4	HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
46/8	46/11	HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing
47/2	47/18	HWY 6 crossing	Skip trees or topping if necessary. Chipping debris near visible roadways /crossing

3.6 List areas with cultural resources and the measures to be taken in those areas.

See Handbook – **Cultural Resources** for requirements.

None Known

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.

Hand cutting will be used on everything over 10 % slope.

Describe sensitivity	Method/mitigation measures
Slopes >10 %	Removal limited to tall growing species

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

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

No cutting in Spanned canyons. Trees were removed in the last cutting cycle and 60 feet of clearance was achieved.

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 DETAIL SHEET.

In areas with stump treatment a 20 % Garlon 4 in Web Oil will be used to treat respouting hardwoods. Mainly big leaf maple and red alder species. Herbicide will not be used on rainy days or around water bodies.

Methods, including herbicide active ingredient, trade name, application technique:
Select Cut = Cut, lop, and scatter
Low Cut= machine mowing or extensive chainsaw cutting
Access roads = 25 width X 15 height (mowing and extended saw cutting)
Chipping=woody debris is run through a commercial chipper- prevent fire hazard
Side-Limb= removing encroaching limbs from otherwise stable trees
Structure sites (wood poles)= cutting brush flat in a 30 ft radius for TLM maintenance requirements
Stump treatment= backpack application w / 25 % Garlon 4 / 75 % web oil mixture to be applied to hardwood species.
Foliar spray= sprays leaves and stems from targeted sprouting species and noxious weeds. The chemical is a 2 % Garlon 3 A / water mix.

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.

Standard cut, lop, and scatter…some chipping around road crossings, and machine will mulch all woody debris. All methods reduce fire hazard.

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 2 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