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(08-89)

United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: April 19, 2004

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA-205-Pearl-Keeler) **Project #: V-E-04/05**

TO: Mark A. Newbill
Natural Resource Specialist – TFE/Chemawa

Proposed Action: Vegetation Management on the 500 kV Pearl–Keeler No. 1 (Structures 1/1 to 19/3) and the 230 kV Pearl–Sherwood No. 1 and 2 (Structures 1/1 to 5/6) Transmission Line Corridors.

Location: The project area falls in Clackamas and Washington Counties, OR and is in the BPA Eugene Region.

Proposed by: Bonneville Power Administration.

Description of the Proposed Action: BPA proposes to clear unwanted vegetation from the rights of way, access roads, tower sites, switch platforms, danger trees, and microwave beam paths for BPA's Pearl-Keeler and Pearl-Sherwood Transmission Line Corridors.

Analysis: A checklist (see attached) was completed for this project in accordance with the requirements identified in the Bonneville Power Administrations Transmission System Vegetation Management Program FEIS (DOE/EIS-0285). The checklist evaluated the following areas:

- *Description of right-of-way and vegetation management needed*
- *Vegetation to be controlled*
- *Surrounding land use and landowner*
- *Natural Resource*
- *Vegetation control methods*
- *Debris disposal.*
- *Monitoring*
- *Appropriate environmental documentation*

In preparation of this Supplement Analysis, the checklists were reviewed. Specific information regarding the areas as identified above are described the attached checklists.

Finding: 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/ Shawn L. Barndt
Shawn L. Barndt
Environmental Scientist

CONCUR: */s/ Thomas C. McKinney* DATE: 4/21/2004
Thomas C. McKinney
NEPA Compliance Officer

Attachment

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

Sbarndt:sb:4722:4/20/2004 (KEP-KEPR-4-W:\EP\2004 FILES\EQ\EQ-14-Supplement Analasys\FEIS-0285-SA-205-Pearl-Keeler.doc)

Vegetation Management Checklist

Project No. V-E-04/05

Eugene Region
Mark A. Newbill, NRS
Pearl-Keeler # 1 Project
Nov. 26, 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
Pearl-Keeler Includes the Pearl-Sherwood 1 & 2 Clackamas, Washington Co.	19 miles and 500 Kv 6 miles and 230 Kv	250 feet 250 feet	1/1 to 19/3 1/1 to 5/6

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

The project will include: access roads, tower sites, 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, and various hardwood species such as Big Leaf Maple, Red Alder, Cottonwood, Wild Cherry, Oak, and Ash.

Med. Density (50-250 stems per acre)

Noxious weeds: Blackberries, Poison oak, 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 Douglas-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, edges of fields, and road crossings.

Areas in private or urban / semi-rural residence (backyards) we will work with landowners to create win – win tree situation. Planting the "right tree" in the "right place" can achieve this goal. Undesirable trees will be removed.

In woodland 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 the low growing plant communities (LGPC) get established, they help reduce the number of invasive weeds and trees while improving wildlife habitat.

1.4 Describe overall management scheme/schedule.

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

Initial entry – In farmland, Rural Woodlands and urban areas hand cutting and machine mowers will be used to control unwanted brush and tall growing trees. Blackberries and other noxious weeds will be removed from around the tower sites. Use of Garlon 4 / web oil in a 25 % mixture will be applied as a stump treatment for hardwood species. Project will begin in the early summer.

Subsequent entries – Return 3 months (following late summer / fall) to apply a foliar herbicide treatment. Use Garlon 3A and Escort (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, fencerows, and around gates. Herbicide buffers will be followed around water sources (see table 3.1) and the project detail sheet.

Future cycles – Try to achieve a 5-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.

Urban & Rural Residential

City of Sherwood

City of Beaverton

Private Farmland

Private Timber lots

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 4 weeks prior to start date.

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.**.

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.

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
To	From						
2\1	2\2	Wetland PEM1Y	No	HCO	None	DNA	35 ft
2/5	3/1	Wetland PFO1W	No	HCO	None	DNA	35 ft
3\4	3\5	Wetland PSS/EM1Y	No	HCO	None	DNA	35 ft
4/1	4/3	Wetland PSS/EM1Y	No	HCO	None	DNA	35 ft
5\3	5\4	Rock Ck	No	HCO	None	DNA	35 ft
6\3	6\4	Creek 5389+50	No	HCO	None	DNA	35 ft
6\4	6\5	Marsh	No	HCO	None	DNA	35 ft
6\5	7\1	Chicken Ck	Yes Winter Steelhead	HCO	None	DNA	60 ft
8\1	8\2	Drain Ditch 5483+67	No	HCO	None	DNA	35 ft
9/1	9/2	Wetlands PFO/EM1Y	No	HCO	None	DNA	35 ft
9\2	9\3	Tualatin River Wetlands R20WZ, PFO/EM1Y	Yes Winter Steelhead	HCO	None	DNA	60 ft
9/3	9/4	Wetlands PEM1/OWKY x	No	HCO	None	DNA	35 ft
10\1	10\2	Drain Ditch 5595+90	No	HCO	None	DNA	35 ft
11/5	12/1	Wetland PFO1W	No	HCO	None	DNA	35 ft
12\3	12\4	Drain Ditch 5815+60	No	HCO	None	DNA	35 ft
12\5	13\1	Drain Ditch 5839+32	No	HCO	None	DNA	35 ft
13\2	13\3	Drain Ditch 5857+46	No	HCO	None	DNA	35 ft

14\2	14\3	Wetland PFO/EM1Y Drain Ditch 5812+42	No	HCO	None	DNA	35 ft
15\1	15\2	Wetland PSS/EM1Y Butternut Creek 5855+80	No	HCO	None	DNA	35 ft
17\4	17\5	Hall Ck	No	HCO	None	DNA	35 ft
18/3	18/4	Rock Ck	Yes Steelhead	HCO	None	DNA	60 ft
18/4	18/5	Wetland PFOC	No	HCO	None	DNA	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
Ditches are listed above

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		
6\5	7\1	Winter Steelhead Chicken Ck	1.) Herbicide buffers & Non Toxic chemical applications in riparian areas. 2.) Selective cutting in riparian areas. 3.) Trees will be topped where no shrubs are present to maintain a shade and silt buffer. 4.) No ground disturbing veg. mgmt.methods.
6\5	7\1	Bald Eagle	Nest located greater than 0.25 miles, but less than 0.5 miles. The nest is not in line of sight of vegetation control activities. According to observations, including landowners, nest is inactive.
9\2	9\3	Winter Steelhead Tualatin River	1.) Herbicide buffers & Non Toxic chemical applications in riparian areas. 2.) Selective cutting in riparian areas. 3.) Trees will be topped where no shrubs are present to maintain a shade and silt buffer. 4.) No ground disturbing veg. mgmt.methods.

18/3	18/4	Winter Steelhead Rock Ck	1.) Herbicide buffers & Non Toxic chemical applications in riparian areas. 2.) Selective cutting in riparian areas. 3.) Trees will be topped where no shrubs are present to maintain a shade and silt buffer. - One Maple tree will be topped by the stream (West-side of ROW) 4.) No ground disturbing veg. mgmt.methods.

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			Method/mitigation measures
To	From		
2\2	2\1	SW Grahams Ferry Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
3\3	3\2	SW Tonquin Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
3\5	3\4	SW Waldo Way	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
5\1	4\5	NE Oregon St	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
5\5	5\4	Tualatin –Sherwood HWY	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
6\2	6\3	US Hwy 99 West	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
7\1	7\2	SW Scholls Sherwood Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
7\4	7\5	SW Lebeau Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
9\3	9\4	Pleasant Valley Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
11\5	12\1	Washington Co Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
12\4	12\5	Koehler Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
12\5	13\1	Green Slope Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.

13\1	13\2	Farmington Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
13\3	13\4	Ridge Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
14\2	14\3	Rosedale Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
14\3	14\4	SW Murphy Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
15\2	15\3	SW McInnis Ln	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
16\1	16\2	State HWY #8	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
16\2	16\3	SW Johnson Ave.	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
16\5	17\1	SW Lois Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
17\2	17\3	SW Baseline Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
17\5	18\1	NW Quatama Rd	Top / trim trees as needed. Chip and clean-up debris from each of these road crossings.
18\6	19\1	NW Cornell Rd	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

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 located in the extreme northern Willamette Valley and around 2 urban cities. The terrain is primarily flat.

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

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

No canyons.

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.

Below is a contract detail sheet with general mile-by-mile prescription and analysis as to what will be accomplished.

Span		Methods, including herbicide active ingredient, trade name, application technique
To	**From**	
1\2	PEARL	Machine mowing – low conductor – stump treat maples (G4 25 %)
3\1	1\2	Hand Cutting ROW & tower sites / mowing access roads
5\1	3\2	Hand Cutting ROW & tower sites and mowing access roads
6\5	5\1	Hand Cutting as needed
9\1	6\5	Farmland – light hand cutting or towers only
9\2	9\1	Wood lot- more intense hand cutting
11\1	9\3	Farmland – SKIP or light cutting
11\3	11\1	x-mas tree farm – look for over ht trees – cut and chip as needed
14\3	11\3	Farmland- orchards (check permits) – light hand cutting area
15\2	14\4	Wood lot – mow as much as possible
16\1	15\2	Farmland – hand cut tower sites only
18\1	16\1	Urban- residential backyard – tree trimming
19\2	18\1	Hand cutting as needed
19\3+400	19\2	Hand cut / Chipping required
		Keeler Substation – Project Ends

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 (rural and woodlands), 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