

# memorandum

DATE: April 1, 2003

REPLY TO  
ATTN OF: KEP/4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-137- Chemawa-Salem1&2)

to: Mark Newbill  
Natural Resource Specialist– TFE/Chemawa

**Proposed Action:** Vegetation Management for the Chemawa-Salem #1 115 kV and #2 230 kV transmission lines from Chemawa Substation to Salem Substation.

**Location:** The project is located in the BPA Eugene Region, Marion County, 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 Chemawa-Salem 115 & 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 ranging from 100 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 a variety of land ownerships and land uses including; agricultural, urban residential, McNary golf course, City of Kizer, and City of Salem. 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. 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 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. Crossbow 2% in water will be used on noxious weed control. These applications will occur in late summer to early fall after farm crops have been harvested. 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  
Thomas C. McKinney  
NEPA Compliance Officer

DATE: 04/04/2003

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)

# 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                                  |
|--|----------------------|------------------|---|
| Chemawa –Salem #<br>1 & 2 Metal poles<br>double circuit,<br>Marion Co. | 12 miles             | 1/1-4/3 100 ft   | 1/1 to 11/5   |
|  | #1 115kv             | 4/3-5/2 150 ft   | (From Chemawa<br>Substation to Salem<br>Substation) |
|  | #2 line 230KV        | 5/3-11/1 100 ft  |   |
|  |                      | 11/1-11/5 150 ft |   |

The vegetation control method used on the Right-of-Way (ROW) will be hand cutting. Topping, side-liming, and pruning trees off ROW trees will be used in urban as well as rural areas.

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, Wild Cherry, Cedar, Cottonwood, Big leaf Maple, Ash, Red Alder, Pine and many varieties of Fruit and Ornamental trees

Low Density (0-50 stems per acre)

Noxious weeds: Poison oak, Blackberries, Tansy Ragwort 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. Many areas are in private residence (backyard) and adjacent to rural farmland. LGPC is not the desired goal.

## 1.4 Describe overall management scheme/schedule.

See Handbook - [Overall Management Scheme/Schedule](#).

**Initial entry** – Cut and or prune trees back a safe distance from the line. Usually control occurs in late spring / summer after growth and dry weather conditions allow access. Crews will use bucket trucks or climb trees and chip all woody debris. This is an urban Forestry operation for all locations down the line.

Chemical treatments will be limited to stump treatments (hardwoods; 25 % Garlon 4 in web oil) and noxious weed control around steel poles (2% Crossbow in water). Appropriate buffers will be used in high urban population and close proximity to farmland. Application will be made with backpack sprayers only.

**Subsequent entries** – Return every year or every two years to trim trees as needed to maintain adequate line clearance.

**Future cycles** – Try to achieve a 2-year trimming cycle. Remove trees from problem areas and insert low growing trees that require ZERO trimming.

**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.

Agricultural

Urban Residential

McNary Golf Course

City of Keizer

City of Salem

**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 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

| Span |      | Landowner/use              | Specific measures to be applied           |
|------|------|----------------------------|---|
| To   | From |                            |   |
| 1/1  | 2/5  | Residential                | Urban Forestry                            |
| 2/6  | 3/1  | McNary Golf Course         | Urban Forestry                            |
| 3/2  | 7/2  | Commercial Ag. Lands       | Individual tree work mostly no-treat zone |
| 7/4  | 7/5  | Red Hawk Vineyard          | Hand cut only, no herbicide around grapes |
| 9/7  | 10/2 | Residential                | Urban Forestry                            |
| 10/2 | 10/4 | Commercial holly tree farm | Do not cut Ag permit                      |

**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 table above

**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 |                     |      |               |           |                       |                    |
| 1/8  | 2/1  | Lake Labish Ditch   | No   | Hand cut only | None      | N/A                   | 35 ft no Herbicide |
| 2/4  | 2/5  | Claggett Creek      | No   | Hand cut only | None      | N/A                   | 35 ft no Herbicide |
| 3/2  | 3/2  | Wetland – PFOC      | No   | Hand cut only | None      | NA                    | 35 ft no Herbicide |
| 4/5  | 5/1  | Willamette River    | Yes  | Topping Only  | None      | N/A                   | 35 ft no Herbicide |
| 6/1  | 6/2  | Wetland – PFOC      | No   | Hand cut only | None      | NA                    | 35 ft no Herbicide |
| 8/3  | 8/4  | Brush College Creek | No   | Hand cut only | None      | NA                    | 35 ft no Herbicide |
| 10/1 | 10/2 | Glenn Creek         | No   | Hand cut only | None      | NA                    | 35 ft no Herbicide |

**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 will not be used in farmland irrigation, ditches, wells or springs

| Span     |          | Well/irrigation/or spring         | Herbicide | Buffer | Other notes/measures |
|----------|----------|-----------------------------------|-----------|--------|----------------------|
| To       | From     |                                   |           |        |                      |
| 2/6 10/6 | 9/7 11/3 | Irrigation/ farm land/ or ditches | None      | 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 |                      |   |
| 4/5  | 5/1  | Anadromous Fish Runs | Listed in 3.1—Water Resources           |

**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.

**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 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 |  |   |
| 1/5  | 1/6  | <u>Road Crossing</u><br>McLeod Lane NE | Tree topping as needed to maintain line clearance |
| 1/7  | 1/8  | 14Ave NE                               | Tree topping as needed to maintain line clearance |
| 2/1  | 2/2  | River Rd NE                            | Tree topping as needed to maintain line clearance |
| 3/4  | 3/5  | Windsor Island Rd                      | Tree topping as needed to maintain line clearance |
| 5/2  | 5/3  | ST HWY 221                             | Tree topping as needed to maintain line clearance |
| 8/2  | 8/3  | Brush Island Rd                        | Tree topping as needed to maintain line clearance |
| 9/3  | 9/4  | Orchard hts Rd                         | Tree topping as needed to maintain line clearance |
| 10/1 | 10/2 | Doaks Ferry Rd                         | Tree topping as needed to maintain line clearance |
| 10/4 | 10/5 | Eola Rd                                | Tree topping as needed to maintain line clearance |

**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 every slope >10 %.

| Span |      | Describe sensitivity | Method/mitigation measures |
|------|------|----------------------|----------------------------|
| To   | From |                      |                            |
| 7/2  | 7/3  | Slope >10 %          | Hand cutting               |
| 11/4 | 11/5 | Slope >10 %          | Hand cutting               |

**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.

The vast majority of work is urban forestry. Tree topping / pruning by manual method.

Mechanical will only occur during the late summer months due to wet soil conditions.

In areas with stump treatment a 25 % Garlon 4 in Web Oil will be used to treat respouting hardwoods. Primary targets are Cottonwood, Wild Cherry, Ash, Bigleaf Maple and Red Alder species. Herbicide will not be used on rainy days or around water bodies including farmlands.

Crossbow 2 % in water will be used on noxious weed control. This will occur in the late summer / early fall after farm crops have been harvested.

No Biological will be used.

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

Steel 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.

Backpack Foliar spray= sprays leaves and stems from targeted sprouting species and noxious weeds. The chemical is a 2 % Crossbow / 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.

For urban forestry and road crossings, all woody debris will be chipped. 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