memorandum

DATE: July 27, 2004

REPLY TO ATTN OF: KEP-PSB-2


TO: Ed Tompkins
Natural resource specialist – TFO/LMT

**Proposed Action:** Vegetation Management along the St. John’s - Keeler 115 kV Transmission Line Corridor from 3/1 to 10/6. This corridor includes portions of the Oregon City – Keeler No 2 115 kV transmission line. The corridor along this section of the proposed project is 100 feet in width.

**Location:** The project is located in Washington County, OR in BPA’s Olympia Region.

**Proposed by:** Bonneville Power Administration (BPA).

**Description of the Proposal:** BPA proposes to remove unwanted vegetation along the right-of-way, along access roads and around tower structures along 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.

Specifically, this vegetation management project will involve the following actions:

- Clearing (mowing, cutting, and spraying) vegetation at 26 tower sites.
- Selective cutting (cutting, lopping and scattering or cut and chip) of vegetation at approximately 56 acres of ROW.
- Clearing (mowing, cutting, and spraying) approximately 0.5 acres of access roads in or adjacent to the ROW.
- Cut or cut and side trim of approximately 4 trees along the ROW.
- Applying low volumes of foliar herbicide along approximately all treated acres in the fall of 2004 to control re-sprouting plants with re-application every three to four years after initial application to maintain accessibility to access roads and tower sites.

Debris will be disposed of using onsite chip, lop and scatter, or mulching techniques. All onsite debris will be scattered along the ROW.

On initial entry, herbicide will be selectively applied using spot/stump treatment of resprouting species and low-volume foliar treatments along access roads, around tower structures, and at noxious weed locations. Garlon 3A herbicide (active ingredient: Triclopyr as triethylamine salt...
(TEA)) will be used in buffer zones established adjacent to riparian areas along the corridor and Garlon 4 (active ingredient: Triclopyr as butoxyethyl ester (BEE)) will be used in all other areas for this project. Backpacks will be used with a 25% Garlon 3A or 4 / 75% crop oil mix. Localized low-volume foliar treatments will use a 3% Garlon 3A or 4 mix in 97% water.

**Analysis:** A Vegetation Management Checklist was completed for this project in accordance with the requirements identified in the Bonneville Power Administration’s Transmission System Vegetation Management Program FEIS (DOE/EIS-0285).

The subject corridor traverses private lands consisting of urban and rural residential lands.

Section 3 of the checklist identifies the natural resources present in the area of the proposed work. The following summarizes natural resources occurring in the project area along with applicable mitigation measures.

**Water Resources:** Waterbodies (streams, rivers, lakes, wetlands) occurring in the project area are listed in section 3.1 of the Vegetation Management Checklist. Trees in riparian zones will be selectively cut to include only those that will grow into the minimum approach distances of the conductor at maximum sag. Shrubs will not be cut that are less than 10 feet high where ground to conductor clearance allows. No ground disturbing vegetation management methods will be implemented thus eliminating the risk for soil erosion and sedimentation near the streams. Adjacent to water resources only spot (cut-stump) and localized chemical treatments using practically non-toxic triclopyr (TEA) will be used.

One drinking water supply well was identified along the project corridor. Buffers will be established surrounding the well in which no herbicide usage is allowed.

**Threatened and Endangered Species:** Pursuant to its obligations under the Endangered Species Act, BPA has made a determination of whether its proposed project will have any effects on any listed species. A species list was obtained from the United States Fish and Wildlife Service (USFWS) on February 26, 2004 as potentially occurring in the project area. In addition a review of species under the jurisdiction of NOAA Fisheries was conducted. A determination of No Effect was made for all ESA listed species and designated critical habitat for the project.

**Essential Fish Habitat:** A review of NOAA database identified one Essential Fish Habitat (EFH) stream occurring in the project area. Measures identified for water resources will be followed for EFH. A determination was made that this project will not affect essential fish habitat.

**Cultural Resources:** No cultural resources are known for the project area. If a site is discovered during the course of vegetation control, work will be stopped in the vicinity and the BPA Environmental Specialist, and the BPA archeologist will be contacted.

**Re-Vegetation:** Native grasses are present on the entire right-of-way and are expected to seed into the areas that will have lightly disturbed soil predominately located on the right-of-way roads.

**Monitoring:** The entire project will be inspected during the work period. Additionally, monitoring for the follow-up herbicide treatment will be in the mid to late summer.
**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 documentation is required.

/s/ James Meyer   for
Elaine S. Stratton
Environmental Protection Specialist

CONCUR:/s/ Thomas C. McKinney          DATE: 7/28/2004
Thomas C. McKinney
NEPA Compliance Officer

Attachment:
St John’s-Keeler 04 Vegetation Management Checklist
USFWS Species List Reference # 1-7-04-SP-0138
Effects Determination for Project V-O-04/12

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
J. Meyer – KEP-4
E. Stratton – KEP-PSB-2
J. Sharpe – KEPR-4
P. Key – LC-7
J. Hillyard Creecy – T-DITT2
K. Rodd – TF/DOB-1
A Campbell – TFO/Olympia
D. Krauss – TFO/Olympia
D. Swanson – TFOP/LMT
Environmental File – KEC-4
Official File – KEP-4 (EQ-14)
Vegetation Management Checklist
Project #: V-O-04/12
1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

<table>
<thead>
<tr>
<th>Corridor Name</th>
<th>Corridor Length &amp; kV</th>
<th>Easement width</th>
<th>Miles of Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Johns-Keeler No. 2</td>
<td>115KV</td>
<td>100 Feet</td>
<td>3/1 to 10/6</td>
</tr>
<tr>
<td>Oregon City-Keeler No. 2</td>
<td>115KV</td>
<td>100 Feet</td>
<td>2/4 to 4/8</td>
</tr>
</tbody>
</table>

Right Of Way:

Right-of-Way – clearing in right-of-way
Transmission Structures – clearing around.
Clearing Access Roads to the ROW

1.2 Describe the vegetation needing management.

Vegetation Types:
- Douglas-fir
- Red Alder
- Cottonwood
- Willow
- Cherry
- Big Leaf Maple
- Western Hemlock
- Blackberries
- Scotchbroom

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.
Cut-stump and follow-up foliar herbicide treatments on sprouting-type 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. Low-growing species are left untreated if they are not a threat to line integrity.

1.4 Describe overall management scheme/schedule.

Initial entry – All tall growing vegetation, as identified in the control prescription, will be cut, and sprouting stumps chemically treated to prevent re-sprouting. Access roads, right-of-way roads and structure sites are to be cut and treated. A follow-up chemical treatment will occur on all treated areas in the late summer of 2004.

Subsequent entries – Every 3-4 years, a maintenance contract will be necessary to treat newly established trees. The use of herbicides on this entry and subsequent cycles should reduce the quantity and cost of work.

Future cycles – Same as above.
2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

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

Landowners/Managers/Uses:
- Rural forest land
- Pasture lands
- Urban

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.

Olympia will send letters to the property owners about 3 weeks prior to cutting the brush. Door to door contact will be made where it is warranted. Door hangers have been used at properties where special treatments are anticipated. Conversations with property owners on site, emails, and phone calls are all used.

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.

<table>
<thead>
<tr>
<th>Span</th>
<th>Landowner/use</th>
<th>Specific measures to be applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
<td></td>
</tr>
<tr>
<td>3/1</td>
<td>10/6</td>
<td>Rural areas, wooded areas.</td>
</tr>
<tr>
<td>7/6</td>
<td>7/7</td>
<td>Urban area</td>
</tr>
<tr>
<td>3/1</td>
<td>10/6</td>
<td>All Uses.</td>
</tr>
</tbody>
</table>

- Cut, Lop, Scatter tall-growing veg.
- Cut and Chip slash
- Clearing structures, access roads, and ROW roads. C-Trees to be cut, lopped, scattered, or chipped.

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.

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.

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.

None.
3. IDENTIFY 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.

<table>
<thead>
<tr>
<th>Span From To</th>
<th>Water body</th>
<th>T&amp;E</th>
<th>Method</th>
<th>Herbicide</th>
<th>Application Technique</th>
<th>Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/4-200 7/4+100</td>
<td>Wetland PFOA</td>
<td>No</td>
<td>Cut, Lop, Scatter tall-growing veg</td>
<td>Garlon 3A</td>
<td>Chemically treat cut stumps and foliar spray sprouts in late summer.</td>
<td>Spot treat with Garlon 3A waters edge to 35 feet.</td>
</tr>
<tr>
<td>8/6+0 8/6+250</td>
<td>Wetland PUBH</td>
<td>No</td>
<td>Cut, Lop, Scatter tall-growing veg</td>
<td>Garlon 3A</td>
<td>Chemically treat cut stumps and foliar spray sprouts in late summer.</td>
<td>Spot treat with Garlon 3A waters edge to 60 feet.</td>
</tr>
<tr>
<td>8/9+0 8/9+367</td>
<td>Wetland PEMC</td>
<td>No</td>
<td>Cut, Lop, Scatter tall-growing veg</td>
<td>Garlon 3A</td>
<td>Chemically treat cut stumps and foliar spray sprouts in late summer.</td>
<td>Spot treat with Garlon 3A waters edge to 35 feet.</td>
</tr>
<tr>
<td>9/4 +0 9/4 +630</td>
<td>Rock Creek</td>
<td>Yes</td>
<td>Cut, Lop, Scatter tall-growing veg</td>
<td>No herbicide w/in 175’ of creek</td>
<td>Chemically treat cut stumps and foliar spray sprouts in late summer.</td>
<td>No herbicide w/in 175’ of creek. Garlon 4 remainder of span</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Span From To</th>
<th>Well/irrigation/or spring</th>
<th>Herbicide</th>
<th>Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/7+100 5/7+300</td>
<td>Well</td>
<td>None</td>
<td>50’</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Span From To</th>
<th>T&amp;E Species</th>
<th>Method/mitigation or avoidance measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/4 +0 9/4 +630</td>
<td>Steelhead</td>
<td>Skip 175’ either side of creek. No vegetation removal or herbicide usage</td>
</tr>
</tbody>
</table>

3.4 List any other measures to be taken for enhancing wildlife habitat or protecting species.

None
3.5 List any visually sensitive areas and the measures to be taken at these areas.

None

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

No known sites

3.7 List areas with steep slopes or potential erosion areas and the measure and methods to be applied in those areas.

N/A

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

N/A

4. DETERMINE VEGETATION CONTROL METHODS

4.1 List Methods that will be used in areas not previously addressed in steps above.

<table>
<thead>
<tr>
<th>Span From</th>
<th>Methods, including herbicide active ingredient, trade name, application technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>For non-sensitive areas, cut-stump/basal treatment uses 25% Garlon 4 (triclopyr) and 75% forest crop oil. Summer foliar application on re-sprouts uses 3% Garlon 4 and 97% water, and dye. For areas near water, Garlon 3A is substituted for Garlon 4.</td>
</tr>
</tbody>
</table>

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

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

Debris Disposal:

**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 usually cut to 10-15 foot 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).

N/A

Native grasses and shrubs are present on the entire right-of-way and are expected to 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.

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

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 cutting and initial herbicide treatment will begin several weeks after starting work. Monitoring the follow-up herbicide treatment will be in the mid to late summer.

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

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 are 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