DATE: December 20, 2002

REPLY TO ATTN OF: KEP-4


TO: James A. Jellison – TFO/Olympia

Proposed Action: Vegetation Management along the Shelton Fairmount # 1-4 230kV & 115kV transmission lines corridor from structure 34/3 through structure 60/2 (reference line ADNO 8354). Right of way width averages 258 feet.

Location: The project area is located in Jefferson County, Washington.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to remove unwanted vegetation along the right-of-way, access roads and around tower structures along the subject transmission line corridors. Approximately 26 miles of right-of-way will be treated using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Approximately 1.5 miles of access roads will be cleared using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Tower sites will be treated 35 feet from center of poles and or tower legs using selective and non-selective methods that include hand cutting, mowing and herbicide treatments. Vegetation management is required for unimpeded operation and maintenance of the subject transmission line. See Section 1 of the attached checklist for a complete description of the proposal.

Analysis: Please see the attached checklists for the resources present. Applicable findings and mitigation measures are discussed below.

Planning Steps:

1. Identify facility and the vegetation management need.

Unwanted vegetation, reclaim trees and danger trees will be removed and/or controlled using selective and nonselective methods that will include hand cutting, mowing, and herbicidal treatment. All methods of herbicide treatment will be used (except aerial) dependent on site conditions/restrictions. This proposal covers approximately 154 acres of land between towers 34/2 through 60/2 on the Shelton-Fairmount #4 230kV line (corridor reference line). The entire width of the corridor needs to be managed.
2. **Identify surrounding land use and landowners/managers and any mitigation.**

The subject corridor traverses private, and public lands in Jefferson County, used for residential, rural residential, farming and grazing purposes. The corridor crosses through approximately 3 miles (93 acres) of US Forest Service lands in the Olympic National Forest from towers 41/3 through 44/2. See Mediated Agreement for the USFS Northwest Region (Region 6). No other federal and no tribal lands are involved. Landowners requiring notification or under tree and brush agreements are shown in Section 2.3 and 2.4 of the attached checklists. 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 cites resources found along with applicable mitigation measures:

**Forest Service Lands:**
For Olympic National Forest lands. Available: All manual and spot and localized herbicide treatments authorized in the USFS Mediated Agreement for the Northwest region (region 6). Triclopyr (Garlon 3A and Garlon 4A), Glyphosate (Accord), and Tordon (Piclorm) are approved for use in National Forests of the Pacific Northwest.

**Riparian Habitat:**
Includes all wetlands, streams, and creeks meeting the definition of riparian habitat. Several areas were identified. See Section 3.1 of the checklists for a complete listing and mitigation methods.

**Riparian Habitat Mitigation:**
- County or private lands, within 30.5 m (100 ft.) of a stream or open water. Available: All manual, spot and localized herbicide, and biological treatments, except grazing. On slopes less than 20% there will be no disturbance within 35ft. of the stream or wetland. On slopes greater than 20% there will be no disturbance within the buffer.
- Within 50 ft. to edge of surface water only cut-stump and localized or spot chemical treatments using practically non-toxic to slightly toxic formulations of glyphosate, triclopyr (TEA) formulation, imazapyr, and metsulfuron-methyl (Escort). Moderately toxic to very highly toxic herbicides (to aquatic species) or those herbicides containing a groundwater or surface water label advisory will not be used in this zone. Triclopyr (Garlon 4) may be used only more than 100 ft. from streams or surface waters.
Drinking Water Supply:
One well was identified 100 feet from the right of way boundary near structure 48/5+300’ on the Shelton-Fairmount #4 line corridor. The corridor crosses a protected watershed from towers 42/2 +700’ through 42/3 +600’. See section 3.2 for a complete description of drinking water resources.

Drinking Water Supply Mitigation:
- Drinking water wells: No chemical application of a herbicides containing a groundwater or surface water label advisory within a 164-foot radius any water wells. Garlon 3A may be used up to a 50 foot radius of the drinking water supply. Garlon 4A will not be used within 164 feet of the drinking water well. Selective cutting only.
- Water shed: No herbicides will be used in this zone. Selective cutting only.

T & E Species:

- **T&E fish Species and Essential fish habitat:** Review of BPA’s T2view databases show Endangered Bull Trout and species of anadromous fish are present in many of the waterways located within the transmission corridor.

  **Mitigation:** No herbicides will be applied within 100 feet of the waters edge of any T&E or Essential Fish Habitat listed water bodies. Spot spraying of non-toxic to practically non-toxic herbicides may be applied 100-200 feet from the waters edge.

- **Marbled Murrelet:** The corridor crosses critical habitat units WA-06-a and Wa-06-b and other individual sightings have been reported at various locations of the transmission corridor. See section 3.3 of the checklist for more detailed information.

  **Mitigation:** During the core-breeding season, April 1st - August 5th, do not carry out maintenance activities that produce noise above ambient noise levels, within 0.25 miles of any known marbled murrelet habitat or occupancy. During the late breeding season, August 6th – September 15th, do not carry out maintenance activities using motorized equipment within 0.25 miles of any known marbled murrelet habitat or occupancy within two hours after sunrise or within two hours before sunset. If any tree needing removal is greater than 32 inches in diameter at breast height and has suitable nest characteristics, initiate formal consultation with the USFWS.

- **Bald Eagles:** BPA’s T2View database shows Bald Eagle nests are probable within .5 miles of the transmission corridor. See section 3.4 of the checklist for more detailed information.

  **Mitigation:** Work is to occur outside the protected nesting season, Jan 1st – August 5th, and therefore will have no effect on any potential bald eagles.
**Cultural resources:**
Marie Herbert Cultural Resources Manager of the Port Gamble Tribe is not aware of any cultural resources in the transmission corridor. Should any cultural resources be discovered during vegetation management control work will be stopped in the vicinity and the tribe will be contacted. See section 3.6 of the checklist for additional information.

**Steep Slopes:**
Areas with slopes in excess of 20% occur within the transmission corridor. Slopes/draws with > 20% slope will either be skipped or trees whose tops are within 50 feet of the conductor at max sag will be selectively cut. No herbicide will be used on slopes of this nature to maintain soil stability. See section 3.7 of the checklist for detailed areas.

4. **Determine vegetation control and debris disposal methods.**

Vegetation will be removed using manual, mechanical, and chemical methods. Debris will be disposed onsite using either chip, lop and scatter, or mulch techniques as described in Sections 4 & 5 of the attached checklists.

5. **Determine re-vegetation methods, if necessary.**

Native grasses and low growing species are present in the areas of the right-of-way that will be managed. These populations will 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. A brush machine will mulch*(see checklist) the structure sites and right-of-way roads where scotch broom and blackberries are present.
Re-vegetation needs will be determined onsite. Any areas identified with limited ground cover will be replanted with native plant species.

6. **Determine monitoring needs.**

The entire project will be inspected during the work period, and, the line will be patrolled annually after treatment to monitor the effectiveness of the treatment measures. Environmental monitoring to ensure sound application practices will be determined in the future as outlined in the BPA/NMFS/USFWS Biological Assessment currently being prepared.
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. This Supplement Analysis also finds the proposed actions will not affect threatened or endangered species. Therefore, no further NEPA or ESA documentation is required.

/\ Greg P. Tippetts
Greg P. Tippetts
Physical Scientist (Environmental)

**CONCUR/\ Thomas C. McKinney**
Thomas C. McKinney
NEPA Compliance Officer

DATE: 12/20/2002

Attachment

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
P. Key – LC-7
M. Hermeston – KEP-4
J. Meyer – KEP-4
J. Sharpe – KEPR-4
D. Hollen – TF/DOB-1
D. Krauss – TFO/Olympia
S. Martin – TFO/Olympia
G. Westling – TFOF/Olympia
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.


<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>Shelton-Fairmount No. 3&amp;4 and No. 1 &amp; 2 ADNO 8350, 8352, 8353, 8354</td>
<td>26 mi. (34/2 to 60/2), 2-230Kv &amp; 2-115Kv</td>
<td>257.5'</td>
<td>26 mi.</td>
</tr>
</tbody>
</table>

Right Of Way:

Right-of-Way – clearing in right-of-way

A combination of mulching the easement because of the Scotch broom and the cut, lop and scatter of tall growing species will be utilized to treat hazardous vegetation and this will be followed up with herbicide treatment.

Transmission Structures – clearing around

All structures will be cut to 35 feet from the center of the pole and from each leg of the steel towers and the stumps will be treated with herbicide.

Access Road clearing - approximate miles – 1.5 miles

All access roads will be mulched due to the encroachment of Scotch broom and stubble treats the stumps.

Reclaim (“C”) Trees

Refer to the prescription cut sheets that notes the location of the draws and the edge of the right-of-ways where reclamation activities will be occurring.

Danger Trees

1 danger tree has been identified to be cut near structure 59/3.

1.2 Describe the vegetation needing management.

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

Vegetation Types:

Douglas Fir
True Fir
Hemlock
Alder
Maple
Willows
Cottonwood
Wild Cherry
Noxious Weeds - Scotch Broom
Blackberries
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.

Cut stump or follow-up herbicide treatments on sprouting-types 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.

1.4 Describe overall management scheme/schedule.

See Handbook - Overall Management Scheme/Schedule.

**Initial entry** – All tall growing vegetation will be cut and the stumps chemically treated to prevent grow-in trees. Access, right-of-way roads and structure sites are to be cut and treated.

**Subsequent entries** – A follow-up chemical foliar treatment is scheduled to begin in the spring of 2003.

**Future cycles** – Every 3-4 years, a maintenance contract will be necessary to treat sprouts. The use of herbicides on the initial and subsequent cycles should reduce the quantity and cost of work.

2. IDENTIFY SURROUNDING LAND USE AND LANDOWNERS/MANAGERS

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


**Landowners/Managers/Uses:**

Resident Rural Property Owners
Timber Managed Lands
DNR Managed Lands
USFS-Olympic National Forest

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.**


Olympia will send letters to the property owners about 2 weeks prior to cutting the brush. Door to door contact will be made where it is warranted.
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.

<table>
<thead>
<tr>
<th>Span</th>
<th>From</th>
<th>To</th>
<th>Landowner/use</th>
<th>Specific measures to be applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>34/2+2049</td>
<td>2124</td>
<td>SF#1 line only</td>
<td>Private owner</td>
<td>I contacted property owner that the trees are out of compliance. He said that he would top the trees this fall after the fire season.</td>
</tr>
<tr>
<td>34/3+400</td>
<td>604</td>
<td>Private owner</td>
<td>Same as above. Full corridor.</td>
<td></td>
</tr>
<tr>
<td>34/4+0</td>
<td>150</td>
<td>Private owner</td>
<td>Same as above. Full corridor.</td>
<td></td>
</tr>
<tr>
<td>41/3+850</td>
<td>44/1+700</td>
<td>USFS</td>
<td>Mediated Agreement</td>
<td></td>
</tr>
</tbody>
</table>

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.

Private owner to top trees that are out of compliance after fire season.

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.

N/A

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.

I have contacted the tribe near Rochester, Washington. They are not aware of any cultural sites.
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.

<table>
<thead>
<tr>
<th>Span</th>
<th>Water body</th>
<th>T&amp;E</th>
<th>Method</th>
<th>Herbicide</th>
<th>Application Technique</th>
<th>Buffer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34/2+600</td>
<td>1100  Fulton creek</td>
<td>Yes</td>
<td>Skip</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34/5+350</td>
<td>550  McDonald creek</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36/5+500</td>
<td>850  Duckabush creek</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40/2+700</td>
<td>900  Dosewallips Creek</td>
<td>Yes</td>
<td>Skip</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42/3+200</td>
<td>400  Turner creek</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44/1+200</td>
<td>700  Maple creek</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44/2+200</td>
<td>550  Spencer creek</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46/5+150</td>
<td>300  No name creek</td>
<td>No</td>
<td>Cut Stump</td>
<td>Garlon 3A</td>
<td>Spot</td>
<td>Waters edge</td>
<td>Selective Cutting</td>
</tr>
<tr>
<td>46/5+550</td>
<td>750  No name creek</td>
<td>No</td>
<td>Skip</td>
<td>Garlon 3A</td>
<td>Spot</td>
<td>Waters edge</td>
<td>Selective Cutting</td>
</tr>
<tr>
<td>46/7+700</td>
<td>1000  No name creek</td>
<td>Yes</td>
<td>Cut Stump</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td>Selective Cutting</td>
</tr>
<tr>
<td>47/5+750</td>
<td>1250  No name creek</td>
<td>No</td>
<td>Cut Stump</td>
<td>Garlon 3A</td>
<td>Spot</td>
<td>Waters edge</td>
<td>Selective Cutting</td>
</tr>
<tr>
<td>48/3+450</td>
<td>700  No name creek</td>
<td>No</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48/5+650</td>
<td>800  No name creek</td>
<td>No</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49/3+350</td>
<td>650  Big Quilcene River</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50/1+450</td>
<td>600  Little Quilcene River</td>
<td>Yes</td>
<td>No Herbicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Span</td>
<td>Well/irrigation/or spring</td>
<td>Herbicide</td>
<td>Buffer</td>
<td>Other notes/measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------</td>
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<td>--------------------------</td>
<td>------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42/2+700</td>
<td>Water Shed</td>
<td>Garlon 3A</td>
<td>Buffer built into control area.</td>
<td>Selective Cutting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42/3+0</td>
<td>Water Shed</td>
<td>Garlon 3A</td>
<td>Buffer built into control area.</td>
<td>Selective Cutting Only</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48/5+300</td>
<td>Well</td>
<td>Garlon 3A</td>
<td>164' for Garlon 4A or Tordon 22k, 50' for Garlon 3A</td>
<td>Selective Cutting Only</td>
<td></td>
<td></td>
<td></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).

See Handbook — Herbicide Use Near Irrigation, Wells or Springs for buffers and herbicide restrictions.
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.

<table>
<thead>
<tr>
<th>Span</th>
<th>T&amp;E Species</th>
<th>Method/mitigation or avoidance measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>34/2+600</td>
<td>1100</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>34/5+350</td>
<td>650</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>36/6+500</td>
<td>850</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>40/2+700</td>
<td>900</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>42/3+200</td>
<td>400</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>44/1+200</td>
<td>700</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>44/2+200</td>
<td>550</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>46/7+700</td>
<td>1000</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>49/3+300</td>
<td>600</td>
<td>Anadomous/Bull Trout</td>
</tr>
<tr>
<td>50/1+450</td>
<td>600</td>
<td>Anadomous/Bull Trout</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Span</th>
<th>Species</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>34/4</td>
<td>Bald Eagle</td>
<td>Seasonal restrictions of no chainsaw activity from January 1 to August 5.</td>
</tr>
<tr>
<td>41/1</td>
<td>Marbled Murrlet</td>
<td>Seasonal restrictions of no chainsaw activity from March 1 to August 5 and from August 6 to Sept 15, no chainsaw activities 2 hours after sunrise and before sunset.</td>
</tr>
<tr>
<td>42/2</td>
<td>Marbled Murrlet</td>
<td>Same seasonal restrictions as for str. 41/1 to 41/2.</td>
</tr>
<tr>
<td>43/3</td>
<td>Marbled Murrlet</td>
<td>Same seasonal restrictions as for str. 41/1 to 41/2.</td>
</tr>
<tr>
<td>46/2</td>
<td>Marbled Murrlet</td>
<td>Same seasonal restrictions as for str. 41/1 to 41/2.</td>
</tr>
<tr>
<td>46/3</td>
<td>Bald Eagle</td>
<td>Same seasonal restrictions as for str. 34/4 to 34/5.</td>
</tr>
<tr>
<td>47/2</td>
<td>Bald Eagle</td>
<td>Same seasonal restrictions as for str. 34/4 to 34/5.</td>
</tr>
<tr>
<td>49/3</td>
<td>Bald Eagle</td>
<td>Same seasonal restriction as for str. 34/4 to 34/5.</td>
</tr>
</tbody>
</table>
3.5 List any visually sensitive areas and the measures to be taken at these areas.

N/A

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

<table>
<thead>
<tr>
<th>Span From</th>
<th>Span To</th>
<th>Describe sensitivity</th>
<th>Method/mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>34/2</td>
<td>60/2</td>
<td>Cultural Sites</td>
<td>Port Gamble tribe, Marie Herbert, Cultural Resource Manager is not aware of any cultural sites on this transmission corridor. If a site is discovered during the course of vegetation control, work will be stopped in the vicinity and the local tribe will be contacted as well as the BPA Environmental Specialist.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Span From</th>
<th>Span To</th>
<th>Describe sensitivity</th>
<th>Method/mitigation measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>34/2+600</td>
<td>7100</td>
<td>Steep Slope</td>
<td>Skip draw</td>
</tr>
<tr>
<td>34/5+350</td>
<td>450</td>
<td>Steep Slope</td>
<td>Selectively cutting trees whose tops that are within 50' of the conductor at max sag. No herbicide application to maintain soil stability.</td>
</tr>
<tr>
<td>42/3+200</td>
<td>600</td>
<td>Steep Slope</td>
<td>Same mitigation as noted for 34/5+ 350 to 650.</td>
</tr>
<tr>
<td>44/1+200</td>
<td>700</td>
<td>Steep Slope</td>
<td>Same mitigation as noted for 34/5+ 350 to 650.</td>
</tr>
<tr>
<td>44/2+200</td>
<td>550</td>
<td>Steep Slope</td>
<td>Same mitigation as noted for 34/5+ 350 to 650.</td>
</tr>
<tr>
<td>46/5+550</td>
<td>750</td>
<td>Steep Slope and Unstable soil</td>
<td>Same mitigation as noted for 34/5+ 350 to 650.</td>
</tr>
</tbody>
</table>

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.

See attached prescription cut sheets.

<table>
<thead>
<tr>
<th>Span</th>
<th>Methods, including herbicide active ingredient, trade name, application technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>To</td>
</tr>
<tr>
<td>34/2</td>
<td>60/2</td>
</tr>
<tr>
<td></td>
<td>For non-sensitive areas (spans) cut stump/basal treatment with 25% Garlon 4 and 75% Forest Crop Oil (FCO). 50/50 Accord or Garlon 3A/Water for stump treatment in the riparian zones, Stubble treat structure sites and the right-of-way roads with 90% Water, 6% FCO, 3% Garlon 4 and 1% Tordon 22 K. Follow-up treatment-foliar application of the above chemicals as noted under stubble treatment, except FCO. Foliar treat Scotch broom.</td>
</tr>
</tbody>
</table>

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.

**Debris Disposal:**

**Chip** (Mechanical brush disposal unit cuts brush into chips 4 in. or less in diameter, and spread over ROW, piled on ROW, or trucked off site. Trunks too large for the chipper are limbed and the limbs chipped. Trunks are placed in rows along the edge of the right-of-way or scattered, as the situation requires.)

**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 occasionally cut in 1-to-2-m (4-to-8-ft.) 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).
See Handbook — Reseeding/replanting for requirements.

<table>
<thead>
<tr>
<th>Span From</th>
<th>To</th>
<th>Reason for Reseed/plant</th>
<th>Type of Seed or Plants</th>
<th>Native?</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Native grasses are present on the entire right-of-way that will 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. A brush machine will mulch the structure sites and right-of-way roads where Scotch Broom and Black Berries are present.

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.

Monitoring of the success of the brush-cutting program will begin the spring in which evaluation of soil erosion as a result of the brush-cutting program will be made. If grass seeding is necessary, native grass seed will be applied.

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.

Monitoring of the effectiveness of the herbicide treatment will begin in the spring and follow up treatment of cut stump/basal or foliar treatment of target vegetation. The mixture of the product is 25% Garlon 4 and 75% FCO or 90% water, 3% Garlon 4 with Depo-RTU drift retardant. There is virtually no drift that occurs with this mixture.

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 the effectiveness of the vegetation management activities on the right-of-way and assess other resources that may have been adversely affected. BPA’s vegetation maintenance activities may increase the public use of the right-of-way due to increased accessibility, which may cause damage to the natural resources.
7. **PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION**

See handbook — **Prepare Appropriate Environmental Documentation** for requirements. Also prepare 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”.

All proposed brush cutting and chemical treatment activities on this corridor is 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.

Yes, refer to the mediated agreement for use of herbicide on USFS managed lands in Region 6. BPA will use herbicides from this list of 5 formulations to control hazardous and unwanted vegetation on BPA’s right-of-ways.