

United States Government

Department of Energy

Bonneville Power Administration

memorandum

DATE: November 27, 2001

REPLY TO
ATTN OF: KEP/Z992

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-33)

TO: Bill Erickson - TFP/Walla Walla
Jim Jellison - TFO/Olympia

Proposed Action: Vegetation Management along the St Helens-Allston Transmission Line ROW. The line is a 115 kV Single Circuit Transmission Line having an easement width of 100 feet.

Location: The ROW is located in Columbia County, OR, being in the Olympia Region.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposed Action: BPA proposes to clear danger trees from varying widths of the indicated transmission line right-of-way that are approaching electrical clearance zones in accordance with the National Electrical Safety Code and BPA Standards. See Section 1.1 of the attached checklist for pertinent information on each section of referenced transmission line. BPA is clearing the danger trees to prevent them from falling or growing into the lines, thereby causing outages.

Analysis: This project meets the standards and guidelines for the Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) and Record of Decision (ROD).

Planning Steps

1. Identify facility and the vegetation management need.

The work involved will be to remove danger trees from BPA's transmission line right-of-way that may affect the integrity and operation of the transmission line. All danger trees marked as potentially unstable and that may fall into the minimum distance or into the safety zone of the power line, as well as trees that could blow into that zone or enter the zone if the conductor swings, will be removed. Hardwood trees in this zone will be stump cut treated after falling to prevent re-sprouting.

The danger trees needing clearing are described in Section 1.2 of the attached checklist and includes both conifers and deciduous varieties. The proposed work sites are located in rural, agricultural, and urban areas.

The proposed maintenance activity will be ongoing. Tree removal would occur throughout the year as trees enter the tolerance zone or the landowner chooses not to maintain the trees as required by tree agreements. This maintenance cycle will occur over the next 4-5 years to remove the danger trees.

2. *Identify surrounding land use and landowners/managers.*

The work will be conducted on agricultural, rural and urban lands. The City of Rainer, Columbia County OR, and Columbia County School have been contacted in addition to the Oregon Department of Forestry.

Landowners are contacted as follows:

During routine ROW surveillance trips, danger trees are identified and marked, usually with red ribbon or metal numbered tags. Once the danger trees have been identified and marked, affected landowners are contacted, either personally, by letter or by e-mail to alert them of the situation. They will be asked to maintain the tree(s) at their own expense and given a period of time to comply. Multiple contacts will be given prior to an adverse removal. If the trees pose a hazard, they will be removed. BPA will offer to remove the tree (s) at no cost to the landowner with items such as clean-up, wood removal and stump removal being negotiable.

3. *Identify natural resources.*

Several small creeks are located in the proposed work area including Goble Creek between 13/8 and 13/7, a small creek between 12/5 and 12/4 and Tide Creek between 10/2 and 10/1. Once a danger tree is removed and prior to stump removal, if that option is chosen, the tree stump is treated with an herbicide to prevent regrowth once the stump is ground. No herbicide treatments, except for cut-stump treatments using the practically non-toxic or slightly toxic formulations of Glyphosate, imazapyr, and Triclopyr (Garlon 3A) will be used within 30.5 m (100 ft.) of these streams.

In addition, the project will cross Milton Creek (a T&E stream) between 3/3 and 3/4. In this area no herbicides will be used within 100 feet from the waters edge. From 100 to 400 feet away, Escort, Clopyralid, Imazapyr, the Rodeo® formulation of Glyphosate and Triclopyr (Garlon 3A) can be used. Highly toxic and very highly toxic (to fish) herbicides will not be used in this zone.

One of the Landowners on the project reported that a Bald Eagle nest exists near 11/7-12/1. On 11/8/01, the Bonneville Helicopter flew the area stated above. After many passes over the area - no nests were identified. A video was taken for documentation. A consultation with Malcolm Hiatt of the Oregon Department of Forestry indicated that there were no known roosting areas in the vicinity. At this time, no mitigations requirements are recommended.

If Bald Eagles were an issue in the future these mitigations would apply:

Wintering bald eagles: No work within 100 meters (328 feet) of any known wintering bald eagle roosts from Nov. 1 through March 15 unless clearance surveys are done daily to determine that no bald eagles are present within 100 meters of activities. If roosting trees are to be removed, a formal consultation with USFWS will be pursued.

Nesting bald eagles: No work within 0.25 miles if out of line-of-sight of nesting tree, or 0.5 miles if in line-of-sight of nesting tree from January 1 to August 31, unless clearance surveys show that there is no nesting occurring. May be able to cut sooner if consult with USFWS and can show that young have fledged.

No other issues dealing with T&E Species, wildlife enhancement, visually sensitive areas, cultural resources or areas associated with steep slopes or canyon crossings were identified.

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

The referenced sections of the ROW will be surveyed for danger trees and the trees removed as necessary. Removal shall be by manual and mechanical methods followed by stump treatment with herbicides prior to stump grinding. All equipment used shall be in good operating condition to eliminate oil or fuel spills or excess exhaust. All equipment will have approved spark arrestors. All stumps will be cut flat for later application of herbicides. Both conifers and deciduous trees will be cut per applicable guidelines with herbicides applied as soon as possible after cutting to prevent re-growth.

A licensed contractor would undertake the work with the herbicides applied by licensed applicators following the manufacturer's label instructions and BPA's management prescriptions.

5. *Determine revegetation methods, if necessary.*

The danger trees will be cleared using chain saws or heavier mechanical equipment if necessary with the woody debris being disposed of either by chipping or by lop and scatter techniques. The woody debris would be turned into chips or mulch depending on conditions present at the time.

6. *Determine monitoring needs.*

An inspector will monitor the work being performed.

The ROW will be inspected on a routine basis for follow up actions associated with any additional encroaching danger trees.

7. *Prepare appropriate environmental documentation.*

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/James Meyer for

Elaine Stratton

Environmental Scientist - KEP

CONCUR: /s/Thomas C. McKinney

Thomas C. McKinney

NEPA Compliance Officer

DATE: 11/28/01

Attachment

Vegetation Management Checklist

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
St Helens Allsiston	23 miles 115kV	100	23

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](#).

Right Of Way:

Danger Tree clearing

Danger Tree Removal Requirements

Remove all off-right-of-way trees that are marked as potentially unstable and would fall within a minimum distance or into the safety zone of the power line, as well as trees that could blow into that zone or enter into the zone when the conductor swings. Tree growth within the treatment cycle should be taken into consideration when selecting trees.

Hardwood trees will be stump cut treated after falling to prevent re-sprouting.

Tract No. SJ-LA	Owner	Date of Analysis	Analysis Amount	Number Of Trees	Cut DTs
08-AN-01	Jesse J. Windham Trust	02/12/01	\$2,880	231	
08-AN-02	Walter & Peggy Shaver	02/12/01	\$150	27	
08-AN-01.1	Jesse Windham Trust	06/05/01	\$3,295	371	
09-AN-01	Randall E. Dunn	06/05/01	\$680	106	
09-AN-02	Larry & Ella Hansen Trust	06/05/01	\$1,950	36	
09-AN-03	Harry Kem & Julie Papavero	06/05/01	\$2,520	75	
10-AN-01	John & Agnes Petersen	06/05/01	\$370	36	
10-AN-02	Agnes J. Thompson	06/05/01	\$1,745	81	eagle
10-AN-03	Michael & Becky Newton	06/05/01	\$1,825	17	
11-AN-01	Daniel Pereira	06/05/01	\$780	93	
11-AN-02	Arnold L. Leppin	06/05/01	*\$3400	198	Pmt 10/23/01
12-AN-01	D.H. & H.J. Lashway & C.M. Carlson	06/05/01	\$475	347	
13-AN-01	Longview Fibre Co. c/o Larry Hurley	06/05/01	\$3,790	88	
13-AN-02	Fred Holden LLC	06/05/01	\$205	259	
14-AN-01	Dean & Patricia Werth	06/12/01	\$100	27	
15-AN-01	Wiechern Jurgen & Pam Farmer	06/12/01	\$1,065	27	
15-AN-02	Donald R. & Linda Bailey Sr.	06/12/01	\$380	32	
15-AN-03	Terry H. & Cynthia Burns	06/12/01	\$2,955	8	
15-AN-04	Kenny L. & Katherine Thomas	06/12/01	\$1,255	81	cleanup \$2,000
15-AN-05	Merle Wright	06/12/01	\$200	6	
15-AN-06	Greg T. & Elizabeth Johnson	06/13/01	\$315	2	
15-AN-07	Gerald D. Pruitt	06/13/01	\$100	28	
15-AN-08	Daniel & Susan Thomas	06/13/01	\$205	9	
16-AN-01	City of Rainier c/o Dwayne Barnes	06/13/01	\$5,720	461	
18-AN-01	John & Edith Rauch	06/13/01	\$1,415	42	
18-AN-02	Harry & Kelly Masterson	06/13/01	\$1,865	105	
18-AN-03	Searl & Debra Stevens	06/13/01	\$5,505	47	
18-AN-04	Steven & Angela Ostling	06/13/01	\$2,140	26	

Tract No. SJ-LA	Owner	Date of Analysis	Analysis Amount	Number Of Trees	Cut DTs
18-AN-05	Jon L. Swanson	06/13/01	\$100	5	
18-AN-06	Richard & Beverly Neises	06/13/01	\$100	7	
18-AN-07	Lindenmeyer Trust	06/13/01	\$2,425	107	
19-AN-01	Rolf Erlandson	06/14/01	\$100	13	
19-AN-02	Gloria Gallien	06/14/01	\$790	2	
19-AN-03	Robert & Claudia Burnham	06/14/01	\$565	10	
19-AN-04	Columbia County c/o Dave Hill	06/14/01	\$1,090	1	
20-AN-01	Charles & Ruth Mattinen	06/14/01	\$1,170	12	
20-AN-02	Longview Fibre Co. c/o Larry Hurley	07/10/01	\$485	23	
20-AN-04	George & Marian Wilkins	07/10/01	\$365	4	
21-AN-01	Raymond Craft & Donna R. Massey	07/10/01	\$530	2	
21-AN-02	Columbia Co. School Greg Larson	07/11/01	\$1,755	58	
22-AN-01	Columbia County c/o Dave Hill	07/11/01	\$1,495	3	
22-AN-02	Mary Sandahl	07/11/01	\$1,120	31	
22-AN-03	David A. White & Debra Kaye	07/11/01	\$610	5	
22-AN-04	Elton Gamble	07/11/01	\$100	18	
22-AN-05	Ivan & Dorothy Archibald Trustees	07/11/01	\$100	20	
23-AN-01	James & Judith Brown	07/11/01	\$100	7	
23-AN-02	Bryan & Melinda Linn	07/11/01	\$1,465	15	
23-AN-03	Larry & Karen Hoekstre	07/11/01	\$330	3	
23-AN-04	Stephen & Elsie Doyle	07/11/01	\$2,880	87	
23-AN-05	Raymond & Catherine Davis	07/11/01	\$2,675	90	
*REIMBURSEMENT FOR CLEANUP					
50		Total	\$64,235	3389	

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

Cedar

Approx 3500 DT's

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.

1.4 Describe overall management scheme/schedule.

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

Initial entry – **Trees are marked and payments are negotiated**

Subsequent entries – **follow up every 8-15 years**

Future cycles -

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.

- Residential
- Rural
- Agricultural
- Industrial Forest lands
- Urban
- Columbia County, City of Rainier

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.

Each landowner is contacted and releases are signed and payments made before cutting.

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](#).

Jesse Windam Wants trees removed when he is living in the area. Next March

Elsie Doyle Has choke cherries that are poisonous to cattle OK to Mark but do not chip just haul away do not leave in field.

All Requirements will be listed on the tree release.

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.

N/A

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

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.

Mostly Private and local public land.

See handbook — [Other Potentially Affected Publics](#) for requirements and suggestions.

All local public landowners are contacted

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							
3/3	¾	Stream	Yes	Hand cut	yes	See below	See below	N/a

Before cutting the area will be reviewed for streams. The following mitigations will be applied if streams are present.

Riparian	State, county, or private lands, within 122 m (400 ft.) of a listed stream. Available: all manual, and spot herbicide treatments. No mechanical treatments.
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T&E Salmon	Herbicides: No herbicides within 100 feet from the waters edge. From 100 to 400 feet away for stream or water, Escort, Clopyralid, Imazapyr, the Rodeo® formulation of Glyphosate and Triclopyr (Garlon 3A) can be used. Highly Toxic and very Highly toxic (to fish) herbicides will not be used in this zone.
Stream Danger tree	State, county, or private lands, within 30.5 m (100 ft.) of a stream. Available: all manual and spot herbicide treatments. Herbicides: No herbicide treatments, except for cut-stump treatments using the practically non-toxic or slightly toxic formulations of Glyphosate, imazapyr, and Triclopyr (Garlon 3A).

3.2 If planning to use herbicides, list locations of any known irrigation source, wells, or springs (landowners may be able to provide this info if requested).

See Handbook — [Herbicide Use Near Irrigation, Wells or Springs](#) for buffers and herbicide restrictions.

Span		Well/irrigation/or spring	Herbicide	Buffer	Other notes/measures
To	From				
		See below	none	N/a	

NON-HERB	<p>NON-HERBICIDE AREAS</p> <p>Water sources and wells, parks, and other sensitive lands within 100 feet of Very sensitive Riparian areas or water sources. Hand Cutting Methods only, no Herbicides allowed.</p> <p>WELLS: No herbicides allowed within 100 feet of well head. Use only herbicides that do not have ground or surface water advisories between 100 and 165 feet of well head. Approved herbicides include: glyphosate, imazapyr, triclopyr, and Escort in the 100 to 165 foot zone.</p>
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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.

Bald Eagle

One of the Landowners on the project claims that a Bald Eagle nest exists near 11/7-12/1. On 11/8/01, the Bonneville Helicopter with observer Dennis Wade flew the area stated above. After many passes over the area - no nests were identified. A video was taken for documentation. A previous consultation with Malcolm Hiatt of the Oregon Dept of Forestry indicated that there were no known roosting areas in the vicinity. At this time, no mitigations requirements are recommended.

If Bald Eagles were an issue in the future these mitigations would apply:

Wintering bald eagles: No work within 100 meters (328 feet) of any known wintering bald eagle roosts from Nov. 1 through March 15 unless clearance surveys are done daily to determine that no bald eagles are present within 100 meters of activities.

If roosting trees are to be removed, you will need to do formal consultation with USFWS.

Nesting bald eagles: No work within 0.25 miles if out of line-of-sight of nesting tree, or 0.5 miles if in line-of-sight of nesting tree from January 1 to August 31, unless clearance surveys show that there is no nesting occurring. May be able to cut sooner if consult with USFWS and can show that young have fledged.

Contact Malcolm Hiatt Oregon Dept of Forestry - 503-397-2636

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

See Handbook — [Protecting Other Species](#) for requirements.

Selective Danger Tree cutting will have limited impact

3.5 List any visually sensitive areas and the measures to be taken at these areas.

See Handbook — [Visual Sensitive Areas](#) for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
Fill-in		none	

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

See Handbook – [Cultural Resources](#) for requirements.

Span		Describe sensitivity	Method/mitigation measures
To	From		
Fill-in			No Ground disturbing activities planned

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.

Span		Describe sensitivity	Method/mitigation measures
To	From		
Fill-in			Selective cutting only

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

See Handbook – [Spanned Canyons](#) for requirements.

Span		Methods, cutting
To	From	
Fill-in		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](#), [Herbicides](#) for requirements for each of the methods.

Methods

- For all methods using machinery or vehicles (i.e. chainsaws, trucks, graders), keep the equipment in good operating condition to eliminate oil or fuel spills or excess exhaust.
- Do not wash equipment or vehicles at a stream.
-

Manual Requirements

- When crews are working during the fire season (defined by the fire protection district with jurisdiction in the area), each crew shall have the proper fire-suppression tools and materials, as required by the responsible fire control agency.
- Equip power-cutting tools with approved spark arresters.
- Cut conifers below the lowest live limb to eliminate the continued growth of lateral branches.

- For safety, cut all brush stumps flat where possible. (Angular cuts leave a sharp point that could cause injuries if fallen upon.)
- For cutting trees close to "live" power lines, use only qualified personnel.

Treatment Zones

Zones	St Helens-Allston Danger Trees only 11/01
DT1 Danger tree	State, county, or private lands with limited environmental constraints. Available: all manual, and spot herbicidal treatments. Herbicides: Glyphosate, Imazapyr, and Triclopyr (Garlon 3A and Garlon 4), may be prescribed for cut-stump, stem-injection, and basal-stem treatments
Stream Danger tree	State, county, or private lands, within 30.5 m (100 ft.) of a stream. Available: all manual and spot herbicide treatments. Herbicides: No herbicide treatments, except for cut-stump treatments using the practically non-toxic or slightly toxic formulations of Glyphosate, imazapry, and Triclopyr (Garlon 3A).
Riparian T&E Salmon	State, county, or private lands, within 122 m (400 ft.) of a listed stream. Available: all manual, and spot herbicide treatments. No mechanical treatments. Herbicides: No herbicides within 100 feet from the waters edge. From 100 to 400 feet away for stream or water, Escort, Clopyralid, Imazapyr, the Rodeo [®] formulation of Glyphosate and Triclopyr (Garlon 3A) can be used. Highly Toxic and very Highly toxic (to fish) herbicides will not be used in this zone.
NON-HERB	NON-HERBICIDE AREAS Water sources and wells, parks, and other sensitive lands within 100 feet of Very sensitive Riparian areas or water sources. Hand Cutting Methods only, no Herbicides allowed. WELLS: No herbicides allowed within 100 feet of well head. Use only herbicides that do not have ground or surface water advisories between 100 and 165 feet of well head. Approved herbicides include: glyphosate, imazapyr, triclopyr, and Escort in the 100 to 165 foot zone.

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.

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.)

5.2 List areas of reseeded or replanting (those areas not already described in steps 1, 2, or 3).

See Handbook — [Reseeding/replanting](#) for requirements.

N/A

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.

Line will be patrolled on a routine basis

6.2 Describe any follow-up or monitoring needed to determine if mitigation measures were effective.

N/a

7. PREPARE APPROPRIATE ENVIRONMENTAL DOCUMENTATION

See handbook — [Prepare Appropriate Environmental Documentation](#) for requirements.

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

7.2 Is there a need for additional NEPA documentation (i.e. Forest Service requirement, Record of Decision, supplemental EIS)? If so, attach.

None