

United States Government

Department of Energy

Bonneville Power Administration

memorandum

DATE: February 15, 2002

REPLY TO
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS
(DOE/EIS-0285/SA-42)

TO: Don Atkinson – TFN/Snohomish
Bob Sweet – TFNF/Snohomish

Proposed Action: Vegetation Management along the Snohomish – Murray #1 from str 1\4 to str 18\5. The proposed work will be to remove both danger and reclaim trees outside and inside the right-of-way, respectively. Right-of-way width varies from 125 to 300 feet.

Location: The ROW is located in Snohomish County, WA, being in the Snohomish Region.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposed Action: BPA proposes to remove both reclaim and danger trees inside and outside the transmission line right of way. BPA crews or contract crews will cut only trees that have been identified and marked as danger trees or reclaim trees. BPA plans to conduct tree removal 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. All work will be executed in accordance with the National Electrical Safety Code and BPA standards. Cut-stump or follow-up herbicide treatments on re-sprouting type species will be carried out to ensure that the roots are killed. No herbicide application will occur on forest service lands. Follow up with re-treatment in 3 to 7 years.

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).

The Planning steps are described in the attached checklist. See attached checklist and danger tree list.

- Vegetation herbicide treatments on sprouting-types of species ensure that the roots are killed. Prevention of resprouts encourages low-growing plant communities to establish themselves and flourish on the right-of-way.
- Water resources (streams, rivers, wetlands) will be protected with 35-100-foot buffers, (165 foot buffer for wells).
- Threatened or endangered (T&E) animal species will be protected by avoiding all work in the recognized T&E habitat during core and late breeding seasons. Additionally T&E species will be protected by examining trees needing to be removed greater than 32in. DBH for evidence of Marbled Murrelet or greater than 11in. DBH for evidence of Spotted Owls. If evidence is found the crew will stop work and begin formal consultation with the USFWS.

The proposed vegetation management area traverses bald eagle sighting areas, predominately wintering bald eagle. Use caution when falling danger and reclaim trees along water course crossings and where the transmission line is located alongside surface waters.

- Reseeding /replanting regimes have not been planned at this time. Low growing aggressive native vegetation within the right-of-way can naturally dominate with the elimination of tall growing vegetation.
- No 'in stream' work is to take place without prior consultation with the appropriate government agencies and proper permits in place.
- Herbicides will be applied by licensed applicators following manufacturers' label instructions and BPA's management prescriptions.

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, unless Potential Spotted Owl or Marbled Murrelet habitat is removed.

/s/ Mark A. Martin

Mark A. Martin

Environmental Protection Specialist – KEPR-4

CONCUR: /s/ Thomas C. McKinney
 Thomas C. McKinney
 NEPA Compliance Officer

DATE: 2/20/02

Attachments

Vegetation Management Checklist Snohomish-Murray #1

1/4 to 18/5

PREPARED BY DON ATKINSON 1/31/02

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way.

| Corridor Name | Corridor Length & kV | Easement width | Miles of Treatment |
|---------------------|----------------------|-----------------------|--|
| Snohomish-Murray #1 | 1/4 to 18/5 230 KV | Variable 125' to 300' | See danger tree list for exact locations of trees to be cut. |

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:

Reclaim (“C”) Trees

Danger Tree clearing

1.2 Describe the vegetation needing management.

See handbook — [List of Vegetation Types](#), [Density](#), [Noxious Weeds](#) for checkboxes and requirements.

Vegetation Types:

| | |
|--------------------|------------------|
| Hemlock | Red cedar |
| Alder | Maple |
| Willows | Grand fir |
| Cottonwoods | Spruce |
| Wild Cherry | Aspen |
| Douglas fir | Birch |

Density:

Will be cutting only trees that have been identified and marked as DT's, and any C-trees (on ROW trees) that are in the immediate area.

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 — [Promoting Low-Growing Plant Communities](#) for requirements and checkboxes.

Tall-growing vegetation that is currently or will soon be a hazard to the line will be removed. (In places where tall growing vegetation must be left in place, it may not be possible to promote low-growing plants.)

Cut-stump or follow-up herbicide treatments on resprouting-type species will be carried out to ensure that the roots are killed on non Forest Service lands.

Vegetation that will grow tall will be selectively eliminated *before* it reaches a height or density to begin competing with low-growing species. [This is done for maintenance of already controlled rights-of-way. This should be done when the saplings are very young.]

Desirable low-growing plants will not be disturbed. Only selective vegetation control methods that have little potential to harm non-target vegetation will be used.

1.4 Describe overall management scheme/schedule.

See Handbook - Overall Management Scheme/Schedule.

Initial entry – **Reclaim “C” trees and danger trees & treat stumps for re-sprouting.**

Subsequent entries – Follow-up with re-treatment and danger trees 3 to 7 years out

Future cycles - Same

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.

Private landowners

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.

Notice of Rights Secured (NORS) and analysis letters have been sent to all landowners. Also, each landowner will be contacted before the trees are cut.

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](#).

Special requirements are identified in the NORS and when personal contact is made with each landowner.

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.

None

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.

Snohomish-Murray No. 1 (See attached maps for locations)

| Span | | Waterbody | T&E? | Treatment Zone | Herbicide | Application Technique | Buffer | Other |
|-----------------|------------|--|------|----------------|-----------|-----------------------|-----------|-------|
| From | To | | | | | | | |
| 6/4 + 410 | 6/4 + 620 | Marsh | No | Riparian | See Below | See below | See below | |
| 15/6 + 270 | 15/7 + 210 | Marsh | No | Riparian | See Below | See below | See below | |
| Riparian | | RIPARIAN: 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. No mechanical treatments. | | | | | | |

| Span | | Waterbody | T&E? | Treatment Zone | Herbicide | Application Technique | Buffer | Other |
|------|----|--|------|----------------|-----------|-----------------------|--------|-------|
| From | To | | | | | | | |
| | | Herbicides: Within 100 ft. of a stream, only cut-stump and localized treatments using practically toxic or Slightly toxic formulations of glyphosate, imazapyr, and Escort can be used up to the waters edge. Highly Toxic and very highly toxic (to fish) herbicides will not be used in this zone. Triclopyr (Garlon 4) may be used only more than 200 ft. from streams or water. | | | | | | |

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.

None known in this project.

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 habitat found in the 9 mile, however it is greater than a 1/4 mile from the ROW. Also, there are no DT's in the 9 mile.

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

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

Promote Low Growing Plant Communities

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

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

None Known

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

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

None Known

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. See attached maps for exact locations.

Snohomish-Murray No. 1

| Span | | Describe sensitivity | Method/mitigation measures |
|-------|---|----------------------|----------------------------|
| From | To | | |
| 8/6 | 8/7 | Steep slope | See below |
| Zones | Treatment Alternatives | | |
| SS | <p>BPA Fee owned US Forest, State DNR, or private lands where a steep slope or visual resources precludes mechanical treatments. Available: all manual, mechanical treatments using track mowers on slopes up to 60%, mowing equipment such as the Spyder (trade name) can be used on slopes up to 90% - 100% and biological treatments, all access roads and structure sites may also be mowed. All herbicide treatments except for cut-stubble treatment following a mechanical treatment.</p> <p>Herbicides: glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments. In addition to the above herbicides, Escort, and clopyralid can be used spot foliar and broadcast treatments. 2,4-d amine can be added to the list to control noxious weed species.</p> | | |

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

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

None within this project.

4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — [Methods](#)

Manual - all trees will be felled using chain saws or other powered saws, trees may need to be climbed and chunked down. Note a lift truck may be used instead of climbing.

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.

| | |
|------------------|---|
| <p>LT</p> | <p>LEVEL TERRAIN: BPA, county, or private lands where the ROW is Fairly flat and level. There are minimal environmental and treatment restrictions. Available: all manual, mechanical (when conditions make it feasible), and biological treatments: all herbicide treatments spot, localized, and broadcast treatment including cut-stubble treatment following a mechanical treatment where suitable.</p> <p>Herbicides: glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments. In addition to the above herbicides, Escort, and clopyralid can be used spot foliar and Broadcast treatments. 2,4-d amine can be added to the list to control Noxious weed species.</p> |
| <p>MS</p> | <p>MODERATE SLOPE: BPA, county, or private lands where the ROW is varies from flat to steep terrain with stable soils. . Available: all manual, mechanical treatments using rubber tired mowers on slopes up to 20%, track mowers on slopes up to 60%, and specializes mowing equipment such as the Spyder (trade name) can be used on slopes up to 90% - 100% (when conditions make it feasible). All access roads and structure sites may also be mowed. Also available are biological treatments and all herbicide treatments spot, localized, and broadcast treatment including cut-stubble treatment following a mechanical treatment where suitable.</p> <p>Herbicides: glyphosate, triclopyr (Garlon 3A and 4), imazapyr, dicamba may be prescribed for cut-stump, stem-injection, and basal-stem treatments. In addition to the above herbicides, Escort, and clopyralid can be used spot foliar and Broadcast treatments. 2,4-d amine can be added to the list to control Noxious weed species.</p> |

SEE CUT SHEET FOR CONTROL METHODS

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.

Lope and Scatter or Chipped depending on agreement with the landowner.

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.

Not Planned at this time - would only grass seed if soil disturbance ocured during the project.

5.3 If not using native seed/plants, describe why.

If reseeding is necessary only native seed would be used.

5.4 Describe timing and any follow-up that will need to take place to ensure germination/success of seeding/planting.

If reseeding is necessary then area will be checked in the spring to ensure germination occurred.

If not then it will be reseeded again.

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.

The NRS will check any areas that were reseeded by spring. Any additional monitoring will be done during line patrol by the line crew and within one year by the NRS.

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

Will review during line patrol by the line crew and within one year by the NRS.

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.

No

Danger Tree List

1

Snohomish – Murray # 1 Danger Trees

| <u>Species and Location</u> | <u>Terrain</u> | <u>Riparian</u> | <u>T&E Species</u> |
|--|----------------|-----------------|------------------------|
| 1/5 – 120' to 1/5 – 130' 11 cottonwood right | MS | No | No |
| 3/9 – 175' 1 cottonwood left 1 wild cherry left 2 willow left | MS | No | No |
| 3/9 + 150' 2 wild cherry left | MS | No | No |
| 4/1 – 275' 3 wild cherry left | MS | No | No |
| 4/1 – 110' 1 wild cherry left 2 alder left | MS | No | No |
| 5/8 + 225' to 5/8 + 150' 16 alder left 4 willow left | LT | No | No |
| 5/8 + 175' to 6/8 + 225' 10 willow left | LT | No | No |
| 5/8 + 175' to 6/2 – 20' 1 Douglas fir left | LT | No | No |
| 6/1 – 160' 2 cottonwood left | LT | No | No |
| 6/2 to 6/3 4 Douglas fir left 1 Grand fir left 1 Spruce left | MS | No | No |
| 6/4 + 120' to 6/4 + 160' 12 wild cherry left 6 alder left 4 cottonwood left | LT | No | No |
| 6/4 + 10' 1 cottonwood left | LT | No | No |
| 6/5 – 300' to 6/6 – 80' 23 willow left | MS | Yes | No |
| 6/5 – 75' 4 cottonwood left | MS | Yes | No |
| 6/5 + 50' 1 cottonwood left | MS | No | No |

| <u>Species and Location</u> | <u>Terrain</u> | <u>Riparian</u> | <u>T&E Species</u> |
|--|----------------|-----------------|------------------------|
| 6/6 – 320' to 6/6 – 80' 27 willow left 38 wild cherry left 13 maple left 4 alder left 1 red cedar left | MS | No | No |
| 6/7 + 350' to 6/8 + 35' 59 maple left 3 Douglas fir left 7 hemlock left 1 alder left 9 wild cherry left 1 red cedar left | MS | No | No |
| 6/8 + 150' 2 hemlock left 1 Douglas fir left | MS | No | No |
| 7/4 + 200' 1 hemlock left | MS | No | No |
| 7/5 + 80' 1 Douglas fir left 1 red cedar left | LT | No | No |
| 8/6 + 30' to 8/6 + 250' 19 maple left 1 hemlock left 1 alder left 1 willow left | SS | No | No |
| 10/1 – 440' to 10/1 – 420' 6 cottonwood left | MS | No | No |
| 10/1 – 400' to 10/1 – 380' 6 cottonwood left | MS | No | No |
| 10/1 – 225' 3 cottonwood left | MS | No | No |
| 10/4 + 160' to 10/5 + 100' 25 cottonwood & alder left | LT | No | No |
| 10/8 – 160' to 10/8 – 120' 2 alder left | LT | No | No |
| 10/8 + 450' to 10/8 + 500' 4 red alder left | MS | No | No |
| 10/8 + 290' to 10/8 + 340' 2 cottonwood left | MS | No | No |

| <u>Species and Location</u> | <u>Terrain</u> | <u>Riparian</u> | <u>T&E Species</u> |
|---|----------------|-----------------|------------------------|
| 10/9 – 320' 2 cottonwood left | MS | No | No |
| 11/2 + 115' 1 cottonwood left | LT | No | No |
| 11/3 – 130' 1 cottonwood left | LT | No | No |
| 11/4 – 275' 8 cottonwood left | LT | No | No |
| 11/4 – 200' 2 cottonwood left | LT | No | No |
| 11/5 – 275' to 11/5 – 120' 9 wild cherry left 5 alder left | LT | No | No |
| 11/6 – 65' 1 wild cherry left 1 cottonwood left | MS | No | No |
| 11/6 + 175' to 11/6 + 250' 6 hemlock left 1 Douglas fir left | MS | No | No |
| 11/6 + 260' 1 hemlock left | MS | No | No |
| 12/3 – 450' to 12/3 – 320' 8 cottonwood left | LT | No | No |
| 12/3 – 100' to 12/3 – 30' 7 willow left 3 cottonwood left 2 alder left 1 Douglas fir left | LT | No | No |
| 12/3 + 150' to 12/3 + 175' 2 Douglas fir left | LT | No | No |
| 12/4 – 240' to 12/4 – 150' 10 cottonwood left 2 wild cherry left | LT | No | No |
| 12/4 – 50' to 12/4 + 110' 12 cottonwood left 3 hemlock left 1 wild cherry left | MS | No | No |
| 12/5 – 70' to 12/5 – 50' 3 hemlock left | MS | No | No |

| <u>Species and Location</u> | <u>Terrain</u> | <u>Riparian</u> | <u>T&E Species</u> |
|---|----------------|-----------------|------------------------|
| 12/5 + 250' to 12/5 + 300' 1 cottonwood left 1 maple left 1 hemlock left | MS | No | No |
| 12/7 – 300' 1 cottonwood left | MS | No | No |
| 12/8 – 450' to 12/8 – 300' 18 cottonwood left | LT | No | No |
| 12/8 – 260' to 12/8 – 25' 7 cottonwood left 3 alder left 1 birch left | LT | No | No |
| 12/8 + 60' to 12/8 + 325' 33 cottonwood left 3 aspen left | MS | No | No |
| 13/3 – 100' 7 red alder left 10 alder left | LT | No | No |
| 13/8 + 30' to 13/8 + 320' 4 birch left 1 willow left 3 hemlock left 1 red cedar left | MS | No | No |
| 13/8 + 430' to 13/8 + 530' 4 willow left 4 birch left 1 alder left 3 red cedar left 4 hemlock left | MS | No | No |
| 14/6 + 90' 2 aspen left | LT | No | No |
| 14/9 + 110' to 14/9 + 310' 1 cottonwood left 3 birch left 1 hemlock left | LT | No | No |
| 14/9 + 48' 2 alder left | LT | No | No |
| 15/1 – 215' to 15/1 – 45' 4 birch left 3 cottonwood left | LT | No | No |

| <u>Species and Location</u> | <u>Terrain</u> | <u>Riparian</u> | <u>T&E Species</u> |
|---|----------------|-----------------|------------------------|
| 15/1 + 20' to 15/1 + 30' 5 alder left 3 birch left 2 cottonwood left | LT | No | No |
| 15/1 + 230' to 15/1 + 300' 15 cottonwood left | LT | No | No |
| 15/2 – 175' 1 cottonwood left | LT | No | No |
| 15/7 – 265' 2 Douglas fir left | LT | Yes | No |
| 16/7 + 230' 2 cottonwood left | LT | No | No |
| 16/7 + 250' 5 willow left 1 alder left 1 cottonwood left | LT | No | No |
| 17/5 + 220' to 17/5 + 280' 13 cottonwood left 26 willow left | MS | No | No |
| 17/6 + 70' to 17/6 + 90' 1 hemlock left 1 red cedar left | MS | No | No |
| 18/3 + 100' to 18/4 + 30' 8 alder right | MS | No | No |
| 18/4 + 100' 1 cherry left | MS | No | No |
| 18/4 + 110' to 18/4 + 200' 2 red cedar right 1 Douglas fir right | MS | No | No |