

United States Government

Department of Energy  
Bonneville Power Administration

# memorandum

DATE: March 29, 2004

REPLY TO  
ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS  
(DOE/EIS-0285/SA-195-Midway-Benton/Benton-Othello Corridor Maintenance)

TO: William Erickson  
Natural Resource Specialist – TFP/Walla Walla

**Proposed Action:** Vegetation Management for the subject transmission line corridor from Tower 11/7 to Tower 25/1. The corridor consists of the Midway-Benton #1 and #2 and the Benton-Othello Transmission Lines. The lines range from 115 to 230 kV and have easement widths ranging from 287 to 500 feet. The proposed work will be accomplished in the indicated sections of the transmission line corridor as referenced on the attached checklist.

**Location:** The subject right-of-way is located in Benton County, WA. being in the Walla Walla Region.

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

**Description of the Proposal:** The work will include vegetation management the areas indicated above. Maintenance will include the control of all brush species within 30 feet of steel transmission structures, 25 feet around wood pole structures and control of vegetation in and along the associated access roads. Vegetation control will be by manual, mechanical and herbicidal treatments. Around the transmission line structures, cut stumps are not to be taller than 4 inches. In access roads, cut stumps will be horizontal to the ground to prevent personal injuries and tire puncture. All un-mulched debris and slash will be pulled out of the cut area for the structures while all un-mulched debris will be pulled back 10 feet from the access roads. Ground broadcast of appropriate herbicides to prevent re-establishment of treated brush will be utilized.

**Analysis:** A checklist was completed for this project in accordance with the requirements identified in the BPA Transmission System Vegetation Management Program FEIS (DOE/EIS-0285). The checklist evaluated the following areas:

- *Description of right-of-way and vegetation management needed*
- *Vegetation to be controlled*
- *Surrounding land use and landowner*
- *Natural Resource*
- *Vegetation control methods*
- *Debris disposal*
- *Monitoring*
- *Appropriate environmental documentation*

**Findings:** This Supplement Analysis finds that 1) the proposed actions are substantially consistent with the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285) and ROD, and; 2) there are no new circumstances or information relevant to environmental concerns and bearing on the proposed actions or their impacts. Therefore, no further NEPA documentation is required.

/s/ Ken Hutchinson

Ken Hutchinson  
Environmental Scientist

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

DATE: 4/2/2004

Attachment

cc:

L. Croff – KEC-4  
T. McKinney – KEC-4  
J. Meyer – KEP-4  
J. Sharpe – KEPR-4  
K. Hutchinson – KEPR/Walla Walla  
P. Key – LC-7  
J. Hilliard Creecy – T-DITT-2  
K. Rodd – TF/DOB-1  
R. Duncan – TFP/Walla Walla  
M. Richardson – TFP/Walla Walla  
G. Wilfong – TFPF/Pasco  
Environmental File – KEC  
Official File – KEP-4 (EQ-14)

# Vegetation Management Checklist

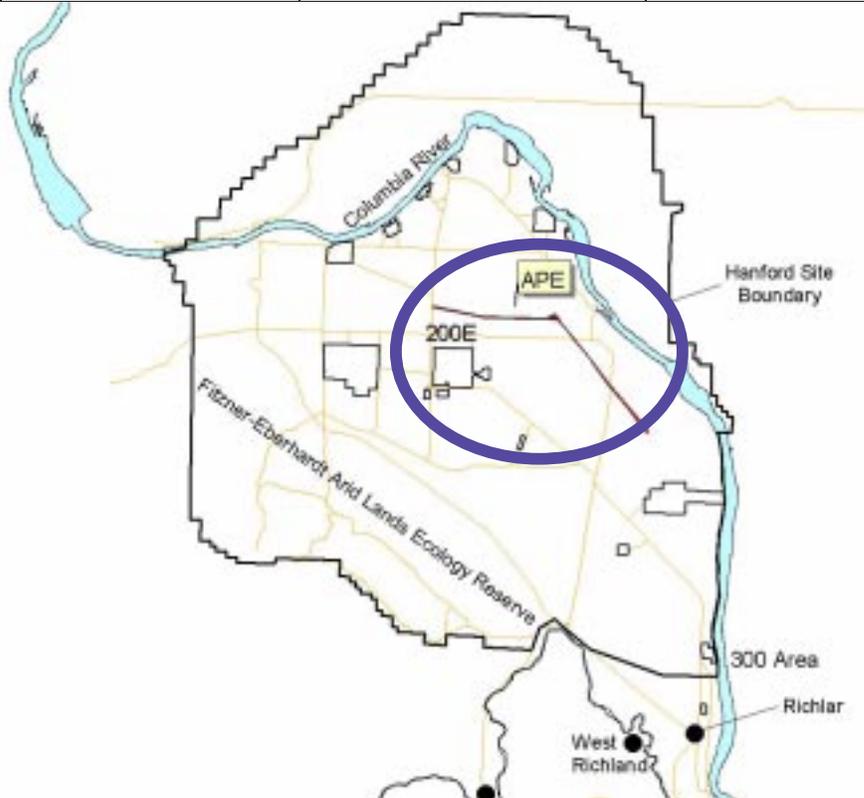
# 1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

## 1.1 Describe Right-of-way. Midway-Benton/Benton-Othello Corridor.

### Access road and Vegetation Management

See Handbook — List of Right-of-way Components for checkboxes and the requirements for the components Rights-of-way, Access Roads, Switch Platforms, Danger Trees, and Microwave Beam paths.

Corridor Name	Corridor Length & kV	Easement width	Miles of Treatment
Midway Benton #1	28 mi 115 kV	287 to 500	11/7 -159 to 24/1
Midway Benton #2	Mi 230kV		11/5+ 100 to 25/1
Benton Othello	8 mi 115 kV		5/10 to 11/7



### Access Roads:

Maintenance crews use access roads to get to the transmission-line towers, substations, and other facilities.

**Requirements:** Access roads have to be sufficiently free of vegetation so that our crews and their necessary machinery and vehicles can safely and efficiently travel over them to the electric facility for emergency and routine maintenance work. Vegetation management will also reduce the potential of fire hazards from vehicles that use these roads during dry weather. Noxious weeds are present in the area.

**Current Practice:** Access roads that we maintain are generally unimproved dirt or gravel roads. We keep them clear of trees and brushy vegetation, using manual cutting tools, machines on wheels or tracks, and herbicide sprayed with backpack sprayers and truck-mounted booms.

**Access roads and Tower sites** will be treated using non-selective methods that include, hand cutting, herbicides and mechanical means.

**Right Of Way:**

**Transmission Structures** – 230+ structures

**Access Road clearing** - approximate miles 25+ miles– up to 42 acres

**Tower Clearing Specifications:**

- Control all brush species within 30 ft. of steel transmission structures and 25 feet around wood pole structures. Cut stumps are not to be taller than 4 in. These species include big sagebrush, gray rabbitbrush, green rabbitbrush, and other vegetation that, by size or density, might hinder routine inspection and maintenance work or make roads and work areas hazardous.
- Pull all un-mulched debris and slash out of the cut area around transmission structures.
- Ground broadcast an appropriate herbicide to prevent re-establishment of treated brush species.

**Access Roads Specifications:**

- Control all vegetation except grasses, to enable safe driving.
- The access road is to be 14 ft. wide. Cut stumps are not to be taller than 2-3 inches in the roadbed.
- Cut stumps horizontal to the ground to prevent personal injuries and tire puncture.
- Pull all un-mulched debris back 10 feet from the access road.
- Ground broadcast an appropriate herbicide to prevent re-establishment of treated brush species.

**1.2 Describe the vegetation needing management.**

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

Rangeland: Sagebrush Bunchgrass. Rainfall 6-10 inches

Big sagebrush, gray and green rabbitbrush, and other brush species

Sandy and Sandy Loam soil to silt loam. 6-12 inch

Noxious weeds:

**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.

Not Promoting Low Growing Plant Communities.

Project only entails the clearing of roads and tower sites to facilitate access maintenance.

**1.4 Describe overall management scheme/schedule.**

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

**Description of the Proposed Action:** BPA proposes to clear unwanted vegetation in the access roads and around tower structures that may impede the operation and maintenance of the subject transmission line. All work will be in accordance with BPA standards. BPA plans to conduct vegetation control with the goal of removing growing vegetation that is currently encumbering access to the transmission line.

The work will provide system reliability.

**Initial entry –**

Using hand cutting or mechanical means, BPA will complete brush management on the access roads and towers. Vegetation is currently encumbering the access roads and towers of the power lines; If needed, treat the associated stumps and stubble with herbicides (spot, localized, and broadcast treatments) to ensure that the roots are killed preventing new sprouts and selectively eliminating vegetation that prevents access to the power lines or creates a fire hazard. Noxious weed will be controlled when appropriate.

Vegetation management will occur before and after access road maintenance that may include grading, blading and shaping, and rock placement. Reseeding will occur if there is limited vegetation to re-establish the site, or soil disturbance has removed the existing vegetation. Areas with disturbed soils will be replanted or reseeded with low-growing grasses.

Keeping trucks and equipment on designated access roads will not disturb desirable plants on the ROW. All work will take place in existing access roads or ROW.

Slash and debris will be pulled at least 10 feet from the road surface and loped and scattered, or it will be mulched mechanically. Herbicides may be used to prevent the re-growth of bush species.

**Subsequent entry-**

The vegetation management program will be designed to provide a 3-8 year maintenance free interval. The overall vegetation management scheme will be to initially clear and remove all encumbering vegetation using a combination of manual, herbicide and mechanical treatments as outlined in the initial treatment

**Future cycles -**

Future cycles of work will involve hand cutting and mechanical treatments. During routine patrols, the ROW will be examined for encumbering vegetation and removed as necessary.

## 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.

The entire site is on the Hanford Reservation.  
BPA is to contact DOE before work begins.

### 2.2 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](#).

The PNNL has identified various mitigations for biological issue and Cultural issue. Note Specific Sections for details

### 2.3 Review any existing landowner agreements (e.g. tree/brush Permits or Agreements). List in table above any provisions that need to be followed and where they are located.

See handbook — [Landowner Agreements](#) for requirements.

See above

The following landowners have responsibility for vegetation maintenance.  
NONE

### 2.4 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.

Site currently closed to the public

### 2.5 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.

BPA has contracted with Pacific Northwest National Laboratory to perform a cultural and Ecological review during this process. Which has lead to the consultation with the Yakama, Umatilla, Wanapum, Colville, and Nez Pierce tribes. Results of this review are noted in the Cultural section of this checklist.

## 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.

NONE Present

**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 Present

**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.

BPA contracted with the Pacific Northwest National Laboratory to perform a Biological review of the project.

The following recommendations need to be implemented in order to limit biological effects of our maintenance activities.

**Ferruginous Hawks** nest are in the area on the Midway Benton # 2 line. Follow the mitigations as listed below.

Based on the submitted ecological resources report, it is the finding of PNNL that no plant or animal species protected under the Endangered Species Act, candidates for such protection, or species listed by the Washington State government as threatened or endangered were observed in the vicinity of any of the sections of the Midway Benton Transmission line Corridor.

Areas of concern are as follows:

Tower Locations of Ferruginous Hawks

ACTIVITY BUFFERS AND PERIODS-Ferruginous HaWKS

**MOST CRITICAL PERIOD-INCUBATION**

Brief human access and intermittent ground-based activities should be avoided within a distance of 250 m (820 ft) of nests during this sensitive period. (1 March to 31 May).

**BREEDING SEASON ACTIVITIES**

Prolonged activities (0.5 hr to several days) should be avoided, and noisy prolonged activities should not occur, within 1 km (0.6 mi) of the nests during the breeding season (1 March to 15 August).

Construction, major work, or other developments near occupied nests should be delayed until after the young have dispersed, which generally occurs about a month after fledging.

**HELICOPTER PATROLS:**

BPA helicopter patrols should note the specific critical periods that may impact these nest sites. Avoid rotor wash on towers with visible nests present.

**FERRUGINOUS HAWKS CRITICAL PERIODS**

<b>Nesting Event</b>	<b>Timing</b>	<b>Critical Nature</b>	<b>Activities</b>
Hawks on wintering area. (Outside of the state of Washington)	Aug 15- Feb 20	None	Best time for tower maintenance/helo patrol- avoid helicopter wash over nests
Courtship/Territory establishment	Feb 21- Mar 20	Insures nest activity	Emergency work, brief helicopter flights, brief visits to tower, No non- essential climbing
Incubation	Mar 21- June 4	Essential to productivity	Emergency only, high probability of nest failure if tower is climbed. Only Emergency Helicopter patrols.
Nestling	June 5- June 19	Young raised	Emergency only, brief flights, brief visits to tower, no climbing
Fledging	June 19- Aug 14	Young independence	Emergency, avoid any prolonged tower activity – greater than 30 minutes.

<b>Midway Benton #2</b>	<b>21/4, 21/3 or 22/1</b>
<b>Midway Benton #2</b>	<b>23/1</b>
<b>Midway Benton #2</b>	<b>23/4</b>
<b>Midway Benton #2</b>	<b>26/1</b>
Ashe MHEW #2	9/5
White Bluffs – 451B	5/3
White Bluffs – 451B	6/1 or 6/2
White Bluffs – 451B	7/4
Ashe-White Bluffs #1	9/3

**VEGETATION MANAGEMENT SENSITIVE PLANT SPECIES:**

No Sensitive Plants were Identified

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

See Handbook — **Protecting Other Species** for requirements.

See above

- Grass seeding with mixtures indicated in Section 5.2.
- The proposed activities are not likely to adversely affect the local population of jackrabbits.

- Workers should stay on established roads, except to access the poles, and disturbance to sagebrush should be minimized to the extent possible. Workers need to minimize the off road use to the extent needed to do the work and maintain safety of the job.
- If any

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

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

NONE

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

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

The PNNL has identified an area of Historical nature in the right of way between Structures 19/6 and 19/7. BPA maintenance needs to avoid the area. The area has been marked with permanent markers

In the future, during all BPA activities, BPA workers shall ensure that the following stipulations are implemented when conducting maintenance:

- *All workers will watch for cultural materials (e.g. bones, artifacts) during all work activities. If any are encountered, work in the vicinity will stop until an HCRL archaeologist has been notified, assessed the significance of the find, and, if necessary arrange for mitigation of the impacts to the find.*
- *BPA employees and contractors will also follow the policy for discovery of cultural materials if artifacts are encountered.*
- *BPA will avoid ground disturbance outside existing rights-of-way and road easements. All activities and staging areas must remain on the BPA Right of Way.*
- *The HCRL will be notified of any changes to project locations or if the scope of and future projects change.*
- *The TLM Foreman III will be responsible for making crews aware of the sensitivity of the island and the requirements of this tech note before work begins in the area.*

### **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.

Erosion treatments and seeding will be applied to eroding areas.

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

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

NONE

#### 4. DETERMINE VEGETATION CONTROL METHODS

See Handbook — [Methods](#)

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

###### WHEN THERE ARE NO ENVIRONMENTAL CONSTRAINTS

Land with no environmental constraints. Available: all manual, mechanical, biological, and herbicidal treatments

**Manual:** Hand tools and chainsaws.

**Mechanical:** Can be used on roads and towers, all areas suitable for mechanical treatment. No ground disturbing activities on slopes over 20%.

**Herbicide:** Glyphosate, Picloram, Imazapyr, picloram, 2,4-d, Triclopyr (Garlon 3A and Garlon 4), Dicamba may be prescribed for spot-foliar, cut stubble and broadcast-foliar treatments. In addition, Escort and clopyralid can be used for spot foliar and broadcast treatments.

#### 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.

- 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.)
- Other – Pull un-mulched debris back 10 feet from road surface and 25-30 feet from tower area.

##### 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.

**If re-seeding is needed, mixtures of the following grasses will be used**

Approved and Suggested seeds	*Native	Reason for seeding
Mixes can be developed from the following seed species. Based on site and adaptation. Sandy and Sandy loam soils, silt loams 6-12 inch precipitation	N-Native I=Introduce d	Re-vegetate area where soil disturbance has occurred and to re-establish ground cover to prevent erosion.
<u>Name</u>		
Indian Ricegrass	N	
Thickspike wheatgrass	N	
Bluebunch Wheatgrass	N	
Sand dropseed	N	
Needlegrass	N	
Siberian wheatgrass	I	
Crested Wheatgrass	I	
Sheep Fescue	N	
Big Bluegrass	N	

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

Natives will be considered in all mixes.

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

Native seeds will be considered in all mixes. Seeding should be completed in the early fall when there is enough moisture to allow for seedling to develop to the 4-5 leaf stage before winter or in the late fall or winter when the soil temperature is below 40 degrees F. Broadcast seeding with follow up harrowing is one method of seeding for small area. Mulching with weed free straw or hydro mulching may be required to prevent wind erosion in the spring.

**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.**

Site will be inspected during treatment. In addition routine patrols by BPA ground and aerial patrols.

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

Routine patrols by BPA ground and aerial patrols.

**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”.**

No

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

No