DOE F 1325.8e Electronic Form Approved by CILR – 10/08/2002
(08-89)

United States Government **Department of Energy**

Bonneville Power Administration

memorandum

DATE: November 05, 2004

REPLY TO ATTN OF: KEP-4

SUBJECT: Supplement Analysis for the Transmission System Vegetation Management Program FEIS (DOE/EIS-0285/SA 232- Lower Monumental-Hanford **Project #: V-P-05/01**

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

Proposed Action: Vegetation Management along the Lower Monumental-Hanford (tower 42/1 to 47/3) 500kV transmission line corridor.

Location: Lower Monumental – Hanford 500 kV Transmission line in Grant and Franklin counties, Washington, in BPA's Walla Walla Region.

Proposed by: Bonneville Power Administration (BPA).

Description of the Proposal: BPA proposes to clear unwanted vegetation within access roads and around tower structures that may impede the operation and maintenance of the subject transmission lines. The work will include the performance of tower pad maintenance and access road maintenance from structure 42/1 through 47/3. Maintenance will include the control of all brush species within 50 feet of transmission structures and controlling all vegetation, except grass along the access roads to provide a 12-20-foot width for travel. Noxious weed management will also occur on the rights-of-way where needed.

Analysis: Vegetation Management Checklist was completed for project corridors in accordance with the requirements identified in the Bonneville Power Administrations Transmission System Vegetation Management Program FEIS (DOE/EIS-0285). Section 3 of the checklist identifies the natural resources present in the area of the proposed work. The following summarizes natural resources occurring in the project area along with applicable mitigation measures. Since the work site is on the Hanford National Monument, which contains numerous cultural and biological resources, BPA has contracted with US Fish and Wildlife Service to perform a cultural and biological review to determine if any of these resources would be impacted during the vegetation management work.

Water Resources: Water bodies (streams, rivers, lakes, wetlands) occurring in the project area are listed in section 3.1 of the vegetation management checklist. As conservation and avoidance measures, only Practically Non-toxic formulations (to aquatic species) formulations of Garlon 3A may be prescribed for wick, and spot-foliar treatments (localized), will be used within a 100-foot buffer up to the waters edge of any stream, pond, wetland, or other sensitive habitat. However, aquatic formulations of Chlorsulfuron, Glyphosate and Metsulfuron-methyl may be utilized for spot and localized treatment within one yard of the waters edge. Additionally, no mechanical treatments will be used within a 100-foot buffer up to the waters edge of any stream, pond, wetland, or other sensitive habitat.

No ground disturbing vegetation management methods will be implemented thus minimizing the risk for soil erosion and sedimentation near the streams.

No drinking water, irrigation wells, or water supplies were identified along the rights of way for either line associated with this project.

Threatened and Endangered Species/Essential Fish Habitat: Pursuant to its obligations under the Endangered Species Act, BPA has made a determination of whether its proposed project will have any effects on any listed species. A Biological Resource Survey for endangered, threatened and rare/sensitive plant and wildlife species was conducted for the project area by the United States Fish and Wildlife Service (USFWS). No rare/sensitive plant or wildlife species were found of concern within the project corridor. A determination of No Effect was made for all ESA listed species and designated critical habitat for the project and for Essential Fish Habitat.

Cultural Resources: The United States Fish and Wildlife Service (USFWS) conducted a Cultural Resource Survey for the project area. As recommended, BPA will limit access to the transmission structures via the existing roads, no new roads will be created to the structures, therefore there will not be an impact to the site. Additionally, an historic irrigation pipeline associated with the Wiehl Ranch appears to cross the transmission right of way, BPA will avoid ground disturbance along the projected pipeline. Washington State Office of Archaeology and Historic Preservation concurred with the report findings and conclusion of no effect.

Re-Vegetation: Re-vegetation needs will be determined onsite. Any areas identified with limited ground cover will be replanted with native plant species.

Monitoring: The entire project will be inspected during the work period. Additionally the line will be patrolled annually after treatment to monitor the effectiveness of the treatment and any issues associated with the project.

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/ John Howington
John Howington
Physical Scientist

/s/ Thomas C. McKinney DATE: 11/9/2004
Thomas C. McKinney
NEPA Compliance Officer

Attachments:
United States Fish and Wildlife Service: Hanford Reach National Monument. Biological Resource Survey, Lower Monumental Hanford Transmission Line and Access Roads. Prepared by Kevin Goldie, Wildlife Biologist, July 20, 2004

United States Fish and Wildlife Service: Hanford Reach National Monument. Cultural Resource Report, Lower Monumental Hanford Transmission Line Structures 42/1-47/3. Prepared by Jenna Gaston, Norm Henrikson, Rose Ferri & Jenny Barnett, August 2004

Bonneville Power Administration Effects Determination For Threatened And Endangered Species (Endangered Species Act)

State of Washington, Office of Archaeology and Historic Preservation. Cultural Resource Report Concurrence letter, October 11, 2004. Prepared by Robert Whitlam.

cc:
L. Croff – KEC-4
T. McKinney – KEC-4
J. Meyer – KEP-4
J. Sharpe – KEPR-4
K. Hutchinson – KEPR/Walla Walla
H. Adams – LC-7
J. Hilliard Creecy – T-DITT2
K. Rodd – TF/DOB-1
M. Richardson – TFP/Walla Walla
G. Wilfong – TFPF/Pasco
Environmental File – KEC-4
Official File – KEP (EQ-14)

Jhowington:tmb:4722:11/1/2004 (KEP-KEPR-4-W:\EP\2005 FILES\EQ-14-Supplement Analysis\FEIS-0285-SA-232-Lower Monumental-Hanford.doc)

Vegetation Management Checklist
Lower Monumental-Handford

Project #: V-P-05/01

1. IDENTIFY FACILITY AND THE VEGETATION MANAGEMENT NEED

1.1 Describe Right-of-way. Lower Monumental Hanford

Corridor Name	Corridor Length & kV	EASEMENT WIDTH	MILES OF TREATMENT
Lower Monumental Hanford Scooteney Tap	55 miles 500 kV 28 miles 115 kV	267	42/1 to 47/3

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.

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 – 58 structures

Access Road clearing - approximate miles 5 miles– up to 18 acres

Tower Clearing Specifications:

- Control all brush species within 50 ft. of transmission 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 50-ft. 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 12-20 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.

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 Knapweeds Thistles

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.

Not Promoting Low Growing Plant Communities, Describe Why?
Project only entails the clearing of low brush on roads and tower sites to facilitate access maintenance, and the control of noxious weeds.

1.4 Describe 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.

Vegetation management will occur before and after access road maintenance that may include grading, blading and shaping, and rock placement. Re-seeding 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.

The entire site is on the Hanford National Monument and is managed by the US Fish and Wildlife Service.
BPA is working with F&W

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.

The US Fish and Wildlife Service has requested that when using herbicides on the National Monument, that only the listed herbicides be used for vegetation management. BPA will work with these herbicides on US Fish and Wildlife lands unless it is determined that the inability to use other BPA approved herbicides would interfere with the operation and maintenance of the Federal Columbia River Transmission System per the Hanford Reach Proclamation.

The Monument has also requested that Native species be used for re-vegetation work.

Monument Approved Herbicides: as of 10/25/04

Jack Heisler
Refuge Operations Specialist
Hanford Reach National Monument
(509) 371-1801

1) Weedar 64; EPA reg # of 71368-1; (2-4-D Amine)
2) Arsenal; 241-346; (imazapyr)
3) GlyphoMate 41; 2217-847; (glyphosate (aquatic)
4) Mirage; 524-445-34704; (glyphosate)
5) Oust XP; 352-601; (Sulfometuron methyl)
6) Plateau; 241-365; (ammonium salt of imazapic)
7) Roundup Pro; 524-308; (glyphosate)
8) Transline; 62719-259; (clopyralid)
9) Escort; 352-439; (Metsulfuron methyl)
10) Tordon 22K; 62719-6; (picloram)
11) Telar DF; 352-522; (chlorosulfuron)

"Several of these herbicides were approved for either a particular species or application method. Most are for general use within existing regulations and will not impact our ability to treat weeds in/along roads as we currently have an on-going program for weed control as part of our own road maintenance program."

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 above
The following landowners have responsibility for vegetation maintenance. (Identify spans where BPA doesn't cut due to landowner agreements — Christmas tree farm, orchard, etc.)

N/A

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.

Site currently is open to the public. White Bluffs-Waluke habitat area.

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.

BPA has contracted with US Fish and Wildlife Service to perform a cultural and Ecological review during this process. Consultation with SHPO, Yakama, Umatilla, Wanapum, Colville, and Nez Pierce tribes occurred. Results of this review are noted in the Cultural section of this checklist. (9/04)

3. IDENTIFY NATURAL RESOURCES

3.1 List any water resources (streams, rivers, lakes, wetlands) that may be impacted by vegetation control activities. For each water body describe the control methods and requirements or mitigation measures that will be used.

Span To	Water body	T&E?	Method	Herbicide	Application Technique	Buffer
47/3+	Columbia River	Yes	Manual Herbicide mechanical	See list from Sec 2.3	Spot, localized Ground Broadcast,	See specs

T & E Rivers: Lands 100 ft of a stream, water and wetlands. Available: all manual, spot and localized herbicide, and biological treatments. No mechanical treatments within 100 feet of streams or wetlands.

Manual: Hand tools and chainsaws.

Mechanical: None, within 100 feet of streams or wetlands except for Access Roads and Tower sites.

Herbicide: Only Non-toxic formulations and slightly toxic (to aquatic species) formulations of glyphosate (such as Rodeo®), clopyralid, Telar, Escort, and 2,4-D and picloram may be prescribed for wick, and spot-foliar treatments (localized). Ground Broadcast treatments can be completed with the appropriate buffers on access roads and tower sites.

Table III-1: Buffer Widths to Minimize Impacts on Non-target Resources *

Herbicide & Adjuvant Ecological Toxicities and Characteristics	Buffer Width from Habitat Source per Application Method (i.e., stream, wetland, or sensitive habitat)				
	Spot	Localized	Broadcast[1]	Aerial[2]	Mixing, Loading, Cleaning
Practically Non-Toxic to Slightly Toxic	Up to one yard	Up to one yard	60 feet	30.5m[4] (100 ft.)	30.5m[5] (100 ft.)
Moderately Toxic, or if Label Advisory for Ground/ Surface Water	7.6m[3,4] (25 ft.)	10.7m[3,4] (35 ft.)	30.5m[3,4] (100 ft.)	76.2m[4] (250 ft.)	76.2m[5] (250 ft.)

Highly Toxic to Very Highly Toxic	10.7 m[3,4] (35 ft.)	30.5m[3,4] (100 ft.)	Noxious weed control only. Buffer as per local ordinance	Noxious weed control only. Buffer as per local ordinance	76.2m[5] (250 ft.)

The buffers in this table are to be used unless other agencies, local authorities, or T&E consultations require more strict buffers. In cases of more strict local buffers, those would apply.
See table 7a for general aquatic toxicities of and label advisories of the active ingredients.
1) Using ultra low volume (ULV) nozzles with orifice size and spray pressure set to produce droplets at a minimum of 150 microns, boom or nozzle heights at the lowest possible height, and crosswind speed of less than 10 mph.
2) Using ULV nozzles with orifice size and spray pressure set to produce droplets at a minimum of 150 microns, minimizing air shear relative to nozzle angle and aircraft speed, boom length at 70% or less of wingspan/rotor, swath adjustment not to exceed 60 feet based on maximum cross-wind speed of less than 10 mph, minimum safety clearance application height, and herbicide tank mixture dynamic surface tension is less than 50 dynes/cm.3
3) Goodrich-Mahoney, J.W., Determination of the Effectiveness of Herbicide Buffer Zones in Protecting Water Quality, Electric Power Research Institute, Report No. TR-113160, September 1999
4) Calculated from: A Summary of Ground Application Studies, Spray Drift Task Force, 1997
5) BPA Best Management Practice
* Changes Made to reflect Washington Toxics Coalition ruling

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).

None

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.

BPA contracted with the USFWS to perform a Biological review of the project. There are no plant or animal species protected under the Federal ESA or candidates for such protection that were observed in the vicinity of the project area.

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

See above

Grass seeding with mixtures indicated in Section 5.2.

To minimize potential impacts to nesting migratory birds, it is recommended that all ground or vegetation disturbing activities take place prior to April 15th.

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

None

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

A cultural resources review completed for the U.S. Department of Energy, Bonneville Power Administration, Walla Walla Region by the USFWS located in Richland, Washington.
The results of the records and literature review conducted by staff are described in the attached reviews. As indicated in the review, the USFWS finds that our activities will have no affect on historic resources. BPA concurs with this recommendation.

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

Erosion treatments and seeding will be applied to eroding areas.

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

N/A

4. DETERMINE VEGETATION CONTROL METHODS

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

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, Imazapyr, 2,4-d, Tordon 22k, clopyralid, Escort, Telar, and dicamba may be prescribed for spot-foliar, cut stubble and broadcast-foliar treatments.

5. DETERMINE DEBRIS DISPOSAL AND REVEGETATION

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

☑ 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 50 feet from tower area.

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

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

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