

# Kangley-Echo Lake Transmission Line Project DEIS Appendix C – Final Vegetation Technical Report

Comments from Seattle Public Utilities  
September 4, 2001

*DEIS Appendix Citations in italics; SPU comments in normal font.*

## **1.2.3 Removal of Forest within the Cedar River Watershed**

*"The HCP for the CRW proposes strict limitation of logging and other forest conversion within the watershed."*

The proposed action is not a "covered activity" under the Cedar River Watershed (CRW) Habitat Conservation Plan (HCP). The DEIS and technical appendix should clearly disclose that the proposed action is not a "covered activity" and provide an evaluation of this circumstance.

### **1.3.1 Uniformity of Vegetation Communities Between Alternatives**

*"Because most of the project area is second-growth forest that has been actively managed since around 1920, the existing forest stands are more or less uniform, with only slight variation in age and size classes between stands."*

Though forests in the project area have been harvested in the past, existing forest communities provide a high diversity of habitats for forest-dwelling species. More importantly, the CRW HCP provides long-term protection status to forests in the CRW. Thus, these forests will continue to age and provide increasingly unique, low elevation conifer forest habitats in the rapidly developing Puget Sound region. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

### **2.1 Data Sources and Study Methods**

*"Washington Department of Natural Resources (WDNR) Natural Heritage Program (NHP) lists of threatened, endangered, and other special-status plant species."*

Though this database is an important resource, it relies on contributed information and should only be used as a crude guide to species distributions.

*"It was also assumed...that vegetation in an additional 75 ft zone on either side of the cleared area would be partially cleared ..."*

This is inconsistent with the statement in Appendix B and information provided in Section 1.1.1.5 of this report that indicate 50 to 60 ft would be partially cleared. The DEIS, its technical appendices, and associated permitting documents need to present a complete and consistent description of the proposed action. Such inconsistencies make this DEIS difficult to review and evaluate. In any case, if this approach applies to Alternative 1, as the text suggests, does this mean that both sides of the 300 ft total ROW will be treated in this way, resulting in a 450 ft wide managed ROW? The DEIS and technical appendage should be explicit about this.

This analysis also apparently fails to describe impacts associated with clearing new (temporary and permanent) roads and staging areas, as well as short- and long-term impacts of the 50 ft temporary

construction easement previously mentioned verbally by BPA to CRW staff (but not mentioned in the DEIS). The DEIS and its technical appendices should explicitly discuss impacts associated with temporarily disturbed areas. SPU believes Table 5 underestimates habitat impacts.

## **2.2 Agencies Contacted**

No private landowners were contacted.

## **3.1 Regional Overview**

*"The project area lies almost entirely within second-growth forests that have been maintained in timber production for most of the last 150 years."*

This is true. However, there is no mention that the CRW HCP effectively places CRW forests in long-term protection status. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

The DEIS and technical appendix indicate the most prevalent plant communities in the project area are TSHE/POMU and TSHE/TITR communities. However, paragraph 4 of this section indicates vegetation in the project area is dominated by PSME (Douglas-fir). The DEIS and technical appendix need to present a complete and accurate analysis of vegetation and potential impacts.

## **3.2 Regulations, Standards, and Guidelines**

*"The CRW HCP outlines proposed regulation of activities within the watershed."*

Again, there is no mention that the CRW-HCP effectively places forests in the CRW in protection status and that forest management activities in the CRW are for restoration purposes. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

## **3.3 Project Area and Approach**

*"The project area for vegetation is a 0.5 mi. corridor centered on the ROWs of the proposed alternatives."*

The definition of project area is inconsistent with Final Wildlife Technical Report, which describes the project area as being within 0.25 mile of the ROW. The DEIS and technical appendices need to indicate why the study area or project area for this environmental analysis varies among disciplines.

## **3.4 Transmission Line Alternatives**

*"Twelve major vegetation cover types were defined and mapped for this project (Figure 3). Their relative areas are shown in Figure 4. The 12 cover types are described below:*

- **Coniferous forested, early seral** ...generally less than 20 years old...
- **Coniferous forested, mid-seral** ...range in size from 12 to 20 in. DBH and ... generally in the range of 15 to 35 years...
- **Coniferous forested, late seral** ...tends to be 36 to 75 years old... range in size from 18 to over 36 in..."

These definitions of seral classes are not accurate. While many variables are involved in the identification of seral class, most professionals in this field would not consider a 40- or 60-year-old west-Cascadian Douglas-fir forest as late-seral. The DEIS and technical appendix should use standard definitions of seral class.

*"Forested communities within the project area have been further sorted into one of four age classes. Due to the history of timber management in the project area, the age classes chosen reflect typical rotation and/or thinning intervals in timber production."*

Timber production schedules are no longer relevant in CRW. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut, not on typical rotation or thinning intervals for timber production.

The DEIS and technical appendix fail to distinguish the distinct, regenerated forest habitat that lies in a strip adjacent to and west of the preferred option. This narrow strip of forest appears to have been cleared of vegetation during construction of the original ROW, but has been allowed to regenerate. As a result, there is an approximately 50 ft band of younger mixed forest (approximately 30 to 50 years old) immediately adjacent to roughly 60 percent of the existing ROW in the CRW. SPU can provide maps delineating this strip. This forest strip coincides with the location of the proposed preferred alternative. The forest outside this strip is generally approximately 60 to 80 years old. The DEIS and technical appendix fail to accurately describe existing conditions. BPA's environmental analysis for this project should be conducted using accurate observations of the forest resources it proposes to permanently clearcut.

### **3.7.2 Survey and Manage Species**

*"Therefore, Survey and Manage requirements are not applicable to this project."*

This is not clear. If BPA owns land "in fee," then that land is federally owned and managed. The DEIS and technical appendix should clarify why such ownership allows BPA to avoid Survey and Manage requirements?

### **3.8 Noxious Weeds...**

*"Scotch broom commonly occurs in the highly disturbed areas of clear-cuts, as well as along the existing transmission line..."*

This statement suggests BPA has actively allowed noxious weeds to invade and persist in their existing ROWs. In fact, this is the case along BPA ROW in the CRW. The DEIS and technical appendix should recognize and explain this existing management approach, and then describe exactly how BPA proposes to manage its existing and proposed ROWs for noxious weeds in the future. If BPA intends to neglect active and effective management of noxious weeds in its ROW, as it does now, then the DEIS and technical appendix need to disclose this information.

The DEIS and technical report should acknowledge that two new noxious weeds have been located in the lower portion of the CRW: yellow hawkweed (*Hieracium caespitosum*) and spotted knapweed (*Centaurea maculosa*). The environmental analysis should take these species into consideration.

## **4.0 Environmental Consequences and Mitigation**

*"Table 3" and "Table 4"*

These tables include redundant information; the numbers contained therein do not correlate between tables. The DEIS and technical appendix need to present pertinent data clearly.

### **4.1.1.1 Impacts**

*"We have used 75 ft on either side of the ROW as an assumption for the analysis."*

This number is not consistent through the DEIS. In 4.1.3.1 of this technical appendix the width is 45 ft; 50 ft was widely referenced in the DEIS. The environmental analysis used in the DEIS and its technical appendices needs to be based on complete and consistent description of the proposed action.

*"In some cases, forested stands, even within the maintained ROW, would not require clearing."*

The DEIS and technical appendix should specify where these cases occur in the CRW, especially relative to the Cedar River.

This section also fails to mention that an acre or less of wetland habitat will be permanently converted due to filling, as is described in the Final Wetland Technical Report.

#### **4.1.1.2 Mitigation**

The DEIS and technical appendix make no commitment to mitigate for the loss of forest habitat, or other vegetated habitat. While the feasibility of meaningfully mitigating for the loss of forest habitat is debatable, BPA should commit to mitigating the permanent loss of the 150 to 200 acres of long-term forest it proposes to clearcut.

*"Develop and implement aggressive vegetation management programs to limit colonization by non-native species and eradicate noxious weeds within the transmission line ROW."*

The DEIS and technical appendix should describe methods for maintaining native plants and managing noxious weed species without the use of herbicides (which are not allowed in the CRW) so reviewers can evaluate their potential efficacy. Statements indicating "an aggressive vegetation management program" will be developed and implemented are inadequate and not able to be evaluated by reviewers. The DEIS and technical appendix should describe the noxious weed management program (without herbicides) that will be implemented. A monitoring program (including adaptive management) needs to be part of that program.

Also, this statement implies BPA implements active and effective noxious weed management programs. In fact, however, the BPA ROW in (and outside of) the CRW is a significant avenue of dispersal and location of infestation for noxious weeds. The DEIS and technical appendix should recognize and explain this existing management approach, and then describe exactly how BPA proposes to manage its existing and proposed ROWs for noxious weeds in the future. If BPA intends to neglect active and effective management of noxious weeds in its ROW, as it does now, then the DEIS and technical appendix need to disclose this information.

*"Use only certified weed-free straw..."*

Weed-free straw will typically have been treated with herbicides. The DEIS and technical appendix need to address this situation, including the specific herbicides and their quantities that would be introduced to the CRW. The DEIS and technical appendix need to evaluate such contamination and the associated risks to water quality as part of this environmental analysis. Also, SPU is aware that certified weed-free straw is difficult to obtain locally. The DEIS and technical appendix should describe exactly what "certification" means in this case, who certifies that straw, and under what conditions that straw will need to have been grown to be certified.

#### **4.1.3.1 Alternative 1 Mitigation**

BPA proposes to permanently convert 118 ac of forest to early successional habitat. This forest would otherwise have been managed to achieve late successional characteristics in CRW. The DEIS and technical appendix should commit to compensatory mitigation for such conversion.

Consistently throughout the DEIS and its technical appendices, there is no acknowledgement that the CRW HCP effectively places forests in the CRW in protection status and that forest management activities in the CRW are for restoration purposes. The DEIS and technical appendix should acknowledge the unique long-term forest protection status provided by the HCP. BPA's environmental analysis for this project should be conducted recognizing the increasing regional biodiversity value of the forest it proposes to permanently clearcut.

#### **4.1.3.6 Access Roads**

*"For the purposes of assessing new access road impacts, a 20-ft road cross section was assumed. Existing access roads are generally 24 ft across, and the actual new access road width would be 16 ft."*

This information is not consistent within the DEIS. In Chapter 2 (2.1.1.5), new roads outside of the ROW would require a 50 ft easement, which includes 16-22 ft of road surface and 10 ft of drainage ditches on either side. The environmental analysis in the DEIS and its technical appendices should be based on consistent dimensions of the project features. The DEIS and technical appendices should commit to compensatory mitigation for permanently converting forest and other vegetated habitats to impervious road surfaces. The DEIS and technical appendix should also evaluate the impacts of constructing mitigation (such as stormwater ponds) for water quality and quantity that will likely be required by the National Marine Fisheries Service for constructing 1 to 2 miles of new impervious surface in basins tributary to waters that support threatened species such as Chinook and coho salmon. Also, in this section, the DEIS and technical appendix should specifically consider BMPs for preventing erosion and protecting water quality. This section also fails to discuss or account for temporary roads and staging areas.

#### **4.1.3.7 Cumulative Impacts**

Cumulative impacts are incompletely evaluated. The DEIS and technical appendix should present a complete evaluation of cumulative impacts. Commitments to compensatory mitigation should be included in that evaluation.

#### **4.2.2.1 Impacts**

*"Any such spills or leaks could kill or injure vegetation in the immediate vicinity of the spill."*

To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills will be prevented in the CRW.

#### **4.2.1.2 Operation and Maintenance Mitigation**

*"Mitigation ... would follow policies and procedures adopted by BPA..."*

These policies and procedures should be summarized. It is not reasonable to expect reviewers to obtain and review the EIS referenced here, especially considering the short duration of the public comment period.

#### **4.2.2.1 Access Roads Impacts**

Impacts of potential spills of hazardous materials were considered to be low to adjacent vegetation. However, any spill of a toxic substance in CRW should be considered a high impact because of the risks to water quality. To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS and technical appendix should indicate how all spills will be prevented in the CRW.

#### **5.6.1 Cedar River Watershed Habitat Conservation Plan**

*"The CRW HCP (City of Seattle 1998, 2000) was prepared by SPU to establish a comprehensive plan for long-term management of the CRW. The HCP includes numerous provisions intended to maintain the quality of fish habitat and the health of fish populations in the CRW. Many of these provisions apply to management procedures such as fish hatchery operation or manipulation of instream flows and thus are not directly relevant to this analysis. Other provisions address the effects on fish and their habitat that can result from forest removal and forest road construction and maintenance."*

With regard to forest resources, the proposed action is inconsistent with the CRW HCP. The DEIS and technical appendix should disclose that the proposed action is not consistent with the CRW HCP.

#### **5.6.4 Washington Department of Natural Resources Forest Practices Rules**

*"The WDNR Forest Practices Rules (WAC 222) describe the types of forest practices allowed under the State of Washington Forest Practices Act (RCW 76.09). They divide forest practices into four classes, based on potential impact to public resources, and outline the processes for permitting of each class."*

The DEIS and technical appendix should describe riparian buffer requirements as contained in the Forest Practice Rules.

#### **6.0 Individuals and Agencies Contacted**

This section is redundant with Section 2.2. of this technical appendix.