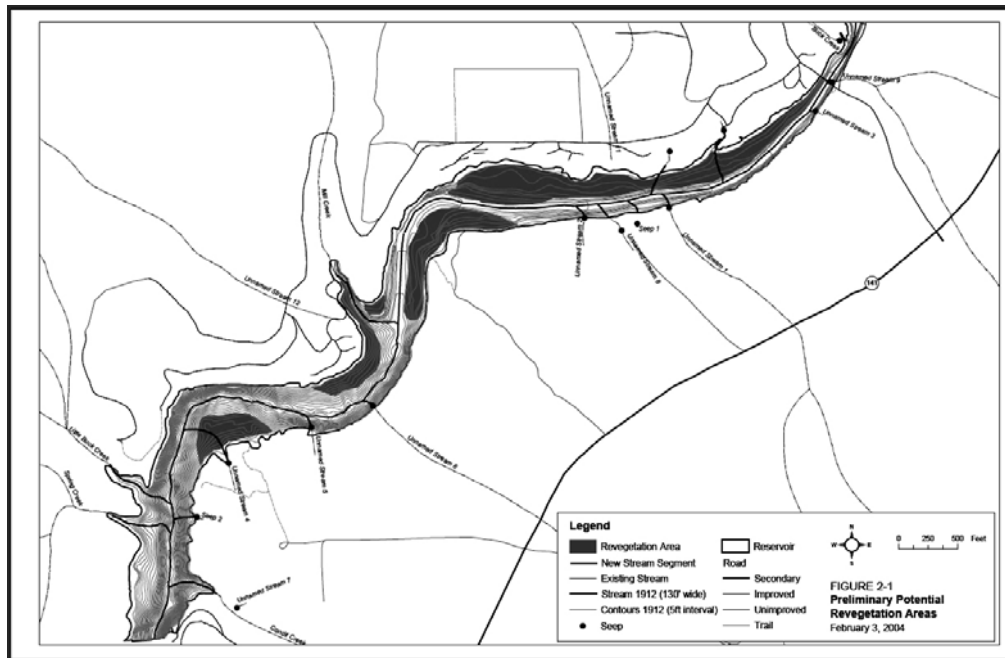




## Restoration of the White Salmon River *Land, Vegetation, and Wetlands*

### 1. How much land will be restored?

Of the 92 acres now under Northwest Lake, 25 to 30 acres are expected to hold sediment and sustain plant cover (depicted as the darkly shaded "Revegetation Area" on the map below, courtesy PacifiCorp). The newly exposed river channel (roughly 11,000 ft long) and tributary streams and seeps will comprise about 30 acres (submerged parts of Buck, Little Buck, Spring and Mill creeks, etc. account for 4,800 linear feet). The remaining 35 to 40 acres are rocky and mostly found in the canyon within 2,000 feet of the dam (CH2M Hill, 2003).



### 2. What are the goals of the revegetation and how were standards established?

The immediate objective is establishment of a protective plant cover to control erosion, followed by colonization with native herbaceous and woody plants. The latter will stabilize the riverbanks and flood plain and minimize erosion and loss of sediment to the river and streams. Revegetation will also reduce growth of noxious weeds within the former reservoir and construction area. Revegetation standards came from the Settlement Agreement and the FERC staff recommendations contained in the FSFEIS (FERC, 2002).

### 3. How will revegetation be evaluated?

Working with the Washington State Department of Ecology and the U.S. Army Corps of Engineers, PacifiCorp will evaluate vegetation along the White Salmon River and the

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streams adjacent to Northwestern Lake in the summer of 2007 or 2008 to set a standard for the types and numbers of plants that should be present. This will establish criteria for revegetating sediment within the Northwestern Lake footprint as well as areas disturbed by construction.

**4. What plant species will be seeded?**

A preliminary seed mix and seeding rate has been developed in consultation with the Underwood Conservation District and Natural Resources Service office. Native grass and broadleaf species will be planted along with suitable introduced plants known to establish quickly, increase soil nitrogen and render the soil hospitable to native woody species. Use of mulch and tackifiers will be used as necessary to control erosion and promote plant establishment.

**6. What performance criteria will be used to assess revegetation?**

Two consecutive years' documentation, plus confirmation by 2018 of appropriate composition and density of woody vegetation on areas that were identified as suitable for revegetation (in the assessment of the drained reservoir) and that remained suitable for revegetation.

**7. How will revegetation be monitored?**

High-resolution color infrared aerial photographs of the site will be taken in September 2009 and September 2011. Vegetation composition and percent cover will be estimated from the aerial photos. Representative plots in the revegetation areas will be manually sampled in the field during the fall of 2009 and 2011 to verify the aerial photo interpretations and again in 2018 to confirm that the revegetation targets have been met.



**8. How will reestablishment of woody species be achieved?**

Woody vegetation will reestablish naturally. The density of woody vegetation will be estimated during each monitoring session, and if the density achieved is not on target by the end of the 2011 growing season, appropriate tree species will be selected from a local nursery and planted the next year to augment the woody component of the revegetated area. The planted trees will be monitored for survival for two years.

**9. Will dam removal affect wetlands habitat along the reservoir?**

Yes, but the wetlands along perennial streams and spring-fed seeps draining into Northwestern Lake will be unaffected and can be expected to restore 3.8 acres of high-functioning wetlands between the former lake shore and the future river and an additional 1.0 acres downstream from the dam (CH2M Hill, 2003). For instance, 1.02 acres of new wetlands is expected along Mill Creek and 0.75 acres is expected along Little Buck Creek.

**10. How will wetlands establishment be monitored?**

To verify that the required acreage of wetlands has formed, newly established wetlands will be measured 3 years after dam breaching. If 4.8 acres of wetlands have not been established by year 3 of dam breaching, PacifiCorp will grade and plant to create that amount. New wetlands will be monitored for 2 consecutive years.

*This factsheet provided by campaign supporters:*

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