

DRAFT - Addendum to the study plans entitled:

***“Comparison of Standard F&F Eastside Riparian Prescriptions with No Shade Removal Within 75-ft Prescription (bull trout overlay) –Study Plan–”***

and

***“Study Plan to Evaluate the Effectiveness of the Current TFW Shade Methodology for Measuring Attenuation of Solar Radiation to the Stream”***

with input from Sally Butts, Terry Jackson, and Steve Toth  
January 29, 2004

- 1) In addition to the site selection criteria described in the study plans, site selection also will be made according to elevation. Sites will be selected in pairs with similar elevation to facilitate statistical analysis when comparing the overlay sites with the standard prescription sites to help reduce the potential confounding factor associated with elevation.
- 2) In order to reduce variability in the prescriptions applied to the standard treatment sites, these sites will be classified as Class A waters and go by the requirements for canopy cover under the 18 degree temperature nomograph in Board Manual Section 1, page M1-4. We chose the 18 degree nomograph over the 16 degree nomograph, since the majority of sites actually are Class A waters.
- 3) In laying out the inner zone harvest prescriptions, a full cruise of the inner zone will be required to determine which trees are required for shade and which trees are available for harvest. The study plan calls for only strip plots to determine riparian stand conditions, pg. 16 of the “Comparison” study plan. This change will increase the amount of data collected in the inner zone.
- 4) Hemispherical photography will be conducted at the middle of each transect used for densiometer measurements, for each treatment and reference reach, for each site, and for each year of the study.
- 5) Solar loading to the stream will be measured at all bull trout overlay sites. Solar radiation will be measured within the reference and treatment reaches at the same transects for the densiometer measurements, except that solar radiation will only be measured at 50 m intervals as opposed to 25 meter intervals. Total incident solar radiation will also be measured on a hilltop above the canopy.
- 6) An additional requirement for site selection is that sites will not have had any recent harvest within 100 feet of the stream, 1,000 feet upstream of the reference reach; in other words, this requirement provides an upstream buffer for the reference reach to minimize any influences on the reference reach data.
- 7) The pre-harvest canopy level categories described in the study plans are no longer a requirement in site selection since most of the potential sites have canopy levels greater than 70%.

8) Some sites that have already been selected for the study have associated streams that are greater than 15 feet bankfull width (a requirement in the study plans), although these streams that don't meet the 15 feet width criteria are almost all less than 20 feet bankfull width. However, for all of the streams, we will be using the RMZ prescriptions for streams less than or equal to 15 feet wide (see the Washington Forest Practices Rules, Dec. 2002, pg. 30-18, first table). This decision was made in order to reduce the variability in applying RMZ prescriptions.

9) At least one site will not have harvest conducted outside of the RMZ on one side of the stream, but will have trees felled within the RMZ as required by the prescriptions (e.g., SF Ahtanum). Virtually all other sites will have an associated upslope harvest, in addition to the riparian harvest associated with the study.