Appendix L - Review of Water Quality Restoration Plan (WQRP) Components

Review of the Flagtail Fire Recovery Project FEIS for Components of a Water Quality Restoration Plan
(January 2004)
Mary Lou Welby, hydrologist

The Flagtail Fire Recovery Project FEIS was reviewed to determine which of the nine components of Water Quality Restoration Plans (WQRPs) were addressed. Supporting documents including the Upper Silvies Watershed Analysis and several Categorical Exclusions (CEs) listed in Appendix J, Cumulative Effects, of the FEIS were also reviewed. The nine components and the results of the review are described below.

This review was undertaken in recognition that the Forest would likely soon be supporting the development of a TMDL for the Silvies River drainage, which is scheduled for completion in 2007. For consistency, the review used a process similar to the four decision framework steps described in "Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters" (USDA Forest Service, 1999). This review was limited to the FEIS project area in the Upper Silvies Watershed.

1. Condition Assessment and Problem Description:
Snow Creek is the only 303(d) listed stream in the project area. It is listed for summer rearing temperature. Additional description of Snow Creek and its condition is found in the Watershed Existing Condition section of the FEIS and in the Upper Silvies Watershed Analysis.

2. Goals and Objectives:
Short- and Long-term goals and objectives were described in the Desired Condition section in Chapter 1 of the FEIS. Goals and objectives that include improving stream temperature in Snow Creek, are listed below:
A. Short-term (2-20 years)

- Native hardwoods, sedges, rushes, and grasses are colonizing and expanding in riparian areas and contributing to improved riparian and aquatic habitat. Stream shade from riparian hardwood shrubs is re-established.
- There are no reductions in water quality caused by land management activities.

B. Long-term (greater than 20 years)

- Riparian areas … are properly functioning with a diverse variety of native grasses, sedges, shrubs, hardwoods, and conifers providing habitat for wildlife and fish.
- Effective ground cover and stream shade are re-established. Temperatures are reduced [in Snow Creek]. [Snow Creek] is removed from the 303(d) list.

3. Proposed Management Measures:
A number of Management Measures for the project area were proposed in Chapter 2 of the FEIS or in CEs referenced in Appendix J of the FEIS. These include road and crossing decommissioning along Snow Creek, Best Management Practices (BMPs), Mitigations, and Avoidance in the FEIS. Roads 2400133 and 2400203 (which crosses Snow Creek) are proposed for relocation to an upland location and the roadbeds would be decommissioned (including pulling of the culvert and reshaping of the banks). No commercial harvest is proposed within Riparian Habitat Conservation Areas. Planting (conifers and riparian hardwoods), coarse wood placement, and aspen protection are included in CEs. Planting occurred in 2003 and is expected to be completed in 2004. Coarse wood placement is expected to begin in 2004 with completion scheduled for 2005. Aspen protection is expected to begin in 2005 and continue for several years. This project incorporates the guidelines recently adopted for post-fire grazing.

4. Timeline for Implementation and Identification of Responsible Participants (schedule of who will do what):
The Project Schedule in Chapter 2 and Appendix J of the FEIS together provide a schedule for project implementation within the project area. Responsible participants for activities in the FEIS are identified in Chapter 2 of the FEIS. The Malheur National Forest Schedule of Proposed Actions (SOPA) identifies responsible participants for activities included in CEs. In addition, recovery timeframes were discussed in Chapter 3 of the FEIS by discipline.

5. Monitor Water Quality Indicators and Reasonable Assurance of Implementation of Management Measures:
Five (5) sites in Snow Creek were monitored for temperature during summer 2003; it is expected that monitoring would continue at these sites or at a subset of them in out years as part of the District's routine water quality monitoring program. Stocking survey plots have been set up to monitor survival of planted conifers and riparian hardwoods in some RHCAs within the project area and results would be applied to Snow Creek. Replanting would be scheduled as needed. It is expected that over time additional vegetation monitoring such as stand exams would occur as part of routine District data collection. It is expected that recovery timeframes discussed in Chapter 3 of the FEIS would be monitored as part of routine District duties.

6. Evaluation of Monitoring Results (including water quality trends and adaptive management):
Stream temperature data are normally assessed, according to the recommended DEQ protocol, by the District following the field season. Changes in stream temperature are not expected to be observable until shade and interflow have recovered after the fire or after rehabilitation activities have become effective (estimated to be a minimum of 7-10 years and a maximum of 40-50 years). Evaluation of vegetation monitoring and recovery timeframes would be incorporated into normal District duties. Results of monitoring would be used to determine need for additional activities such as replanting.

7. Public Involvement:

Flagtail Fire Restoration Project DEIS disclosed that Snow Creek is a 303(d) listed stream for summer temperature. Information about proposed activities was presented at public meeting held at the Federal Building in John Day, Oregon on February 13 and 14, 2003. Among the information presented was that no commercial harvest in RHCAs would occur and that several projects, including planting, coarse wood placement, and aspen protection, would be analyzed separately using CE authority. Public comments about the 303(d) listing were received. Public involvement is summarized in Chapter 4 of the FEIS.

8. Maintenance of Effort over Time:
The Project Schedule (Chapter 2) and Appendix J display how effort will be expended over time. Many of the Management Measures selected require effort for implementation and initiation. With the exception of BMPs and mitigation measures, most Management Measures, for instance, planting, were selected because they require little maintenance, and thus little effort, after implementation. These measures gradually become effective over varying periods of time. BMPs and mitigation measures would be implemented in concert with the appropriate activities and would be maintained as needed to control effects from those activities. It is expected that recovery timeframes discussed by discipline in Chapter 3 of the FEIS would be informally monitored as part of routine District duties, for instance as new projects or resource surveys were initiated.

9. Discussion of Cost and Funding:
Costs for BMPs and mitigations were included in the appraisal process for the timber sale. Funding for BMPs and mitigations by proposed activities is required for implementation as prescribed. The District should know the cost and source of funding as each CE is scheduled for implementation. For instance, the Watershed program is funding the planting of riparian hardwoods. Funding of other Management Measures is contingent on availability.