

8

Restoration Maintenance, Monitoring, and Compensatory Mitigation

8.1 Restoration Maintenance and Monitoring

A maintenance plan will be developed as part of the Final Restoration Plan for Coldwater Fork and Wolf Creek. Minor maintenance of bank stabilization treatments may be required.

A monitoring plan will also be developed as part of the Final Restoration Plan. The monitoring plan will be designed to track the success of the restoration efforts, including both planting and stabilization activities. Monitoring of planting efforts will include assessment of vegetation survival, growth, diversity, and aerial coverage. The monitoring of stabilization activities will include qualitative assessments of the structural integrity of bank treatments. Any guidelines for monitoring procedures provided by the SACS Team and approved by the EPA OSR will be reviewed and incorporated into the monitoring plan, as appropriate.

8.2 Long-term Monitoring

After assessment and implementation of any necessary removal activities (based on the approach discussed in Section 6.6), long-term monitoring program will be implemented to measure the recovery of the system.

The overall goal of the long-term monitoring program will be to document spatial and temporal changes with respect to identified biological and physical variables. Water and slurry parameters such as turbidity, deposition rates, migration potential and others, may be included as measurement variables. In addition, bio-assessment sampling will be conducted to document aquatic community conditions after implementation of the selected removal option. The primary biotic communities to be evaluated with this type study will include benthic macroinvertebrates and/or fish. The overall goal of the bioassessment sampling activity will be to determine and document changes, if any, within the biotic community that can be attributed to factors associated with natural vari-

8. Restoration Maintenance, Monitoring and Compensatory Mitigation

ability (population flux, environmental stress (e.g., habitat and water quality degradation), and/or cleanup and restoration activities. For the biological monitoring program to be effective, the selected variables will consist of indicators which have been shown to be sensitive to removal-affected variables such as turbidity and/or slurry accumulation.

Monitoring locations may include those established during the post-spill response period (see Section 4.3), or may include other locations within appropriate stream reaches.

8.3 Compensatory Mitigation

In conjunction with this phase of the program, MCCC will assess any temporal or permanent losses to waters of the United States resulting from the spill and develop an appropriate compensatory mitigation plan (Order, §VII, 12(d)vii). This plan will take into account all compensatory mitigation measures taken by MCCC since the slurry release and identify additional measures, if any, as appropriate. This plan will be submitted to EPA within 12 months of completion of the removal and restoration activities outlined in Sections 6 and 7 of this Work Plan.