7

Restoration Procedures

7.1 Stream/Floodplain Restoration Plan

The Preliminary Stream/Floodplain Restoration Plan was completed on February 27, 2001, and distributed to all SACS Team members. The intent of the Preliminary Plan was to present the approach and methods proposed for stream and floodplain restoration in the Coldwater Fork and Wolf Creek drainages and to offer a range of measures that may be utilized to revegetate and stabilize areas impacted by mechanical washing and removal.

Work is ongomg to complete the final Stream/Floodplain Restoration Plan for Coldwater Fork and Wolf Creek, but cannot be completed until a final stream assessment is conducted. The final assessment will occur in late April/early May 2001 after spring runoff has occurred. It is anticipated that the cleanup of the lower nine miles of Wolf Creek will be complete by the time the final assessment will be conducted, and therefore this area will be included in the Final Restoration Plan. The approach and methods for restoration defined in the Preliminary Plan will be integrated into the Final Plan.

7.1.1 Coldwater Fork and Wolf Creek

The approach and methods, as well as the general bioengineering techniques outlined in the Preliminary Plan, are applicable to the Coldwater Fork and Wolf Creek drainages in their entirety. However, the Preliminary Plan specifically addresses only those reaches of these two streams that were observed during the preliminary stream assessment in January. The preliminary stream assessment included only those reaches in which cleanup activities had already been completed since further washing or scraping would alter the condition of the area and, therefore, the level of appropriate restoration. It did not include Lower Wolf Creek.

Because the Coldwater Fork and Wolf Creek drainages were the "front line" and contained the majority of slurry deposition,

cleanup activities were most intense here. In some areas this involved removal of all trees and shrubs, construction of access roads, and extensive scraping of the streambanks. While these removal measures addressed the slurry, they increased the potential for erosion. Therefore, MCCC's initial restoration activities focused on seeding, placement of straw, and installation of silt fences to reduce erosion. Future restoration activities will focus on continued efforts to stabilize the weakened or disturbed areas. These activities will predominantly be restoration of vegetation with some bioengineered structures. It is imperative that restoration be conducted in a timely manner to take advantage of this year's growing season. Because the majority of the basins for these drainages are relatively undeveloped, vegetative and bioengineered stabilization techniques are ideal. Any extreme risk areas or banks with homes or other structures that require protection may need to be supplemented with more extensive stabilization treatments,

The vegetative component of the proposed stabilization measures addresses the goal of restoring aquatic and terrestrial wildlife habitat. Restoring the riparian vegetation will improve aquatic habitat by providing overhead cover, stream shading and cooling, and regulation of dissolved oxygen and pH. The vegetated corridors will also serve as filters for sediment and nutrient inputs from the basins. Debris from the streamside vegetation will provide the base of the aquatic food chain. The restored riparian corridors will benefit terrestrial species as well by providing shelter. nesting and forage habitat, and travel corridors.

7.1.2 Rockcastle Creek, Tug Fork, and Big Sandy River

The approach and methods that may be appropriate for the Rockcastle Creek, Tug Fork, and Big Sandy River are different than those for Coldwater Fork and Wolf Creek. This is due to the substantially larger size of these drainages and the notably reduced level of impact on them by the slurry spill, due to their location farther down stream from the MCCC facility. It is likely that treatment measures, if required, will differ from those proposed for the upper drainages.

Restoration activities that are appropriate for the lower drainages will be determined largely by the results of the slurry investigations and estimates of resultant impacts during the SERA (see Section 6.5).