

## Section 17.24.801

### AVF: PRESERVATION OF ESSENTIAL HYDROLOGIC FUNCTIONS

#### (1) Preservation of Essential Functions Outside the Permit Area

South Fork of Spring Creek has been designated an alluvial valley floor (AVF) not significant to farming. SCM will preserve the features of this valley floor as outlined in detail in Appendix J, "Postmine Hydrology". Spring Creek within the permit boundary is not an AVF. Appendix I AVF Investigations for the Spring Creek drainages contains the results of the investigations on which the non-AVF determination was based. The essential functions of both drainages above and below the mine area will not be affected. Spring Creek is affected by the Decker Mine downstream from the SCM. The functions of the stream, transporting runoff and associated sediment from the drainage basin to the Tongue River, will be interrupted during the mining lives of these mines but will be restored after mining.

The Pearson Creek AVF assessment determined the unconsolidated stream laid deposits of Pearson Creek do not provide sufficient subirrigation to benefit or enhance agricultural activities. Natural or artificial flood irrigation are either non-existent or the supply is not dependable enough to be a irrigation source. Therefore, Pearson Creek, within the study area, does not meet the regulatory definition of an AVF

#### (2) Reestablish Essential Functions Within the Permit Area

SCM will restore the hydrologic balance of the Spring Creek, South Fork of Spring Creek and Pearson Creek as outlined in detail in Appendix J, "Postmine Hydrology".

#### (3) Reestablish Agricultural Utility and Productivity

Strip mining and reclamation operations will be conducted to ensure that the agricultural utility and the level of productivity of the land surface in affected areas are reestablished to pre-mining levels.