

### Alternative 1 – No Action

Under the No Action alternative, no new construction would occur. The No Action alternative is not expected to affect riparian and wetland resources within the study area. Should routine maintenance and/or other activities approved via summer operating plans requiring jurisdictional impacts, BSR would consult with the Forest Service and COE to obtain the necessary permits and approvals prior to project initiation. Wetland effects from implementation of previously approved projects have been disclosed in the 1998 and 2002 EAs.

### Alternative 2 – Proposed Action

#### Direct Effects

## **Breckenridge 4a**

The Proposed Action would result in 0.01 acres of permanent jurisdictional impacts resulting from the upgrade of the Lehman water system. The Lehman water supply would require an approximately 479-square foot settling tank. The settling tank would be constructed in the existing location of the aging settling pond currently in place on the left overbank of the stream.

Temporary effects to wetlands would also result from implementation of the two water systems. Construction access within and direct burying of potable water lines through wetlands would be required. Furthermore, the Sawmill water supply would require installation of an approximately 411-square foot infiltration gallery within the bed of Sawmill Creek. The infiltration gallery would be installed below the existing streambed with the existing grade streambed being restored immediately following installation. Total temporary effects to wetlands under Alternative 2 would be 0.14 acres. Design phase modifications to pipeline alignments were made in an effort to minimize wetland impacts. Construction impacts to wetlands associated with water line installation would be short in duration and are not expected to result in a loss of wetland functional value or a conversion of wetland community type. No forested wetland clearing would be required under Alternative 2.

#### Indirect Effects

Water line installation would be performed in such a manner as to prohibit or impede groundwater movement, which would involve the use of impervious structures/substances (e.g. clay collars) periodically spaced within the linear disturbance in and proximate to pertinent wetland areas. In addition, subsoil would be compacted within trenches to prohibit the diversion of subsurface flows along the pipeline corridor in order to maintain wetland hydrology. Topsoil would be stockpiled during construction and replaced in order to maintain soil horizons and preserve the wetland seed bank. Additional plantings (of approved native plant material) would be utilized where necessary in order to speed the reclamation of the wetland community.

Wetlands adjacent to the two water systems would be adequately protected from erosion/sedimentation effects and direct construction activity (as practicable) through the use of appropriate BMP design, installation, and maintenance. With selection of the Proposed Action, a site-specific erosion and sediment control plan would be prepared and review by the Forest Service prior to implementation.