

EXISTING CONDITION OF MINERALS

While mineral rights exist within the watershed, there are no active mining or exploration activities. The Highland Mine, located at the very headwaters of Basin Creek, represents the most significant historic mining activity. This hard rock-gold operation extracted sub-surface ore from dolomite found in the Gallatin Formation. A mill was erected on-site in 1932, but then quickly moved to the Middle Fork Moose Creek site due to water quality concerns by the Butte Water Company. Water flowing from the adit reaches Basin Creek via surface flow. Recent investigations detected metals in the adit water after interacting with waste rock material high in pyrite, located below the adit opening. The remedy involved routing adit water around the waste rock. (*Montana Department of State Lands, Abandoned Mine Reclamation Bureau, 1993*).

Minerals exploration is scheduled in the fall of 2003 in the China Gulch area. The Plan of Operations consists of digging test pits to assess whether minerals deposits are present and have commercial value. If the exploration is successful and assay samples identify potential for commercial development, the proponent may submit an expanded Plan of Operations.

FOREST PLAN DIRECTION

Forest Plans provide Forest-wide goals, objectives and standards, for subunits of the forest called Management Areas (MA's). The following paragraphs highlight MA standards for minerals that are relevant to the proposed action discussed in this assessment.

Management Area A3 – Standard – Minerals: Requirements for mineral projects will be taken from the management area standards that the trail passes through.

Management Area C3 – Standard – Minerals: Mineral related operations will be according to approved operating plans. Conditions and stipulations will maintain forage and security cover to the extent practical.

Management Area D2 – Standard – Minerals: Mineral related operations will be according to approved operating plans. Conditions and stipulations will maintain forage and security cover to the extent practical.

Management Area E1 – Standard – Minerals: Mineral related operations will be according to approved operating plans. Conditions and stipulations will maintain timber productions to the extent practical.

Management Area J3 – Standard – Minerals: Evaluate area for withdrawal from mineral entry.

ENVIRONMENTAL EFFECTS TO MINERALS

ALTERNATIVE 1 (NO ACTION)

This alternative would not implement any harvest activity in the Basin Creek and Blacktail Watershed, and would have no direct, indirect, and cumulative effects on mineral resources.

EFFECTS COMMON TO ALL ACTION ALTERNATIVES

Possible consequences of the proposed action alternatives would be increased accessibility for prospecting and exploration activities. However, increases are not expected since all newly constructed roads would be made impassable to all users soon after the timber harvest. No significant increases in prospecting and/or exploration are predicted for any of the action alternatives because of the short duration of access on the proposed temporary road construction.

This alternative would be in compliance with Forest Plan direction for mineral standards for all management areas.

ALTERNATIVE 2

Alternative 2 would have no direct, indirect, or cumulative effects on mineral resources.

This alternative would be in compliance with Forest Plan direction for mineral standards for all management areas.

ALTERNATIVE 3, 4, AND 5

Under Alternatives 3, 4, and 5, two units and a temporary road are proposed in and adjacent to the minerals exploration site referenced in the existing condition. Depending on the timing and duration of the timber harvest, the exploration site and development could be affected. If this were to occur, then mitigation between the mining operation and timber harvest would be required.

This alternative would be in compliance with Forest Plan direction for mineral standards for all management areas.

Alternatives 3, 4, and 5 would have no cumulative effects on mineral resources.