

### 3.3. CULTURAL/TRIBAL/HISTORIC RESOURCES

This section addresses the affected environment and potential impacts to cultural resources within the area surveyed for the proposed Project, which includes the MOP Application Boundary (approximately 1,888 acres) and associated access roads (see **Figure 3.3-1**). Cultural resources include the locations of human activity, occupation, or usage of the environment that contains sites, features, structures, objects, or landscapes that may have important tribal, historic, or archaeological values.

The Project is located on private land and there is no federal regulatory involvement; therefore, the federal laws relating to the protection of cultural resources (e.g., Section 106 of the National Historic Preservation Act) do not apply. The Montana Antiquities Act, which applies to activities conducted on state-owned land, also does not apply. MEPA requires identification of known cultural resources within a project area and a disclosure of what the potential impacts might be to those resources. This consists of a summary of the results of a file search conducted with the Montana SHPO. In addition to the file search, the Proponent conducted cultural resource inventories to identify cultural resources that may be eligible for listing in the NRHP. The inventories were conducted under the same standards as required by federal law and followed guidelines provided by the SHPO. The SHPO concurred with the methods and site recommendations in the survey reports in letters dated February 11, 2013, October 29, 2015, and August 30, 2018.

#### 3.3.1. Analysis Methods

The Proponent conducted the following cultural resources surveys and literature searches for the Project:

Three cultural resource surveys that examined 1,633 acres within and adjacent to the Project area (Tetra Tech 2013a, 2013b, 2015, 2018) (see **Figure 3.3-1**). This includes an intensive pedestrian survey of 970 acres in 2011, 20 acres in 2012, 510 acres and 1.25 miles of access roads in 2015, and 133 acres in 2018.

- A background file and literature search for the entire current Project area. This background search identified two previously recorded cultural resources (Butte Creek Road [24ME936] and Sheep Creek Road [24ME925]), both of which were recommended as not eligible for listing under the NRHP.
- Evaluative testing on one archaeological site (24ME163) in 2012 to determine its eligibility for listing in the NRHP.



### 3.3.2. Affected Environment

The Project is located on private land in the Little Belt Mountains, with general elevations that range between 5,600 and 6,100 feet above mean sea level. The topography is moderately sloped with open woodland consisting of Douglas fir on the ridgetops and aspen and willow along the drainages. The total surface disturbance of the Project would impact approximately 311 acres.

The Project is located within the prehistoric cultural subarea known as the Northwestern Plains, a region that extends from central Alberta to southern Wyoming and from western North Dakota to western Montana. Prehistoric site types common to the region included campsites, rock shelters, rock structures (e.g., hunting blinds), lithic quarries, stone rings, stone cairns, stone alignments, ceramic remains, rock art, bison processing areas, and lithic reduction areas. Historic cultural resources identified in the vicinity of the Project include homesteads, ranches, and refuse dumps.

A total of 24 cultural resources (21 archaeological sites, one historic district, and two isolates) were documented during the three surveys conducted in 2011, 2012, and 2015 (Tetra Tech 2013a; 2013b; 2015) (see **Table 3.3-1**). Evaluative testing was conducted on one prehistoric site (24ME163) (Tetra Tech 2013b). The archaeological sites consist of 13 prehistoric sites (all lithic scatters) and eight historic sites (a log structure, mining structural remains, two roads, a homestead, a historic cairn, and two irrigation ditches). The historic district is a prehistoric stone quarry district that includes the 13 lithic scatters and a thin veneer of isolated flaking debris. The two isolates consist of historic prospect pits.

Seven historic sites and the two isolated finds were recommended as not eligible, two sites (one prehistoric and one historic) and the stone quarry district were recommended as eligible, and 12 prehistoric sites remain unevaluated for listing in the NRHP. SHPO concurred with all eligibility recommendations of sites identified in the survey reports.

**Table 3.3-1  
 Cultural Resources Identified within the Survey Area**

Site Number	Site Type	Potential Impacts	NRHP Recommendation	Report Source
Isolate 1	Prospect Pit	Avoided	Not eligible	Tetra Tech 2013a
Isolate 2	Prospect Pit	Avoided	Not eligible	Tetra Tech 2013a
24ME0158	Historic Log Structure	Avoided	Not eligible	Tetra Tech 2013a
24ME0159	Historic Mining	Avoided	Not eligible	Tetra Tech 2013a
24ME0160	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0161	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0162	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a

<b>Site Number</b>	<b>Site Type</b>	<b>Potential Impacts</b>	<b>NRHP Recommendation</b>	<b>Report Source</b>
24ME0163	Lithic Scatter	Avoided	Eligible under Criterion D	Tetra Tech 2013a, Tetra Tech 2013b
24ME0164	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0165	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0166	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2013a
24ME0925	Historic Road-Sheep Creek	No Impact	Not eligible	Tetra Tech 2015
24ME0936	Historic Road-Butte Creek	No Impact	Not eligible	Tetra Tech 2013a
24ME0940	Historic Homestead	Avoided	Not eligible	Tetra Tech 2013a
24ME1104	Historic Shepherd's Cairn	Avoided	Eligible under Criterion C	Tetra Tech 2015
24ME1105	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1106	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1107	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1108	Lithic Scatter	Avoided	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1109	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1110	Lithic Scatter	Impacted	Unevaluated; further testing required to determine eligibility	Tetra Tech 2015
24ME1111	Sheep Creek Surface Stone Quarry District	Impacted	Eligible under Criterion D	Tetra Tech 2015
24ME1135	Coon Creek Irrigation Ditch	Impacted	Not eligible	Tetra Tech 2018
24ME1136	Sheep Creek Irrigation Ditch	Avoided	Not eligible	Tetra Tech 2018

### 3.3.3. Environmental Consequences

#### 3.3.3.1. *No Action Alternative*

Under the No Action Alternative, the Project would not be permitted or constructed and there would be no additional ground disturbance with the potential to disturb cultural resources associated with proposed activities in the MOP Application. Existing disturbances include land that was previously approved for exploration facilities under Exploration License No. 00710. Existing resources would continue to degrade over time.

#### 3.3.3.2. *Proposed Action*

One historic site (24ME1104) was recommended as eligible under Criterion C, one prehistoric site (24ME0163) was recommended as eligible under Criterion D, and seven historic sites (24ME0158, 24ME0159, 24ME925, 24ME0936, 24ME940, 24ME1135, 24ME1136) and two isolated finds were recommended as not eligible for listing in the NRHP. Project activities would avoid eligible sites 24ME1104 and 24ME0163. Avoidance was recommended or, if avoidance is not possible, additional testing to determine the eligibility of the 12 unevaluated sites. The Sheep Creek Surface Stone Quarry District (District) (24ME1111) encompasses all of the prehistoric sites and a thin veneer of isolated flaking debris. The results of evaluative testing at the archaeological sites could contribute to the eligibility recommendation of this District.

As currently designed, the Project would avoid eight of the unevaluated prehistoric sites (24ME0160, 24ME0161, 24ME0162, 24ME0166, 24ME1105, 24ME1106, 24ME1107 and 24ME1108) and no further work is recommended at these sites. If there are design changes that would impact these sites, then additional testing is recommended. Additional testing was recommended for the four unevaluated prehistoric sites that the Project is likely to impact (24ME0164, 24ME0165, 24ME1109, and 24ME1110) to determine their eligibility for listing in the NRHP.

A proposal for mitigation of the District (24ME1111) and archaeological testing of sites 24ME164, 24ME165, 24ME1108, 24ME1109, and 24ME1110 was developed (Tetra Tech 2016). Mitigation of 24ME111 would be through chert<sup>1</sup> chemical analyses in an effort to identify a chemical fingerprint of the Sheep Creek cherts. Chert samples would be collected across the quarry area and several of the lithic scatters. These samples would be subjected to neutron activation analysis to identify the chemical makeup of the Sheep Creek cherts and determine if a unique chemical signature exists. The results would add to southwest Montana's chert database to provide data for future chert sourcing projects and research concerning prehistoric lithic procurement and lithic technology.

Construction will avoid any cultural resources eligible for listing in the NRHP.

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<sup>1</sup> Chert is a fine-grained sedimentary rock that was often used as a raw material for stone tools.

### **Smith River Assessment**

There would be no ground-disturbing activities associated with the Project conducted between the Smith River and the Project area. Therefore, there would be no potential impacts to known cultural resources along the Smith River.

#### **3.3.3.3. Agency Modified Alternative**

The potential impacts of the AMA on cultural resources would be the same as described for the Proposed Action. There would be no additional ground-disturbing activity within the MOP Application Boundary due to the backfilling of additional mine workings. Therefore, there would be no change to impacts on cultural resources.

### **Smith River Assessment**

There would be no ground-disturbing activities associated with the AMA conducted between the Smith River and the Project area. Therefore, there would be no potential impacts to known cultural resources along the Smith River.