4 PAST MINING & MINING RELATED LEGACY ISSUES

The Project is located in an area referred to as the Stibnite Mining District (**District**). Over the past century, the District has been subject to considerable prospecting, exploration, underground mining, and open pit mining (see Appendix D).

To support past mining, other related activities occurred in the District, including: ore milling and processing, tailings disposal, smelting, heap leaching of ore, spent heap leach ore disposal, development rock disposal, hydro-power generation, water retention dam construction, saw mill operations, electric power transmission line construction, and occupancy by thousands of people in housing camps and later in the town of Stibnite with its multiple neighborhoods.

4.1 PAST MINING ACTIVITY

Two major periods of mineral exploration, development and operations have occurred in the Stibnite Mining District. These activities that occurred over the past century have left behind substantial environmental impacts that remain to this day.

The first period of activity commenced in the mid-1920s and continued into the 1950s; it involved the mining of gold, silver, antimony, and tungsten mineralized materials by both underground and, later, open pit mining methods. During World War II, this District is estimated to have produced more than 90% of the Nation's antimony and 65% of the Nation's tungsten; materials that were used in munitions, steel-making, fire retardants and for other purposes. Mining of these strategic minerals was considered so critical that the federal government subsidized the mining activity, managed site operations and military time could be served at the mine site. Strategic mining operations at Stibnite continued through much of the Korean War. Antimony-gold-tungsten mining and milling ceased in 1952, near the end of the Korean War.

The second period of major activity in the District started with exploration activities in 1974 and was followed by open pit mining and seasonal on-off heap leaching and one-time heap leaching from 1982 to 1997, with ore provided by multiple operators from a number of locations, and processed in adjacent heap leaching facilities.

Table 4-1 summarizes production from the three major mining areas located within the Stibnite Mining District.

Table 4-1, Estimated Stibnite Mining District Metal Production

Area	Production Years	Tons Mined	Recovered Au (oz)	Recovered Ag (oz)	Recovered Sb (tons)	Recovered W (lbs)
Hangar Flats(1)	1928-1938	303,853	51,610	181,863	3,758	1,062
Yellow Pine	1938-1952	4,405,170	352,091	1,756,928	40,257	13,579,157
	1987-1992	2,088,668	127,426	-	-	-
West End	1978-1996	8,156,942	454,475	149,760	-	-
Totals		**14,954,633**	**985,602**	**2,088,551**	**44,015**	**13,580,220**

Notes:
(1) Metal production from the Hangar Flats area came from the Meadow Creek Mine.
(2) The data included in this table is from the Midas Gold Prefeasibility Study Technical Report for Stibnite Gold Project, dated December 2014.

4.2 LEGACY OF PAST MINING

The mining, milling and processing activities created numerous legacy impacts including underground mine workings, multiple open pits, development rock dumps, tailings deposits, heap leach pads, spent heap leach ore piles, a mill and smelter site, three town sites, camp sites, a ruptured water dam (with its associated erosion and downstream sedimentation), haul roads, an abandoned water diversion tunnel, an airstrip and other disturbances. Extensive forest fires have compounded the human-created impacts and have increased soil erosion and impacted water quality.

Both the main stem of Meadow Creek and its East Fork tributary have been severely impacted by past mining activity. The East Fork of Meadow Creek, locally known as "Blowout Creek", is today one of the largest sources of sediment for this part of the Salmon River. "Blowout Creek" got its name from a water dam that failed in the 1960s with a washout that scarified an erosional channel and drained the meadow and the productive wetlands above. The erosional and dewatering effects continue today, with sediment being rushed downstream with every spring melt and every summer rainstorm, the finer sediments choking the spawning grounds of the Salmon River.

The EFSFSR, a branch of the Salmon River headwaters, currently runs though the old Yellow Pine pit (sometimes referred to locally as the "Glory Hole"). First mined in 1938 and abandoned in the late 1950s, the pit has since filled with river water and formed a lake. While recreationists currently camp on the old mine benches within the open pit and catch fish in the un-reclaimed pit lake, anadromous and local fish populations have not been able to migrate upstream from this point since 1938. Figure 4-1 illustrates the current condition of the Yellow Pine pit.

Figure 4-1, Current Condition of the Yellow Pine Pit

These and other widespread impacts from past mining and ore processing and related activities are evident across the Project site to any visitor today. Figure 4-2 illustrates the extent of these legacy impacts; Appendix E includes present-day photos of the site. While mining provided strategic metals

critical for the defense of the Nation, especially during World War II and the Korean War, and brought substantial economic benefit to Valley County and the State of Idaho, the past actions and events in the District (along with numerous forest fires) also changed the course, nature and quality of rivers and streams, and left behind substantial surface disturbance, detrimental environmental impacts and residual surface features that persist to this day. In 2000, URS completed a two-part report "*Stibnite Area Site Characterization Report, Volume 1&2*", (URS, 2000) which provided the then current environmental status of the site and provides a summary of the existing environmental conditions from legacy disturbance and activities.

These large-scale impacts on the Project area are in need of comprehensive, designed and engineered restoration to address the millions of tons of materials to be moved. The scale and nature of these legacy impacts are substantial and require large-scale solutions. The plan set out in this PRO integrates clean-up of legacy impacts into the redevelopment of the site, and these restoration and reclamation activities take advantage of large-scale equipment, processing facilities, development rock storage facilities and an engineered and lined tailing storage facility in order to achieve the objective of a restored site. Without access to the equipment, processing facilities and supporting infrastructure and personnel, such restoration and reclamation work would be prohibitively expensive and likely never undertaken by governmental authorities.

Figure 4-2, Past Mining and Related Activities