

# STIBNITE GOLD PROJECT: FINDING SOLUTIONS FOR LEGACY PROBLEMS

Mining and the environment can work together;  
the Stibnite Gold Project proves that.



The historic Stibnite Mining District and the East Fork of the South Fork of the Salmon River need help and on a large scale. We believe industry can bring the economic drivers and expertise to provide environmental solutions. That is why Midas Gold Idaho has dedicated tens of millions of dollars to designing a proposal based on facts and scientific method. We are proud to be a responsible, 21st Century mining company with a plan to restore this critical stretch of the Salmon River. We are a group of people that consider mining, environmental restoration, and long-term sustainability to be intricately connected.

## LEGACY ISSUES OVERVIEW

### Yellow Pine Pit

**TODAY:** Since 1938, the Yellow Pine Pit has blocked fish passage when the East Fork of the South Fork of the Salmon River was diverted to facilitate mining. Mining in this area stopped more than 65 years ago but river still flows into the pit today.

### Blowout Creek

**TODAY:** A few miles upstream from the Yellow Pine Pit, failure of a water retention dam in 1966 resulted in extensive and ongoing erosion of glacial till material, contributing significant sediment into the water and draining the creeks and river in the valley above.

### Meadow Creek Valley

**TODAY:** More than 10 million tons of legacy spent ore and unlined tailings in the Meadow Creek Valley continue to degrade water quality and are likely a source of metals leaching into the surface and groundwater.

**Private investment is the most viable option to fix the historic Stibnite Mining District's legacy mining problems.**

## LEGAL AND FINANCIAL ASSURANCES TO ENSURE COMPLETION



### THE LAW

A comprehensive network of state and federal laws governs the mining industry, making it one of the most heavily-regulated industries in the world. Additionally, these laws are complemented by exhaustive environmental, ecological, and reclamation laws and regulations to ensure that operations fully protect public health and safety, the environment, and wildlife.

More than **three dozen** federal environmental laws and regulations govern the U.S. mining industry, including the Clean Water Act and Endangered Species Act.



### THE INVESTMENT

Before any mining begins, Midas Gold Idaho must set aside the funds necessary to reclaim the site. In the unlikely scenario the company is unable to complete the project, real-cost bonding ensures the site will be repaired to the standards set by the regulators with those funds, not taxpayer dollars. Also, by building legacy restoration and concurrent reclamation into the beginning of the project, we are illustrating our commitment to use the proceeds of mining to benefit the environment.

**\$180 million** spent by Midas Gold Idaho in the last decade assessing the economic feasibility and environmental conditions of the project.

# MITIGATING PROBLEMS WITH PRECISE SOLUTIONS

ISSUE	SOLUTIONS
<b>Project Size</b>	At just under 2,000 acres, this is a large project. However, 90% of the mineral resources to be mined are located on privately held land, most of which has been heavily disturbed by past mining activities. In fact, 42% of the project is on land that has already been disturbed, minimizing new disturbance to the maximum extent possible. The largest use of undisturbed public lands will be for the tailings facility and housing complex.
<b>Mining Technique</b>	Midas Gold Idaho's proposal is for an open pit mining operation, not strip mining. In strip mining, deposits are accessed by removing layers of rock in horizontal strips. Open pit mining has a smaller footprint and is a technique used for mining deposits that extend to depth, like Stibnite.
<b>Legacy Tailings</b>	Midas Gold Idaho will pick up 10.5 million tons of old waste rock and tailings material and reuse and/or reprocess it before storing it in a manner that does not interact with the river or ground water going forward.
<b>New Tailings</b>	New tailings generated during proposed operations at the site will be neutralized and thickened in the mineral processing circuit building before they reach the tailings storage facility. In fact, Midas Gold Idaho has gone to extraordinary lengths to design its proposed tailings storage facility, having 90% of the perimeter surrounded by mountains, a fully lined storage facility, and added an additional buttress with 65 million tons of coarse rock that brings the factor of safety to more than twice what is required.
<b>Solution Storage &amp; Accident Prevention</b>	All piping and tanks are contained within a building with concrete floors and walls that have been designed to accommodate the total solution in the system in case of any failure. Additionally, lime will be available to neutralize accidental spills or component failures and personnel will be trained on what to do upon this type of failure event.
<b>Waste Treatment</b>	Dried sludge will be mixed with compost (such as food waste) and incorporated into growth media to boost volumes of available topsoil and used during the reclamation process.
<b>Acid Rock Drainage</b>	An extensive independent testing program of more than 700 samples of all material types has demonstrated a very low risk for acid rock drainage. The rocks in the Stibnite Mining District have a very low sulphide content and other minerals present in the rock, like the carbonates in limestone and other rock types, act as neutralizers. Additionally, more than 60 years of exposed, abandoned pits in the area have demonstrated no acid rock drainage. Any rocks that have even the slightest possibility of creating a reaction will be required to be managed, stored in a lined facility, treated, and capped with neutralizing limestone.
<b>Cyanide</b>	Gold will be recovered by placing the treated gold concentrate into sealed vats and mixed with cyanide solution. After gold recovery, any residual cyanide will be destroyed to levels that meet regulatory standards and are protective of fish and wildlife before leaving the processing facility. There will be two loads of cyanide briquettes delivered to the plant per week in special designed sealed trailers. The briquettes will not be transferred to a storage facility but used directly from the trailer as needed, thus incidental contact with water is not a risk. This transportation method has been used for decades, with no known incidents resulting in contamination.
<b>Fish Tunnel</b>	The temporary solution to the currently blocked fish passage is to construct a 0.8 mile, 15x15 ft. tunnel with high flow and low flow stream designs, lighting, resting pools and a gradient that is suitable for migrating fish. All are approaches that have worked elsewhere in the world. Midas Gold Idaho is working with top fisheries biologists to design the tunnel to optimize the potential for fish migration during its use.
<b>Permanent Fish Passage</b>	The permanent solution to fish passage will commence in year seven of operations, when the company starts backfilling the Yellow Pine Pit and re-establishing the natural flow and gradient of the river for the first time in 80 years.

## The Biggest Threat Facing the Region is Inaction.

**Midas Gold Idaho is committed to Idaho, to fixing the river, and restoring the natural ecosystem of the site. Our proposal will allow us to be a part of the solution.**