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Comments: Having grown up at Warm Lake, and having spent multiple summers working at Idaho Fish & Game's Warm Lake Fish Weir on the Salmon Recovery Project, I feel a sense of obligation to share my grave concerns about the current proposal for Perpetua's Stibnite Project and the current SDEIS.

Stibnite sits at the headwaters of the East Fork of the South Fork of the Salmon River, a critical spawning habitat for endangered Chinook salmon and bull trout, and threatened steelhead. These waters also feed into many additional waterways in our state and the proposed mining operation also threatens my beloved Warm Lake and the drainage it feeds on the South Fork of the Salmon River, which is also habitat for the same threatened and sensitive fish populations. Many mining companies over the last century have pulled ore from the ground here and left heartbreaking environmental damage in their wake. The mining companies have left with the profits and the taxpayers and citizens of our state and country have been left to deal with toxic damage left behind. Although Perpetua promises to clean up existing damage, their proposal would actually expand this existing site and open one of the largest open pit mines in the country, having the very real potential of dramatically expanding the environmental damage.

Unfortunately, the antiquated General Mining Act of 1872 gives Perpetua (or anyone, foreign or domestic) the right to mine on Idaho land while paying zero royalties. However, this act does not also grant them the right to cause environmental damage or harm the recreational use and enjoyment of nearby areas. This SDEIS does not provide the breadth and granularity required to fully assess the risks and required mitigation for a project of this scope. Nor did the abbreviated comment period allow adequate time for a thorough enough review of a project of this magnitude.

As the second longest free-flowing river in the lower 48, the South Fork of the Salmon River (SFSW) provides habitat for species protected under the Endangered Species Act. But mining efforts are responsible for the SFSR's shocking rank of #5 on America's Most Endangered Rivers 2020 Report. Home to native westslope cutthroat trout, and critical habitat and active spawning grounds for threatened steelhead and endangered Chinook salmon and bull trout, this river is the foundation of ongoing efforts to restore these species. Past decades of heavy mining in the Stibnite area have already proven detrimental to water quality, landscapes, natural habitats, wildlife, and fisheries. In an effort to curb arsenic and mercury leaking into the river, miners unsuccessfully tried to reroute the headwaters by building a dam, but it blew out in 1965. Proposed as a Superfund site, U.S. taxpayers have already invested over four million dollars cleaning up damage from previous Stibnite mining operations. Yet, despite decades of restoration efforts, material contaminants remain in mine tailings, soil, groundwater, sediment and surface water. According to the U.S. Geological Survey's Idaho Water Science Center, the average concentration of dissolved arsenic currently in the EFSF is 57 micrograms per liter - five times the human health benchmark, and with highest reading dangerously close to the aquatic life long-term toxicity value of 150 micrograms. As an example of the damage mining can do to the environment, Panther creek, a nearby tributary to the Salmon River, suffered from mining operations at Blackbird Mine, releasing copper, arsenic, and cobalt into its tributaries. Before the mine, Panther Creek, like Stibnite, supported abundant Chinook and steelhead populations. But from the 1960's to the 1980's, no fish and few aquatic invertebrates could be found within 25 miles of the mine. In an effort to revitalize the fish population, years of studies transplanted fish, but fish populations failed to recover, and tests showed close to a 100% mortality rate. The watershed had barely any disturbances other than water quality, proving that mining-related pollution was the reason for these lethal effects.

Yet as bad as the existing damage at Stibnite is, new expanded mining could spread the problems dramatically. The proposal by Perpetua for their massive open-pit gold and antimony mine includes the expansion of two

existing pits, as well as adding a third massive open pit and building a 400 foot tall dam to hold 450 acres of tailings and dump waste. Previous mining operations have already left elevated levels of arsenic, mercury and antimony in the tributaries. In spite of Perpetua's public relations & cleanup promises, reopening and expanding mining operations threaten to further pollute SFSR headwaters. At this scale, a project like this could have permanent, catastrophic repercussions for the South Fork of the Salmon River, and everything downstream of it. According to the U.S. Environmental Protection Agency's Toxin Release Inventory, metal mining continues to be the nation's #1 toxic polluter, even with modern mining methods. To process all ore, Perpetua will use an on-site cyanide leaching method. Dangerous enough to be outlawed in some areas, including nearby Montana, this method involves spraying the solution over piles of low-grade ore with low concentrations of gold, and cycling millions of liters of alkaline water containing high concentrations of free cyanide and metal-cyanide complexes. Used in a milling process to extract precious metals, cyanide is an extremely toxic chemical which has a direct, lethal effect on biota and reduces aquatic biodiversity. We must evaluate this SDEIS in light of that level of potential catastrophic damage. Even with all proper measures taken and no accidents, cyanide and other toxic chemicals will inevitably leach into the ground and watersheds. As Perpetua builds the fishway bringing vital waterways closer to their operation, impending contamination puts these already at-risk species in an extremely precarious situation. According to the E.P.A., 40% of the headwaters of watersheds in the western U.S. have already been dangerously polluted by mining. We have a moral responsibility not to exacerbate this problem.

Along with on-site use, the transportation of hazardous material is dangerous. The supply and export of mining materials will use the only rural road that accesses the mine: a narrow, treacherous 50-mile stretch of road that sits directly adjacent to the EFSFSR. The project estimates half a million round trips on this road, with many trucks requiring a HAZMAT vehicle escort, where even one spill into the river just feet away could sterilize all life for the foreseeable future. Beyond surviving the threat of pollution, native and endangered fish species must successfully navigate the East Fork of the South Fork of the Salmon River (EFSFSR) to reach their crucial spawning grounds. Today the Salmon River flows directly into the Stibnite pit, where 80 feet of collected toxic sediment blocks a major migratory route, cutting off the spawning passage entirely. Perpetua plans to build a 0.9 mile long tunnel fishway to allow fish to swim back to historical spawning areas for the first time in over 80 years. This tunnel will feature resting pools, riffles, simulated river hydraulics, artificial lights, and low water velocities, yet it will travel directly below a large open pit of toxic mine tailings and chemicals. While this might sound promising to investors and the public, it is not without controversy and risk, nor has a complete fishway like this ever been tested, other than at the individual component level. The true impact of such a long, underground, artificial passage on endangered fish, and their ability to successfully spawn, remains unclear.

With all the environmental risks associated with the Perpetua mining project, and lack of sufficient federal oversight, we should not support nor allow this project to move forward. In spite of the 1872 mining act, there is recent precedent for denying a minerals mining permit. Last year, the federal government blocked the Twin Metals copper mine along the pristine Boundary Waters in northern Minnesota and in late 2020, the Pebble Mine gold mine project was denied by the U.S. Army Corps of Engineers because it could not adequately comply with Clean Water Act guidelines, thus they concluded "the proposed project is contrary to the public interest." I would propose that similar justification is equally warranted in this sensitive and unique habitat in Idaho.

Respectfully,
Jolie Drake