

Data Submitted (UTC 11): 1/6/2023 1:43:58 AM

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Comments: I have hiked and fished Johnson Creek, the Southfork Salmon and the East Fork of the Southfork Salmon since the late 1980's. The valley encompassing the East Fork of the Southfork Salmon was arguably one of the most beautiful valleys before the wildfires in the 2000's struck. All three rivers are important habitat for cutthroat trout, bull trout and Chinook salmon.

Despite the promise of Perpetua to use "best practices" for mining, the USFS's own SDEIS concludes that construction and operation of the Perpetua mine would result in lasting damage to the habitat for Chinook salmon, cutthroat trout and the threatened bull trout.

"Post-closure, a net decrease in quality and quantity of bull trout habitat would occur despite removal of passage barriers and an increase of lake habitat for bull trout..." (SDEIS Fisheries Specialist Report p. 150).

"Fish species composition and/or relative populations within the creeks in the SGP area may change after reclamation, as anticipated habitat may favor steelhead over Chinook salmon, and there would be a decrease in habitat for bull trout and westslope cutthroat trout and Chinook salmon. Therefore, fishing opportunities may be altered after reclamation as well." (SDEIS, Section 4.12, p. 4-544)

Damage to habitat can come as a result of toxic waste leakage/spills, siltation, and warming water temperatures to as much as 12 degreesF. This level of water temperature rise would likely not return to pre-mine levels for nearly 100 years. I would ask that the USFS consider it's own conclusions in the SDEIS as it contemplates issuing permits for Perpetua to construct and operate the mine.

Estimates are that there will be over 3000 trucks annually traveling state and US highways carrying potentially hazardous mine waste. These trucks may also travel popular backcountry roads such as Lick Creek, Southfork Salmon Road, Johnson Creek Road, and Warm Lake Road. Despite best efforts, accidents will happen, and the released toxins can have devastating consequences. Accidents along any of the backcountry roads could deliver lethal levels of toxins into adjacent waterways, aggravating the destruction of fish habitat. And has the USFS contemplated the results from mining truck accidents that would occur along state highway 55 between Cascade and Boise, or along state 55 and US95 between McCall and Payette?

During the operation of the mine, it's likely that arsenic will be released into the air. What are USFS's plan to monitor the real time levels of arsenic in the air, and what levels are deemed permissible or "safe"? Should arsenic levels exceed permissible levels, what is USFS's plan to stop the excessive release of arsenic?

Perpetua has pitch the mine as a source of Antimony, which would support clean energy through integrating Antimony in Ambri's Flow Battery. However, it appears the Ambri's batteries are still in the developmental stage, and are not yet deployed in any meaningful quantity. Flow batteries have been a promise for cost effective long duration energy storage for decades, but have yet to make any significant impact in the energy storage market. Issues around insufficient flow rates (required power) and cost effectiveness (ROI) have made flow batteries still more of a dream than a real solution for the energy storage market. Even a well established technology like the Vanadium Redox flow battery has not been able to meet power and ROI goals to make them effective solutions in the marketplace. It is a stretch to think that an Antimony-based flow battery that has not yet reached the marketplace will surmount these barriers. Thus Perpetua's mine remains a mine for gold, along with its potentially dangerous cyanide leach process.

I ask that USFS consider all these critical aspect of the Perpetua mine and either deny the required permits, or

request an additional supplemental plan to adequately address the issues noted above.

Respectfully,
Paul Cooperrider