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Comments: Ms. Jackson:

I'm the Senior Engineer with Perpetua Resources, and have worked on the Stibnite Gold Project since 2013. Combined with 25 years of engineering experience in various aspects of water resources engineering, including hydrology, sediment transport, and stream restoration, I've had many opportunities to get deep in the weeds on the technical details of this project and others. But 25 years in industry has also afforded another opportunity - that of perspective. As a junior engineer I, like many, spent countless hours ensuring every parameter was estimated as accurately as possible, and every detail of every calculation was correct. While those skills remain important, and I insist on quality and well-presented work from our consultants, experience has also brought perspective as to what matters, and what does not, in assessing a project.

While it successfully compiles a vast array of data and analyses from multiple technical disciplines, the Stibnite Gold Project SDEIS could benefit from a broader perspective as to the scale and relative importance of the project's impacts and benefits. Specifically, there seems to be little consideration given to framing the Project disturbance at the watershed and Forest scale.

As to the watershed perspective, from SDEIS Table ES-2, the Stibnite Gold Project would disturb a total of 1,740 acres (2.72 square miles) at the mine site, roughly half of it (49.3%) already disturbed. The drainage area of the South Fork Salmon River at its confluence with the East Fork South Fork, that is, the furthest upstream point on the South Fork where the Project could exert any influence, is approximately 784 square miles, making the Project disturbance just 0.35% of that watershed. Just above its confluence with the Salmon River (1,310 square miles), it's 0.2%, and on the East Fork South Fork just below Sugar Creek (43 square miles), it's 6.3%. Broadly speaking, disturbance or development of up to 15% of a watershed tends not to lead to significant detrimental environmental changes, and flow changes of that magnitude are within the uncertainty of stream gage measurements - meaning that Project impacts are below that threshold even just offsite, below Sugar Creek. Even without the various mandatory mitigation measures such as contact water management and treatment, at the scale of the larger watershed, the effects of proposed Stibnite Gold Project disturbance will be essentially undetectable. Similar calculations could be done with offsite components of the project, but complicated by much of those facilities lying in the Payette River watershed.

From the standpoint of the Payette National Forest, per SDEIS section 3.4.4.22, from 1990 to 2013, roughly the same duration as the Project's lifespan from construction through early closure, 18.2% of the Payette National Forest burned. Over 24 years, that is about 0.76% burned per year. The Payette National Forest encompasses over 2.3 million acres (3,600 square miles), meaning approximately 17,400 acres of it burns, on average, every year. That also places the life-of-mine Stibnite Gold Project mine site disturbance at roughly 0.08% of the Payette National Forest land area, without discounting the proportion of onsite disturbance that is either on private land or previously disturbed or both. Roughly ten times that amount of new disturbance is expected every single year in the Payette due to fire - and needless to say there are no engineered sediment controls or water treatment plants in place in advance to manage runoff and sediment from burn scars. As with the watershed-scale perspective, and again discounting mandatory (sediment control and contact water management) and voluntary (Blowout Creek restoration) practices that reduce Project sediment loads, concurrent reclamation, or the multi-year persistence of fire impacts, Stibnite Gold Project sediment loads are likely to be dwarfed by those following wildfire.

On the other side of the ledger are the outsized benefits of the Project on the economy, restoration of the site, water quality, fisheries, and establishing a domestic antimony supply chain, all written about at length elsewhere.

Improvements adopted in the 2021 MMP in response to public feedback magnify these positive aspects of the Project, against which I would argue single-digit square miles of intensively managed disturbance are a pinprick. I respectfully urge you to advance the Stibnite Gold Project towards the FEIS and positive Record of Decision so that these myriad benefits are realized.

Thank you,