October 28, 2020

Brian Harris, Project Contact
Payette National Forest
800 West Lakeside Avenue
McCall ID. 83638

Re: Comment on Stibnite Gold Project Draft Environmental Impact Statement

Mr. Harris,

Please accept the following comments from Idaho Wildlife Federation, Trout Unlimited, Theodore Roosevelt Conservation Partnership and Backcountry Hunters and Anglers regarding the Stibnite Gold Project Draft Environmental Impact Statement (DEIS).

The Idaho Wildlife Federation (IWF) is Idaho's oldest statewide conservation organization, founded by sportsmen and women in 1936. Today, we represent a nonpartisan voice of 28 affiliate organizations with 45,000 affiliate members and individual supporters who desire to sustain and enhance Idaho's fish and wildlife, conserve their habitat, and maximize sporting opportunity for current and future generations. Our efforts advance "made in Idaho" solutions to the modern challenges of wildlife management.

Trout Unlimited (TU) is the nation's oldest and largest non-profit coldwater conservation organization with over 300,000 members and supporters dedicated to conserving, protecting and restoring North America's coldwater fisheries and their watersheds. Since 1959, TU staff and volunteers have worked toward the protection of sensitive ecological systems necessary to support robust native and wild trout and salmon populations in their respective ranges. Nine chapters with 2,500 members statewide actively participate in projects with the Forest Service, local communities, and private landowners in order to maintain the larger landscape that is so vital to the social and economic well-being of communities in Idaho.

The Theodore Roosevelt Conservation Partnership (TRCP) is a national non-profit conservation organization working to guarantee all Americans quality places to hunt and fish. In addition to its 60 formal partner groups, the TRCP represents more than 100,000 individual members across the United States and 3,500 in Idaho. In cooperation with other sporting and conservation organizations, we work to ensure access to public lands while at the same time working through federal land use planning to make sure big game animals – such as deer, elk, bighorn sheep, and pronghorn – have room to thrive.

Backcountry Hunters & Anglers (BHA) is the voice for our wild public lands, waters and wildlife. We seek to ensure North America's outdoor heritage of hunting and fishing in a natural setting, through education and work on behalf of fish, wildlife and wild places. With more than 250,000 members and supporters and chapters in 48 states, two Canadian provinces and one territory, BHA is one of the fastest growing hunting and fishing organizations in the world. In Idaho, over 2,000 public land and water advocates have officially joined our ranks as dues paying members.

Additionally, we recognize the high value of public lands and the role public lands play in providing habitat to coldwater fisheries, drinking water, and wildlife habitat. Our organizations believe that the actions taken on public lands are ultimately reflected in the quality of fish and wildlife habitat and their populations.

We also have a keen interest in the landscape surrounding the proposed mine location. Some of our groups serve as members of the Payette Forest Coalition and have been in discussions about management of lands in the South Fork Salmon watershed. Additionally, Trout Unlimited serves on the Idaho Roadless Commission. Roadless lands are a key component in this DEIS. All of us have members that hunt, fish and recreate in the South Fork Salmon drainage.

The historic Stibnite/Yellow Pine mining site was located in the same watershed as the newly proposed Stibnite Mine described by the DEIS. The historic site was mined from the early 1900's to the late 1990s largely for antimony and gold. Contaminants associated with those operations resulted in heavy metals and cyanide contamination in area soils, groundwater, seeps, sediments, and thus surface waters. An initial assessment conducted by the US Environmental Protection Agency (EPA) in 1985 determined habitat impairments in the watershed significant enough to consider it amongst the US's most contaminated sites. Despite some cleanup efforts, the site remains contaminated, with designation as a Superfund site. Moreover, numerous streams in the East Fork of the South Fork Salmon River (EFSFSR) as well as the South Fork

Salmon River exceed Idaho standards for drinking water and aquatic habitat, and thereby are considered 'impaired.'

Past mining in this area has left many long-term impacts on the landscape. Midas Gold has stated many times in the development of this project that they will reclaim the site and leave it more environmentally sound than its current condition. While we have no reason to doubt the company's intentions, it is hard to believe that a mine of this magnitude, in production for twenty years, will not have a serious impact on fish, wildlife and the natural environment in the EFSFSR and further downstream. Our organizations also have concerns about whether post-mine cleanup scenarios are achievable. Further, we feel the current DEIS is incomplete and makes assumptions about impacts that may be incorrect.

We submit the following comments for the Forest's consideration.

Fisheries

Our organizations have a keen interest in the survival and perpetuation of anadromous fish and native trout that are found in the project area. IWF and TU are currently serving on the Governor's Salmon Workgroup which is tasked with writing recommendations for salmon and steelhead recovery in Idaho. Runs of wild steelhead and salmon have hit historically low numbers in Idaho, prompting concern from numerous groups throughout the state and beyond. Four species of salmonids are found in or downstream of the Stibnite Gold Project Area with steelhead, Chinook and bull trout being federally listed under the Endangered Species Act while native westslope cutthroat trout are recognized as a species of conservation concern. The Stibnite mine development will result in decreases to both habitat quality and quantity with cumulative impacts to these fish over the life of the mine possibly being underestimated by the DEIS.

Physical habitat impacts from mining are underestimated in the DEIS. While some important aspects of habitat complexity and connectivity were characterized in baseline assessments referenced in the document, they are ignored in the DEIS predictions of impacts. Degradation of those habitats from decreased flows, road crossings, increased sediment loads, spills, and other activities associated with mine development will inevitably impact salmonid populations.

Comparing impacts to current habitat conditions drastically underestimates cumulative impacts of mining. In the DEIS, mine impacts are compared to current baseline conditions. Habitat considered in the DEIS is already severely impacted by historic mining in the area and other development activities. Undoubtedly, historic mining impacts contributed to the current conservation status of all species evaluated. While the proposed alternatives describe some remediation of historic impacts, mine cleanup efforts simply cannot restore habitat to pre-mining conditions and cannot outweigh impacts from currently proposed mining. Previous domestic and global efforts have shown habitat restoration and mitigation is difficult, expensive, and often ineffective. Impacts should be predicted relative to estimated habitat conditions prior to mine development.

Impacts to water quantity and quality from Stibnite Mine development are vastly underestimated in the DEIS. Flawed assumptions and conclusions from the baseline hydrologic model are compounded in predictions of hydrological impacts. Water temperature predictions rely on the

same baseline hydrologic model outputs predict substantial temperature increases, but fail to incorporate well documented impacts of climate change. Because water temperature is fundamental to salmonid growth and survival during multiple aspects of their freshwater life history, seemingly small deviations from predictions could result in drastic underestimations of mining impacts. Water chemistry impact predictions consider unjustifiably limited parameters of concern. The DEIS qualitatively evaluates impacts to fish from potential increases in concentrations of five metals. Those described impacts are largely minimized in the document, but multiple other contaminants of significant concern to salmonids and other aquatic life receive no consideration.

Impacts to salmonids from project related groundwater changes are ignored in the DEIS. Groundwater and hyporheic inputs increase salmonid incubation and emergence success, and often support higher densities of fish due to their temperature and oxygen profiles relative to surface waters. Not only are groundwater flows poorly predicted in the DEIS, their role in salmonid survival and resulting impacts to it from changing groundwater levels is unaddressed.

Temperature increases ignore climate change, are otherwise underestimated and their impacts are unreasonably minimized. In addition to other shortcomings of the model used to predict project related temperature changes, it fails to incorporate temperature increases due to climate change. Climate change is already impacting bull trout and cutthroat trout habitat and those impacts will only be compounded by project related temperature increases.
Impacts to all non-salmonid species are ignored in the DEIS. Mountain whitefish, suckers, Pacific lamprey and other important fish, freshwater insects, algae, and other primary producers are all critical elements of the foodwebs supporting salmonids considered in the DEIS.

The DEIS assumes no interactions among impacts. By considering fish species, stream reaches, and limited habitat impacts all separately, the DEIS fails to acknowledge the broad ecological understanding that multiple stressors will amplify one another's effects on the ecosystem. This leads to a serious underestimate of impacts to fish and their habitat.

Loss of headwater streams are falsely assumed to have no downstream impacts. While loss of stream miles are estimated for the project area itself, those estimates exclude consideration of the function of upstream and downstream waterbodies. Headwater and upstream habitats are fundamental drivers of physical, chemical, and biological characteristics of their downstream receiving waters. Failure to incorporate those impacts in the DEIS result in a substantial underestimation of project development.

The DEIS assumes that mitigation and restoration efforts are possible and effective. Experience has shown that habitat restoration and mitigation are difficult, expensive, and often ineffective. Restoration activities to restore salmon, trout, lamprey, and other fish restoration are ongoing and extremely expensive.

Mitigation descriptions rely heavily on the success of a constructed bypass tunnel. However, an evaluation by the National Marine Fisheries Service (NMFS) of the bypass tunnel submitted on October, 2019, NMFS stated that:

> "Due to the uniqueness of the proposed design, the expected correlation between fish passage criteria and actual passage performance may not develop. Even after close consultation and collaboration with NMFS, meeting applicable NMFS passage criteria and guidelines, and executing all potential adaptive management measures, there exists a reasonable probability that the project will not be able to volitionally pass fish safely, timely, or effectively."[1]

The letter goes on to say that a trap and haul program may be necessary to pass fish upstream of the mine site.

Economic Impacts to Hunting, Fishing, Outdoor Recreation

Hunting and fishing is a significant economic driver in Idaho. In 2011, 534,000 resident and non-resident hunters and anglers recreated over 9.7 million days in the field, spending $1.02 billion. Abundant hunting and fishing opportunities also generate 15,261 jobs in the state. Breaking this down further, Idaho Sportsmen and women support $2.8 million in spending per day, $442 million in salaries and wages, $105 million in federal taxes, and $97 million in state and local taxes[2]. More specifically, visitors to the South Fork Salmon River and the Wild and Scenic Salmon River spend $13.5 million annually in the region. These impressive statistics are a result in high-quality, in-tact public lands administered by the Forest Service and other federal agencies. Hunters and fishermen spend their time and money in rural Idaho, where many of these communities have embraced and become reliant on this financial source year after year.

The footprint of the Stibnite Gold Project (SGP) falls within Idaho Department of Fish & Game Management Unit (GMU) 25. GMU 25 is enjoyed by an average of over 2,000 deer and elk hunters yearly, totaling 13,110 hunting days within the unit boundary. Other sporting opportunities within this landscape include wolf, bear, mountain lion, and forest grouse hunting. IDFG's McCall Zone Elk B Tag, of which GMU 25 is part of, is one of the few remaining over-the-counter, non-capped zone elk hunting opportunities in Idaho and across the West. Though many hunting units and zones may be capped or limited draw entry as a technique to manage for animal quality and maturity, these techniques can and will be used in the future to address hunting experience and hunting pressure. With few opportunities left for over-the-counter, non-capped elk tags, paired with the rapidly expanding Idaho population and increased disturbance from associated mining activities related to the SGP, this area will likely see increased and unsustainable human pressure over the next decades. This, in turn, may force wildlife managers to implement restrictions to limit hunting or recreational pressure, such as switching to a capped zone system or a draw unit.

The SGP also lies less than 4 miles from the Western boundary of GMU 26, where in 2011, an additional 398 hunters spent a combined 2,258 days pursuing elk and deer. In addition to these over-the-counter opportunities for deer and elk hunting, GMU 26 also offers an extremely limited Rocky Mountain Bighorn Sheep season, where in 2019, three hunters were drawn via an application process. In 2019, Bighorn Sheep harvest in GMU 26 ranked third highest in average horn length. Though these units are expansive, the SGP may have direct impacts to the quality of the hunting experience and may create edge impacts to the neighboring GMU 26.

[1] National Marine Fisheries Letter to USFS and Midas Gold, October 1, 2019.

[2] http://congressionalsportsmen.org/uploads/page/EIR_Idaho_final_low.pdf

The DEIS fails to adequately analyze impacts to this important socio-economic sector in each alternative. We request that the PNF expressly state these impacts to these concerns stated above in the final document or in a supplementary DEIS.

Impacts to Roadless

Access routes to the SGP weave through several primitive and unroaded areas with high ecological integrity. The Idaho Roadless Rule generally prohibits road construction in Idaho Roadless areas. However, there is an exception to construction when providing access to hard rock mining projects when it is found to be needed.[3] The Idaho Roadless Rule Briefing Paper lists that a temporary mine access/public by-pass route would be constructed, referred to as the "Burntlog Route." This route begins 32 miles southeast of the mine site. Development would include re-alignment of portions of the Burntlog Road, new construction for connecting roads, re-constructing portion of the "Old Thunder Mountain Road" and Meadow Creek Lookout Road on the wilderness boundary and constructing a new road down from the wilderness boundary to the planned main mine gate near the head of the EFSFSR. Fourteen miles of the route would be within IRAs managed as Backcountry Restoration. Mine reclamation would include decommissioning new segments of the Burntlog Route. We question the necessity of the Burntlog Route and request the Forest provide a clear rationale as to why this route is needed, as required by the Idaho Roadless Rule. Alternatives 1, 2, and 3 would authorize between 13.2-17.3 miles of road construction in IRAs (specifically Black Lake, Burnt Log, Meadow Creek, and Reeves Creek IRAs)[4] However, Alternative 4 would not require new construction and would improve or reconstruct existing roads.

We are generally very supportive of providing public access to National Forest System Lands and work diligently across the state to promote these values so we can enjoy them in a responsible way. However, we are concerned with the cumulative impacts to wildlife with mining operation, administrative, and public recreational traffic combined within various roadless areas. We are concerned with the possibility of the Forest fulfilling requirements under the Idaho Roadless Rule by permitting public access via the Burntlog Route at the project start. The Forest also fails to address public access on the Burntlog Route after project completion. The Idaho Roadless Rule states that "temporary roads are available for administrative use until decommissioned" (36 CFR Part, Subpart C SS 294.21 Definitions). If public access were to be granted, it must be included in the Forest Transportation Atlas and designated as a Forest Road. As we understand, the Burntlog Route, as proposed, may only be legally available for administrative use and implementation of the Special Use Permit.

[3] "Road construction is only permissible in Idaho Roadless Areas designated as Backcountry/Restoration when the Regional Forester determines … (iii) A road is *needed* pursuant to statute, treaty, reserved or outstanding rights, or other duty of the United States." 36 CFR § 294.22(b)(1) (emphasis added).

[4] DEIS at 4.23-46—4.23-47

The DEIS does not address how the Forest will mitigate impacts to the identified values of Burntlog Creek if construction of the Burntlog Route is authorized. Burntlog Creek cuts through the Burnt Log IRA and is listed as an "eligible" Wild & Scenic River in the Boise National Forest Plan. The Boise National Forest Plan segments Burntlog Creek into two segments, one eligible as "recreational" and one as "wild." The DEIS fails to provide any tangible mitigation measures that would adequately limit potential impacts with this new route construction. Potential measures that were not fully analyzed include hardened crossings, bridges that provide for Aquatic Organism Passage (AOP) on major, perennial streams that likely to see multiple crossings due to construction and maintenance access, establishment of construction seasons when risk of sedimentation is low, and turbidity monitors at and downstream of stream crossings.

The Boise National Forest Plan identifies a small population of mountain goats as one of the special features of the Burnt Log Roadless Area. Disturbance can particularly harm wintering mountain goats (e.g., panic-caused increases in metabolic rates/energy expenditures and reduced time feeding), which inhabit extremely harsh winter ranges and are stressed by cold and limited forage[5]. Repeated winter disturbances (e.g. helicopters, snow-machines, logging, road building, etc.) can ultimately contribute to population declines by displacing mountain goats from important habitats[6]. There are 5 trails in the Burnt Log IRA, of which 12 miles are motorized and 7.2 miles are non-motorized. If the Burntlog Route were to be approved and the public had accessibility to this landscape, it may negatively impact the long-term population dynamic of these mountain goats. We request that the Forest address these threats to this small and potentially vulnerable mountain goat herd if they are observed in the vicinity of the proposed Burntlog Route. All newly proposed recreational opportunities should undergo Travel Management Planning in a separate NEPA process.

Though primitive roads are not maintained in the winter months, it is likely maintenance through IRAs will be required throughout all months of project implementation. The Forest Service should analyze how these routes will disturb wildlife habitat, migration corridors, and increases of human-caused stress and disruption to wildlife species throughout each season.

Forest Plan Amendments

In its analysis, the Forest Service identified upwards of 175 Forest Plan provisions that apply to the SGP, but which the agency determined would not be met or were still unsure if they would be met. In response to these inconsistencies, the Forest Service provided Appendix A "Forest Plan Consistency and Land and Resource Management Plan Amendments" with various amendments in an attempt to move the goalposts and allow the SGP operations to meet these new standards.

It is obvious there are several components of the SGP that do not conform to the Boise and Payette Forest Plans, and as a result, the Forest Service analyzed four project-specific

[5] Gordon, S. M., and D. M. Reynolds. 2000. The use of video for mountain goat winter range inventory and assessment of overt helicopter disturbance. Biennial Symposium of the Northern Wild Sheep and Goat Council, 12:26–35.
[6] Chadwick, D. H. 1983. A beast the color of winter. San Francisco, CA: Sierra Club Books

amendments to each Forest Plan. These project-specific amendments must adhere to the 2012 Planning Rule, including analysis and disclosure of the effect each amendment may cause to the Forests. However, there are no details given in the DEIS anywhere of the effects of any of the four proposed amendments. The Forest Service cannot simply sweep these issues under the rug by claiming the four proposed Forest Plan amendments somehow cover these dozens of inconsistencies with the Forest Plans. The Forest Service must actually consider the relevant Forest Plan provisions and must explain to the public how the Stibnite Gold Project complies with them; and where it does not comply, must make changes to the Project, reject the Project, or amend the Forest Plan.

Forest Plan Amendment 1 in the DEIS proposes to amend the Boise and Payette Forest Plans to allow the SGP to "degrade aquatic, terrestrial, and watershed resource conditions during the duration of project implementation." Current language from the Forest Plans allows only temporary degradation, specifically up to three years. This amendment runs counter to language from the 2012 Planning Rule that requires all forest amendments to be "informed on the best available scientific information, effects..." The DEIS states "The proposed plan amendment maintains the intent of the original plan standard, while allowing for the implementation of the proposed [Stibnite Gold Project]. The plan amendments adjust the time frame for the impacts but retain the plan components requiring maintenance or restoration of key characteristics associated with terrestrial and aquatic resources; rare aquatic and terrestrial plant and animal communities; and the diversity of native tree species." However, Plan components, while intended to maintain or restore key characteristics, may degrade those key characteristics.

Amendment 1 is also problematic as it allows degradation throughout project implementation, which could be defined as construction, mine operations, closure, reclamation activities, monitoring, and any associated water treatment measures. Though construction, operations, and reclamation may be completed within 20 years, implementing water treatment measures may be necessary in perpetuity. This specific amendment deviates substantially from the current Plan language and may allow drastic changes in degradation during a time that our wild anadromous salmonids returning to the South Fork Salmon River are hanging on by a thread. Long term effects to these ESA-listed stocks may be felt if degradation is allowed on this scale, which again runs counter to guiding language in the Planning Rule.

Amendment 4 proposes to "suspend the requirement that new surface diversion provide upstream and downstream fish passage…" We are concerned that this amendment to the Forest Plans is not a suspension of the current requirement, but a total elimination of this in both Forest Plans. This seems to be similar to Amendment 1, where negative effects may be felt well past the project implementation and reclamation activities. By allowing new surface diversions to not require fish passage upstream and downstream, bull trout and Chinook salmon habitat quantity is reduced. This runs counter to the Planning Rule's requirements for ecosystem integrity, as this decrease in habitat quantity and/or quality does not maintain or restore the structure, function, composition, and connectivity of aquatic ecosystems. The Forest Service should provide a more robust rationale for these proposed amendments. If determined they do not meet the statutory requirements in the National Forest Management Act (NFMA) and in the 2012 Planning Rule, the Forest Service should not implement these and require that the SGP meet the current Forest Plan standards and guidelines.

In closing, our organizations have many concerns about a project of this magnitude in a remote landscape within such an important watershed for fish, wildlife and recreation. In the best of conditions, long-term impacts to the watershed are unavoidable. In the worst of scenarios, a catastrophic incident could impair the watershed for generations to come. We recommend that the Forest Service take a hard look at this project and possibly require a Supplemental DEIS that would provide missing data and rectify erroneous conclusions.

We thank the Forest for the opportunity to comment.

Sincerely,

Garret Visser

Idaho Wildlife Federation

Michael Gibson

Trout Unlimited

Rob Thornberry

Theodore Roosevelt Conservation Partnership

Ace Hess

Backcountry Hunters and Anglers