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Comments: June 30, 2024

Chris Bachman

Conservation Director

Yaak Valley Forest Council

Kootenai National Forest

Attn: Sam Martin

District Ranger

Three Rivers Ranger District

District Ranger Martin,

RE: Why Not Stardust Minerals Exploration DRAFT Environmental Assessment

I am writing on behalf of the Yaak Valley Forest Council to comment on the Why Not, Stardust, and Devil Dog placer mining claim Plans of Operation outlined in the Why Not Stardust Minerals Exploration Draft Environmental Assessment. We appreciate the opportunity to offer comments. The ecological value of rivers in the Yaak is far more precious than gold.

The Yaak Valley Forest Council, established in 1997, is a non-profit organization based in Montana. We focus on implementing conservation and restoration programs that protect and preserve critical wildlife habitats for sensitive, threatened, and endangered species residing in the wild Yaak Valley. Our mission is to safeguard the last roadless areas in the Yaak Valley and the Kootenai National Forest and to maintain and restore the ecological integrity of our geographic zone by conserving and enhancing habitats for native and sensitive species.

We support Alternative 1: No Action. The USFS is only authorized to regulate, but not prohibit, lawful locatable mineral operations conducted on NFS lands(1). Prohibiting suction dredge mining does not prevent panning for gold or other non-motorized, less impactful mining activities.

Some items your analysis must consider, and disclose to the public, include:

- * Has this claimant complied with all requirements from past permits including reclamation?
- * Has monitoring of past claimant activities been completed?
- * Have results of monitoring past exploration activities in this area shown unexpected impacts?

Concerns

There are few operational details provided in the scoping notice and Draft EA. Extensive mining activities have occurred for many years in this area. Extensive past and future logging and road building also. The potential for cumulative effects indicates this proposal must undergo full NEPA Environmental Impact Statement analysis, not simply an EA.

In addition to disclosing historical compliance, a scheduled plan for monitoring compliance must be included in the analysis along with a supporting budget. The Draft EA allows operators to visually monitor downstream sediment transport. The EIS should include a plan to sample and analyze resuspended sediment for mobilized toxins. The EIS should also thoroughly investigate the presence of bull trout and its impact on bull trout habitat at and downstream of the Devil Dog Claim.

Baseline testing must be completed to establish the presence of mercury. The existing dredging site and the proposed dredging site on the Yaak River are both below the former gold mining town of Sylvanite, the existing operation may be suspending and transporting mercury downstream and into the Kootenai River, which has documented water quality issues including elevated selenium concentrations. We have not found any specific mercury testing conducted on the Yaak River or Star Creek, representing a significant data gap.

The Draft EA states:

"No future, non-Federal actions are known at this time." (2)

However, two subdivisions are being planned in the Yaak Valley, the South Yaak and West Pine Creek properties. The South Yaak subdivision is situated next to the Devil Dog Claim to the south and downstream from both the Why Not Stardust and Devil Dog Claims. Both subdivisions have been heavily debated at Lincoln County Commission meetings and well documented in the press. Stating no future non-Federal actions are known at this time is negligent.

(1: Why Not Stardust Minerals Draft Environmental Assessment. (2024). USDA Forest Service Northern Region/Kootenai National Forest. <https://usfs-public.app.box.com/v/PinyonPublic/file/1546995441165>)

(2: Why Not Stardust Minerals Draft Environmental Assessment. (2024). USDA Forest Service Northern Region/Kootenai National Forest. <https://usfs-public.app.box.com/v/PinyonPublic/file/1546995441165>, p 16.)

Public Trust

Montana's 1972 Constitution codifies public ownership of water, meaning that suction dredge mining claims on public lands prioritize the commercial extractive interests of individuals over the public trust. While the current permit supports the multiple-use mandate of the Forest Service, expanding that permit to include an additional location expands overall impacts on fish habitat, increases the likelihood of conflicts with other river users, and raises the possibility of mercury mobilization downstream from past mining activities. This prioritizes extractive interests over the public trust benefits bestowed on Montana citizens.

Wild and Scenic Eligible Rivers

The proposed dredge mining activities are outlined in the 2015 Kootenai National Forest Land Management Plan, 2015 Revision, as eligible for Wild and Scenic designation. The Management Area Direction for Eligible Wild and Scenic Rivers under the Wild and Scenic Rivers Act of 1968, as amended states:

"Eligible rivers and adjacent areas are managed to protect the free-flowing nature of these rivers, and outstandingly remarkable scenic, recreational, geologic, fish, wildlife, historic, cultural, or other similar values for the benefit and enjoyment of present and future generations."(4)

The U.S. Forest Service may authorize non-commercial mineral collecting for recreational purposes on eligible rivers. However, before authorization can be granted, a detailed assessment of the impacts of this activity is required. This assessment should include a thorough discussion of potential alternatives and a careful consideration of the cumulative impacts of the proposal with existing and foreseeable future development within the project area. It should also address the resource values affected and the management objectives for Wild and Scenic Eligible rivers.

As an eligible Wild and Scenic River, the Yaak River has scenic, recreational, and historical outstandingly remarkable values (ORVs). While canoeing, kayaking, and rafting generally occur during high flow in early spring, pack rafting, pack raft fishing, and wade fishing can be done at much lower flows later in the summer. In general, outdoor recreation in Montana has increased (5,6) during and since the COVID-19 pandemic. Increased outdoor recreation pressure is having a broad impact on Montana's landscapes, raising specific concerns in the communities of Troy and Libby about an increase in river recreation. Allowing mining on the Yaak River may align with historical ORV, but it could lead to increased recreational conflicts without further limits on the permitted timeframe for mining activities.

(3: Blumm, Michael C. and Wisehart, Lorena and Stein, Emily and Brown, Ian and Guthrie, Rachel D. and Smith, Mac and Marienfeld, Kya and Morales, Nathan and Dawson, Elizabeth B. and Menees, Robert and Parsons, Melissa and Short, Stephanie and Sheets, Brian and Doot, Erika A. and Allen, David and Guiao, Rebecca and Moore, Carter and Andiman, Alexis and Zultoski, Elizabeth and Fisher, Kevin and Hill, Casey and McLaughlin, Candice and Schaffer, Lynn. The Public Trust Doctrine in Forty-Five states. 2014. Lewis & Clark Law School Legal Studies Research Paper. Pg. 465-491.)

(4: USDA Forest Service Northern Region. (2015). Land management plan: Kootenai National Forest, p 51.)

(5: U.S. Bureau of Economic Analysis. 2023. Outdoor Recreation Satellite Account, U.S. and States, 2022.)

(6: Weddell, M. 2024. The Montana Travel Industry - 2023 Summary. University of Montana, Institute for Tourism and Recreation Research.)

Ecological Impacts

The Forest Service's analysis must consider and disclose how the mining activities would be consistent with the INFISH forest plan strategy and any TMDL developed or proposed for the streams in the area.

The Forest Service must inventory the culverts, erosion problems, weeds, and other environmental liabilities associated with any roads proposed for the proposal and disclose them

within the analysis documentation.

Please explain how the Region One Soil Quality Standards would apply to this project's activities, especially as per the limitations on soil disturbance within project Activity Areas.

Suction-dredge mining is known to harm fish and their aquatic habitats. Direct impacts on fish include mortality of early life history stages or eggs, lower productivity as a result of habitat modifications, and indirect impacts including changes in food resources, and cumulative human disturbance. Significantly, it found a high likelihood of "take" of ESA-listed fish if suction-dredge mining occurs where fish are present. (7)

Placer mining can harm fish in several different ways:

- * Geomorphic Effects. Dredging directly removes the natural streambed, rearranges the material, and deposits it back into the stream as tailings. This destabilizes streambeds, simplifies aquatic habitat, and increases the potential for streambed erosion.

- * Piling of cobbles. Miners commonly pile rocks too large to pass through their dredges. These piles can persist during high flows and as imposed topographic high points, may destabilize channels during high flows. (8)

- * Sediment. Suction-dredge mining directly releases suspended sediment into the water column, a "pollutant" under the Clean Water Act. Suspended sediment can be especially damaging to fish eggs, juvenile fish, and prey species. Sediment deposited as tailings can also smother eggs, fill pools, and have negative hydrologic impacts.

- * Entrainment. Small fish, fish eggs, and invertebrates are sucked into suction dredges and can be killed. Many non-salmonids have protracted spawning periods extending into summer. Eggs of non-salmonid fishes, which often adhere to rocks in the substrate, also are unlikely to survive entrainment.(9)

- * Mobilization of Toxins (e.g. Mercury). Suction dredging resuspends sequestered mercury. Although suction dredging captures some mercury from the streambed, much of the mercury is washed downstream. The sediment plume below the suction dredge operation can have mercury concentrations exceeding water quality standards, creating a health hazard for fish, wildlife, and humans. Resuspended mercury bioaccumulates in the food chain. The effects of mercury exposure on life are well documented.(10)

- * Cumulative Impacts. More important than any of the individual factors, all factors, and outside events, interact and accumulate. The whole is more than the sum of the parts. A complete understanding of mining impacts requires analysis of these cumulative impacts.(11)

(7: REGULATION CONSIDERATIONS FOR SUCTION-DREDGE PLACER MINING: A COLLECTION OF THE NEW SCIENTIFIC AND OTHER FACTUAL INFORMATION FOR CONSIDERATION BY THE STATE OF WASHINGTON AS IT REFORMS ITS SUCTION-DREDGE PLACER MINING REGULATIONS. (2018). Cascadia Wildlands. <https://www.cascawild.org/wp-content/uploads/2019/04/SUCTION-DREDGE-WHITE-PAPER-Cascadia-Wildlands-Fall-2018.pdf>, p 1.)

(8: Harvey, B. C., & Lisle, T. E. (1998). Effects of suction dredging on streams: A review and an evaluation strategy. *Fisheries*, 23(8), 8-17. [https://doi.org/10.1577/1548-8446\(1998\)023<0008:eosdos>2.0.co;2](https://doi.org/10.1577/1548-8446(1998)023<0008:eosdos>2.0.co;2))

The financial implications of the actions may be significant for taxpayers and must be disclosed in the Forest Service's NEPA document. Under 36 CFR 228, the agency must require financial assurance to ensure that reclamation will be completed in the event of abandonment of the site. The Forest Service should detail the amount, scope, and form of the financial assurance to ensure that such a critical issue is subjected to public review and comment.

The federal government can review and challenge the validity of any mining claim at any time [Cameron v. U.S., 252 U.S. 450(1920)](12), therefore it must inquire into these issues at the outset as part of its NEPA and 36 CFR

228 review processes. This inquiry is also required to the Forest Service's duty under the Organic Act, before approval of an operation.

Impacts on TES Species

The Forest Service analysis must comprehensively assess past, present, and reasonably foreseeable impacts on all threatened and endangered species (TES), including wildlife, fish, and plant species, as well as management indicator species.

Obtain a Biological Opinion to Thoroughly Assess Impacts to Fish and Wildlife

We urge the Forest Service to mandate full consultation with the Fish and Wildlife Service, including obtaining a biological opinion rather than a concurrence letter. This will ensure a comprehensive evaluation of the impacts on endangered and threatened fish and wildlife species.

(9: Moyle, P. B. 1976. Inland fishes of California. University of California Press, Berkeley.)

(10: Brooks, O. (2022, March 5). The ills of suction dredging. Wild Salmon Center.
<https://wildsalmoncenter.org/2017/04/26/ills-suction-dredging/>)

(11: REGULATION CONSIDERATIONS FOR SUCTION-DREDGE PLACER MINING: A COLLECTION OF THE NEW SCIENTIFIC AND OTHER FACTUAL INFORMATION FOR CONSIDERATION BY THE STATE OF WASHINGTON AS IT REFORMS ITS SUCTION-DREDGE PLACER MINING REGULATIONS. (2018). Cascadia Wildlands. <https://www.cascwild.org/wp-content/uploads/2019/04/SUCTION-DREDGE-WHITE-PAPER-Cascadia-Wildlands-Fall-2018.pdf>, p 2.)

(12: Cameron v. United States, 252 U.S. 450 (1920). (n.d.). Justia Law.
<https://supreme.justia.com/cases/federal/us/252/450/>)

Grizzly Bears

Grizzly bears are known to use the area of all three mining claims. The Draft EA states:

"Consultation is occurring for the effects to grizzly bears and Canada lynx." (13) Where can I find documentation supporting the claim that this consultation May Affect, and Is Not Likely to Adversely Affect (14), the grizzly bear and Canada lynx? In the Draft Environmental Assessment (EA), it is mentioned that there may be potential disturbance to a dispersing individual grizzly bear, but no impact on habitat is expected. However, it's known that dredge mining can resuspend sediment containing the neurotoxin mercury. This can affect the water supply in grizzly bear habitat.

The Draft EA, Section 3.7.6 states:

"Within the Kootenai National Forest portions of the Cabinet-Yaak Recovery Zone, all bear management units (BMUs) have met the permanent wheeled motorized access management measures established in the Forest Plan." (15)

The Yaak Valley Forest Council has conducted surveys of road barriers designed to prevent motorized access in the Kootenai National Forest in the project area. Unfortunately, the Council has found that many of these barriers intended to prevent motorized access are not effective and can be passed by motorized vehicles. Therefore, the assertion that all BMUs (Bear Management Units) are upholding permanent wheeled motorized access measures is clearly inaccurate.

The EIS should detail a plan to monitor compliance with Food/Wildlife Attractant Storage Order R1-2023-02 and Camping Restrictions Order #R1-2023-01. Any wildlife conflict related to failure to comply with R1-2023-02 must result in a fine to the claimant and no retaliation on wildlife.

Aquatic Species

Forest Service climate shield data⁽¹⁶⁾ identify many tributaries of the Yaak River and Star Creek as providing important future climate refugia for bull trout and cutthroat trout. Preserving connectivity to important cold-water refuge habitats is essential for watershed-scale climate adaptation and mitigation.

(13: Why Not Stardust Minerals Draft Environmental Assessment. (2024). USDA Forest Service Northern Region/Kootenai National Forest. <https://usfs-public.app.box.com/v/PinyonPublic/file/1546995441165>, p 36.)

(14: Why Not Stardust Minerals Draft Environmental Assessment. (2024). USDA Forest Service Northern Region/Kootenai National Forest. <https://usfs-public.app.box.com/v/PinyonPublic/file/1546995441165>, p 35.)

(15: Why Not Stardust Minerals Draft Environmental Assessment. (2024). USDA Forest Service Northern Region/Kootenai National Forest. <https://usfs-public.app.box.com/v/PinyonPublic/file/1546995441165>, p 38.)

(16: Rocky Mountain Research Station. Cold-Water Climate Shield.)

Western Montana, including the Yaak watershed, is predominantly historic, current, and future bull trout and cutthroat trout habitat. These species are declining in part due to habitat loss. It is critical to evaluate dredging impacts to current fish populations as well as impacts that might impair connectivity to future climate refuge habitat.

The western pearlshell mussel (WEPE), *Margaritifera falcata*, a state species of concern, has experienced significant statewide range reductions in the last 100 years and is now known from approximately 85 populations, of which, only about 20 are expected to be viable 100 years from now. The Yaak River contains the largest A-viable population of western pearlshell mussel in Montana⁽¹⁷⁾. While documented populations are upstream of Yaak Falls, every effort should be made to protect stream riparian areas, maintain connectivity and in-stream flows in the documented western pearlshell mussel streams.

Thank you for considering our comments. Please keep us on your list to receive all future mailings on this proposal.

Respectfully,

Chris Bachman

Conservation Director

Yaak Valley Forest Council

(17: Stagliano, MNHP Aquatic Ecologist, D. M. (2015). Re-evaluation and Trend Analysis of Western Pearlshell Mussel (SWG Tier 1) Populations across Watersheds of Western Montana. Montana Natural Heritage Program.)