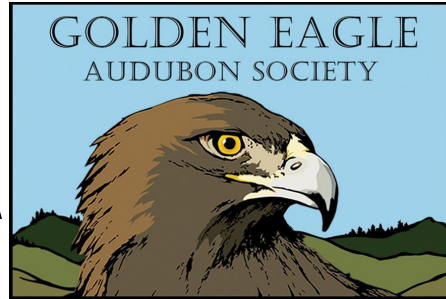




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Boise National Forest  
1249 S. Vinnell Way, Suite 200  
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Attention: Joshua Newman

Submitted via the online portal and emailed to Joshua Newman at [joshua.newman@usda.gov](mailto:joshua.newman@usda.gov) and Rick Wells at [ricky.wells@usda.gov](mailto:ricky.wells@usda.gov)

November 2, 2023

RE: 2023 CuMo Exploration Project scoping

Dear Rick,

Thank you for considering our scoping comments for the 2023 CuMo Exploration Project. Since 1973, the Idaho Conservation League has worked to protect Idaho's clean water, wilderness, and quality of life through citizen action, public education, and professional advocacy. The Sierra Club's mission is to explore, enjoy, and protect the wild places of the earth, practice and promote the responsible use of the earth's ecosystems and resources, educate and enlist humanity to protect and restore the quality of the natural and human environment, and use all lawful means to carry out these objectives. Idaho Rivers United mission is to protect and restore the rivers of Idaho, including keeping our drinking water clean, defending at-risk populations of fish, establishment of instream flows, and minimizing the impacts of dams on Idaho's rivers. The Golden Eagle Audubon Society is dedicated to building an understanding, appreciation, and respect for the natural world in order to conserve and restore natural ecosystems for birds and other wildlife.

Our organizations represent thousands of Idahoans who have a deep personal interest in protecting our drinking water, fish, wildlife and watersheds from the impacts of mining and mining exploration activities. Our members use the project area, downstream watershed, access routes, and surrounding area for fishing, hiking, birding, botanizing, photography, wildlife watching, skiing, as well as a source for our municipal drinking water supply. There is no other permitted use of our public lands that has such a dramatic and permanent impact on the landscape, soils, water and wildlife than mining. Even exploration

activities can have significant, long term water quality impacts from road and drill pad construction in sensitive areas.

Regarding the timing of this analysis and potential Decision Notice, it is unclear if surveys and baseline conditions are current. The last update we are aware of was the 2017 Supplemental Information Report, which documented changed conditions from the 2013 Revised Supplemental Environmental Assessment (EA). Changed and updated conditions included Sacajawea's bitterroot populations, vegetation, groundwater, soils, slope stability and wildlife:

Other resources addressed in detail in the 2015 SEA that require baseline updates to their respective analysis areas include soil, water quality, vegetation, terrestrial and avian wildlife, public safety, recreation, and visual resources. Needs to update effects disclosures will vary depending on the outcome of the resource baseline updates. -SIR

These studies should have been updated this last season in order to comply with NEPA. If this information has not been updated since 2017, we strongly recommend that the Forest Service and project proponent collect updated studies in the spring/summer of 2024 to form the baseline for the environmental analysis and then proceed with the draft analysis for public comment. Substantive issues like Sacajawea's bitterroot, groundwater quality and quantity, and slope stability can drive alternatives. These substantive issues need to be carefully considered as part of the upcoming environmental analysis and not deferred until after the Decision Notice is issued. We are also including for reference all our previous comments, meeting notes, appeal, objection, and litigation as part of this comment period.

The integrity of the environmental analysis is founded on the adequacy of baseline data, best management practices, special design features, a comprehensive monitoring program, and an adaptive management approach. A review of the project record in 2013 revealed that best management practices were not followed or effective for stream work (culvert removal) and log bridge construction in RCAs. This monitoring showed that adverse impacts to water quality and riparian areas were occurring that were not anticipated in the original EA.

Since the project was originally permitted, certain activities have occurred, including the construction of 1.5 miles of new road and several drill pads and associated drilling activities. The previous EA did not go into sufficient detail describing if design features were implemented as intended, if they were effective at meeting standards and guides, and what additional adaptive management steps may be needed based on past results and based on changed conditions due to the 2014 and 2016 fires in the project area. Also since the project was originally permitted, the 2018 CuMo Project had proposed specific areas for road construction and drilling through the "Checklist" process, but these proposals were not reflected in that EA.

We hope that the next step in the environmental analysis will address these and other issues discussed in detail in our comments below. While we refer to past Environmental Assessments in our comments, we still maintain that an Environmental Impact Statement (EIS) is needed for this next analysis. We urge the *Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 2 of 51.*

Forest Service to prepare an EIS to adequately evaluate, fully disclose to the public, and better mitigate the potentially significant adverse impacts to sensitive wildlife and plant species, threatened fish, and water quality from the 2023 CuMo's extensive exploration proposal on our public lands.

Sincerely,



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# Idaho Conservation League, Sierra Club, Idaho Rivers United, Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project

## **Project name**

We appreciate the Forest Service referring to the project as the “2023 CuMo Exploration Project” instead of the “CuMo Project.” The project proponent has previously used the term “CuMo Project” to describe both the current mineral exploration proposal and open pit mining development and operations which has created confusion about the scale and purpose of this particular project.

## **Public comment on draft environmental analysis (Environmental Assessment or Environmental Impact Statement)**

We appreciate that the cover page of the Proposed Action Report states: “This document outlines the proposed action that is being analyzed by the Forest Service. Upon completion of the analysis and environmental assessment, it will be released for a public comment period.”

NEPA, CEQ NEPA regulations, and Forest Service NEPA regulations all require adequate opportunity for public comment. 40 C.F.R. § 1506.6(a) (agencies shall “[m]ake diligent efforts to involve the public in . . . implementing their NEPA procedures” and shall “[s]olicit appropriate information from the public.”). Given the long history of this project, the strong public interest in it, and the fact that the project is just now being revived after years of dormancy, it is critical that the public be given an opportunity to review and submit comments on the environmental analysis. We maintain that an Environmental Impact Statement would be more appropriate. There will be a lot more information available in the draft environmental analysis about the potential environmental effects, how the alternatives, design features and mitigation measures may or may not address them and opportunities for people to provide substantive comments.

## **Compliance with prior court decisions on groundwater impacts and Sacajawea’s bitterroot**

We agree with the Forest Service’s decision to go through a new NEPA process but also note that the Forest Service must still comply with the remand orders in the prior court decisions issued in 2012 and 2016, by gathering sufficient baseline information and otherwise taking a hard look at and mitigating against the risks this project poses to water quality and to Sacajawea’s bitterroot. While Idaho Copper submitted a new Plan of Operations, the project is essentially the same as that which was at issue in the prior lawsuits, as the Forest Service acknowledges in the Proposed Action Report at page 4.

In the 2012 decision in *Idaho Conservation League, et al. v. Forest Service*, 2012 WL 3758161 (D. Idaho Aug. 29, 2012), the court held that the Forest Service violated NEPA when it failed to take a hard look at the potential effects of the project’s drilling to groundwater hydrology. Specifically, the court rejected the Forest Service’s arguments that there would be no impact because drilling fluids would be non-toxic and biodegradable and because drill holes will be filled and sealed and will follow Idaho mining BMPs. *Id.* at \*15. “The Court finds the Forest Service's analysis and conclusion that the CuMo Project's impacts on the area groundwater to have no significant impact is arbitrary and capricious. The EA does not undertake a

proper analysis of the environmental consequences in regards to the impact the Project's anticipated exploratory drilling will have on the groundwater in the area. Instead, the Forest Service relies on the notion that because the Project will use "closed drilling" methods that there will be no impact on groundwater. NEPA requires more. *Ocean Advocates*, 402 F.3d at 864 (An agency "cannot avoid preparing an EIS by making conclusory assertions that an activity will have only an insignificant impact on the environment."). The fact that closed drilling methods will be used may address the concerns relating to contamination of the ground water but does not address the issue regarding the impact the drilling itself will have on the hydrology of the groundwater. Boring down to 3,000 feet over 200 times into the subsurface of the area undoubtedly warrants some analysis and consideration of the impact of the drilling itself; irrespective of the concerns solved by using closed drilling." *Id.* The Court added: "The appropriate course would be for the Forest Service to have conducted some baseline study and analysis of the groundwater in the area in order to reach the finding of no significant impact. The Forest Service's assurances that the closed system alleviates any concerns over impact to the groundwater may be enough as to the contamination concern if there were some baseline established and a system for monitoring. In this case, however, there is no monitoring mechanism in place for groundwater nor any mitigation measures in place to respond to possible impacts as have been put in place for other environmental considerations such as impacts to sensitive species." *Id.* at \*16. "These are significant environmental concerns which demand at least baseline analysis and/or at least some monitoring mechanism to give some assurance to the assumptions regarding the closed drilling methods before a finding of no significant impact can be made." *Id.* at \*17. The Court vacated and remanded the EA to the Forest Service for further proceedings consistent with the opinion. *Id.* at \*22. The Court directed the Forest Service to determine whether potential groundwater impacts can be addressed in a Supplemental EA or whether they necessitate EIS. The Forest Service subsequently added three additional water quality mitigation measures and concluded that drilling impacts to water quality will be insignificant (see 3 additional water quality mitigation measures on page 31-32 of the Revised Supplemental EA).

To comply with the 2012 decision (and with NEPA, the Organic Act, and other legal duties), the Forest Service must--prior to approving the project--conduct an adequate and up-to-date assessment of baseline hydrologic conditions at the site, must study and disclose the potential effects of drilling on water quality and quantity, and must develop appropriate monitoring and mitigation strategies for the Project. Attached to these comments are the Forest Service's July 2020 guidance, titled "Working Guide[:] Evaluating Groundwater Resources for Mineral Exploration Drilling." This document serves as a useful guide, which the Forest Service must follow here. Attached is also Idaho DEQ's 2008 Preliminary Assessment Report for the Enterprise Group of mines, which provides useful information on existing mining features at the site which could provide conduits for further contamination due to Project drilling.

In the 2016 decision in *Idaho Conservation League, et al. v. U.S. Forest Service*, 2016 WL 3814021 (D. Idaho July 11, 2016), after the Forest Service conducted further analysis and reapproved the Project, the court again vacated the Forest Service's EA and FONSI for violating NEPA and NFMA, finding "error in the Forest Service's analysis which failed to take a 'hard look' at the Project's impacts on the environment with regard to a known rare and at risk plant." *Id.* at \*16. "The Forest Service is directed to undertake the proposed re-evaluation of LESA's baseline forthwith and analyze the results for purposes of determining

*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 5 of 51.*

whether its decisions and conclusions with regard to LESA as stated in the SEA and SDN/FONSI are different or remain the same.” *Id.* “Consistent with its ruling on the NEPA claim, however, the Court finds the Forest Service failed to re-evaluate the baseline data for LESA following the Grimes Fire prior to approving the Project. Without an accurate baseline, the Project's monitoring and mitigation measures will not be effective or accurate. Failing to obtain the necessary baseline is contrary to Guideline BTGU01 because the Forest Service did not determine the existing suitable habitat for and presence of LESA within or near the project area. [] For these reasons, the Court finds the Forest Service was arbitrary and capricious and in violation of NFMA.” *Id.* at 17.

To comply with the 2016 decision (and with NEPA, the Organic Act, NFMA, and other legal duties), the Forest Service must--prior to the approving the project--establish an accurate and up-to-date baseline of both suitable habitat for Sacajawea’s bitterroot (LESA) and the presence of plants within and near the project area. The Forest Service must also develop and include in the project effective monitoring and mitigation measures, based on the baseline information.

### **Use of information, monitoring, mitigation, and requirements from prior approvals**

We appreciate the Forest Service’s decision to go through a new NEPA process. We support taking additional public comment, gathering new/up-to-date information, and performing additional analyses. However, the Forest Service should also utilize the wealth of information, analysis, monitoring, and mitigation measures that have already been gathered and developed in the prior approval processes for this Project.

As one example, through the prior approvals, the Forest Service developed a Plant Conservation Area (PCA) to assess potential impacts to Sacajawea’s bitterroot. While the PCA could be improved upon and is not sufficient by itself to protect this rare plant, the Forest Service should not jettison the PCA and related measures. Instead, the Forest Service should build upon the PCA and exclude the core areas and 20 m buffer ring from surface disturbance in the new alternatives. Other examples include the requirement for a Plan of Operations and BMPs Checklist Supporting Approval of proposed Temporary Road and Drill Pad construction, and other associated operational activities (Appendix A in the 2015 EA), fencing around mud (sump) pits, the photo monitoring field notebook and annual report, and the Petroleum Risk Assessment.

All of the monitoring, mitigation, and other requirements and practices in the prior approvals should serve as a floor: we expect these to be the minimum starting point for requirements the Forest Service will include in any new approval. Further, we expect the Forest Service to add more requirements, or improve these minimum requirements, to be even more protective of the environment than what was previously approved. Failing to do so will run afoul of the Forest Service’s duty under the Organic Act and its regulations to minimize impacts.

Similarly, information gathered during the prior project approvals should be used by the Forest Service, and expanded upon and updated, in order to comply with NEPA. CEQ NEPA regulations require: “Agencies shall ensure the professional integrity, including scientific integrity, of the discussions and

*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023*

analyses in environmental documents. Agencies shall make use of reliable existing data and resources.” 40 C.F.R. § 1502.23.

### **Implementation website**

When the project was approved in 2015, we agreed to withdraw one of our key objection points based on the Forest Service’s agreement to develop an implementation website. On that website, the Forest Service posted documents, such as monitoring reports, while the project was underway. We appreciate the Forest Service’s use of the project website to post supporting documents in order to keep the public informed. We strongly encourage the Forest Service to implement a similar system as the project website from the past to post reports, including site inspections, monitoring and compliance reports, violations, remedies, etc. It is important for there to be full disclosure to the public of any reports associated with the exploration project before, during, and after operations.

### **Purpose and need, minimizing impacts, and taking a hard look**

We agree with the statement in the Proposed Action Report at page 5 that “the decision for whether to approve the use of NFS lands would be a major federal action subject to the National Environmental Policy Act (NEPA).” As outlined below, we believe that this project does constitute a major federal action, that it may have significant impacts, and it should be analyzed through an Environmental Impact Statement.

We also agree with the statements that the Forest Service must minimize impacts. On National Forests, the Organic Act requires the Forest Service “to regulate their occupancy and use and to preserve the forests thereon from destruction.” 16 U.S.C. § 551. “[P]ersons entering the national forests for the purpose of exploiting mineral resources must comply with the rules and regulations covering such national forests.” *Clouser v. Espy*, 42 F.3d 1522, 1529 (9th Cir. 1994). Forest Service’s mining regulations require that “all [mining] operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest resources.” 36 C.F.R. 228.4(c)(3). “Although the Forest Service cannot categorically deny a reasonable plan of operations, it can reject an unreasonable plan and prohibit mining activity until it has evaluated the plan and imposed mitigation measures.” *Siskiyou Regional Education Project v. Rose*, 87 F.Supp.2d 1074, 1086 (D.Or. 1999) *citing Baker v. U.S. Dept. of Agriculture*, 928 F.Supp. 1513, 1518 (D. Idaho 1996).

We also appreciate the statement in the Proposed Action Report that the Forest Service “should attempt to minimize or prevent, mitigate, and repair adverse environmental impacts on NFS surface and cultural resources as a result of lawful prospecting, exploration, development, mining, and reclamation operations, as well as activities reasonably incident to such uses.” -Forest Service Manual (FSM) 2800, “Minerals and Geology,” Chapter 2810.

To this end, and as discussed throughout these comments, the Forest Service must avoid, minimize and mitigate impacts by requiring more advance planning and restrictions than proposed by the open ended “results driven” previous versions of this project. In previous versions of the project, safeguards were only

provided to the maximum extent practicable and only when they did not substantially interfere with the mining company's proposed action. Instead, the Forest Service has an obligation to modify the proposed action so it does not substantially interfere with Forest Plan standards and guides for surface resources. We strongly encourage the Forest Service to incorporate additional safeguards to protect the Project site's uniquely large populations of Sacajawea's bitterroot, minimize incursions into protected Riparian Conservation Areas, avoid locating roads and drill pads on landslide prone areas, require strict water quality protection measures during fuel haul and exploration activities, minimize impacts to bull trout habitat, and avoid impacts to wildlife by developing additional design features.

Relatedly, to comply with NEPA, the Forest Service must disclose project details and likely effects to the public, and take a hard look at those effects prior to approving any operations. NEPA is "intended to ensure Federal agencies consider the environmental impacts of their actions in the decision-making process." 40 C.F.R. § 1500.1(a). "NEPA's purpose is . . . to provide for informed decision making and foster excellent action." *Id.* "In considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and degree of the effects." 40 C.F.R. § 1501.3(b). The purpose of NEPA "is to obviate the need for speculation by insuring that available data is gathered and analyzed prior to implementation of the proposed action." *LaFlamme v. FERC*, 852 F.2d 389, 400 (9th Cir. 1988).

"Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and include the following: (1) Direct effects, which are caused by the action and occur at the same time and place. (2) Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. (3) Cumulative effects, which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. (4) Effects included ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial." 40 C.F.R. § 1508.1(g).

Again, while it may be appropriate for the Forest Service to allow for some flexibility as IDCU's exploration unfolds, we urge the Forest Service to include in the EA or EIS sufficient information about the Project's details (such as proposed or potential locations of roads and drill pads) and to evaluate the effects of those Project details (such as how many Sacajawea's bitterroot plants and how many acres of potential habitat will be directly and indirectly affected by the proposed/potential road and drill pad locations, and similar information for impacts to fish, wildlife, and water quality).



## **Preparation of an EIS**

The Proposed Action Report at pages 5-6 indicates that the Forest Service will prepare an environmental assessment (EA) and then decide whether there is a need to prepare an EIS. An Environmental Assessment does not provide the in-depth analysis that is warranted for such a lengthy and large disturbance as proposed. We urge the Forest Service to prepare an EIS now. The POO is for extensive operations which easily meet the threshold of “may” have significant environmental impacts requiring an EIS.

A finding of no significant impact (FONSI) is appropriate only if the Forest Service determines based on an EA that the proposed action “will not have significant effects.” 40 C.F.R. § 1501.6(a). An “EIS must be prepared if substantial questions are raised as to whether a project . . . may cause significant degradation of some human environmental factor.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (quotation omitted). The Ninth Circuit Court of Appeals has regularly described the bar for whether significant effects may occur as a “low standard.” See, e.g., *League of Wilderness Defenders v. Connaughton*, 752 F.3d 755, 760 (9th Cir. 2014); *Cal. Wilderness Coal. v. U.S. Dep’t of Energy*, 631 F.3d 1072, 1097 (9th Cir. 2011); *Klamath Siskiyou Wildlands Center v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006).

The short- and long-term direct, indirect, and cumulative adverse effects the project will have on Sacajawea’s bitterroot, other “sensitive species”, “threatened” bull trout, and water quality from the Project meet the low threshold that the Project “may” have significant impacts on the environment. See 40 C.F.R. § 1501.3(b)(2). This is further supported by the “affected area and its resources” and the “setting of the proposed action,” which is in the Boise River watershed, upstream of Idaho’s largest communities, and on public lands containing the largest populations of the rare Sacajawea’s bitterroot. See 40 C.F.R. § 1501.3(b)(1).

The difficulty the Forest Service has had supporting its prior FONSI is proof of this, and since that time, fires and logging projects in and around the Project area add to the severity, uncertainty, and controversy surrounding the project’s environmental effects. The Forest Service should prepare an EIS to address the issues throughout these scoping comments, to fully disclose impacts to the public, to consider less environmentally damaging alternatives, and to better mitigate against project impacts to our public lands.

## **Forest plan consistency**

The Forest Service must fulfill its duty National Forest Management Act (NFMA), 16 U.S.C. § 1601 *et seq.* to ensure that the project complies with the Boise Forest Plan. Congress enacted NFMA in 1976 to establish a new legal framework for managing natural resources on National Forest lands. Among other requirements, NFMA requires the Forest Service to prepare a land and resource management plan, or “forest plan,” for each National Forest. 16 U.S.C. § 1604(a). Each plan must include standards and guidelines for how the forest shall be managed. 16 U.S.C. §§ 1604(c), (g)(2) & (g)(3). Once a forest plan is adopted, all resource plans, permits, contracts, and other instruments for use of the lands must be consistent with the plan. 16 U.S.C. § 1604(i). “It is well-settled that the Forest Service’s failure to comply  
*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 9 of 51.*

with the provisions of a Forest Plan is a violation of NFMA.” *Native Ecosystems*, 418 F.3d at 961. *See also Idaho Conservation League v. U.S. Forest Serv.*, No. 1:16-cv- 0025-EJL, 2016 WL 3814021 at \*17 (D. Idaho, Jul. 11, 2016) (Forest Service violated NFMA by approving mine exploration without following Boise Forest Plan standard and guideline to identify sensitive plant occurrences and habitat and conduct up-to-date surveys). Failing to follow, or to evaluate and document compliance with a Forest Plan provision can also be a NEPA violation. *See ONDA v. BLM*, 625 F.3d 1092, 1110–11 (9th Cir. 2010) (NEPA analysis must include “considerations made relevant by the substantive statute driving the proposed action”). *See also Westlands Water Dist. v. United States Dept. of Interior*, 376 F.3d 853, 866 (9th Cir. 2004) (“When an action is taken pursuant to a specific statute, the objectives of that statute serve as a guide by which to determine the reasonableness of alternatives” examined under NEPA).

The Boise Forest Plan (2010) includes important forest-wide desired conditions, goals, objectives, standards, and guidelines that must be followed for this Project, including for threatened, endangered, proposed, and candidate species (Forest Plan pp. III-8 - III-15); soil, water, riparian, and aquatic resources (pp. III-18 - III-24); wildlife (pp. III-25 - III-29); vegetation (pp. III-30 - III-33); botanical resources (pp. III-34 - III-36); non-native plants (pp. III-37 - III-39); mineral and geology resources (pp. III-50 - III-53); facilities and roads (pp. III-60 - III-62); recreation resources (pp. III-63 - III-68); scenic environment (pp. III-69 - III-70); tribal rights and interests (pp. III-73 - III-74); wild and scenic rivers (pp. III-77); research natural areas (III-78); among others. The Forest Plan also includes management direction specific to areas impacted by the Project, including Mores Creek (pp. III-201 - III-208) and Lower South Fork Payette (pp. III-245 - III-251).

### **Alternatives**

Under NEPA and its duty to minimize impacts, the Forest Service must consider a reasonable range of alternatives, including developing environmentally preferable alternatives. Considering alternatives is at the heart of NEPA, which directs agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(E). “[C]onsideration of alternatives is critical to the goals NEPA.” *Bob Marshall All. v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988). “The consideration of alternatives requirement . . . guarantee[s] that agency decisionmakers have before them and take into proper account all possible approaches to a particular project . . . which would alter the environmental impact and the cost-benefit balance.” *Id.* (quotation omitted).

Whether an agency prepares an EIS or an EA, NEPA requires an agency to study, develop, and describe appropriate alternatives. *N. Idaho Cmty. Action Network v. U.S. Dep’t of Transp.*, 545 F.3d 1147, 1153 (9th Cir. 2008). While an agency’s obligation to discuss alternatives is less in an EA than in an EIS, the “agency must still give full and meaningful consideration to all reasonable alternatives in an environmental assessment.” *W. Watersheds Proj. v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (quotation omitted). “The existence of a valid but unexamined alternative renders an EA inadequate.” *Id.* (quotation omitted).

Under Forest Service NEPA regulations: “Ordinarily, the environmentally preferable alternative is that which causes the least harm to the biological and physical environment; it also is the alternative which best protects and preserves historic, cultural, and natural resources. In some situations, there may be more than one environmentally preferable alternative.” 36 C.F.R. § 220.3. Under Council on Environmental Quality (CEQ) NEPA regulations: “Each agency shall: . . . Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources . . . .” 40 C.F.R. § 1501.2(b). “Reasonable alternatives means a reasonable range of alternatives that are technically and economically feasible, and meet the purpose and need of the proposed action.” 40 C.F.R. § 1508.1(z).

The Forest Service cannot simply consider the proposed operations and a no action alternative, as the Proposed Action Report at page 10 indicates the Forest Service might do, as there are unresolved conflicts concerning use of the public lands and natural resources at issue, and there are several environmentally preferable alternatives. Specifically, we recommend the following alternatives (or elements that can be combined into an alternative or alternatives).

The Forest Service should develop an alternative focused on minimizing impacts to Sacajawea’s bitterroot while still allowing for mineral exploration. Idaho Copper Corporation (IDCU) appears to propose extensive operations within occupied and potential Sacajawea’s bitterroot habitat. Because the proposed project is “results driven” (meaning it has not yet been determined precisely where roads and drill pads will be located), the Forest Service should develop an alternative that focuses the exploration outside of areas with Sacajawea’s bitterroot and its habitat at first; and only later--if results of the exploration so far support doing so--should operations potentially be allowed into areas with Sacajawea’s bitterroot habitat. This alternative should also identify and place critical Sacajawea’s bitterroot areas entirely off limits to surface disturbance (or should at least impose some strict limits on the amount and location of roads and pads in these areas). In other areas of Sacajawea’s bitterroot habitat, the Forest Service should require consideration of alternatives to avoid or minimize incursions before allowing them. Where such incursions into Sacajawea’s bitterroot habitat cannot be avoided, this alternative should require strict processes for approving, mitigating, monitoring, and reclaiming such incursions.

The Forest Service is proposing to allow for partially concurrent reclamation, potentially leaving 60-80% of the exploration roads open at any one time. The greater the number of routes that are open at any one time, the greater the impacts to soils, vegetation, wildlife and other resources. We believe that it is incumbent on the Forest Service to develop an alternative that decreases the amount of roads open at any one time to 25%.

Other mining companies are able to phase projects, including exploration, development, production and reclamation all at the same time. An open-ended time frame asking the mining company to decide when a road is no longer needed is no longer consistent with best management practices.

The Forest Service should consider an alternative that requires sumps to be lined and drill cuttings and other materials from sumps to be disposed of off site to reduce impacts to water quality.

The draft No Action alternative states that the 3.7 miles of “temporary” roads that were constructed from original AMAX exploration would remain unreclaimed, implying that the only way to rehabilitate these “temporary roads” is to proceed with the Plan of Operations for additional road construction. The Forest Service should not simply accept the continued presence of what the agency itself defines as “temporary roads.” The Forest Service should expand the purpose and need to include restoration of temporary roads within the project area associated with this project that the mining company(s) have benefited from accessing over the last several decades.

Regarding additional alternatives, as the Forest Service proceeds with the analysis, we believe that reducing the number of drill rigs from four to two may help ameliorate several environmental issues related to surface disturbance, reclamation rates, wildlife, and water quality issues. Another alternative might allow all four drill rigs, but limit their use to one quadrant of the project area at a time which would minimize noise, light and road disturbance.

The Forest Service should also consider an alternative that excludes roads, drill pads, sumps, and other structures or facilities from protected Riparian Conservation Areas (RCAs). Instead of using the results-driven checklist process to try and avoid RCAs on a piecemeal basis after project approval, and without public review, the Forest Service should develop an alternative now to strategically locate roads and drill pads so as to minimize incursions into RCAs while still meeting IDCU’s needs.

The Forest Service should also consider an alternative to reduce impacts to wildlife in light of the impacts of the fires, salvage logging, and other activities that have disturbed habitat in and around the Project.

In addition to the above recommendations, we strongly encourage the Forest Service to explore a potential alternative that further reduces the length of temporary roads that would be constructed to achieve the outlined exploration goals.

### **Sacajawea’s bitterroot**

We are concerned about potential impacts to Sacajawea’s bitterroot, *Lewisia sacajaweanana* (*LESA*) which is an R4 sensitive species, State Ranked S2 and Global Ranked G2 species (imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction). Information from prior NEPA processes for the project have shown that this plant is very rare, found only in a few counties in central Idaho, and that the largest known populations of Sacajawea’s bitterroot are found at the Project site--including areas targeted for road and drill pad construction and drilling operations. Drill and road construction, as well as utilizing roads and drill pads, has many adverse effects, including directly destroying plants, fragmenting plant habitat, impairing pollinators, creating the risk of a fire, and fostering the spread of invasive and noxious plants, among other adverse effects.

In an EIS or EA, the Forest Service must disclose and analyze the information previously collected for Sacajawea’s bitterroot, plus any new information (already gathered, or in need of gathering) bearing on

the status of the species, its populations at the Project site, and the threats the Project, climate change, and other factors have on the species.

The Proposed Action Report includes a statement from IDCU's Plan of Operations that the proponent will continue to analyze and study Sacajawea's bitterroot to ensure the overall population will not be threatened or endangered during operations. However, the Forest Service has a much higher standard to meet and must ensure it complies with Forest Plan standard BTST01 which requires: "Management actions that occur within occupied sensitive plant species habitat must incorporate measures to ensure habitat is maintained where it is in desired conditions, or restored where degraded." Furthermore, the Boise Forest Plan's first guideline for protecting botanical resources (labeled "BTGU01") instructs: "For site/project-scale analysis, suitable habitat should be determined for Sensitive species within or near the project area. Conduct surveys for those species with suitable habitat to determine presence." The Forest Plan includes additional guidance and objectives relative to sensitive plants:

BTGO02 Emphasize conservation and recovery of Region 4 Sensitive species, Forest "Watch" plants, and other species at risk where quantity and quality of habitat needed to support viability is a concern (see Appendix C).

BTGO03 Maintain or restore globally rare plants identified as the Natural Heritage Program G1, G2, and G3 and/or S1 and S2 species, and provide for their continued compositional and functional integrity for those species for which we have habitat (see Appendix C).

BTOB02 During fine-scale analyses in areas containing sensitive species habitat, identify and prioritize opportunities for restoring degraded Sensitive species habitat.

From the most recent prior NEPA process for the Project (which was started but not completed), our understanding is that the Forest Service had some data/information on Sacajawea's bitterroot plants and habitat at the Project site from 2017. Such data is now stale, due to the passage of time, climate change, fires, logging, and other circumstances at the Project site. It is imperative that the Forest Service utilize up-to-date surveys of Sacajawea's bitterroot at the Project site in the EIS or EA.

Even back in 2017, the Forest Service acknowledged that it needed more data than it had. In 2011 13,300 plants were recorded. In 2016, following the Grimes Fire, 7,300 plants were found, a significant decrease. The 2016 Pioneer Fire affected baseline conditions again so the area was resurveyed in 2017. The Pioneer Fire burned 1,578 acres (55% of the project area), mostly in the eastern half at mostly low to moderate severity. The Supplemental Information Report (SIR) stated that nine of ten subpopulations were affected by the Pioneer Fire and that fire suppression activities impacted 6 of the subpopulations, but does not include any information on what these effects were or how long they might last. The Spring/Summer 2017 survey found 13,735 plants, an increase of 49% from the 2015/2016 survey and similar to 2011 surveys. The amount of occupied habitat in 2017 increased by 2.6 acres compared to 2015/16 surveys and the SEA should clarify if this is an expansion into areas that were previously surveyed or surveys into new locations.

The 2017 Supplemental Information Report for the Project recommended the following field work be conducted to determine how the Pioneer Fire affected the following criteria:

*As stated in the 2015 SEA, section 3.3.1.5.1, “Pollinators are vital for successful reproduction and seed set for about 85 percent of flowering plants (Hatfield et al. 2012). Where pollinator populations have declined, a parallel decline occurs in insect-pollinated plants. Researchers found that bees that preferred declining plant species also declined (Scheper et al. 2014). Without successful pollination, many plants could not set seed and reproduce, and many species would die out with serious implications for native ecosystem diversity and economic stability (USDA Pollinator Initiative CP42).”*

The effects on the 2016 Pioneer Fire on pollinator habitat within the CuMo project PCA are in the process of being evaluated. The 2015 Draft Best Management Practices for pollinators identified that “IDTs or project teams should evaluate the suitability of habitat for pollinator forage on the basis of the following criteria:

- *which types of foraging pollinators are present in the project area;*
- *which plant species are present;*
- *whether the plant species are native;*
- *whether the flowers are attractive to the target foraging pollinator*
- *whether the vegetation provides a continuous bloom from early spring through fall or provides forage at times of nectar and pollen dearth in the surrounding landscape; and*
- *what effects the proposed project activities have on foraging pollinators and the vegetative features mentioned above.”*

Following the conclusion of the pollinator habitat analysis within the 500-meter assessment area, design features in the 2015 SEA for the 300-meter PCA should be reviewed to determine if they are still sufficient to result in effects that fall within the 2015 SEA range of effects in light of the changed baseline conditions to pollinator habitat resulting from the 2016 Pioneer Fire.

The SIR also noted the following:

The changed conditions and new information related to LESA populations indicate that fire and fire suppression activities varied in effects to the LESA population over time within the Project area, as well as populations within the 10-mile radius surveyed around the Project area. Based on the new survey information and changed conditions resulting from the 2016 Pioneer Fire related to the LESA population, the baseline conditions in the 2015 SEA should be updated and, based on these updates, direct, indirect, and cumulative impacts of Alternatives A, B, and C should be re-evaluated. As stated in the 2015 SEA, page 138, the analysis area for assessing cumulative effects for LESA included the range of the species. Work within the 10-mile radius of the Project area should be specifically updated within the CIA analysis.

Again, the EIS or EA must include updated surveys and other information bearing on these important issues. We are concerned that the status of the plant may have changed since 2017 and strongly recommend conducting surveys in 2024 as part of the environmental analysis. If the last surveys were conducted in 2017, failing to update surveys until after the Decision Notice/Record of Decision would be in violation of NEPA. In the EIS or EA, the Forest Service must use data and quantitative information and analysis to assess the potential effects to Sacajawea's bitterroot, including by estimating the number of plants that will be directly and indirectly affected, the amount occupied and potential habitat that will be directly disturbed, the amount of occupied and potential habitat that will be indirectly affected, the amount of habitat fragmentation that will occur, and other information. These analyses must account for climate change and for cumulative effects, and must consider the unique importance of the Project site to species as a whole.

The Forest Service should also gather and consider information from recent past drilling under the prior approvals of the Project to determine the effects roads, drill pads, and other operations had on Sacajawea's bitterroot plants and habitat and incorporate these findings into the analysis. We understand that Sacajawea's bitterroot may reoccupy old roadbeds but it is unclear what type of site preparation (such as decompaction) may be helpful, the time period for recolonization, and the distance from existing populations.

It is also imperative that the Forest Service require robust ongoing monitoring, mitigation, avoidance, and reclamation for Sacajawea's bitterroot and Sacajawea's bitterroot habitat. The Forest Service must utilize, build upon, and improve the Sacajawea's bitterroot Plant Conservation Area (PCA) delineated at the site, as well as the related avoidance, mitigation, and monitoring measures required in prior approvals and proposed in the most recent prior NEPA process. As already mentioned above regarding alternatives, the Forest Service should identify and protect critical plant areas from all disturbance. In other areas of Sacajawea's bitterroot occupied and potential habitat, disturbance (roads and drill pads) should be allowed only after carefully considering and finding that there is no alternative to doing so. A total cap should be set on the allowed disturbance in occupied Sacajawea's bitterroot habitat and another cap in potential habitat. Even when incursions into Sacajawea's bitterroot habitat are allowed, surveying should be conducted to avoid as many plants as possible, and regular (at least annual) ongoing monitoring, mitigation, and reclamation should be done to ensure areas recover.

Where there are unavoidable impacts to Sacajawea's bitterroot, IDCU should establish a rare plant mitigation program. In a previous iteration of the project, the Forest Service contacted the Idaho Botanical Garden about initiating a seed collection program to see if this could be developed into a viable mitigation option at some point in the future. Approximately 100 plants were collected from six different sites and successfully raised for five years at the Idaho Botanical Garden. However, the plants only produced two seeds which were not sufficient to support the development of a formal seed collection program.

Based on this study, seed banking does not appear feasible for this species. Instead, the most viable option is to conserve and protect the maximum number of plants in situ as possible. Plants that are going to be

directly impacted and unlikely to survive should be relocated to nearby suitable habitat with similar soils, slope and aspect in an area that is not going to be disturbed by exploration activities.

We believe that a reasonable way to prevent further losses of Sacajawea bitterroot habitat would be to create at least three new Research Natural Areas (RNAs) or Special Interest Areas (SIAs), focusing on other Sacajawea's bitterroot populations. Special Interest Areas can be designated to recognize a broader range of values than research natural areas, including botanical, geological, historical, paleontological, scenic, or zoological resources. They may be allocated to protect and manage threatened, endangered or sensitive species and other elements of biological diversity, or for their historic importance, scenic values or public popularity. The Boise National Forest has no SIAs, and only hosts 14 RNAs,<sup>1</sup> none of which are focused on Sacajawea's bitterroot. There are a number of suitable sites, including Mores Mountain, Scott Mountain, Whitehawk Mountain, Deadwood Ridge, Mains Ridge, and Observation Peak-Elk Creek Divide. In addition to designating at least three RNAs, the Forest Service should also take steps to protect these populations from disturbance by working with the BLM to administratively withdraw these areas from mineral entry for twenty years and taking steps to protect them from disturbance from recreationists and communications infrastructure such as new facilities and access roads. In addition to Forest Service resources, the Idaho Department of Fish and Game and US Fish and Wildlife Service office have a database and reports of potentially suitable locations for RNAs.<sup>2,3</sup> Multiple locations are needed in the event that one or more of these populations is compromised by a stochastic event such as a wildfire or unforeseen direct disturbance. We suggest that the project proponent contribute to the funding for monitoring efforts of these new RNAs.

The Sacajawea's bitterroot mitigation program should also include investing in additional noxious weed treatments in and around the project area. Specific opportunities may exist on private lands including the Baby and Enterprise properties. Since this is one access route, reducing noxious weeds in these locations will help reduce noxious weed spread in the project area and help maintain native plant strongholds where they currently exist. Equipment washing to reduce noxious and other weed spread sounds like a good idea, but it is unclear if it will be done and who will have the monitoring responsibility.

### **Transportation of hazardous materials**

We have concerns about impacts to the watershed, the City of Boise's municipal water supply if there is an accident during the transportation of hazardous materials on riverside roads or a leak or spill on site. One of the most important ecological services that National Forests provide is clean water.

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<sup>1</sup> [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5196589.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5196589.pdf)

<sup>2</sup> Mancuso, Michael. 2017. 2016 field survey for Sacajawea's bitterroot (*Lewisia sacajawea*) in the Sawtooth Mountains, Idaho. Report prepared by Mancuso Botanical Services for Idaho Natural Heritage Program, Boise, Idaho and U.S. Fish and Wildlife Service, Idaho Fish and Wildlife Office, Boise, Idaho. 12 pp plus appendices.

<sup>3</sup> Mancuso, M., and J. Powell. 2018. A 2017 field survey for Sacajawea bitterroot (*Lewisia sacajawea*) in the Sawtooth Mountain, Idaho. Report prepared by Mancuso Botanical Services and Idaho Natural Heritage Program, Boise, ID, for U.S. Fish and Wildlife Service, Idaho Fish and Wildlife Office, Boise, Idaho.



The Boise River currently provides between 25 and 30% of the City of Boise's drinking water supply<sup>4</sup> and this percentage is expected to increase in the future. The Boise River also provides irrigation water for 300,000 acres of farmland in the Treasure Valley. In addition, the Wilderness Ranch community obtains their drinking water supply from Mores Creek which is along a proposed transportation route. We are concerned about impacts to these drinking water supplies from accidental spills along the transportation route.

In the published scoping document, the three primary transportation routes present traffic originating from Idaho City, Horseshoe Bend, or Garden Valley. Since all primary routes share overlapping access roads, these points of entry help differentiate proposed routes, however, it must be taken into account that traffic impacts and spill risks must assume additional mileage and at the very least assume all traffic originates from the Boise/Treasure Valley area. During the drilling season, many of these access routes are extremely busy with recreational traffic, particularly on weekends as individuals travel to and from the Treasure Valley.

When evaluating the Idaho City Route and the above assumption, given the proximity to water intakes and the lack of dilution from reservoirs, this route from the Highway 21 bridge over the Boise River to Lucky Peak dam is of particular concern to the Boise water supply and the route along Mores Creek is of particular concern to Wilderness Ranch. We also represent members of the public who have drinking water wells a few miles downstream of the project area.

Additionally, the road from Idaho City to New Centerville raises additional concerns. This 2-lane forested route, while not directly adjacent to large streams, is a very popular route with high volumes of traffic. We are concerned about potential public safety impacts along this route during busy summer months.

In the new scoping documents, one of the original access routes that originates from Garden Valley and utilized CR 382 has been redefined for "emergency use only". Given this change, we ask that the Forest Service define what constitutes "emergency use" as well as clarify if this route can be used to access the site as it is presented as a potential exit route stating that the route travels northwest "towards Garden Valley along CR 382". At no point should fuel haul be allowed on Grimes Pass Road.

This alternate route from Garden Valley parallels the South Fork of the Payette River, crosses the South Fork of the Payette River, continues east along the river, and then goes up and over Grimes Pass, paralleling Sweet Creek for some distance. This is an extremely windy single-lane mountain road with occasional pullouts. The South Fork of the Payette is an extremely popular recreational river and supports bull trout. We are concerned about potential impacts of a hazardous material spill on water quality, recreation, and fisheries along this alternate route.

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<sup>4</sup> <https://boisedev.com/news/2022/09/08/you-asked-how-does-our-water-work/>

The stretch of South Fork of the Payette River from Sweet Creek by Grimes Pass Road is an eligible river under the Wild and Scenic River Act and that fuel haul and the estimated 30 trips per day threaten several of the Outstandingly Remarkable Values which include scenery, recreation, and ecology.<sup>5</sup>

Although sections of the Grimes Pass Road are under a FRTA (Federal Roads and Trails Act) easement with maintenance authority given to Boise County, this does not absolve the Forest Service of its NEPA duty to analyze the impacts of permitted activities on these roads on forest resources. For purposes of NEPA, it does not matter who maintains the road. The FS must consider impacts. Furthermore, Grimes Pass road is under Forest Service authority, even if it is maintained by the county (*See Idaho Rivers United v. US Forest Service*, No. 11-cv-95-BLW, 2013 WL 474851 (D. Idaho Feb. 7, 2013 (holding USFS has authority over highway through National Forest under multiple authorities, including NFMA, even though the State of Idaho operates the highway pursuant to an easement with the Forest Service))).

While never explicitly referenced in the published scoping document, attachment 7, CuMo Exploration Project Fuel Transport Memorandum (Memorandum), outlines additional analysis, crash estimates, and risks associated with project-related fuel transport. While we appreciate the additional analysis and assessment, we feel that the Memorandum still falls short of fully evaluating all potential risks. We request that this report be updated for future reference.

Specifically, the Memorandum estimates crashes based on data provided by ITD's State Crash Database. However, the calculations included are based on outdated data from 2008-2012 and only evaluate crash data on roads classified as rural, which limits analysis to roads outside the limits of a city of 5,000 or more people. As emphasized above, transportation of hazardous fuel does not exist in a vacuum and only begins at Idaho City, Horseshoe Bend, or Garden Valley. While we understand that the Forest Service needs to focus its analysis on a reasonable area, not calculating the additional miles and traffic volumes that are associated with this project outside of these rural roads significantly underrepresents the true picture and potential risks associated with transportation in general and the transportation of hazardous materials associated with this project.

We recommend that the Forest Service spend additional time analyzing the overall traffic volumes, types of traffic (car, truck, semi, commercial), potential hazards, availability and quantity of emergency turn outs, accident data on all potential access routes, not just those that are presented by IDCU as the three primary routes. Considering the high volume of traffic that will result from this project, we strongly encourage that hazardous materials specifically, and general project traffic when feasible, utilize whichever route that sees the lowest volume of traffic to avoid additional interactions or potential incidents involving the general public.

This report, while acknowledging that the South Fork of the Payette River contains critical habitat for bull trout, makes the assumption that "there are no listed aquatic species within ten stream-miles downgradient of the Project access routes". As we further elaborate in later comments specific to bull trout, this

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<sup>5</sup> [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5394050.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5394050.pdf)  
*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 18 of 51.*

assumption cannot be made and the Forest Service must assume, until proven otherwise, that bull trout are indeed present within environments adjacent to site access routes.

The Forest Service needs to develop alternatives that minimize risks to bull trout and risks to other resources, including public safety and surface water supplies. Specifically, the Forest Service should consult with the US Fish and Wildlife Service regarding the levels of risk for bull trout for different haul routes

The Forest Service should review the previously completed risk assessment and determine if there are additional ways to avoid, minimize or minimize identified risks. The Forest Service should also evaluate the transportation route to locate particularly hazardous areas that could be improved through guardrails, lower speed limits, or other road improvements.

The scoping document states that approximately 100 gallons of fuel will be consumed each day by each drill rig, with a total of up to four drill rigs to be in operation at any one time. Drill rigs could be operating potentially from April 15 to December 15 for an additional four years. With four fuel trips per day, 244 days per year, for four years, the total number of trips is 3,904 trips. Fuel would be delivered to a drill rig in a 100-gallon USDOT certified fuel cell mounted in the back of the pickup truck. The scoping document also estimates that there will be 30 total vehicle trips per day, including other vehicles than fuel trucks.

Regarding the number of vehicle trips and vehicle size, there is a trade off. One can reduce the total number of vehicle trips and the probability of a single accident by using a larger vehicle to haul larger quantities of fuel, but then one increases the potential effects if a fuel spill occurs. While we are generally averse to large fuel loads because of the risk of a larger fuel spill, the Forest Service should conduct a risk assessment of hauling larger amounts of fuel and thus minimizing the actual number of vehicle trips versus hauling smaller amounts of fuel which would increase the number of vehicle trips. Simply stating that vehicles would be limited to pickup trucks and that the number of vehicle trips would be “minimized” is meaningless given the Forest Service has already determined that the vehicles used would be limited to pickup trucks and does not constitute a real analysis as required by NEPA.

Road and traffic conditions vary throughout the year and throughout the week. One alternative to examine would be to avoid or limit fuel haul during certain road conditions such as spring breakup and during particularly busy times for other traffic, and to potentially haul larger amounts of fuel during periods of good road conditions and lower numbers of other vehicles. The analysis should factor in the pros and cons of storing fuel in suitable locations on site. These less-frequent, higher-volume fuel trips should be accompanied by pilot cars and spill cleanup vehicles.

We understand that IDCU and Boise County may have completed a road maintenance agreement and, while this will hopefully reduce accidents resulting from degraded road conditions, this agreement does not prevent accidents and does not abrogate the Forest Service from its responsibility under Forest Service Standard SWGU11 to take steps to reduce the risk of fuel spills:

Transport hazardous materials on the Forest in accordance with 49 CFR 171 in order to reduce the risk of spills of toxic materials and fuels during transport through RCAs (USDA 2010)

In attachment 5: Spill Protection, Control, and Countermeasure Plan (SPCC) states that there may be isolated instances in which it is “deemed necessary” to transport and store fuel or oil in 55-gallon containers or larger, drums would be stored within 95-gallon overpack drums or similar containers and fuel would be managed in accordance to the SPCC plan. First, it is unclear if the Forest Service or IDCU is the entity in charge of determining necessity. Second, we point out that 100 gallons of fuel would be transported normally, making the greater than 55-gallon-“isolated incident” appear irrelevant.

The scoping document notes that a standard marine-type fuel containment boom, spill prevention kit, and fire kit would be stored at the re-fueling site and that a spill prevention and cleanup kit would be carried in vehicles transporting fuel and at drill sites. These steps represent minimal measures and we also recommend that spill kits be placed along the fuel haul route at several strategic locations where stream access and stream morphology (fords, pools, etc) allow for quick and easy set up in the event that there is a fuel spill upstream and vehicles with the spill kit are unable to deploy the kit far enough downstream to capture the spill.

The Forest Service states that various spill response and prevention measures would minimize the risk of contamination to water bodies from fuel storage, transportation and handling during refueling (SPCC - attachment 5) and provides an outline of these measures, but does not actually describe these measures in sufficient detail, discuss how they will be enforced, or disclose what the environmental impacts would be should these measures not be sufficient.

We recommend that the Forest Service review relevant information regarding the issue of fuel transportation for the Golden Meadows Project on the Payette National Forest. The Payette National Forest had completed a *Petroleum Risk Assessment and Risk Reduction Procedures* analysis which, while still not sufficient from our perspective, did provide a relative comparison of the miles of riparian areas within two transportation routes. Based on the information in this analysis, the Forest Service is directing the operator to use one route for one part of the year and the other route the remaining part of the year.

We acknowledge that the fuel haul for the 2023 CuMo Exploration Project is on a smaller scale than the Golden Meadows, but point out that there are potentially greater implications for downstream surface water users should there be a fuel spill. It is important to note that we do not consider these design features to be sufficiently protective and we believe the Forest Service needs to improve upon them for this project, but they represent a starting point for this discussion.

The Forest Service should allow for the minimal amount of chemicals necessary for that month’s operations. If chemicals are transported and utilized as needed throughout the process, there will be a smaller stockpile on site if operations are suspended for some reason. If operations are suspended unexpectedly, there will also be a smaller stockpile to transport back out through the transportation corridor for reclamation. IDCU should provide the Forest Service with monthly reports on fuel and

chemical usage so that the allowable amounts of materials can be further refined for future operations. The Forest Service needs to further define the quantities of materials that can be transported on a monthly basis.

The Forest Service should provide restrictions for which chemicals can be stored next to each other and transported together in the same vehicle. The Forest Service should also specify the types of vehicles to be used (tanker truck, pickup, truck, etc) and the operating standards for these vehicles. Specifically, the Forest Service should require regular vehicle inspections to ensure that brakes, lights, and seatbelts are functioning properly. Only inspected vehicles should be allowed to transport certain chemicals.

Chemical containers need to be rated to withstand impacts, pressure, and extreme temperature gradations. For example, if there were a vehicle fire next to a river, a container could become super-heated and then roll into the cold river. The differential expansion and contraction in the lid and body of the container could result in a catastrophic leak. All items transported need to be packaged in such a way that no spillage would result in the event of a crash.

The transportation route should be examined to locate particularly hazardous areas that could be improved through guardrails, lower speed limits, or other road improvements. A Spill Prevention, Containment, and Countermeasures plan should be required given the sensitive nature of this watershed. This plan would require that each vehicle is equipped with all necessary equipment for spill containment and countermeasures and that all drivers are trained and tested in rapid response. Fuel containment equipment, including chemical absorbers and booms to intercept stream transport, need to be on site and cached at stream crossings. Regularly inspected fire extinguishers need to be placed in all vehicles. In case of a vehicle fire, each vehicle should be required to contain a Pulaski axe, fire rake, McLeod fire tool, fire flag, and shovel.

### **Handling of hazardous materials on site**

A hazardous material plan needs to be in place in the event of a fuel or solvent leak en route to the site and on site. We are particularly concerned about potential fuel leaks from the water pump which is adjacent to the stream. The Forest Service should require the use of a double liner underneath all such pumps. The containment system should be designed to protect the soil from the full volume of diesel fuel or oil as well as high rainfall events in case there is a leak.

Hazardous wastes including grease, lubricants, oil, and fuels need to be disposed of off-site in an environmentally appropriate manner on a weekly basis. Fuel containment equipment, including chemical absorbers and booms to intercept stream transport need to be on site. Regularly inspected fire extinguishers need to be placed in all vehicles.

Any waste material not re-injected in the drill holes should be characterized for contaminants and managed to isolate any contaminants.

## **Traffic issues**

We are concerned that the access road system will not be able to sustain the estimated volume of traffic and that Boise County will not be able to adequately maintain the roadway(s). The Forest Service should analyze the ability of the existing road system to support the predicted increases in traffic, estimate any increased maintenance costs and ensure that IDCU can cover these costs. In the past, the mining company had a road maintenance agreement with Boise County for portions of Grimes Pass Road and had agreed to grade a minimum of five times per year for a period of five years beginning in 2011 (Fuel haul Supplemental Information Report p. 8). The Forest Service should assess whether the roads have been maintained as required, how many times a year grading has been needed, and if any modifications of this agreement are needed to protect public safety and forest resources. This information should be incorporated into the environmental analysis.

The Forest Service should disclose the number of landslides, rock falls, avalanches, fatalities, and other traffic accidents that have occurred along each of the proposed transportation routes in the last decade. This report should include the number of single-vehicle accidents, the number of multiple vehicle accidents, the number of vehicles leaving the road surface, and the number of vehicles entering the stream or river below. The percentage of alcohol or drug-related accidents should be disclosed. This information will be very helpful in selecting routes. These routes may also change seasonally or with road conditions. The Forest Service could also establish “triggers” for when certain routes are particularly unsafe or when chains or other measures such as pilot cars are required. As mentioned earlier, the Forest Service should require the use of a pilot car when loads of diesel fuel or large trailers hauling drill rigs are used. The schedule for these large or hazardous loads should be given to Boise County and distributed to the Sheriff’s office and posted online so members of the public can adjust their schedules accordingly.

## **Temporary roads**

IDCU proposes to continue to use existing 5.5 miles of the 1970’s exploration program and construct 8.9 miles of new temporary roads. Depending on the reclamation sequencing, temporary roads may remain the landscape throughout the four year drilling period and up to two years post-drilling until they are reclaimed. (Proposed Action Report, p. 16). The presence of roads on the landscape can have adverse impacts on wildlife and vegetation, including from dust generation that can affect nearby plants and pollinators. Keeping unauthorized recreational use from occurring on these authorized-use only access roads is a continual challenge for land management agencies: “There is currently a surge taking place in the amount of ATV and Motorcycle use in the Grimes Pass area, which includes the Project Area.” (2010 CuMo EA, p. 74). Recreation use has increased significantly since then. We are concerned that these temporary roads may receive high recreational use before they are fully reclaimed. Since these roads are not engineered for recreational use and have multiple dead ends, we are concerned that this road system will lead to trail pioneering and other resource damage. As mentioned before regarding a more comprehensive concurrent reclamation plan, we suggest that the Forest Service close these roads as soon as the drilling plan is complete for each plan. An alternative is to ensure that sufficient personnel are on site to sign, gate and enforce road closures.

In addition, the Proposed Action Report states that access roads will be constructed on ridges whenever feasible, using natural routes and topographic features. We note that Sacajawea's bitterroot often occurs on ridgetops and exposed areas. We recommend modifying this direction to state that access roads will be constructed on ridges whenever feasible, using natural routes and topographic features, and will be sited outside of Ring 1 (known population) and Ring 2 (20 m buffer) of Plant Conservation Areas. The maps in the May 2011 Proposed Temporary Drill Roads, included as an appendix of the current proposal, shows several routes that do not follow these features. In short, it is difficult to assess and provide substantive comments if the desired drill pad locations are not marked. Apparently this information is known since there are an estimated number of locations for each alternative. This is a key piece of information that should be provided in the draft EA or EIS.

### **Sediment modeling**

The Idaho batholith is notoriously unstable and landslides and mass wasting events are common in this area:

Roads constructed within the Idaho batholith increase surface erosion by 220 times the natural rates per unit area (USDA Forest Service 1997, p. 1104, referenced in 2002 Sixshooter DEIS III-36).

The majority of the parent rock, Batholith, is principally composed of biotite granodiorite, a medium-grained igneous rock that disaggregates easily on steep slopes. Thus the subbasin is subject to rapid surface erosion and mass wasting (overland or instream debris flows). Geologic immaturity paired with an easily erodible granitic rock makes for naturally high erosion rates.

[http://www.deq.idaho.gov/water/data\\_reports/surface\\_water/tmdls/boise\\_mores\\_creek/boise\\_mores\\_creek\\_sec1.pdf](http://www.deq.idaho.gov/water/data_reports/surface_water/tmdls/boise_mores_creek/boise_mores_creek_sec1.pdf)

As such, the Forest Service should use appropriate methods to provide accurate predictions of sediment delivery under each alternative.

### **Detrimental Soil Disturbance and Total Soil Resource Commitment**

The SIR stated that Detrimental Disturbance was negligible because new roads would be reclaimed, but the timing for conducting concurrent reclamation within the 5-year exploration plan is unclear given the "open ended nature" of the exploration. We note that some of the "temporary" roads in the project area date back to AMAX and exploration in the 1960s-1980s. In addition, the Connector road that was constructed in 2011 is still in use and has not been reclaimed as originally envisioned.

Regarding metrics for disturbance, the Forest Service should analyze Detrimental Soil Disturbance and Total Soil Resource Commitment areas and percentages, miles of road, number of drill pads, and number of stream crossings. By focusing only on one metric, the Forest Service may miss opportunities to reduce other disturbance aspects.

Drill pads can have a disproportionate effect on the environment compared to access roads. While roads have a 14 to 15 foot wide road bed and have a minimal 40' width of disturbance, drill pads are typically 25' wide (with an unstated width of disturbance) and contain a mud pit measuring 25' long, 25 feet wide, and 8 feet deep. While roads occupy much more surface area, roads have intermittent use limited to the change of crew shifts and occasional movement of large equipment from one drill site to another. In contrast, drill pads that are in use are occupied 24/7, have high noise levels and use powerful lights for night activity. Since trucks, equipment and fuel are parked on site, there are increased opportunities for spills and soil impacts are greater, particularly with sump pit construction. The large amount of equipment stored on site for long periods of time greatly increases the chance of leaks and spills. Furthermore, the heavy equipment and vehicle parking within the pads increases soil compaction. In addition, the occupancy by drill crews increases the disturbance level and risk of fires from human sources. Thus, simply comparing miles of roads, or even acres of surface disturbance, between alternatives is not necessarily the best metric for certain impacts. We recommend that the analysis show the different locations of drill pads in each alternative.

The Forest Service should confirm that IDCU will decommission all 4.7 miles of AMAX temporary roads being proposed for use, regardless of whether their exploration drilling ends up utilizing them or not. We note that Otis Gold, the proponent of the Kilgore North Project on the Caribou-Targhee National Forest, voluntarily decommissioned several miles of unauthorized roads in the project area as mitigation for exploration activities.

### **Landslide prone areas**

Following the 2014 Grimes Fire and 2016 Pioneer Fire, the site is more susceptible to mud and landslides due to destabilized soil profiles, and runoff. Wildfires can increase the risk of natural and human-caused landslides by removing vegetation that slow surface water flows, killing roots that stabilize soils and increasing surface and groundwater flows due to decreased transpiration. This increased risk can continue for several years as tree roots stabilizing hillsides decompose. The Forest Service must ensure an updated and comprehensive assessment of fire activity and its effects on landslide prone areas is conducted, including an overlay of drill pads and roads on landslide prone areas, and the development of alternatives to minimize risks of landslides.

It should be noted that Idaho batholith is notoriously unstable and the frequent landslides and mass wasting events in the watershed highlight the need for additional engineering standards. Of particular concern is the fact that the new road systems will destabilize slopes substantially more than a single pass across the hillside. In essence, the use of switchbacks may break up the structural integrity of the hillside in several places, affecting both the tensile strength and compressive strength of the hillside.

Roads have the potential to affect landslides in several ways. Roads alter the natural ground slope with cuts and fills. Road cuts may destabilize slopes above the cuts by removing material that provided stability to the slope above. Road fills place additional material on slopes that tends to load the slope below the road, increasing the risk of mass failures. Road drainage features such as



dips and culverts tend to collect water and concentrate it on slopes below. The additional water can add instability to the slopes. Care should be taken with road drainage so that water is not collected and concentrated on landslide prone areas below roads.

Landslides could have a significant impact to the Project area and downstream areas. Both riparian and biological communities within streams and wetlands within and adjacent to the Project area are likely to adversely be affected by the increase of temperature, sedimentation, and turbidity associated with landslide activity. We note that bull trout have been located both north and east of the project area and that the Forest Service needs to avoid, minimize and mitigate risks to bull trout. These same impacts could also negatively affect drinking water and irrigation uses (as noted above) of downstream communities.

Landslides could also have adverse impacts on intensive watershed restoration projects located downstream. For example, the Grimes Creek restoration effort was a collaborative effort between the Forest Service, non-profit organizations, private citizens, school groups, and private property owners with a goal to revegetate riparian areas affected by historic mine dredging. The result of these improved conditions was a dramatic improvement in both water quality and fisheries. Grants supporting these restoration efforts surpassed tens of thousands of dollars. This work was featured in local newspapers, television news channels, and newsletters. Should a landslide occur upstream, the subsequent increases in stream temperature, sedimentation, turbidity and potentially flow rates could undermine these extensive restoration efforts.

### **Seismic activity**

The mine is located within the Snake River Plan seismic zone which has seen extensive vertical and horizontal displacement. Areas such as Cascade that have previously been rated as relatively low in risk for seismic activity recently experienced a “swarm” of earthquakes. This data needs to be factored in along with the confidence of making predictions. The Forest Service needs to describe how maximum probable earthquake estimates have been calculated and engineer the road network to withstand such an event for each stage of operations.

### **Water quality**

We have both surface water and ground water quality concerns regarding the project. As noted above, in the 2012 decision in *Idaho Conservation League, et al. v. Forest Service*, the court held that the Forest Service violated NEPA when it failed to take a hard look at the potential effects of the project’s drilling to groundwater hydrology. Accordingly, all future project analysis must consider this decision.

Notwithstanding the 2012 court decision, a comprehensive analysis of surface and ground water characteristics, and their interaction will be critical to ensure proposed project impacts do not adversely affect water quality, or riparian and biological communities within the Project area. Furthermore, and as noted above, local communities, the City of Boise, and the greater Treasure Valley agriculture community all rely on clean water within Grimes Creek, Mores Creek and the Boise River. A surface and ground

water characteristics analysis must also be broad and thorough enough to adequately understand potential Project impacts to these communities as well.

In addition to metals contamination concerns, Project documents state, at various times, that all drilling fluids to be used are “non-toxic” and “biodegradable”.

Page 9 of the Plan of Operations states, “MSDS information will be available for these chemicals (see Attachment 4 - Spill Protection, Control & Countermeasure Plan, June 2011)”. However, no MSDSs or SDSs were included in project documents (including for the proposed fluids of “Max Gel”, “Poly Plus 2000”, or “Rod Ease”).

Promising that all drilling fluids are “non-toxic” and “biodegradable” is inappropriately vague and does not absolve the Forest Service and Idaho Copper from ensuring all applicable federal and state regulations are met.

While project documents do state that “All drill fluid additives pumped down hole are regulated and meet all State and federal safety and environmental standards”. (Plan of Operations, page 11 and Proposed Action Report, page 20). This statement is also vague and lacks appropriate analysis and detail.

Primary applicable regulations include Idaho Surface Water Quality Standards (IDAPA 58.01.02) and Idaho Ground Water Quality Rules (IDAPA 58.01.11). Both include a specific list of constituents for which surface water and ground water quality must be protected against as well as general duty clauses to protect overall surface water and ground water quality. The Forest Service and Idaho Copper must provide up to date SDSs for all proposed drilling fluids and comprehensively compare them to all applicable regulations for compliance.

Finally, the use of fire-fighting chemicals associated with the Pioneer Fire may have impacted the site and proposed project activities may interact with these chemicals. We recommend that the environmental analysis investigate whether fire-fighting chemicals were used within the project area and analyze if and how project activities may interact with these residual chemicals.

### **Water quality monitoring requirements**

Grimes Creek is listed by the State of Idaho as impaired due to excess sediment and temperature and is not fully supporting beneficial uses. Due to effects from the proposed Project activities, the Pioneer Fire in and around the Project site, salvage activities and other cumulative effects, sediment loading could potentially be increased. We are concerned that water quality monitoring will not be adequate for this project. Notably, the Quality Assurance Project Plan (QAPP) included within Project Documents appears to state that turbidity, total dissolved solids (TDS) and total suspended solids (TSS) are field parameters that are not required for collection (QAPP, Table 5). Given that Grimes Creek is impaired due to excess sediment it would appear that collection of turbidity, TDS, and TSS are critical to ensure the proposed project will not contribute to additional water quality degradation. Monitoring requirements must be updated to include turbidity, TDS and TSS.

Further specific concerns with the proposed list of analytes to be monitored exist. Per the QAPP, arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver, copper, fluoride, and zinc are proposed for monitoring. However, several analytes for which Idaho has groundwater quality standards (IDAPA 58.01.11, Tables II and III) are not proposed for monitoring including: antimony, beryllium thallium, iron, manganese, aluminum. Accordingly, given the associated nature of these metals to the existing metals proposed for monitoring these additional metals must also be included for monitoring to ensure compliance with IDAPA 58.01.11.

The Quality Assurance Project Plan included within Project Documents states that sampling frequency will be quarterly before, during and after the drilling season (April 15 to December 15). Monthly monitoring would provide a more accurate understanding of water quality on site and ensure greater confidence that water quality on site is not being degraded. In addition, monitoring must continue after reclamation procedures have been completed to ensure their effectiveness. Finally, monitoring results and inspection reports should be posted on the project website.

Regarding the duration of water quality monitoring, we point out that the Kilgore gold exploration project on the Caribou-Targhee National Forest entails monitoring of water quality well in advance of project implementation and for one year following project completion. We believe that the same, if not longer, post-closure monitoring program is prudent here, particularly given the high selenium and arsenic levels in some locations.

In addition, the Forest Service should include additional details regarding specific water quality thresholds with respect to turbidity, metal concentrations, etc. and establish triggers for additional action. Below is a reference to thresholds associated with the Kilgore exploration Project. A similar detailed plan should be developed for the 2023 CuMo exploration project:

When water quality data over a period of three consecutive months indicates a substantial increased concentration of the water quality parameters listed in the EA and Otis' baseline water quality testing, the USFS will require Otis to investigate possible causes for the negative change in water quality (Kilgore, North Area (Otis Capital USA, Corp. Kilgore Gold Exploration Area Project-Mine Ridge North Area) Decision Notice, p. 70).

The Kilgore EA goes on to define a substantial increase and describe first and second actions to verify the monitoring results as well as steps to mitigate the impacts:

Within 45 days, Otis will confer with the USFS and other agencies to develop monitoring and best management plans consistent with Idaho rules to address the source of contamination. (Kilgore, North Area (Otis Capital USA, Corp. Kilgore Gold Exploration Area Project-Mine Ridge North Area) Decision Notice, p. 71).

Specific actions:

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- Produce a map of monitoring locations
- Include a notation showing past monitoring dates
- Establish a 1-year baseline in advance with sampling at least once per season. For drill areas with insufficient data, delay drilling until this baseline has been established
- Commitment to continue monitoring for at least one year following drilling
- Defining trigger levels in contaminants of concern that trigger additional action including confirming results and designing mitigation measures

Given the importance of Grimes Creek and the Boise River watershed, we recommend that the Forest Service adopt a similar or more proactive approach.

### **Water use and water rights**

The environmental analysis should describe the amount of water that will be used in the drilling process, the specific source of water rights and the validity of these rights. The Forest Service should examine alternative water sources that have fewer environmental effects. As mentioned previously, we are concerned that diversions from Grimes Creek and Charlotte Gulch will have adverse impacts on local fish populations, potentially including bull trout.

The previous operator was authorized to utilize water from Drill Hole #12, Charlotte Gulch, and Grimes Creek, but the Forest Service did not disclose which water source will be used when. Moving forward, the Forest Service needs to describe which water source will be utilized for which drill pad operation so that water quantity impacts can be assessed and water quality can be verified.

### **Water pumping from Grimes Creek, Mohawk Gulch, and Charlotte's Gulch**

We appreciate the fact that a fish screen would be used at water pumping stations at Grimes Creek. However, it should be required that if pumping from Grimes Creek, it will include a 3/32-inch screen mesh screen placed around the intake and the pumping rate will be less than 10% of streamflow.

We are additionally concerned about surface impacts and the potential for diesel fuel and lubricant spills. The diesel-powered pumps should be completely contained with a double-lined, leak-proof containment system capable of withholding all fuel and fluids in addition to any precipitation from 100-year storm events that might infiltrate the pump.

The location for the pump needs to be disclosed and confirmed by a Forest Service fisheries biologist to avoid sitting in sensitive areas. To reduce potential impacts to riparian and aquatic resources, we recommend using water from the existing water well for all water needs. In addition, the amount of water that could potentially be pumped out of Grimes Creek needs to be disclosed and evaluated by a Forest Service fisheries biologist to mitigate degradation to fish habitat.

### **Fisheries**

The Plan of Operations falsely claims in attachment 3, 2022 Update Quality Assurance Project Plan (QAPP) and Site-Specific Sampling Plan, that Grimes Creek is a non-fish-bearing stream. While we appreciate that Grimes Creek is the least preferred option for water withdrawal, it should still be categorized as a fish bearing stream as there are substantial reports proving that fish are present in the creek.<sup>6</sup> Please see the attachment of the Fish and Wildlife photos from the project area.

### *Bull trout*

Bull trout have been showing their presence within the proposed project area and have been identified in numerous reports. However, the scoping document fails to account for any potential impacts of this proposed exploration project on bull trout or potential habitat.

In 2008, the Idaho Department of Environmental Quality's Dec. 2008 Preliminary Assessment Report for the Enterprise Group of mines cited an IDFG 2000 study reporting that bull trout are present within both Grimes Creek and Charlotte Gulch.<sup>7</sup>

Bull trout [*Salvelinus confluentus*] are present in Charlotte Gulch and Redband rainbow trout [*Oncorhynchus mykiss gairdneri*]; brook trout [*Salvelinus fontinalis*] and bull trout are present within Grimes Creek (IDFG, 2000).

In 2017, the USDA published a study looking at the occurrence of bull trout using eDNA.<sup>8</sup> The results show that the last eDNA sample in Grimes Creek was August 2015, which tested positive for the presence of bull trout. Even the exploration plan states:

“Bull trout is the only threatened or endangered species possibly known to inhabit the vicinity of the project area;” (pg. 11).

We request that the Forest Service conduct additional eDNA sampling within the project area and along Grimes Creek downstream of the project area, and Charlotte Gulch to better understand the presence of bull trout or other sensitive species.

The Plan also fails to consider impacts to bull trout in the South Fork Payette River drainage, which could be impacted by a fuel spill or sedimentation from the use of the Grimes Pass Emergency Route. The South Fork of the Payette is designated as critical habitat for bull trout and any exploration activities need to prevent or mitigate any degradation to the river ecosystem.

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<sup>6</sup> Species occurrence data from the Range-Wide Bull Trout eDNA Project. 2017. Fort Collins, CO: Forest Service Research Data Archive. Updated 05 June 2021. <https://doi.org/10.2737/RDS-2017-0038>; Grimes Creek <https://idfg.idaho.gov/ifwis/fishingplanner/water/1159517437260>

<sup>7</sup> Idaho Department of Environmental Quality Preliminary Assessment Report for Enterprise Group <https://www2.deq.idaho.gov/admin/LEIA/api/document/download/5673>

<sup>8</sup> Species occurrence data from the Range-Wide Bull Trout eDNA Project. 2017. Fort Collins, CO: Forest Service Research Data Archive. Updated 05 June 2021. <https://doi.org/10.2737/RDS-2017-0038>

The Forest Service should reinitiate ESA consultation with USFWS in light of the numerous surveys identifying that there are bull trout in the Grimes Creek drainage and to address the effects to bull trout in the South Fork Payette River drainage.

Considering the recent fire activity in the area, we are concerned that burned areas may be more prone and susceptible to erosion as a result of this project, which could lead to an increase in sedimentation within Grimes Creek. We request that the Forest Service conduct additional baseline studies for aquatic species habitat that reflect the current state of the project area and potential direct, indirect, and cumulative effects.

With the proposed project interacting with bull trout habitat, it highlights the need to disclose the proposed road and drill pad locations, examine alternatives that decrease sedimentation, commit to a greater percentage of concurrent reclamation to address sedimentation issues, and increase monitoring efforts and inspections to address any issues in a timely fashion. This monitoring and analysis will recreate the baseline of population information. In addition, riparian succession ought to be studied to understand how the Grimes Creek and Pioneer fires affect bull trout.

Part of the plan is to potentially pump water from Grimes Creek, Mohawk Gulch, or Charlotte's Gulch and a screen will be placed around the water intake to keep fish from entering the pump. However, there is no information on how this will impact the fish populations that inhabit that stream, nor is there information on the amount of water that could be potentially pumped out of Grimes Creek. Map 4 in the Plan shows the possible water drawdown points. However, the map does not show where these points exactly lie on the streams because the locations of the streams are not present on the map. When compared to USDA's (2017) eDNA study, the locations of the pump seem to match directly with the sample areas of where bull trout were present<sup>9</sup>.

Up to date and robust water quality baseline data needs to be obtained from Grimes Creek and Charlotte's Gulch in order to accurately assess the project's effects on bull trout and native fish habitat. The Plan references water quality data from 2012 when discussing the state of the water that would be withdrawn from streams and used for drilling, however, this data is inadequate and recent baseline data needs to be collected prior to the beginning of operations. If there is more current water quality data that is being used for baseline data, then those reports should be disclosed to the public and included with the project documents.

### **Riparian Conservation Areas**

We urge the Forest Service to follow Best Management Practices and Forest Plan Standards when evaluating proposed temporary roads, drill pad locations, and other project infrastructure in regard to protecting Riparian Conservation Areas (RCA) to the highest degree. Specifically standards MIST08 and

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<sup>9</sup> Link to Bull Trout eDNA Map:

<https://usfs.maps.arcgis.com/apps/webappviewer/index.html?id=6d5597b2755c4c00a35613b7a1849760>

MIST09 which prohibit locating roads, drill pads, and other structures/facilities in Riparian Conservation Areas (RCAs) unless the Forest Service makes a determination that there is no alternative to doing so.

Within the Proposed Action Report and Plan of Operations, it is clear that the proponent plans to construct roads and drill sites within RCAs. We request that the Forest Service explore the necessity of these specific sites as well as develop alternatives that will eliminate the need to do so. Where an exploration road crosses an RCA, the Forest Service must consider an alternative that closes this route or, if necessary, provide an alternate (even if it is longer) route around the RCA instead of allowing this disturbance throughout the life of the project.

One of the most important Standards in the Boise Forest Plan concerns the protection of Riparian Conservation Areas. *See* Appendix B of the Boise Forest Plan. RCAs are directly relevant to the Project. As there are numerous small ephemeral, intermittent and perennial tributaries of Grimes Creek dissect the Project Area.

RCAs are designed to help protect streams from increased sediment and temperature, both of which have been identified by the State of Idaho as pollutants. The width of RCAs vary depending on the type of stream (*e.g.*, forested vs. non-forested, perennial vs. intermittent). Based on the Forest Plan, the width of protected RCAs for the perennial reaches of Grimes Creek and its tributaries is 600 feet (300 feet on either side), and 300 feet (150 on either side) for intermittent streams. Boise Forest Plan at B-33.<sup>10</sup> The reach of Grimes Creek within the project area is listed by EPA and the State of Idaho as water-quality impaired under Section 303(d) of the Clean Water Act because of higher-than-standard water temperature; and 303(d) listed for sediment farther downstream.

As the Forest Service evaluates the current POO, we emphasize the need to pay close attention to any activities that may cause an increase in erosion or sediment delivery to streams and RCAs within the project area and along proposed transport and haul routes, which in turn can lead to temperature pollution. Following major fires that burned within the area, this need is magnified by the likelihood that the surrounding area is more prone to erosion and sediment delivery than it was prior to burning.

The leading federal court decision dealing with RCAs and mining is Hells Canyon, *supra*. In that case, the court ruled that the Forest Service's approval of mining operations with Riparian Habitat Conservation Areas (RHCAs) under INFISH violated INFISH and the Forest Plan. The INFISH Standard at issue in that case (MM-2) is essentially the same as the MIST08 Standard in the revised Boise Forest Plan. The court described the legal issues in that case as follows:

Plaintiffs argue that the Forest Service did not comply with standard MM-2 and therefore acted inconsistently with the Forest Plan when it authorized road and settling pond

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<sup>10</sup> The 600 and 300 foot RCA widths are subject to slight variation based on local conditions, such as amending the width based on tree-heights. Boise Forest Plan at B-33.

construction within RHCAs. Standard MM-2 provides that structures, support facilities, and roads should be located outside of RHCAs unless no alternative exists, and where no alternative to road construction exists, such construction must be limited to the minimum necessary for the approved mineral activity. AR 02298. The Forest Service argues that the ROD does not “locate” any new roads, and that MM-2 does not apply to settling ponds.

Hells Canyon, *supra*, 2006 WL 2252554, \*8 (emphasis added). Regarding the placement of roads in RHCAs, the court ruled that, if any roads will be constructed within the RHCA:

[T]he Forest Service is responsible for analyzing the necessity of these new roads, whether alternatives exist, and providing more specific assurances that new road construction will be limited to the minimum amount necessary to comply with MM-2. The Forest Service must provide a more thorough analysis on the issue of new road construction in RHCAs to satisfy the mandate of MM-2.

Hells Canyon, at \*8.

Since a virtually identical Standard applies here under the Boise Forest Plan, the Hells Canyon decision is squarely on point, and confirms that the Forest Service must prohibit all roads in the various RCAs, unless there is no alternative. In order to meet these requirements as presented in the Forest Plan and Hells Canyon, The Forest Service must move all proposed roads outside of RCAs or provide rationale and analysis for any that will move forward within this plan.

During the life of the project, the Forest Service should require that drilling proceed in such a manner that as drill sites are completed and reclaimed, temporary access roads will also be progressively reclaimed once sites that they provide access to have been drilled and abandoned. By progressively decommissioning these roads along with drill sites, potential environmental impacts will be reduced.

While road construction entails a significant amount of environmental impact, the continued existence of the road bed provides a continuous source of sediment that can bleed into perennial and intermittent streams. Every year the road bed remains open is one more year for noxious weeds to become established and one less year for the soils and vegetative community to become reestablished. The vegetative community within the RCAs is particularly important because it shades the creeks and maintains cool water temperatures, as mandated by the Mores Creek and Grimes Creek TMDL.

The longer that temporary roads are left on the landscape the longer the risk of increased chronic sedimentation. We are also cognizant that constructing, decommissioning, and then reconstructing roads if requested by the operator will increase sedimentation compared to simply leaving these temporary roads intact until all operations are concluded. However, the confirmed presence of bull trout in Grimes Creek and the risks proposed by the road network requires that the Forest Service take a harder look at decommissioning and reclaiming roads following drilling activities. This would mean revisiting the need for drilling access with the project proponent and revising the



environmental analysis accordingly and also having more frequent reviews of the drilling plans with the proponent during operations.

Regarding the prohibition against locating any “structures or support facilities” within a RCA, Hells Canyon is again controlling. The court first described the legal dispute:

Plaintiffs argue that the record contains no evidence that the Forest Service did the required analysis as to whether alternatives existed to locating settling ponds in RHCAs. The Forest Service argues that MM-2 applies only to structures, support facilities and roads, and that settling ponds are none of these such that MM-2 does not apply to the location of settling ponds.

Hells Canyon, at \*8.

After rejecting the agency’s argument against applying the Standard to such structures in a RHCA, the court concluded:

This court finds that the settling ponds in this case are subject to INFISH standard MM-2. The Forest Service must perform the required analysis under MM-2 as to whether alternatives exist to locating settling ponds in RHCAs.

Hells Canyon, at \*9.

In order to comply with this standard, the Forest Service must require that all pits, sumps, and any additional support structures/facilities be located outside of RCAs..

In addition, Boise Forest Plan Standard MIST09 applies here, and requires a series of strict limitations on the placement of mine waste (such as drilling muds and other materials resulting from the drilling operations). Similar to MIST08, it “prohibit[s] solid and sanitary waste facilities in RCAs.” Forest Plan at III-50. Also similar to MIST08, such prohibition is binding unless there is “no alternative” to locating these activities in a given RCA. *Id.* Even if there is no alternative, MIST09 requires an extensive analysis of the materials and strict technological limitations on the placement of the materials. *Id.*

The Idaho Department of Environmental Quality has prepared a Total Maximum Daily Load (TMDL) for Grimes Creek, which EPA has approved pursuant to the Clean Water Act. The Grime Creek TMDL is contained in the Project Record for the CuMo Exploration Project. *See* Project Record # 2212, Boise-Mores Creek Subbasin Assessment and TMDL.

The U.S. Forest Service is required by NFMA and Section 313(a) the Clean Water Act to adhere to the TMDL requirements. *See* 33 U.S.C. § 1323(a) (requiring federal agencies to conform to federal and state water quality standards and regulations); Marble Mountain Audubon v. Rice, 914 F.2d 179, 182 (9th Cir. 1990); ONRC v. US Forest Service, 834 F.2d 842, 848 (9th Cir. 1987); Northwest Indian Cemetery v. Block, 795 F.2d 688, 697 (9th Cir. 1986), rev'd on other grounds, 485 U.S. 439 (1988) (all holding that federal land management agencies must comply with state WQS under CWA § 313). This requirement *Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 33 of 51.*

extends to both "point source" and "non-point source" activities permitted by federal agencies which affect water quality standards. *Id.*; see also Citizens Interested in Bull Run v. Edrington, 781 F. Supp. 1502, 1510 (D. Or. 1991).

The Grimes Creek TMDL relies on the percentage of shade provided by Potential Natural Vegetation (PNV), *i.e.*, vegetation in an undisturbed state, as the main metric for controlling stream temperature. Because this TMDL is based on loading that does or would occur under PNV, which is equivalent to background load, the load allocation is essentially the desire to achieve background conditions. See Grimes Creek TMDL, *supra*, Project Record # 2212, p. 166.

Due to the nonpoint characteristics of this form of thermal pollution, the TMDL directs responsible parties to focus on management activities that may affect stream shading:

However, in order to reach that objective, load allocations are assigned to nonpoint source activities that have affected or may affect riparian vegetation and shade as a whole. Load allocations are therefore stream reach-specific and are dependent upon the target load for a given reach.

*Id.*, p. 166.

Furthermore, the TMDL requires knowledge of baseline or background conditions, as well as current conditions:

Additionally, because this TMDL is dependent upon background conditions for achieving WQS, **all tributaries to the waters examined here need to be at natural background condition in order to prevent excess heat loads to the system.**

*Id.* (emphasis added).

The TMDL provides a map showing both existing conditions as well as target conditions for sections of both Grimes Creek and Charlotte Gulch (which is within the Project area, and tributary to Grimes Creek). We implore the Forest Service to focus their analysis on places where restoring riparian shade is most needed and other places where the shade is provided by Potential Natural Vegetation and meeting TMDL goals:

Although the following analysis dwells on total heat loads for streams in this TMDL, it is important to note that differences between existing shade and target shade, as depicted in Figure 45, are the key to successfully restoring these waters to achieving WQS. Target shade levels for individual reaches should be the goals that managers strive for with future implementation plans. Managers should key in on the areas with the largest differences between existing and target shade as locations to prioritize implementation efforts.

*Id.*

The TMDL notes that this information is from a limited number of data points along the major streams, *Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 34 of 51.*

such as Grimes Creek, and that data gaps exist. To improve the accuracy of the TMDL, it directs that additional information regarding the shade structure along tributaries is needed:

Data Gaps for Temperature:

Vegetation and percent shade characterization **for tributary reaches** and shade curves developed using native subbasin vegetation.

*Id.*, p. 108 (emphasis added).

Implicit in the TMDL is the assumption that vegetation adjacent to streams is not reduced through management activities:

The MOS (Margin of Safety) in the temperature TMDL is considered implicit in the design.

Because the target is essentially background conditions, loads (shade levels) are allocated to lands adjacent to these streams **at natural background levels**.

*Id.*, p. 168, emphasis added.

Moving forward, it is imperative that the Forest Service conduct the needed baseline studies to determine accurate background stream temperatures within the project area and immediately downstream. Site specific monitoring shows that there are temperature exceedances in the Project Area. The TMDL noted that water temperatures at Grimes Creek at the Golden Age Mine, which is adjacent to the Project Area, exceeded the 13 degree daily maximum water temperature for spawning redband trout for 14 days and the 9 degree daily average temperature for 23 days. Project Record # 2212, Boise-Mores Creek Subbasin Assessment and TMDL, p. 220.

Understanding the baseline conditions and of maintaining shade structure in riparian areas is critical because road construction and drill pad construction at stream crossings and in RCAs will certainly remove vegetation along Grimes Creek and its tributaries impacting stream temperatures.

In addition to our concerns focused on Grimes Creek, additional attention must be placed on smaller perennial and intermittent streams found within the project area that may be impacted by drill pads, temporary roads, and stream crossings:

Small streams are more affected by hillslope activities than are larger streams because there are more smaller than larger streams within watersheds (actual area and extent); smaller channels respond more quickly to changes in hydrologic and sediment regimes; and streamside vegetation is a more dominant factor in terms of woody debris inputs and leaf litter **and shading**. Small perennial and intermittent non-fish bearing streams are especially important in routing water, sediment, and nutrients to downstream fish habitats.

See Boise Forest Plan, Appendix B, p. 40 (emphasis added). The importance of understanding these effects is stressed in the Forest Plan:

Projects in watersheds with 303(d) listed water bodies should be supported by the appropriate scale and level of analysis sufficient to permit an understanding of the implications of the project within the larger watershed context.  
Boise Forest Plan, SWGU07.

During any project related activities that may require the removal or thinning of riparian vegetation, the Forest Service must analyze and quantify what the impacts will be on stream temperatures and what the overall impact may be for temperature loading within the system.

We believe that stream crossings represent a major issue and suggest developing additional alternatives to reduce impacts to riparian and watershed resources. Sediment entering streams from stream crossings can affect aquatic organisms. We request that the Forest Service explore alternatives that reconfigure certain aspects of the proposed plan to avoid stream crossings wherever possible. The Proposed Action Report notes 15 stream planned crossings. We recommend that the environmental analysis include a map indicating the roads and their numbers, the crossings, and the names of the water bodies, if known.

### **Wildlife Overview**

The project area supports habitat for a wide range of wildlife. Sixteen volunteers collected footage from game cameras placed in the project area, with continuous monitoring over a four year period, they documented, black bear, elk; both bulls and cows with calves, mule deer, whitetail deer, mountain lion, gray wolves, coyotes, red foxes, bobcats, and winter and spring phase snowshoe hares. Please see attached photographs.

The Forest Service had previously concluded that potential wildlife impacts from exploratory mining in the area would have temporary or short-term impacts. Since the last EA, additional studies have been conducted assessing disturbance impacts from similar developments. Impact thresholds are levels of development and disturbance that impair key habitat functions by directly eliminating habitat; disrupting wildlife access to habitat; or causing avoidance and stress (WGFD 2010a). The Forest Service had previously determined that the vegetative clearing for the project was a small percentage of the total area in terms of habitat disturbance. Looking ahead to this current proposal, with respect to measuring habitat disturbance, the Forest Service should not only look at the acreage of vegetative clearing but also other site conditions such as noise and lighting, which could also lead to habitat fragmentation or make habitat unsuitable.

Although the Forest Service previously noted the availability of other suitable habitat nearby the project site for use as wildlife corridors and activities such as calving and fawning, the 2015 SIR reported that the Pioneer Fire will require a reassessment of that conclusion:

The modified Project area is likely used in the spring and summer for calving and fawning, which typically occurs within or near dense deciduous shrubs near water (Olson 1992). Willow/alder dominated, narrow (approximately 10 to 25 feet wide) riparian thickets, commonly present along intermittent and perennial drainages in the modified Project area, are more likely locations for  
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calving and fawning, though such activities could occur almost anywhere within the modified Project area.

Vegetation conditions that contribute to habitat suitability, habitat quality, and effectiveness have changed across the direct, indirect, and cumulative effects analysis areas. The Pioneer Fire has killed or top-killed vegetation across the broad landscape. This may affect big game habitat and use within the Project area, and patterns of big game use and distribution are expected to change as a result of natural vegetation recovery over time. Baseline conditions discussed in the 2015 SEA should be updated to reflect the effects of the 2016 Pioneer Fire. Once the baseline is updated, the existing mitigation and design features for big game included in Chapter 2 of the SEA should be reviewed to insure they will continue to result in the effects as disclosed in the 2015 SEA.

Other vulnerabilities arising from habitat fragmentation and worth analyzing are the established grounds for mule deer fawning and elk calving, habitually utilized routes often linked to meadow complexes or riparian communities and larger seasonal migration movement in and out of the project area. Depending on the level of habitat disturbances from new road construction, vegetative clearing, lighting effects, well drilling noise and vehicle noise, some routes and habitat locations may be abandoned. Current guidelines indicate habitat disturbance leads to alarm and avoidance behavior and the expenditure of unnecessary energy, which triggers physiological stress (Gill et al. 1996, Frid and Dill 2002).

As of 2005, Idaho Department of Fish & Game (IDFG), Game Management Unit (GMU) 39 had a stable mule deer population, before exploration activities commenced. GMU 39 has been home to one of Idaho's three largest herds of mule deer and hosts extensive winter range for wild ungulates. If the Forest Service moves forward with further analysis, updated population and migration data for mule deer and elk should be reviewed for potential impacts onto wild ungulates living in the project area. In order for the biological assessment to be complete, it must also consider habitat requirements for other local wildlife, including black bear, coyote, and bobcat.

We recommend that the Forest Service evaluate the potential impacts to Species of Greatest Conservation Need as well as MIS (Management Indicator Species). This analysis should include pileated woodpecker, white headed woodpecker, Forest Service sensitive species, lynx, migratory birds, elk and mule deer fawning habitat, elk and mule deer habitat suitability, and forage impacts from noxious weeds. The analysis should also take into account increased vehicle collisions with mule deer, elk, amphibians, and other wildlife. Hunting Unit 39 is one of the most popular hunting units in Idaho. Hunting and fishing revenues in Idaho top \$540 million dollars annually and are an important economic driver for local communities. We are concerned about loss of these opportunities as a result of permitted or unpermitted activities that are a result of project activities.

As mentioned previously, drill pads can have a disproportionate effect on the environment compared to access roads as they are occupied 24/7, increase soil compaction with heavy equipment, have high noise levels and use powerful lights for night activity. With the exception of vehicle collisions, these factors are potentially more disruptive to wildlife than infrequent road use by motor vehicles. Wildlife, including

migratory birds, bats, forest carnivores, as well as deer and elk could be affected by these around the clock disruptions.

Numerous studies demonstrate the adverse impacts of nighttime lights on wildlife, such as changes in circadian, reproductive, and social behavior; bird migration; and often affecting animal health (e.g., Longcore and Rich 2004, Ouyang et al. 2017, Raap et al 2017, Cabrera-Cruz et al. 2018). Many birds migrate at night, relying on the positions of stars, the moon, and other night sky features to aid in navigation. The additional lights needed for night activity will drown out stars and possibly confuse birds until they are exhausted. High noise levels are also unsupportive of birds and other wildlife. For birds, the noise levels needed for operation could alter reproductive timing and hatching success, and affect bird nesting location, diet and migration (Senzaki et al. 2020).

The distribution of drill pads across the landscape needs to be factored into wildlife habitat use issues. It may be preferable to either concentrate or distribute drill pad use throughout the project, or to only drill in certain areas during certain seasons. For example, if a particular area is important for elk or deer fawning, drill pad operations should take place far enough away where noise, light and occupancy will not be an issue.

Because of the large amount of roadwork and site disturbance, the security cover will be dramatically reduced for elk and other wildlife. This area is already deficient in security cover for ungulates:

“... the existing distribution of roads and open trails across the Upper Grimes Creek and Clear Creek 6<sup>th</sup> Level HUCs is such that it results in a high degree of habitat suitability reduction.(EA, p, 56).

As a mitigation measure, we recommend that the Forest Service close an equal number of roads and landings in adjacent areas such that there is not net increase in overall road densities, road densities in RCAs, Detrimental Disturbance, Total Soil Resource Commitment, or Equivalent Clearcut Area.

Since the original CuMo analyses, increased recreational pressure in the area may have also affected wildlife. The cumulative effects analysis should factor in effects from this project and the Upper Mores vegetation management project and Highway 21 Recreation Corridor projects, all of which may affect wildlife movement in the larger area.

#### *American Goshawk and Great Gray Owl*

Buffers surrounding any identified American goshawk and great gray owl can be useful design features but the radius needs to exceed a 150-foot radius. The Golden Meadows Project on the Payette National Forest utilized a ¼ mile buffer around all raptor nests with no project activity allowed until fledglings have left the nest.<sup>11</sup> Additional design features could include seasonal restrictions and phasing the development in a way that avoids impacts entirely.

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<sup>11</sup> Payette National Forest, Golden Meadows 2013 Environmental Assessment, p. 3-91.

Great gray owls and goshawks have each been documented during the 2011 and 2012 monitoring work Revised Supplemental EA p. 134 (great gray owl), p. 135 (goshawk). The Forest Service should incorporate updated American goshawk and great gray owl surveys, effects of project activities on bird and wildlife behavior, and efficacy of measures to minimize and mitigate impacts.

We recommend the monitoring protocol be expanded to a reasonable distance beyond the project area to better identify an active goshawk nest in an unknown location adjacent to the project area, as identified in an email from Michael Feiger to Randy Hayman, Subject LH-2011-098 –ROC Kyle Fend, Date, Friday, March 30, 2012:

Given the concerns and possible conflicts timing wise associated with the northern [American] goshawk habitat (occupied) and the location of the still mystery nest, I'd offer this up for consideration...As we are currently functioning, we are essentially band-aiding that issue with the annual surveys, essentially surveying to, as best we can, assure absence in potential nesting habitat in the project area. We functionally have 5 years of consecutive sightings information within or adjacent to the CuMo project area. either within, or adjacent to the project area, there is a nest that is producing offspring.

Some of the hallmarks of the critter, they're territorial, have large territories, and tend to be very repetitive in their nesting behavior.. Usually having 1-2 nest stands (30-50 ac in size), and 2-4 nest trees that they rotate through over multiple years. It would probably be worth Mosquito's time to, in addition to this year's annual 'absence check', to invest in additional time and effort in June – early August to look in habitat immediately adjacent to the project area, if they don't find a nest this spring within. Once you document the location of the nest, it gets a lot easier to predict a) where the alternate nest area, and b) figure out what true risks/concerns/impacts, or lack thereof, their operations would have. If they find this year's active nest, and do some thorough looking in likely alternate nest stands nearby, we'd have a much clearer and more focused picture of where they're at, and would simplify there out year monitoring by being able to focus on actual nest sites and alternative sites....

Expanding the goshawk study area is critical as it relates to connected actions and cumulative effects. With this information in hand, operations can be conducted in a manner to avoid impacting the nest and fledglings on the outer perimeter of the project area and potentially within the project area.

### *Canada Lynx*

Although the Pilot/Sunset Lynx Analysis Area is outside of identified Critical Habitat, the heavily wooded north aspects of the project area that are slated for road construction appear to be potential lynx denning and foraging habitat. Game cameras in the project area have recorded a variety of species, including snowshoe hare. The new analysis should take a close look at this issue. The SIR had noted that the Pioneer Fire likely affected a portion of the 700 acres of lynx source habitat that existed pre-fire and that baseline should be reviewed and updated as needed in the SEA. The 2017 North and South Pioneer Salvage and Reforestation Biological Assessments documented that

several thousands of suitable acres within the Lynx Analysis Unit (LAU) were converted to an unsuitable condition following the 2016 Pioneer Fire, increasing acres of potential habitat to an unsuitable condition to over 30% of the total potential acres.

According to Forest Plan standard TEST15, once unsuitable habitat exceeds 30% within an LAU, no additional lynx habitat may be changed to unsuitable habitat through vegetation management. The SIR had reported that this standard was specifically developed to address vegetation management activities and not mineral activities. We disagree; TEST15 should apply to the 2023 CuMo Exploration Project. And even if TEST15 does not apply to the 2023 CuMo Exploration Project as a binding Forest Plan standard, the 30% threshold is still important. The threshold was used in the previous CuMo SEA and supporting BA as an indicator of effects and what impacts to 18 or 21 acres of suitable habitat may mean to lynx. Allowing further disturbance in excess of that threshold may have significant effects on lynx and lynx habitat and allowing excessive disturbances beyond the threshold fails to minimize impacts to lynx.

Since the 2017 BAs, the Pioneer Fire Salvage and Restoration Project has been implemented. The Forest Service needs to conduct an implementation review to see if the trees slated for logging were actually logged and if the habitat assessment for lynx and other wildlife is still accurate. We note that estimates for natural tree mortality based on wildfires are not 100% accurate. In order for an accurate assessment, the Forest Service should determine if there are more or less acres of suitable habitat remaining.

The SIR reported that conservation measures for minerals and energy development can include rehabilitating abandoned mine lands to original contours and native vegetation as habitat for lynx. The SIR also recommended incorporating “appropriate rehabilitation habitat conditions with the Pilot Rock/Sunset LAU.” While habitat restoration is laudable and should be integrated in this and other projects, a greater priority should be protecting or minimizing impacts to suitable habitat. The Forest Service should assess if an alternative using helicopters to transport drill rigs instead of new road construction will reduce impacts to suitable lynx habitat. While we also support mitigation measures, we note that the Plan of Operations does not include a mitigation component for terrestrial wildlife.

### *Wolverine*

Wolverines have been reported near the project area and are a Forest Service sensitive species and State species of greatest conservation need. Although wolverines are extremely wide-ranging, BMPs could help reduce negative impacts. These measures could include additional monitoring requirements, an adaptive management trigger, shortening the seasons of operation, and focusing drilling operations in certain areas as opposed to spreading them throughout the project area at any one time.

Mitigation for wildlife is challenging with proposals like these but the Forest Service and IDCU could examine limiting factors for wildlife in the broader area and develop proposals to address these.

### *Other wildlife*

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We are also concerned about bats, birds, and amphibians becoming trapped in the sumps on site. To prevent this problem, we recommend skirting the sumps at a sufficient height to prevent amphibians and mammals from accessing these ponds and providing escape ramps if animals should fall in.

### **Access and recreation**

We are concerned about trail closures and fishing and hunting restrictions due to exploration activities. The Forest Service should provide additional details of where public access will be allowed within the project area for both motorized access as well as foot traffic, including cross-country. The Forest Service should develop an alternative responding to public access issues which phases the drilling across the area in such a way that fewer places are closed at any one time.

Regarding access and recreation, the SIR reported the following:

The Pioneer Fire did impact a large portion of this CIA area and is expected to result in displacement of recreation users due to the resulting conditions and potential for closures of road and trails to address hazardous conditions of the next 3 to 15 years.

The baseline of the CIA area should be updated to reflect the effects resulting from the 2016 Pioneer Fire on displacement of recreationists. Once the CIA baseline is updated and disclosures concerning displacement of recreation users within the broader CIA area resulting from the 2016 Pioneer Fire are considered, update disclosures pertaining to displacement from actions occurring under the action alternatives as needed to be consistent with CIA conclusions.

More recently, recreational use across the Boise National Forest has increased significantly. The Forest Service should factor in the effects of project activities on recreation as well as cumulative effects of both recreation and exploration on other forest resources.

### **Drilling techniques**

The Forest Service must elaborate on the potential environmental and water quality impacts that pertain to drilling fluid loss/gain, total loss of returns, fluid gain, and drilling fluid disposal. Within the scoping document, it states that if a “Lost Circulation Zone (LCZ) is encountered...mud will be circulated to allow the zone to seal.” The Forest Service must clarify what compounds are approved for use and what potential environmental impacts may occur as a byproduct of their deployment.

Attachment 2 (CuMo Drilling Procedures - 2015) outlines project drilling procedures that does answer some of the above questions, but it appears that this document has been attached from previous plans and must be amended to clarify if the details within are still pertinent. The information within this attachment is helpful in explaining the proper protocols for when the “closed loop” system is compromised via drilling fluid loss/gain, total loss of returns, fluid gain, but it does not explain the related environmental concerns. Please clarify what environmental concerns may be associated with a compromised closed loop system.

However, assessments of similar drilling activities elsewhere made similar assumptions, but additional analyses revealed the potential for water contamination from both the drilling fluids themselves and from the mobilization of hazardous metals contained within certain aquifers (see section on arsenic below). The Forest Service must analyze if there is potential for any drilling lubricants or bentonite-based sealants to have an adverse impact on fisheries or reach fish habitat via surface or groundwater transfer.

We request that the Forest Service specify the size of the drill bit/core sample that will be produced by this proposed exploration. Considering the large volume of proposed holes and the potential for these holes to be 3,000 ft deep, the difference in materials and water required to achieve outlined mitigation/abandonment practices varies widely.

It is stated in the scoping document that “hole abandonment entails plugging the holes from bottom to top with a low-permeability bentonite-based grout” and indicates that Benseal may be used. Benseal’s own manufacture guidelines indicate for hole abandonment, 2.5 lbs of Benseal will be required per foot of 4 inch pipe. Averaging drill depths to 2,250’ and assuming that no artesian conditions have been encountered, this project will require over 1.4 million pounds of Benseal. It must be assumed that this will be hand mixed on site as there is no indication of additional equipment such as mixers or concrete trucks. This leaves serious questions regarding the ability of the three drill operators to hand mix the required 5,625 pounds of Benseal that will be required, on average, for each hole. The Benseal Product Data sheet<sup>12</sup> also states that Benseal should not be used as a centrifugal pump. We request that this process be further explained and outlined to ensure that the outlined abandonment measures are indeed feasible.

## **Sumps**

Within the primary scoping document, the Forest Service outlines the proposed dimensions of mud pits/sumps to accompany each drill pad as “10 feet long, 5 feet wide, and 5 feet deep **or less when using hydrocyclone**”. We support any proven drilling method that requires less water resources and may have less of an impact on the environment, but the Forest Service must outline what these reduced pit dimensions are. This is especially important as the use of cyclone or hydrocyclone separation system is to be utilized “if available” as stated within the Plan of Operations”.

The Forest Service also needs to describe what tests will ensure that the sumps are not located in areas where groundwater levels could rise above the bottom of the sump. Previous analysis of the project area has shown that a shallow water table exists and presumably changes seasonally.

Additionally, since sumps are designed to be open to allow for settling and evaporation prior to capping, the Forest Service must describe what measures will ensure that precipitation and weather do not push contaminated drilling muds beyond the boundary of the sump itself.

## **Pollution Discharge Permits**

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<sup>12</sup>  
[chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cdn.brandfolder.io/3RYPUX6K/at/q8kt5u-13fyts-55ir51/BENSEAL\\_EZ-MUD\\_SLURRY.pdf](chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://cdn.brandfolder.io/3RYPUX6K/at/q8kt5u-13fyts-55ir51/BENSEAL_EZ-MUD_SLURRY.pdf)

We also have significant concerns that, despite the use of these BMPs, the 2023 CuMo Project will increase sediment delivery to at-risk streams, thereby reducing water quality and impairing beneficial uses. Stormwater runoff from roads is a significant percentage of this sediment. Because the project involves constructing up to four new culverts, IDCU must obtain these permits in advance of the Plan of Operations being approved by the Forest Service. All stormwater discharges will need to meet Tier II anti-degradation standards for waters and anti- or non-degradation for ground waters.

In the case of the CuMo Project, road traffic and dragging of drilling rigs on sleds grinds up surface rocks and gravel into finer particles. While roads with outslopes and placement of windrows of vegetation can help capture sediment before it can reach streams, there may still be circumstances in which ditches and culverts need to be utilized. Water transported in ditches is often sediment-laden and the sediment may adversely affect fish by disrupting eggs, decreasing oxygen levels, increasing stream temperature, and interfering with feeding. As such, this stormwater runoff, collection, and discharge is a point source discharge subject to the NPDES permit process under the CWA. Sections 301 (a) and 402 of the CWA prohibit the discharge of any pollutant from a point source into navigable waters of the United States without a NPDES permit. In order to be consistent with the CWA, IDCU will need to obtain permits for stormwater runoff that flows from mining roads through engineered ditches, culverts, and channels into Grimes Creek.

### **Reclamation**

Because of the fragile nature of the bedrock and steep slopes involved, we have concerns that IDCU will be unable to completely reclaim these roads to original hydrological and biotic functioning. The Forest Service should examine the feasibility and effectiveness of pulling fill slope material back up to the roadbed and recontouring the hillside to the original slopes.

#### *Road reclamation*

All new, relic, and unclassified roads need to be completely obliterated and reclaimed. In many areas, this will require hauling fill slope material back up to the road surface to restore the original contours. The Forest Service should include a detailed description of reclamation requirements. Topsoil and large woody debris removed during road construction should be salvaged, stockpiled and replaced following operations. Instead of storing topsoil for extended periods of time, it should be utilized as soon as possible in concurrent reclamation activities so that the living constituents are still viable. If insufficient material is available on site, the Forest Service must describe the impacts of removing this material from another site.

#### *Concurrent reclamation*

The Plan of Operations states that at any given time only 60 to 80 percent of the total length of exploration roads would be constructed and operational at any one time and that concurrent reclamation would prevent soil and water quality impacts.

The use of the term "only" does not make sense when describing a majority (60-80%) proportion and appears to be a subjective value judgment designed to minimize public concerns about the impacts. A more objective phrasing would delete the term "only."

We realize that the logistics of exploration activities requires leaving certain roads open for reasonable access until necessary drilling is completed. But in this case, it appears that an unreasonable amount of roads remain open longer than absolutely necessary and that this will increase habitat disturbance and soil impacts.

Furthermore, it is unclear how long it will take the remaining 40 to 20% of roads to be successfully reclaimed. The Plan of Operations and Proposed Action Report state that reclamation could take an additional 2 years for final completion of all reclamation. It is unclear if this time period means the reclamation-related *work* (recontouring, seeding) will be completed by this time or if the actual *reclamation* (soil stabilization, successful revegetation with desired species, proper hydrological functioning, coarse woody debris requirements met). In our experience with timber contractors, once use on a road is concluded, decommissioning takes very little time. It is unclear why a 2 year window is necessary given the ongoing resource concerns for existing roads.

The Forest Service should create a timeline showing the phases of road construction for each road segment. Time would be the x axis and each individual road would be represented by a horizontal bar extending out from the y axis. Each bar could be colored green (pending construction), red (in construction, in use, or awaiting reclamation), yellow (in the active process of road reclamation), brown (initial vegetative growth) and finally blue (reclamation successful and fully meeting ecological and hydrological goals). These colors are subjective. In this manner, the public could see how much cumulative disturbance was occurring at any one time (year 1, year 2, etc). It would also be possible to calculate the total acreage in each phase at any one time.

### **Additional infrastructure needs**

The Forest Service should describe anticipated infrastructure needs such as water tanks, equipment storage lockers, porta potties, etc. No surface occupancy should be permitted.

### **Air Quality**

Per the Idaho Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01.650-651, “All reasonable precautions must be taken to prevent particulate matter from becoming airborne.” Project documents state that dust abatement (including use of water sprays or chemical products on roads) will be done as required. However, project documents do not specify when the use of dust abatement techniques will be triggered. The Forest Service should require Idaho Copper to prepare a fugitive dust control management plan detailing fugitive dust monitoring procedures and associated control actions.

### **Noise**

We remain concerned about the noise from drilling operations on wildlife, and recreationists in the area. The Forest Service needs to describe the volume (decibels) and regularity of noise from drilling and transportation activities and analyze how visitors and wildlife will be affected. Alternatives to address this issue may include either dispersing or concentrating use of drill pads in certain areas, depending on how the noise is shielded or amplified across the surrounding topography. We suggest that water pumping and

drilling should be limited to daylight hours to reduce impacts on recreationists and wildlife. We also point out that the Golden Meadows Project on the Payette National Forest required both mufflers on equipment and sound-dampening pads around drill rigs.

### **Visual effects**

We are concerned about visual effects for recreationists and wildlife in the area. Negative effects include exhaust, smoke, and dust during the day and lights at night. Clear views of the night sky are important for many campers and we are concerned that light pollution will impair visitor experiences.

Given the impacts of the 2014 and 2016 fires across the landscape, the Forest Service should reanalyze Visual Quality Objectives in the new analysis. The SIR had noted the need to reassess baseline conditions contributing Visual Quality Objectives (VQO) along access routes and from vantage points as project activities will be more visible.

The 2010 EA had stated that visual effects would be temporary to short-term until reclamation begins (2010 EA, p. 33). However, in some places the visual effect rankings were due to the removal of medium and large-sized trees and the effects would be longer lasting. If mature trees are an important visual component, the Forest Service should reemphasize the retention of large trees and, where trees are removed, disclose the duration of the impacts based on site-specific tree growth rates.

We note that noise and glare from light pollution will also carry farther in a more open landscape. To help address this, the Forest Service should update design features regarding noise baffles and light shields. We also point out that the Golden Meadows Project on the Payette National Forest incorporates downward-pointing lights and a parachute-style cover to reduce upward light emissions to minimize light pollution. IDCU should utilize “dark sky” principles in which lights are strategically located, directed down toward the ground, have a “warmer temperature” and a lower wattage.

### **Noxious weeds**

One of the best ways to reduce potential noxious weed spread is to minimize soil disturbance. We believe the Forest Service should consider an alternative using helicopters to transport drill rigs instead of allowing new road construction. We note that Midas Gold has successfully used this method to minimize soil disturbances for exploration activities related to the Stibnite Gold project.

As stated in previous comments, it is far preferable to avoid noxious weed infestations than to attempt to treat them after establishment. Furthermore, treatments such as herbicides and biological control agents may further compromise the ecological integrity of these areas and harm special status plants such as *Lewisia sacajaweanana*. To reduce noxious weed expansion, all vehicles and equipment should be cleaned before entering the site. The Forest Service had previously proposed washing construction equipment and this design feature should be expanded to include passenger vehicles that regularly travel between the construction site and residences. We note that large outbreaks of rush skeletonweed are occurring in the Garden Valley area. The presence of noxious weeds along each transportation route needs to be factored in when selecting routes. In addition, mine workers should be required to clean off all boots and shoes at

*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 45 of 51.*

the start of every trip. The project area should be routinely inspected and treated for noxious weeds. As mitigation, IDCU should be required to control or eliminate all noxious weeds along all the access roads.

### **Vegetation restoration**

Restoration steps should include restoring soils, the original vegetation types and >15" coarse woody debris for nutrient cycling and wildlife. The Forest Service should require the use of native species to the maximum extent practicable. Monitoring should be conducted 5 years after reclamation to ensure reestablishment of native vegetation and lack of noxious weeds.

### **Seasonal closure**

The Forest Service should set a date or conditions such as snow depth or temperature which will signify the end of each field season. At or by this point, IDCU needs to "winterize" operations by stabilizing roads with berms adequate for spring runoff, removing equipment, stabilizing topsoil and coarse woody debris stockpiles, among other tasks. The Forest Service needs to inspect the site before the operators leave to ensure that this work is completed.

### **Fire risk**

The 2010 EA had stated that the road construction will reduce the fire hazard in activity areas by clearing forest fuels along the roadways. This analysis did not appear to factor in that fine fuels (limbs and needles) will be clumped immediately below the road in windrows designed to intercept sediment, the fact that clearing trees will likely increase ground temperatures at certain aspects, or that human-caused ignitions often start next to roadways.

In assessing the fire hazards for the upcoming analysis, the Forest Service should attempt to describe the many different variables affecting fire risk. We recommend that IDCU and the Forest Service take a proactive approach regarding fire prevention and have fire suppression equipment and trained staff on site. If a water tank is available for drilling activities, it may be helpful to have that adaptable for fire suppression or prevention measures.

### **Contingency plans for operations**

Operations may need to be suspended under adverse circumstances such as lightning, wildfires or snowstorms. The Forest Service needs to provide directions for safely suspending operations and evacuating personnel. Inspector-certified fire extinguishers should be placed in all vehicles and in all structures. We recommend that the IDCU have an approved fire plan and emergency equipment in place during all times of operation. The Forest Service and IDCU should develop an evacuation plan at the start of each season for new staff in the event that a wildfire is approaching the area. IDCU on site staff should be able to have regular radio contact with the Forest Service.

The Forest Service needs to define and set standards for qualified operators. All operators need to be able to describe the spill prevention, containment, and countermeasures plan and have an intimate knowledge of operating systems and the permit requirements. Agency staff should be able to test new operators on

knowledge requirements, including spills, procedural operations, chemical safety, and permit specifics. The Forest Service should require that trained staff supervise new operators for a set time period before they assume increased responsibility. The IDCU needs to provide the agencies with a list of currently certified operators so that inspectors can ensure that on-site operators are qualified. The Forest Service and other agencies need to be able to inspect the site at any time and without any advanced notice.

IDCU needs to submit a full emergency system guideline for all potential problems with the operation. The Forest Service should review these guidelines to ensure that operations can be safely run and that environmental impacts will be minimized.

### **Cumulative effects**

The Forest Service needs to analyze cumulative effects from past, current, and foreseeable mining, timber, or recreational activities in and around the project area. We are particularly concerned about resource damage from Off Highway Vehicle use:

“There is currently a surge taking place in the amount of ATV and Motorcycle use in the Grimes Pass area, which includes the Project Area.” (EA, p. 74).

In addition, elk and deer habitat is already compromised from existing road densities:

“... the existing distribution of roads and open trails across the Upper Grimes Creek and Clear Creek 6<sup>th</sup> Level HUCs is such that it results in a high degree of habitat suitability reduction.(EA, p, 56).

Since this original CuMo analysis, recreational pressure in the area has continued to increase. Other cumulative effects include logging, fire, noxious weeds, mining, and grazing issues. The cumulative effects analysis should also factor in effects from this project and the Upper Mores vegetation management project and Highway 21 Recreation Corridor projects, all of which may affect wildlife movement in the larger area. In order to better address these cumulative effects, an Environmental Impact Statement is in order.

We are also concerned how activities at the nearby Enterprise Group may have changed risks of exposure to hazardous materials. The Revised Supplemental EA had reported that the Idaho Department of Environmental Quality had determined that the exposure levels do not appear to pose a substantial risk and, as such, that No Remedial Action is planned for this property. However, the Forest Service had neglected to add that the DEQ report was based on “current property uses”.<sup>13</sup> These uses may have changed significantly since then due to drilling activities on the private property. The Forest Service needs to assess the activity type and level at this area as part of the Cumulative Effects analysis.

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<sup>13</sup> See Preliminary Assessment Report for the Enterprise Group (a.k.a. Blackbird No. 5 Tunnel, Diana Mines, Mineral Mines & Baby Mines; Blackbird, Enterprise Fraction, Enterprise, Red Flag & Commonwealth lode & Red Flag millsites), Idaho Department of Environmental Quality, December 2008, p. 39.

It is also unclear if the Forest Service has recently updated its cumulative impacts analysis for past, ongoing or anticipated future activities and factored in climate change. The Forest Service must disclose what work IDCU has done on both Forest Service and private property over the last few years, particularly what activities have occurred between the 2010 EA and now. In addition, Grimes Creek is one of the few streams in the area that remains open to suction dredge activities. Suction dredge use on the creek has increased significantly. Although the Grimes Creek TMDL contains an allocation for suction dredging, it is unclear if this allocation is within permitted levels. The Forest Service must also consider any new reasonably foreseeable activities that have come to light since the original EA was prepared.

In addition, a large number of drill holes were excavated by previous mining companies, potentially with a different set of standards:

While we cannot speak to the abandonment procedures employed by previous operators, field observations suggest drill holes were abandoned according to the protocols that were in place at that time. Email from Phil Bandy to Bradford Campbell, sent Thursday, July 11, 2013, Subject: Drill Hole Information.

The new analysis needs an additional discussion of what protocols were in place at the time of previous drilling operations and what the environmental impacts could be. We understand that current closed-drilling systems are designed to minimize groundwater impacts, but it is currently unclear what the cumulative effects may be from previous operations.

### **Effectiveness of Best Management Practices**

As stated in our 2018 scoping comments, our review of the Project Record revealed that Best Management Practices were not followed or were not effective during the placement of waste material from the Grimes Creek culvert removal, during the pulling of the second culvert, and during construction of log bridges across RCAs. Despite Forest Service objections, the contractor apparently pulled a culvert improperly and at an improper time, resulting in very high turbidity levels of approximately 500 units. Pat Trainor Daily Diary reports.

Inspection of required stream crossing BMPS on 9/19/2011 “The first one seems to be working well even though the log structures are placed about 3 feet down on the steep fill slope. Therefore all the water will eventually erode in the soils and pass under the log trap. The on-functioning placement appears to be consistent on most of the first stream crossing structures. The 4<sup>th</sup> log structure (heading up) is already full of sediment and water has already starting to head cut on the outlet side of the ditch. This one will fail on the next storm.” (it was fixed the next day after Pat talked with the contractor). From 10/10, “The waddle #6 from the bottom on road 382 is completely blown out. The undercut is about the size of a bowling ball. This needs some major work...it is starting to rain hard.” From 10/11, “Rained hard at times in the AM...The waddle #6 from the bottom was not repaired.”

Pat Trainor Daily Diary. CuMo Project Record.



While the previous EA and supporting documents revisited many baseline analyses for species and species habitat due to the fires, the EA failed to evaluate the effectiveness of mitigation and minimization measures post fires. Throughout the EA and its supporting documents, the Forest Service relied on BMPs and other measures to claim Project impacts will be small. The Forest Service needs to review previous monitoring studies and reports to examine if designed BMPs were implemented as prescribed and effective in meeting goals and update them as needed. We are concerned that BMPs and other measures may not be as effective now. The Forest Service also needs to describe in more detail how best management practices will be enforced. We also suggest continuing to utilize the Project Website to post monitoring and inspection reports.

### **Mitigation**

After avoiding impacts and minimizing negative effects, the Forest Service has an obligation to mitigate the remaining impacts in a manner that is enforceable and durable. The mitigation measures referenced in these comments include offsetting Sacajawea bitterroot impacts with permanent protections, offsetting soil and vegetation disturbance from rehabilitation of nearby unauthorized roads, and mitigating for wildlife disturbances through beneficial projects in the larger area. The upcoming analysis should describe the feasibility and effectiveness of these various mitigation measures and propose triggers and subsequent steps if the mitigation measures are not effective.

### **Bonding**

The reclamation bond needs to cover equipment removal, road decommissioning, final reclamation measures and monitoring. We believe that these bonding calculations need to be part of the NEPA analysis for all viable alternatives in the forthcoming EA or EIS. It is important that these figures be presented as early as possible during the NEPA process to allow the public sufficient time for review. In addition, strict time limits need to be set at which point the bond will be forfeited if reclamation is not complete. We are particularly concerned if there is a suspension of operations for several years, during which time significant resource damage could occur in terms of sedimentation.

For the 2014 Thompson Creek Mine Expansion DEIS, The US EPA had specifically notified the USFS that bonding must be discussed and reviewed as part of the NEPA process:

EPA believes that financial assurance is an important element of the proposed action and must be disclosed in the EIS. FA is an important component of the mitigation plan, and disclosing information on the costs and form of FA is essential for the public to understand and comment on the adequacy of mitigation, risks to the environment, and financial risks to the public. EPA believes it is not possible to fully evaluate anticipated effectiveness of the mine and reclamation plan and associated risks to the environment without this type of information. (Letter from Lynne McWhorter, EPA Environmental Review and Sediment Management Unit to Dave Rosenkrance, Challis BLM, dated September 27, 2010)

### **Claim Validity**

*Idaho Conservation League, Sierra Club, Idaho Rivers United and Golden Eagle Audubon scoping comments on the 2023 CuMo Exploration Project, Page 49 of 51.*

The Forest Service should scrutinize the validity of these claims under current costs for reclamation and mitigation. An objective validity analysis, including a marketability and prudent person test, needs to be performed to take into account the following factors:

- projected molybdenum and copper prices over the next twenty years
- the increased expense of mitigation and monitoring measures required to comply with all federal and state laws including the National Forest Management Act standards and guidelines, the Boise National Forest Plan, Riparian Habitat Conservation Area protections, and the Endangered Species Act
- mitigation of impacts to species that have become threatened or endangered since the last validity test
- mitigation measures for water protection
- increased labor costs
- increased fuel costs
- bonding requirements and costs

### **Mining is a reasonably foreseeable development**

We believe the Forest Service is in error by interpreting this proposal to be entirely separate from mine development or production. Mining is a reasonably foreseeable development directly linked to this exploration. IDCU materials frequently refer to this project in terms of open-pit development and production. Isolating the analysis to this one project represents a segmentation of the NEPA process. The original scoping notice states that the purpose and need of the CuMo Project is to determine whether the CuMo molybdenum prospect is economic and suitable for mining. While the ongoing analysis may help determine the economic suitability, it is completely insufficient to determine whether this area is suitable for mining. Our organizations maintain that large-scale industrial mining in the Boise River watershed is unsuitable given the importance of this area to provide clean drinking water for downstream communities, irrigation water for agriculture, recreational opportunities, continued economic development, and habitat for fish and wildlife. As such, we conclude that the current approach represents segmentation of the NEPA process and believe that a comprehensive EIS is in order.

## References

Longcore, T. and C. Rich. 2004. Ecological light pollution. *Frontiers in Ecology and the Environment* 2(4): 191-198

Ouyang, J.Q.; M. DeJong; R.H.A. van Grunsven; K.D. Matson; M.F. Haussmann; P. Meerlo; M.E. Visser; and K. Spoelstra. 2017. Restless roosts: light pollution affects behavior, sleep, and physiology in a free-living songbird. *Global Change Biology* 23(11): 4987-4994. <https://doi.org/10.1111/gcb.13756>

Raap, T.; J. Sun; R. Pinxten; and M. Eens. 2017. Disruptive effects of light pollution on sleep in free-living birds: season and/or light intensity dependent? *Behavioral Processes* 144: 13-19. <https://www.sciencedirect.com/science/article/pii/S0376635717302292>

Cabrera-Cruz, S.A.; J.A. Smolinsky; and J.J. Buler. 2018. Light pollution is greatest within migration passage areas for nocturnally-migrating birds around the world. *Scientific Reports* 8: 3261. DOI:10.1038/s41598-018-21577-6

Senzaki, M.; J.R. Barber; J.N. Phillips; N.H. Carter; C.B. Cooper; M.A. Ditmer; K.M. Fristrup; C.J.W. McClure; D.J. Mennitt; L.P. Tyrrell; J. Vukomanovic; A.A. Wilson; and C.D. Francis. 2020. Sensory pollutants alter bird phenology and fitness across a continent. *Nature* 587, 605–609 (2020). <https://doi.org/10.1038/s41586-020-2903-7>