Boise National Forest  
1249 S. Vinnell Way, Suite 200  
Boise, ID 83709  
Attention: Joshua Newman and Rick Wells

Submitted via the online portal and emailed to Joshua Newman at joshua.newman@usda.gov and Rick Wells at ricky.wells@usda.gov

June 27, 2024

RE: 2023 CuMo Exploration Project Draft Environmental Assessment Comments

Dear Rick and Joshua,

Thank you for considering our comments for the 2023 CuMo Exploration Project Draft Environmental Assessment (EA). Since 1973, the Idaho Conservation League has worked to protect Idaho’s clean water and air, public lands, 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’s 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. 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 tens of 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 primary 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, we are concerned that surveys and baseline conditions are currently incomplete. 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. We strongly recommend that the Forest Service and project proponent collect updated studies in the spring/summer of 2025 to complete baseline data collection for the environmental analysis and then proceed with the final analysis for public comment. We recommend the spring/summer of 2025 as it is too late to complete substantive inventory surveys for Sacajawea’s bitterroot in the remaining 2024 growing/flowering season. Substantive issues like Sacajawea’s bitterroot, groundwater quality and quantity, and slope stability can, and should, drive alternatives. These substantive issues need to be carefully considered as part of the environmental analysis and not deferred until after the Decision Notice is issued. We submitted our previous comments, meeting notes, appeal, objection, and litigation during the scoping period as part of the project record.

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 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,

Randy Fox
Public Lands Associate
Idaho Conservation League
PO Box 844
Boise, ID 83702
(208) 345-6933 x 510
rfox@idahoconservation.org

Lisa Young
Director
Idaho Sierra Club
PO Box 552
Boise, Idaho 83701
(208) 384-1023
lisa.young@sierraclub.org

Sydney Anderson
Mining and Policy Manager
Idaho Rivers United
P.O. Box 633
Boise, ID 83701
(208) 343-7481
sydney@idahorivers.org

Cynthia Wallesz
Executive Director
Golden Eagle Audubon Society
P.O. Box 8261
Boise, ID 83707
(208) 995-7400
cwallesz@goldeneagleaudubon.org
Idaho Conservation League, Sierra Club, Idaho Rivers United, Golden Eagle Audubon comments on the 2023 CuMo Exploration Project Environmental Assessment

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.

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 acknowledged in the Proposed Action Report.

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 groundwater 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. We remain concerned that the Forest Service has not followed all recommendations in the Forest Service’s July 2020 guidance, titled “Working Guide[:] Evaluating Groundwater Resources for Mineral Exploration Drilling”, which were submitted with our scoping comments in 2023. We also worry that the Forest Service has not adequately accounted for the risk of contamination related to drilling within the vicinity of historical mining features, such as those identified in Idaho DEQ’s 2008 Preliminary Assessment Report for the Enterprise Group of mines, which we also submitted with our scoping comments.

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 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. 

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, we are concerned that the Forest Service has failed to 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 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
As outlined below and supported by specific comments throughout this document, 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 note 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 is 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).

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 an 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). However, as comments below show, we are concerned that this has not occurred.
Preparation of an EIS

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). Impacts to Sacajawea’s bitterroot in particular require preparing an EIS due to the unique ecological significance of the project site to this exceedingly rare and at-risk species, and the direct, indirect, and cumulative adverse effects of the project.

The difficulties the Forest Service has had supporting its prior FONSI’s are 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 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 under the 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 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. We are concerned that not all Forest Plan provisions have been followed, as discussed for specific provisions below.

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]onsideation 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 Cnty. 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).

In scoping comments, we warned that the Forest Service cannot simply consider the proposed operations and a no action alternative, 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 recommended 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.

Unfortunately, the Forest Service refused to develop any of these alternatives and stuck with the No Action Alternative and the Proposed Action in the EA. The Forest Service did add a section on alternatives considered but eliminated from detailed study. But the agency offered incomplete and inaccurate rationales for rejecting these alternatives. The Forest Service should revise or supplement the EA to consider something other than the mining company’s proposal.

Section 2.3.1 in the Draft EA describes a Helicopter-Assisted alternative, which proposes to use helicopter support for transporting drilling equipment, supplies, and personnel and conducting helicopter -supported drilling on platforms to reduce or eliminate new road construction. The Forest Service eliminated this alternative from consideration, stating that, “a comprehensive analysis of the environmental, safety, and economic risks, considering the proponent’s evaluation of feasibility (emphasis added) (Draft EA, p. 27). The Draft EA then cites the 2023 CuMo Exploration Project helicopter Transport Alternative Consideration for further justification stating that the report is available in the project record. However, the cited document does not appear in any of the project documents provided on the project webpage. The Forest Service is severely limiting the ability of the public to access and understand the agency’s decision process by citing a report then not providing it without a special request for access. Further, we remind the agency that NEPA’s purpose is to provide adequate analysis and data regarding potential impacts to the human environment and provide the public an opportunity to better understand and weigh in on the potential implications of a proposed action, not to base those decisions or potential alternatives on the “proponent's evaluation of feasibility.” While using existing and newly constructed roads with design features and mitigation measures may provide a “more practical and lower-risk alternative,” failing to provide the public with adequate opportunity to evaluate and understand the stated justification for dismissing this alternative represents a grievous error.
Section 2.3.2 covers an alternative our organizations proposed in our scoping comments: to restrict operations within Sacajawea’s bitterroot habitat. Again, the agency declined to advance this alternative for further consideration, stating that the design features and mitigation measures, “already incorporate comprehensive actions to minimize impacts on Sacajawea’s bitterroot,” (p. 29). We strongly disagree with this assessment and detail our opposition and reasoning in our comments below.

Section 2.3.3 describes an Integrated Road Management and Reclamation Alternative, consisting of adjustments to the proposed action, including implementing road use restrictions, reducing temporary road construction, prompting and expanding road reclamation, and reducing the active road use and activity timing. The public provided several suggestions for road use, including: limiting roads through the application of directional drilling (geologic data collection requires more access than existing road network can provide and the proposed action incorporates directional drilling); obliteration of unauthorized roads prior to drilling (the necessity to use existing temporary roads makes decommissioning them prior to drilling infeasible; the need for access contradicts the proposal); immediate reclamation of temporary roads (the results-driven nature of the proposed project makes immediate reclamation impractical; we contend that perhaps it is the results-driven nature of the project that is impractical rather than measures meant to lessen environmental impacts); limiting open roads to 25% (a 25% threshold for open roads at any given time could lead to increased impacts attributable to repeated reclamation and reopening of roads; again, the results-driven nature of the project is repeatedly cited as the justification for not considering or analyzing a proposal when in fact it is the underlying results-driven proposal that continues to limit opportunities for reducing impacts); and reduction of temporary road length (topography and vegetation limitations dictate road lengths). While we agree that several of the design features and mitigation measures make some aspects of the above listed proposals redundant, we are disappointed that the Forest Service appears to be basing the agency’s decision-making process on methods and pathways that fit the proponent’s desired outcome of an approved “results-driven” exploration project rather than identifying and seriously considering alternatives that reduce potential impacts from a road system that fragments habitat, may likely impact LESA populations, impact fisheries, and encourage further user-created and unauthorized routes.

Section 2.3.4 describes an alternative that would reduce and sequence drilling operations by either reducing the number of drilling rigs from 4 to 2, clustering drilling operations, and immediate reclamation. All three of these public suggestions were eliminated from consideration based on the justification that each option would prolong the project’s timeline, thus prolonging potential impacts and delaying final reclamation. Again, we concur that several of the mitigation measures do make portions of this alternative redundant, but we disagree with the agency’s assessment that clustering operations would not significantly reduce wildlife resource impacts. Rather than pushing wildlife from a section or quadrant of the project area, the
the proposed action will discourage wildlife and fragment habitat throughout the entire project area where temporary roads and drilling activities are proposed. Light and noise impacts will occur throughout the project area, as will fugitive dust issues and unauthorized road access.

The final alternative that was considered but not adopted is described in Section 2.3.5 and consists of riparian and watershed impact reductions through strategic location of project activities to minimize potential disturbances and impacts to water resources. The Forest Service eliminated this alternative from further analysis as design features, mitigation measures, BMPs and “adherence to the Forest Plan” sufficiently address concerns regarding RCAs, water resources and landslide areas. While there are mitigation measures and design features that reduce impacts to RCAs, we strongly encourage the Forest Service to create a provision that eliminates drilling pad construction from riparian areas with no exceptions. Further, temporary roads should only pass through RCAs when absolutely necessary, not alongside or parallel to a riparian area. The Forest Plan offers guidance for constructing roads within RCAs (MPC 3.1, Road construction or reconstruction may only occur where needed (emphasis added), and the Forest Service actively seeks to reduce road density within RCAs to address watershed health needs. Standards MIST08 and MIST09 provide further guidance regarding the construction of roads and/or drill pads in RCAs - an action only when all other alternatives are exhausted or determined inadequate or unfeasible. Therefore, we encourage the Forest Service to bar construction and use of drill pads and to severely restrict the construction of temporary roads in RCAs.

Sacajawea’s bitterroot
Sacajawea’s bitterroot, Lewisia sacajaweana (LESA) 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 demonstrate that this plant is very rare, endemic to 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. The 2023 CuMo Exploration Project Botanical Specialists Report clearly states that the 58.3 acres within the project area that support the currently known population of Sacajawea’s bitterroot represent a range of 37-52% of all reported individuals for the species (p. 17). With 1/3 to 1/2 of all known LESA occurrences found within the project area, any significant individual plant loss or habitat impacts/destruction could move this rare species closer to either listing under the Endangered Species Act (ESA) or actual extinction when one considers the potential impacts of climate change.

There is a long and documented history of botanical clearance surveys being conducted during the wrong or inappropriate season, as demonstrated by the 2020 Sage Hen project. Further, the conclusions found in the Botanical Specialists report are grounded in, “the assumption (emphasis added) that the proponent will complete botanical clearance surveys in a timely manner as
described in the proposed mitigation measures,” (p. 13). We believe that LESA rarity, restricted habitat, and the fact that the plant’s core area falls within the project boundary demands the full attention of an alternative that specifically addresses LESA issues rather than relying on Design Features and assumptions.

Drilling and road construction, as well as utilizing roads and drill pads, have many adverse effects, including, but not limited to directly destroying plants, fragmenting plant habitat, impairing pollinators, creating the risk of a fire, and fostering the spread of invasive and noxious plants. The EA states that, “The proposed exploration would be results-driven, so the exact locations of the proposed temporary roads depicted in the Draft EA, drill sites, and drill holes would be progressively identified based on the results from prior holes drilled,” (p. 1). However, the project proponent and the Draft EA fails to identify the locations of the initial drilling pads the proponent hopes to begin this exploration project with, and base future drilling pads and temporary roads on. This is a significant deficiency that we recommend the Forest Service address, preferably in an environmental impact statement (EIS), and certainly in a Final EA and before issuing any potential Decision Record or Finding.

Because the Forest Service and the project proponent cannot predict future road prisms or drill site locations using this results-driven strategy without initiating ground disturbing activities, the Forest Service must complete an EIS. Our assessment and recommendation is supported by the lack of current LESA surveys covering the majority of the project’s proposed new temporary road and drill site locations (only the proposed locations of temporary roads are revealed in the Draft EA and no potential drill pad locations are identified). A comparison of Map 2 in the EA (p. 15) and Map 4 in Appendix 6.3 shows that the vast majority of 2023 CuMo proposed temporary road templates remained un-surveyed and -inventoried. While small surveys were conducted in 2021 and 2022, the work focused on 5.5 miles of previously established temporary roads associated with either the 2007 CuMo exploration (1.8 miles constructed in 2011) or between 1962 and 1982 for mining purposes (3.7 miles) (EA, p. 12). The proposed temporary North Road is the only 2023 CuMo temporary road corridor that has been inventoried for Sacajawea’s bitterroot. To date, no surveys or inventories are complete farther south than the Connector Road (Appendix 6.3, Map 4).

**Alternative Development and Selection**

While we appreciate the Forest Service considering an alternative that focuses on restricting operations in LESA habitat, we are disappointed that the agency chose not to advance this alternative for consideration. The alternative would have restricted operations in LESA habitat while allowing the proponent to conduct exploration in areas without LESA populations to minimize the impact on plants and habitat through a phased exploration approach, and only entering LESA habitat if initial drilling results justify expansion. The Forest Service eliminated the alternative from consideration, stating that the proposed mitigation measures already
incorporate actions to minimize LESA impacts, thus rendering this alternative “redundant and incompatible with the proponent’s overarching goals at this phase of their operations,” (EA, p. 29). We remind the Forest Service that the agency’s role is not to create and advance alternatives that meet a project proponent’s overarching goals, but to address specific impacts to resources that are either directly or indirectly attributable to the proposed action, or provide alternative methods that reduce or eliminate those potential impacts. With the project area containing 1/3 to 1/2 of all LESA populations and with nearly all of the 2023 CuMo Exploration Project temporary roads being located outside of previously conducted survey and inventory corridors, we believe that the Forest Service did not adequately examine, nor justify the decision to eliminate this alternative from consideration.

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. We believe the Forest Service missed an opportunity to include these enhanced protections and study opportunities in the LESA-specific alternative, and we encourage the agency to incorporate the PCA expansion and exclusion area in the final analysis document as a mitigation measure.

We were discouraged to learn that the neither the EA nor the Botanical Specialist Report address ways to improve the Sacajawea’s bitterroot PCA delineated within the project area, nor does the Forest Service address mitigation measures that would ensure that the proposed project actions would not adversely affect the sustainability of this rare plant, such as the creation of a Research Natural Area or Special Interest Area either within or adjacent to the project boundary and impact zone. 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.

The Boise National Forest has no SIAs, and only hosts 14 RNAs,¹ 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. However, designating an RNA within the Sacajawea’s bitterroot stronghold makes the most conservation and protective sense in order to ensure the sustainability of this endemic and rare plant. 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.\(^2\)\(^3\) 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.

*Adequate Inventory Surveys and Data Collection*

We appreciate that the Forest Service acknowledges the absence of adequate *LESA* inventory surveys within and surrounding the proposed temporary road prisms and potential drill pad locations, as well as the development of Design Features meant to mitigate the absence of adequate inventory data (VG-1, VG-2, VG-12 though VG-16, VG-21). However, the window to adequately inventory and document *LESA* populations is narrow (June 1 - July 20), and because of this timeframe, we recommend that the Forest Service complete *LESA* surveys on all proposed temporary road templates prior to approving the 2023 CuMo Exploration Project. Since none of the potential drill pads are identified for the 2023 CuMo project, it is essential that the potential temporary road templates are subjected to adequate inventory surveys prior to project approval. It is possible that population densities in the southern portion of the project area reflect the known densities in the northern half of the project area. Whether population densities are higher or lower, the verifiable data would significantly inform the project, potential exploration areas, and mitigation measures that would reduce or eliminate impacts to Sacajawea’s bitterroot. Given the endemic nature of Sacajawea bitterroot and the undisputed fact that the project area represents the *LESA* “stronghold” combined with the narrow window for conducting surveys, we believe that prior identification is the safest and most effective way to ensure that ground disturbing activities do not adversely affect or impact unknown *LESA* individuals or populations.

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.” In fact, Forest Service Manual (FSM) 2670.22 states that the agency must develop and implement management practices to ensure that species do not


become threatened or endangered because of Forest Service actions, that the agency must maintain viable populations of all native and desired nonnative wildlife fish and plant species in habitats distributed throughout their geographic range on NFS lands, and the agency must develop and implement management objectives for populations and/or habitat of sensitive species.

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.

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 EA should clarify if this is an expansion into areas that were previously surveyed or surveys into new locations.

In 2021 and 2022, Tetra Tech completed additional surveys in the project area. These surveys were completed to reflect the Court-ordered mandate to supplement earlier environmental analyses with current additional and sufficient data regarding Sacajawea’s bitterroot (Appendix 6.3, Map 4). We do not believe that the limited surveys conducted in 2021 and 2022 (resulting in
the identification of 2 additional plants in 2022, raising the occupied acreage to 58.3 from the previous 58.0 identified in 2017 [EA, p. 46]) satisfy the Court-ordered need to acquire additional relevant data. Further, the limited surveys do not satisfy the requirements of the standards and guidelines described above. Failing to adequately update surveys and population inventories prior to a Decision Notice/Record of Decision is a violation of NEPA.

Our review of the 2023 CuMo Exploration Project Draft EA resulted in the identification of an additional area of insufficient data related to Sacajawea’s bitterroot: the direct and cumulative impacts of climate change on Sacajawea’s bitterroot. We note that the only potential impact analyzed for climate change effects in the Draft EA is air quality, representing a significant deficiency in the analysis document. Our land management agencies and the Council on Environmental Quality (CEQ) recognize that the United States faces a climate crisis and CEQ has put forth a guidance document titled National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, published 1/09/2023. The guidance document describes how land management agencies should consider the effects of climate change on a proposed action and its environmental impacts. This topic-specific analysis has a direct correlation and relevance when applied to Sacajawea’s bitterroot considering the plant’s endemic nature, limited distribution, and specific necessary growing conditions and habitat. We recommend the Forest Service correct this oversight through a more complete and thorough EIS process. 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.”

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.

We appreciate that the Forest Service provides a detailed account of the Qualitative and Quantitative botanical analysis, as well as the most recent pollinator assessment in 2018 to determine the effects of the Pioneer Fire. According to the Botanical Specialist Report, “As of 2018, pollinator foraging habitat within the pollinator habitat assessment area would be considered high quality given the relatively high percentage of vegetative cover contributed by flowering forbs and shrubs, the high species diversity, and the range of blooming periods across the entire growing season,” (p. 18). Based on the 2017 and 2018 pollinator assessments, the Botanical Specialist report also determines that without mitigation measures, “Potential impacts to Sacajawea’s bitterroot, botanical resources, and pollinator habitats would be high in probability and moderate in intensity,” (p. 25). Given that the potential impacts are ranked with a high probability for, and moderate intensity of impacts, we reiterate our concerns regarding the absence of complete botanical surveys and inventories in the proposed temporary road alignments.

In our 2023 scoping comments we recommended that the Forest Service 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 were encouraged to learn that the Forest Service followed through with this recommendation by modeling the potential impacts of the 2023 CuMo proposed actions on Sacajawea’s bitterroot. According to the Botanical Specialists
report, “it is reasonable to conclude all 515 (the estimated number of individuals found within the 40’ disturbance zone for road prisms) individuals may be impacted during road maintenance and use of the roads at any time for the duration of the project given the anticipated maintenance needs and frequency of use. It is also reasonable to conclude that an undetermined number of individuals outside the 40-foot disturbance footprint may be impacted.” (p. 39). This represents 3.7% of the 2017 count. A 3.7% loss of the project area Sacajawea bitterroot population may seem inconsequential from a statistical standpoint, but the number becomes more meaningful when one considers cumulative impacts that incorporate climate change in the equation, which this analysis fails to do. Further, the number of individual plants impacted is likely higher than the 515 estimated.

We again recommend that a total cap be set on the allowable disturbance in occupied Sacajawea’s bitterroot habitat and another cap in potential habitat. Further, the Forest Service should determine an “incidental take” threshold that establishes the highest allowable and/or acceptable number of individual plants that could be impacted by the project’s proposed actions. If modeling then demonstrates that the proposed actions would exceed this threshold, then the Forest Service should not approve the 2023 CuMo Exploration Project. 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.

The Botanical Specialists report references the 2017 surveyor’s notation that LESA individuals were identified in roadbeds and road cuts, and notes that these individuals, “may be susceptible to injury during snow plowing operations,” (p. 33), although the potential impacts would be moderate in probability and low in intensity for Sacajawea’s bitterroot, and other botanical resources, including pollinator habitats. We are concerned that snow removal and activities in the winter may change the snow drift patterns and this could negatively impact Sacajawea’s bitterroot by changing the water flow patterns and result in the loss of these plants. Therefore, we recommend limiting snow removal activities in the core Zone 1 areas at all times and ask that the Forest Service create a specific Design Feature to address this issue.

**Design Features**

Again, we appreciate the Forest Service’s creation of several Design Features meant to mitigate the potential impacts of mineral exploration on Sacajawea’s bitterroot plants and habitat. Two of the Design Features, VG-1 and VG-16, make specific reference to the LESA growing and flowering season (June 1-July 20). Specifically, VG-1 states that the project proponent is responsible for conducting botanical clearance surveys during the period when the plants are identifiable and VG-16 restricts any new construction from occurring in Zones 1 and 2 during the growing/flowering season. We concur that these Design Features will likely reduce adverse effects and impacts to Sacajawea’s bitterroot populations and habitat. However, we believe that
climate change is altering the known growing/flowering period with growing/flowering occurring earlier than June. With increasing global temperatures we are seeing some LESA populations beginning the growing/flowering period in May (Dr. Roger Rosentretreter, personal communication). Therefore, we recommend that the Forest Service take this into account and adjust the seasonal restrictions to begin in May rather than June.

We agree with many of the conclusions reached in the Botanical Specialists report, noting that soil movement, “may damage meristematic buds and root structures located near the soil surface ... reducing seed bank germination potential,” (p. 36). Further, slash and debris may further cover occurrences with a depth sufficient to suppress a subpopulation of seed banks and reduce overall population vigor. We recommend that the Forest Service work with the project proponent to ensure that VG-21 and VG-23 are strictly adhered to in order to reduce the likelihood that soil disturbance and accumulating debris or woody material do not impact existing or potential populations.

Design Feature NX-12 addresses noxious weeds and invasive plants, calling for noxious weed control in Zone 1 to consist of hand-pulling and bio-control, and allowing chemical treatment along with hand pulling and biocontrol in Zone 2. However, the documents do not detail what methods/products would be used for bio-control and/or chemical treatment. We recommend the Forest Service include this information in the final analysis document. Because the chemical and bio-controls have varied efficacy rates for individual plant species, and because chemical treatments represent the most assertive treatment form with potential unintended results, such as impacting Sacajawea’s bitterroot populations, we recommend using bio-controls whenever possible. 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.

The Botanical Specialists report states that, “For non-native plants, proposed mitigation measures would not change the probability or intensity of impacts. Proposed mitigation measures described in the “Heavy Equipment Operations” section below exclude vehicles from cleaning that do not leave existing roadbeds. Thus, vehicles that do not leave existing roadbeds would continue to serve as vectors,” (p. 27). Because the introduction of invasive plants and noxious weeds is a serious threat to Sacajawea’s bitterroot and other native plants, we recommend the Forest Service require cleaning of all equipment and vehicles that operate in the project area prior to the equipment’s arrival on site. Transportation vehicles that come into and out of the project area should be cleaned on at least a weekly basis and should never leave an established road prism. Equipment washing to reduce noxious and other weed spread remains essential to helping halt the spread of invasive and noxious weeds and plants, but it remains
unclear who will have the monitoring responsibility. We recommend the Forest Service provide further detail regarding inspections and monitoring in the Final EA.

Little is known about Sacajawea’s bitterroot reproductive biology and recruitment success. The Botanical Specialists report concludes that, “The proposed mitigation measures would reduce impacts to Sacajawea’s bitterroot and pollinator habitats to moderate in probability and moderate in intensity,” (p. 53). This may be accurate for the exploration phase of the project, but once drilling is complete, should the proponent conclude that the underlying mineral deposits are sufficient for either expanded exploration or to develop into a full mining project, this incredible subpopulation of Sacajawea’s bitterroot that represents the known core area and stronghold for this endemic plant, will be lost. Permitting the exploration phase is one step closer to ending this stronghold population for Sacajawea’s bitterroot. We encourage the Forest Service to more completely study the impacts of climate change (which remains unaddressed in the Draft EA), which remain unaddressed in the 2023 CuMo Exploration Project EA and Botanical Specialists Report, on Sacajawea’s bitterroot. We believe this analysis can only be completed through an EIS. Therefore, we recommend the Forest Service deny a permit to construct and operate for the 2023 CuMo Exploration Project, and complete a more detailed analysis of the potential impacts to Sacajawea’s bitterroot through an EIS that includes the potential cumulative impacts of climate change.

**Transportation of hazardous materials**

We have concerns regarding potential impacts to the watershed and 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.

The Boise River currently provides between 25 and 30% of the City of Boise’s drinking water supply\(^4\) 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 Environmental Assessment (EA), 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

\(^4\) [https://boisedev.com/news/2022/09/08/you-asked-how-does-our-water-work/]
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 EA, 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.

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. ⁵

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,

⁵ http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5394050.pdf
While never explicitly referenced in the EA, attachment 7, the 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.

The Forest Service fails 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.

Attachment 7 (Fuel Transportation Memorandum) in appendix 6.1 of the EA seems to contain outdated information and should be updated. One of the assumptions listed in the memorandum states that "[t]here are no listed aquatic species within ten stream-miles downgradient of the Project access routes. The South Fork of the Payette River is designated as bull trout habitat; however, the river is not occupied by bull trout.” This assumption has been proven false by the findings in the EA’s Fisheries Report. The Forest Service needs to update the attachments in
appendix 6.1 or communicate what information from those attachments is still relevant to the project and what is not.

The Forest Service should review the previously completed risk assessment and determine if there are additional ways to avoid 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 EA states that approximately 60 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. However, we ask the Forest Service to clarify if each pickup truck that is transporting fuel will be carrying more than 60 gallons, as each truck will have a 100-gallon slip tank. Drill rigs could be operating potentially from April 15 to December 15 for an additional four years. With four fuel trips per day (roundtrip), 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. Attachment 8 in the EA appendix 6.1 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 fewer 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 at least 60 gallons of fuel would be transported normally per fuel transport vehicle, making the greater than 55-gallon-“isolated incident” appear irrelevant.

The EA 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 EA 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. Furthermore, at the public meeting hosted on June 18, 2024 by the Forest Service in Boise, Idaho, it was stated in the video that the locations of the proposed roads may change based on results from drilling operations. It is difficult to assess and provide substantive comments if all of the potential drill pads and temporary road locations are not fully disclosed. This is a key piece of information that should have been provided in the EA and should be included in either a supplemental EA or an 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.


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**

EA documents note that a previously conducted mapping analysis, supported by field assessments, was used to identify landslide prone areas within the project area. This information was used to compare the landslide hazard of the existing road network to the Project proposed network and is summarized within Table 14 of the EA (New and existing temporary roads by landslide prone category under Alternative B). Most notably, an additional 0.3 miles of high landslide hazard roads are being proposed under the Project. While EA documents also note that little significant landslide activity has occurred within the project area along existing roads, we would caution against a 50% expansion of roads within the high landslide hazard category. By significantly increasing the miles of high landslide hazard roads the underlying conditions for landslide activity increases irrespective of observed historic landslide activity. We ask that Project modifications be made to avoid this increase of constructed high hazard roads.

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 groundwater 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”. 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.

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”).

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.

In our comments during the scoping period, we raised concerns about 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 Forest Service analyze whether fire-fighting chemicals were used within the project area and analyze if and how project activities may interact with these residual chemicals in a supplemental EA or an EIS.

**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 the EA Appendix 6.1 appears to state that turbidity, dissolved oxygen (DO), oxidation reduction potential (ORP), 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, DO, ORP, 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, DO, ORP, 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 for public transparency.

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:
- 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.

The Surface Water report states that the proposed action lists three “possible locations” for water drafting, but claims that the locations are not exclusive. The proposed action should disclose an exhaustive list of possible water drafting locations in order for the Forest Service to adequately analyze the effects to the water resources and to fulfill NEPA's requirement for informed decision-making (40 C.F.R. § 1500.1(a).

**Field Survey Data for Stream and Riparian Classifications**
The Forest Service notes in the Surface Water Hydrology report that pre-field work information was collected from the following surveys: Rosgen Channel Classification (Rosgen, 1996), stream stability ratings (Pflankuch 1975) as modified for Rosgen Channel Classification (Rosgen, 2006), and riparian ecotypes (Kaplan-Henry, 2007). These surveys were utilized as baseline data for describing the affected environment to determine the stream classifications and riparian ecotypes. We appreciate the Forest Service gathering baseline data to determine these classifications. However, we believe the surveys used may be outdated. We encourage the Forest Service to gather up-to-date baseline data, or please explain how the past field surveys would still be relevant.

**Water pumping from Grimes Creek, Mohawk Gulch, and Charlotte 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 Existing Condition section of the EA (P. 69) states that “Grimes Creek does not support cold water aquatic life and salmonid spawning”, contradicting other sections in the Fisheries Report that cite 2020 studies showing that juvenile bull trout were observed in Upper Grimes Creek and wider utilization of spawning and rearing habitat by bull trout in Upper Grimes Creek than had previously been considered. We appreciate that Grimes Creek is the least preferred option for water withdrawal, however recent surveys and specialist reports show that cold water fish (bull trout) are present in the creek and use the area to spawn.6 Please see the attachment of the Fish and Wildlife photos from the project area.

---

**Bull trout**

While bull trout and bull trout eDNA have both been identified in numerous reports within the Grimes Creek watershed and downstream in Arrowrock Reservoir, the EA fails to adequately 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.\(^7\)

Bull trout [*Salvelinus confluens*us] 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.\(^8\) 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 appreciate that new surveys for resident fish were conducted in Grimes Creek in July, 2021. This work confirmed the presence of juvenile bull trout, updating the previous population data set as well as information used for analysis of critical habitat within the Upper Snake Recovery Unit of the Bull Trout Recovery Plan (USFWS 2015a). The survey findings also reinforced earlier sampling that detected the presence of bull trout eDNA in 2017. The Fisheries Report doesn’t indicate whether similar surveys were conducted in Charlotte Gulch. We believe, similar to Grimes Creek, Charlotte Gulch should be surveyed for the presence of bull trout.

Table 3 of the Fisheries Report shows that Subpopulation Character matrix indicators for Bull trout in the Headwaters Grimes Cr 6th HUC are currently “Functioning at Unacceptable Risk” for the following Pathways: Subpopulation Size, Growth and Survival, Life History Diversity and Isolation, and Persistence and Genetic Integrity. The 2021 survey, which identified a hybridized bull trout, confirms risks to the genetic integrity of the subpopulation. Additionally,

---

\(^7\) Idaho Department of Environmental Quality Preliminary Assessment Report for Enterprise Group
https://www2.deq.idaho.gov/admin/LEIA/api/document/download/5673

the Fisheries Survey Specialist Report highlights the isolated nature of the Upper Grimes Creek subpopulation by indicating that recent eDNA surveys in the nearest watershed, Mores Creek, produced negative sample results.

Other Environmental matrix indicators characterized as “Functioning at Unacceptable Risk” include: Sediment, Substrate Embeddedness, Refugia, and Road Density. Documentation of juvenile bull trout during 2020 surveys showed wider utilization of spawning and rearing habitat in Upper Grimes Creek than had previously been considered and was used to update Forest Service MIS Protocol from Strata 2 to Strata 1.

These population and environmental findings, reinforce the summary in the last line of Table 3 (Discussion of Baseline-Current Condition) that the Project Area and upper reaches of Grimes Creek “are relatively pristine and generally meet habitat requirements for bull trout.” However, the summary then diminishes the value of this high-quality bull trout habitat by incorrectly asserting that the mere presence of brook trout “reduces potential for bull trout to recolonize the subwatershed.” Bull trout are an ESA-listed species. This status combined with their exceptional intrinsic conservation value could warrant targeted management actions that attempt to minimize the potential for hybridization with Brook trout in Upper Grimes Creek. As noted in the specialist report (P. 25), this tactic could be reasonably considered given general approaches to manage native trout described within IDFG’s wild trout management document (2019).

The report also concludes that the Upper Grimes Creek bull trout subpopulation likely employs a fluvial and/or resident life history strategy, indicating that individuals (particularly, sexually mature adults) could be migrating downstream seasonally, past the project area, to access larger segments of the watershed. The Fisheries Report (P. 36) also reiterates this stating, “bull trout could occur at these lower elevations seasonally (winter/early spring) when temperatures are more conducive.” Adfluvial use of Arrowrock Reservoir by bull trout has also been documented by IDFG⁹. We therefore encourage the Forest Service to expand the Fisheries Direct/Indirect Effects Analysis Limit to encompass Upper Grimes Creek, and align with the eastern portion of the Fisheries Cumulative Effects Analysis Limit. We would also encourage the USFS to continue consultations with USFWS regarding documented use of the Grimes Creek subwatershed by bull trout with the potential for the area to be included as a revised segment within the Arrowrock Reservoir Critical Habitat Subunit based on new information.

We generally disagree with summarizations made in Table 4, concluding no long-term effects on local population size, growth and survival, life history diversity and isolation, and persistence and genetic integrity. Similar conclusions about no long term effects to integration of species and

habitat conditions are also unfounded, based on new information of bull trout presence in the subwatershed.

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. The Forest Service should re-engage in ESA consultation with USFWS to address the effects to bull trout in the South Fork Payette River drainage.

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 Gulch and a screen will be placed around the water intake to keep fish from entering the pump. 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.\textsuperscript{10}

Up to date and robust water quality baseline data needs to be obtained from Grimes Creek and Charlotte 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**

It is clear from the EA Appendix 6.1 attachment 2 that the proponent plans to construct roads and drill sites within RCAs. 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 MIST09 which prohibit locating roads, drill pads,

\textsuperscript{10} Link to Bull Trout eDNA Map: https://usfs.maps.arcgis.com/apps/webappviewer/index.html?id=6d5597b2755c4c0a35613b7a1849760
and other structures/facilities in Riparian Conservation Areas (RCAs) unless the Forest Service makes a determination that there is no alternative to doing so. In addition, the Forest Service needs to disclose the proponent’s potential locations of all the drill sites and where they might interfere with RCAs.

We request that the Forest Service explore the necessity of each drill site as well as develop alternatives through an EIS that will eliminate unnecessary drill sites. 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.

We recommend the Forest Service further analyze the Riparian and Watershed Impact Reduction Alternative in an EIS as described below:

“This alternative is designed to safeguard sensitive environmental areas by prohibiting the construction of roads, drill sites, sumps, and other structures within RCAs; using alternative water sources to protect aquatic life; minimizing riparian vegetation removal to reduce stream temperature changes and sediment influx; and avoiding activities in moderate-to-high-risk landslide-prone areas that could trigger increased sedimentation.”

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).\(^\text{11}\) 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.

\(^{11}\) 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.
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 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. As the EA stands, there are multiple instances where a proposed road interferes with the boundary of an RCAs.
We appreciate that the Forest Service is requiring 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 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, 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 EA notes 21 planned stream crossings. We recommend that the Forest service provides a map clearly 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, mule deer, whitetail deer, mountain lion, gray wolves, coyotes, red foxes, bobcats, and winter and spring phase snowshoe hares. We attached photographs from the game camera footage to our scoping comments.

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.

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 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 resident wildlife, including black bear, coyote, and bobcat.

We recommend that the Forest Service also evaluate the potential impacts to Idaho’s Species of Greatest Conservation Need. The EA states that 311 wildlife species are modeled as occupying the Forest. Appendix E of the Boise National Forest Land and Resource Management Plan identified 57 of those birds, mammals or reptiles as species of conservation concern (now referred to as SGCN species). The Management Area 8 (Mores Creek) section of that document also indicates that “terrestrial habitat is functioning at risk due to past silvicultural management practices and changes in fire disturbance patterns” and that the “Upper Mores Creek watershed (5th code HUC 1705011207) has been identified as important to the recovery of Forest sensitive species and other native wildlife utilizing late-seral forests with low canopy conditions, and is identified as a short-term high-priority watershed for restoration.”

While the EA states that “wildlife presence was assumed for species with source habitat or documented sightings in or near the project area”, many of those wildlife species have not been accounted for in the EA. For example, based on range maps available from IDFG, at least 8 of 13
Idaho bat species identified in the SWAP as SGCN/SGIN species have ranges that overlap the Project Area (see idfg.idaho.gov/species/taxa). The predominant habitat type of the Project Area is what Idaho’s State Wildlife Action Plan (SWAP) references as Dry Lower Montane-Foothill Forest. The SWAP lists Townsend’s big-eared bat as typically associated with this habitat type, yet the EA fails to analyze them in detail as a Focal Species.

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 6th 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. This EA also indicates that additional stressors to resident wildlife could be contributed by recreational trappers (incentivized, in part, by State efforts to reduce wolf populations) accessing areas near the Project Area.

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.

*Migratory Birds*

We appreciate the Forest Service’s detailed analysis in the Wildlife Technical Report and Biological Evaluation on impacts of Alternative B on migratory birds, including Region 4 Sensitive Species and MIS, with habitat in the project area and the inclusion of mitigation measures in the proposed action that may help reduce impacts. However, we disagree with the assumptions and rationale for the determination made for each of the avian sensitive species (White-headed Woodpecker, Boreal Owl, Flammulated Owl, Great Gray Owl, Northern [sic] Goshawk, and Mountain Quail) that while the proposed action may impact individual species or their habitat, it is not likely to contribute to a trend toward federal listing. We also disagree with the conclusion for each of the avian MIS (White-headed Woodpecker, Black-backed Woodpecker, and Pileated Woodpecker) that the proposed action is not expected to affect the population trend of the species at the scale of the Forest.

These determinations and conclusions rely heavily on the successful implementation of numerous mitigation measures by the proponent, including the proponent reporting observations of Northern Goshawk, now called American Goshawk,\(^\text{12}\) Great Gray Owl, White-headed Woodpecker and other species to the Forest Service. Mitigation Measure WL-2 indicates that the proponent will report any observations of great gray owls to the Forest Service. However, the mitigation measures, design features and the Draft EA do not detail how the project proponent or its employees will gain the technical experience and/or training that will enable them to identify the species. Further, WL-7 states that if threatened, proposed, candidate and sensitive species are identified within the effects analysis area, protective measures will be implemented, including timing restrictions and buffers, but the Forest Service fails to clearly outline what those

restrictions and buffers would entail. The Forest Service must not abdicate its responsibility for ensuring adequate protections of sensitive species to the proponent. It would be in the proponent’s interest to ignore, rather than to report, such sightings. Thus, it is not reasonable to base effects determinations and conclusions on actions the proponent may take without the Forest Service’s knowledge.

We feel that it is unreasonable for the Forest Service to determine that the disturbance to these species and their habitat from actions by the proponent will be temporary or short-term (drilling for four years, with an additional two years possible for reclamation) and not likely to contribute to a trend toward federal listing when there is not full disclosure of the details for the mitigation measures. NEPA, codified in 42 U.S.C. §§ 4321–4370h, requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. We ask that the Forest Service require an Environmental Impact Statement (EIS) under NEPA since the project has the potential to pose significant impacts on migratory birds. Preparing an EIS would ensure a comprehensive analysis of all reasonable alternatives and their environmental consequences.

Disturbance associated with the project began in 2005 and continued until at least 2012 (DEA Table 1., p. 10). The proponent already has enough information about the extent of mineral deposits in the project area to state its goal to establish itself as one of the world’s largest producers of molybdenum with the potential to create 1000 direct jobs.13

The only reasonable conclusion from the Draft EA and the proponent’s own information is that disturbance will continue and become more intense as the mine is developed. An EIS would evaluate and disclose to the public the full, long-term impacts of the project on migratory birds, other wildlife, and other natural resources. Alternatives could include a range based on acres of habitat destruction and disturbance under various potential future mining scenarios. Without such comprehensive analysis and responsible decision-making by the Forest Service based on that analysis, we fear significant adverse impacts to migratory birds may result, including continued downward population trends for sensitive species that may lead to federal listing and similar downward population trends for MIS at the Forest scale and beyond.

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 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

13 https://cumoproject.com; accessed June 17, 2024
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.

_Wolverine_

The North American wolverine was listed as threatened under the ESA in early 2024. Wolverines have been reported both north and southwest of the project area over the past five years and a large tract of modeled wolverine habitat extends from the project area for over ten miles in a southeasterly direction. 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.
Additionally, given the well-known fact that recreational trapping in wolverine habitat poses a grave threat to these rare animals, we have serious concerns about activities associated with the proposal that could increase trapping efforts (and potential incidental captures of wolverines) in and around the Project Area. To every degree possible, as the USFS evaluates this proposal, the agency must fully analyze potential risks and minimize all human caused impacts to wolverines.

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.

**Sump Impacts**
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 EA, 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 EA 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\textsuperscript{14} 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.

Throughout the EA, it is stated that up to four drill holes would be open during drilling operations. However, attachment 6 (Reclamation) in appendix 6.1 of the EA states that IDCU could request that more than four drill holes be allowed to remain open. We request further explanation as to when this would be allowed and what parameters would be in place for operating additional drill holes. We ask that the Forest Service analyze the environmental impacts of having more than four drill holes open at one time.

**Sumps**

The EA states that IDCU intends to utilize hydrocyclone technologies and equipment to remove the majority of suspended solids from drilling fluids (p. 17). If IDCU uses a hydrocyclone to remove produced drilling waste and fluids the associated sump pits are proposed to be 10 feet long, 5 feet wide, and 5 feet deep. However, if a hydrocyclone technology isn’t used or is unavailable, sump pit dimensions will be 25 feet long, 6 feet wide, and 8 feet deep, a marked increase in soil impact and commitment. We appreciate that the sumps would be lined with bentonite with compartmentalized sections for settling and separating cuttings from drilling fluid. We concur with Mitigation Measure WR-7, which states if a hydrocyclone is not used, the sumps will be lined with a 6 mil or greater plastic liner (Appendix 6.2, p. 22). However, we strongly recommend that all liners be removed during reclamation, not just if the project proponent believes removal is feasible. If the liner can be installed and breached for permeability, there are no circumstances that would prevent the removal of a sump liner. We note that Figure 1 in the Draft EA (p. 16) depicts a conceptual layout for a drill site using a hydrocyclone with an associated sump pit. However, the depicted pit has rough and uneven edges and walls, suggesting that this pit was not lined with bentonite clay. Therefore, we recommend the Forest Service conduct unannounced inspections to ensure the project proponent adheres to the prescribed mitigation measures.

The Draft EA fails 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. We respectfully request that the Forest Service include this date in the final analysis document, be it an EIS (as suggested elsewhere in these comments) or the Final EA.

\textsuperscript{14} chrome-extension://efaidnmbpnj bfdgfpk <!----> https://cdn.brandfolder.io/3RYPUX6K/at/q8ktu-13fyts-55ir 5i/BENSEAL_EZ-MUD_SLURRY.pdf
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.

We offer four additional sump-related best management practices (BMPs) for the Forest Service to include in the mitigation measures:

- All pits should have either a sloped side or wildlife safety “ladder” to allow any animals that inadvertently fall into the pit to escape. While fencing will prevent larger animals from falling into a sump, most fencing materials do not maintain the capability to prevent smaller terrestrial animals from entering the sump pit area.
- Any overburden material generated during initial excavation of mud pits should be utilized to create an earthen berm partially surrounding each mud pit or sump area, to prevent any run-on or run-off from precipitation events flooding onto or escaping the mud pits or the drill pad site. BMP's shall be utilized, which may include above-ground tanks, to contain any water produced from the exploration holes at the drill site.
- Any drilling locations that are situated directly upon bedrock, or otherwise lacking sufficient soil depths necessary for adequate mud pit construction, located within or below groundwater; shall discharge into portable, above ground tanks that are sized to fully contain all drilling-related fluids. Discharge of this water, or any drilling fluids, to the ground surface or to an ephemeral watercourse is prohibited.
- All drilling cores and any excess drill cuttings shall be collected and disposed of properly.

**Pollution Discharge Permits**

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
As noted in our previous scoping comments, 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.” Overall, Draft EA documents discuss the use of dust abatement measures (including use of water sprays or chemical products on roads, speed limits, or seasonal limitations) will be done as required and as directed by the Forest Service. However, EA documents provide no specifics or even a generic protocol specifying when the use of dust abatement techniques will be triggered. As the Forest Service is assumedly well aware, fugitive dust control plans are well established in the mining industry and various agencies provide guidance as to their development.\(^\text{15}\) Requiring the project proponent to develop a fugitive dust control plan in advance of operations is neither overly burdensome nor arbitrary and would be a reasonable design feature. The Forest Service should require Idaho Copper to prepare a fugitive dust control management plan detailing fugitive dust monitoring procedures and associated control actions.

In addition to our concerns above, are the potential vegetation and water quality impacts from the use of chemical dust suppressants. Since a fugitive dust control plan has not yet been developed for the Project, it is unclear what type and to what amount chemical dust suppressants might be

---

\(^\text{15}\) For example, See Environmental Protection Agency’s,"Fugitive Dust Control Measures and Best Practices", January 2022
used. This creates concern for water quality within the Project Area as chemical dust suppressants should be used in appropriate volumes and with consideration to adjacent vegetation and water bodies.

Several sources have noted the potential effects of chloride based dust suppressants (such as calcium chloride and magnesium chloride) on vegetation and water quality, including a technical report from Colorado State University’s College of Agricultural Sciences, “Environmental Effects of Magnesium Chloride- Based Dust Suppression Products on Roadside Soils, Vegetation and Stream Water Chemistry” (CSU Technical Report)\(^6\). The CSU Technical Report notes that “Roadside trees along non-paved roads treated with MgCl\(_2\) and CaCl\(_2\) dust suppression products have exhibited comparable symptoms to those recorded as NaCl damage, such as leaf scorching, marginal necrosis, and needle tip burn”. In addition, the CSU Technical Report found that “Downstream electrical conductivity, chloride and magnesium concentrations were positively correlated with road surface area draining water towards the stream and yearly amount of MgCl\(_2\) applied (R\(^2\) = 0.75, 0.51 and 0.49, respectively), indicating that road managers can limit the amount of product entering roadside streams by assessing drainage characteristics and application rates in best management practices.” However, it was also found that, “Although MgCl\(_2\)-based dust suppressants did move into some roadside streams, the concentrations detected were below those reported to adversely affect freshwater aquatic organisms, but the ultimate fate of these ions in Colorado water bodies are not known”. Given the potential for vegetative and water quality impacts from chemical dust suppressants, the need to develop a fugitive dust control plan to avoid and mitigate any impacts is further reiterated.

**Noise**

We remain concerned, as noted in our previous scoping comments, 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. More alternatives should be developed 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

\(^6\) W. Jacobi, B. Goodrich, R. Koski “Environmental Effects of Magnesium Chloride- Based Dust Suppression Products on Roadside Soils, Vegetation and Stream Water Chemistry”
http://hermes.cde.state.co.us/drupal/islandora/object/co:5704/datastream/OBJ/view
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 sacajawea*. 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 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.

ICDU 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 6th 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”. 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.

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 place 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 4th 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 an 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)

We are concerned about IDCU’s financial capability to fulfill the reclamation bond. In March 2023, the British Columbia Securities Commission issued a "Cease Trade Order" against IDCU and Multi Metal (owner of a 56% interest in IDCU), prohibiting them from trading until the order is lifted (which has not yet occurred). Additionally, IDCU and Multi Metal are bound by a "lock up" agreement that prevents insiders, such as Multi Metal, from selling their shares, and this agreement remains in effect until at least June 2024. Multi Metal owes a debt of $2.9 million to International Energy, which it cannot pay due to its inability to sell stock. International Energy obtained a summary judgment for the debt, and in December 2023, the court directed the Ada County Sheriff to satisfy the judgment. Consequently, a Sheriff's auction was held on April 2, 2024, where International Energy put in a credit bid to purchase 121 million shares, valued at just under $50 million, to satisfy the $2.9 million judgment. Multi Metal had a hearing on June 14, 2024, to submit a motion to vacate the Sheriff's sale, with a decision still pending. In light of this situation, we encourage the Forest Service to delay a decision on the CuMo exploration project until a reclamation bond has been set and a deep investigation has been carried out on whether IDCU can ensure that all reclamation requirements will be met and paid for by the operator.

Claim Validity
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.

Environmental Justice
We appreciate that the Forest Service considered environmental justice in the EA. However, the EA states that “[t]he effects of the Proposed Action on communities identified as disadvantaged are unlikely to be measurable, and no mitigation measures were recommended to minimize effects in accordance with 36 CFR 228.8.” We recommend that the Forest Service have mitigation measures in place in case unforeseen circumstances come to fruition.

Climate Change
We appreciate that the Forest Service considered the ways the project could contribute to climate change in the EA. However, Climate change affects more than just air quality. The Climate Change and Air Quality report states that “[t]he Forest Service and other federal agencies are asked to consider Greenhouse Gas Emissions (GHG) and the effects of climate change on a proposed action and its environmental impacts in National Environmental Policy Act (NEPA) reviews (CEQ GHG Guidance; 88 FR 1196) that may be relevant to the decision-making
process.” The standards for analysis under NEPA do not limit reviewing climate change to only as it relates to air quality. In addition to air quality, the forest service should analyze climate change and its effects to water quality and temperature, wildlife distribution, fisheries, wetlands, riparian resources, soil quality, vegetation management, and effectiveness of reclamation plans.

The EA should also include an emergency plan in the event of evacuation or damage from wildfires. The EA must analyze the potential impacts of climate change, including more frequent and severe storm events. The EA must also take a hard look at the potential impacts of climate change on revegetation efforts associated with proposed reclamation, and increased erosion from construction and exploration activities.

The Climate Change Technical Report states that “[n]o new calculations were created for carbon-related metrics specific to this project.” Instead, carbon data was used from Forest Carbon Assessment for the Boise National Forest, which utilizes data from 1990 to 2013. The assessment that is referenced claims that “conditions on the forest are stable or improving.” However, the data is outdated for the Forest Service to be able to still make that statement. We recommend that the Forest Service gather updated carbon-related metrics to accurately depict the impacts of climate change. Using outdated data to describe forest conditions violates NEPA as outdated data does not accurately reflect current environmental conditions, violating NEPA's requirement for informed decision-making (40 C.F.R. § 1500.1(a)).

Finally, the Draft EA failed to address the potential impacts of climate change on Sacajawea’s bitterroot. This endemic plant is found in high elevations, commonly along ridgetops and in loose granitic soils. As global temperatures increase we are seeing more indications that our ecological systems and historic patterns are dynamic, with known bird migration patterns shifting to earlier seasons and new routes based on food availability and temperatures. The same is true of botanical species, and the Forest Service’s failure to evaluate the impacts of climate change, both direct and cumulative, on Sacajawea’s bitterroot represents a significant analysis inadequacy. A final analysis document must take this into account.

References


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
