

July 10, 2015

*Sent via e-mail*

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**Re: OBJECTION** to the  
CuMo Exploration Project Supplemental Environmental Assessment and  
Draft Supplemental Decision Notice and Finding of No Significant Impact  
Responsible Official: Cecilia R. Seesholtz, Forest Supervisor  
Boise National Forest

## **I. INTRODUCTION.**

Pursuant to 36 CFR Part 218, **Idaho Conservation League (ICL), Idaho Rivers United (IRU), Golden Eagle Audubon Society, and Sierra Club** (collectively Objectors), by their undersigned attorneys, file this Objection to the Supplemental Environmental Assessment dated March 2015 (SEA) and Draft Supplemental Decision Notice and Finding of No Significant Impact dated March 2015 (Draft SDN/FONSI) issued by Forest Supervisor Cecilia R. Seesholtz for the CuMo Exploration Project in the Idaho City Ranger District of the Boise National Forest in Boise County, Idaho, proposed by Idaho CuMo Mining Corporation (CuMoCo). *See* May 26, 2015 Letter from Supervisor Seesholtz to Interested Parties. The SEA and Draft SDN/FONSI are available at the USFS webpage for the CuMo Exploration Project at:  
<http://data.ecosystem-management.org/nepaweb/fs-usda-pop.php?project=21302>

Pursuant to Part 218, ICL is the lead objector. Contact person: John Robison, ICL Public Lands Director, PO Box 844, Boise, ID 83701, 208.345.6933; Street Address: 710 N 6th St., Boise, ID 83702. However, all Objectors are represented by their undersigned counsel and all U.S. Forest Service (USFS) correspondence regarding this Objection should be directed to the attorneys, Mr. Bryan Hurlbutt and Mr. Roger Flynn, at the address and contact information listed in the signature block at the conclusion.

All of the Objectors filed comments on the Draft SEA and the USFS's proposed actions on or about September 18, 2013, and have fully participated in the USFS review of the project. Pursuant to 36 CFR 218.8, the Objectors state that the following content of this Objection demonstrates the connections between Objectors September 18, 2013 comments ("previous comments") for all issues raised herein unless the issue or statement in the SEA or Draft SDN/FONSI arose or was made after the opportunity for comment on the Draft SEA closed, as detailed herein. Pursuant to 36 CFR 218.8(b), Objectors' previous comments dated September 18, 2013, and reprinted in Volume 2 of the USFS's 2015 decision documents for the CuMo Exploration Project (SEA Comment

Letter 899S), are hereby incorporated by reference, with the applicable section and content as shown in the reprint.

## **II. THE PROPOSED PROJECT WOULD VIOLATE NUMEROUS FEDERAL LAWS AND CANNOT BE APPROVED AS PROPOSED IN THE SEA AND DRAFT SDN/FONSI.**

As detailed herein, and as noted in Objectors' previous comments, the CuMo Exploration Project would violate numerous federal public lands, environmental, wildlife, and related laws, regulations, and policies. As such, the USFS cannot approve the proposed Project or Plan of Operations (PoO), as amended by any of the action alternatives. These laws (with their implementing regulations and policies) include, but are not limited to: the National Environmental Policy Act (NEPA), the Forest Service Organic Act of 1897 (Organic Act), the 1872 Mining Law and related federal mining laws, the National Forest Management Act (NFMA), the Endangered Species Act (ESA), the Clean Water Act (CWA), and the Clean Air Act (CAA).

The remedy for these violations is for the USFS to not issue any Final SDN/FONSI that would authorize approval of any PoO for any action alternative reviewed in the SEA that does not fully comply with each and every law, regulation, and policy noted herein. Instead, the USFS must deny or reject any such PoO, and the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein before the USFS can consider approving any operations at the site.

The following Objection issues were raised in the previous comments, or arose subsequent to the public comment period, and are discussed here in no particular order of importance. Pursuant to the Administrative Procedure Act, 5 U.S.C. § 553-706, and USFS requirements, the Regional Forester's Office must provide a detailed response to each of the issues/objections raised in this Objection.

## **III. GENERAL OBJECTION ISSUES**

This section raises general objection issues that are common to many of the specific environmental issues raised in the previous comments, to the USFS responses to those comments, and to new issues that have arisen since the public comment period. The next section (Section IV) provides more detail on specific issues raised in the previous comments, on the USFS responses, and on new issues that have arisen since the public comment period.

### **A. The SEA and Draft SDN/FONSI Violate NEPA**

#### **1. NEPA Background**

The National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321-4370(h), is America's basic "charter for protection of the environment." 40 C.F.R. § 1500.1(a). The

Council on Environmental Quality (“CEQ”) promulgates regulations implementing NEPA, which are binding on all federal agencies. 40 C.F.R. §§ 1500-1518.4.

NEPA requires federal agencies to ensure fully informed decision-making and provide for public participation in environmental analysis and decision-making. 40 C.F.R. § 1500.1(b)-(c). NEPA serves two principal purposes: (1) it ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts, and (2) it guarantees that the relevant information will be made available” to the public so it may play a role in the decision-making process. This “hard look” at an action’s impacts fosters both informed decision-making and informed public participation.

NEPA requires federal agencies to prepare an Environmental Impact Statement (EIS) for all “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). “Environmental information [must be made] available to public officials and citizens before decisions are made and before actions are taken.” 40 C.F.R. § 1500.1(b) (emphasis added). Among other things, an EIS must consider a reasonable range of alternative actions and assess site specific and cumulative impacts. 42 U.S.C. § 4332(2)(C)(iii); 40 C.F.R. §§ 1502.14, 1502.16, 1508.25.

CEQ regulations list factors to consider when evaluating whether an EIS is required, which include: “[t]he degree to which the proposed action affects public health or safety”; “[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas”; “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial”; “[t]he degree to which the possible effects on the human environment are uncertain or involve unique or unknown risks”; “[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration”; “[w]hether the action is related to other actions with individually significant impacts”; and “[w]hether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.” 40 C.F.R. § 1508.27(b).

Under CEQ’s regulations implementing NEPA, federal agencies may prepare an Environmental Assessment (EA) to assist in the NEPA process. 40 C.F.R. §§ 1501.4(b), 1508.9. An EA is a more limited review of environmental factors associated with a federal action, and is performed to assist the agency in determining whether a lengthier and more thorough EIS is warranted because the proposed action may have significant impacts. If the analysis in the EA indicates that there are unlikely to be any significant impacts, the agency issues a Finding of No Significant Impact (FONSI) along with its substantive decision regarding the proposal.

One of NEPA’s fundamental goals is to “promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.” 42 U.S.C. § 4321. The scope of NEPA review is quite broad, including disclosure and consideration of all reasonable alternatives, 40 C.F.R. § 1502.14(a), and direct, indirect

and cumulative effects on “ecological. . . aesthetic, historic, cultural, economic, social, or health” interests. 40 C.F.R § 1508(b). The federal agency must “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated”; “[d]evote substantial treatment to each alternative considered in detail including the proposed action”; and “[i]nclude reasonable alternatives not within the jurisdiction of the lead agency.” *Id.* § 1502.14(a)-(c).

An adequate analysis of the environmental impacts of a project also must include consideration of the direct, indirect, and cumulative impacts of the project. *Id.* §§ 1508.7, 1508.8, 1508.25(c). Cumulative impacts are the impacts on the environment that result from incremental impacts of the action when added to all other past, present, and reasonably-foreseeable future actions regardless of what agency or person undertakes such other actions. *Id.* § 1508.7. “Cumulative impacts can result from individually minor but collectively significant actions.” *Id.*

NEPA obligates the agency to make available to the public high-quality information including accurate scientific analyses, expert agency comments, and public comments before decisions are made and actions are taken. 40 C.F.R. § 1500.1(b). The Council on Environmental Quality’s (CEQ) implementing regulations for NEPA provide that information used to inform NEPA analysis “must be of a high quality” and that “[a]ccurate scientific analysis . . . [is] essential to implementing NEPA.” *Id.* The agency’s discussion and analysis must be based on professional and scientific integrity. *Id.* § 1502.24. To take the required “hard look” at a proposed project’s effects, an agency may not rely on incorrect assumptions or data.

## 2. The USFS Failed to Take a Hard Look at Direct, Indirect, and Cumulative Impacts

As set forth in further detail in Section IV below, the SEA fails to adequately consider and disclose direct, indirect, and cumulative impacts of the Project to Sacajawea’s bitterroot, bull trout, wildlife, soils, groundwater, surface waters, and other resources. The SEA admits that CuMoCo’s activities (including road, drill pad, and sump construction; fuel haul and other vehicle transportation; and exploratory drilling) would impact these resources; however, it is difficult to evaluate the degree and extent of potential impacts given the inadequate information presented.

The SEA provides little information about where and when CuMoCo will build new roads, drill pads, and sumps; where and when CuMoCo will be operating drill rigs; and where and when CuMoCo will haul fuel. A common USFS response to the previous comments is that CuMoCo’s project is “result driven” and that, therefore, the USFS does not know where and when these activities will occur or what the impacts will be. This is also stated throughout the SEA and Draft SDN/FONSI. *See, e.g.*, SEA at 21; Draft SDN/FONSI at 8–9. While it may be appropriate for the USFS to allow for some flexibility as CuMoCo’s exploration unfolds, we are concerned that the USFS has not

sought from CuMoCo and included in the SEA more information about the Project's details and disclosed the impacts of those activities.

Instead of allowing a free for all, it seems reasonable for the USFS to ask CuMoCo to provide more information about its plans, and to work with CuMoCo to fine-tune those plans now, while still allowing for some flexibility in the future. Note, CuMoCo has already completed one drilling season for this Project, and it seems likely that CuMoCo knows (or is readily capable of determining) what it plans to do next—at least for the next drilling season or two. Without additional project detail, it is hard to understand how the USFS evaluated direct, indirect, and cumulative impacts.

Furthermore, it is difficult to understand what impacts the USFS did evaluate in the SEA, because of its heavy reliance on the post-approval checklist process. As provided in the SEA, and noted by the USFS in many responses to comments, there is a checklist process by which CuMoCo would notify the USFS before constructing new roads, drill pads, and sumps. While we are not necessarily opposed to the use of this checklist process, we are concerned that the USFS is improperly relying on a post-decision review and approval process to avoid fulfilling its duty to take a hard look at impacts before approving the Project.

For example, with regard to potential water contamination related to drilling, the USFS admits that drilling near springs and other hydrologic features could have adverse impacts. But the USFS did not identify the location of seeps and springs, and it is unknown how many of CuMoCo's drill holes might be located near seeps and springs. Instead, the USFS would have CuMoCo look for seeps and springs later, when each drill pad is proposed. When the USFS determined in the SEA that groundwater impacts were unlikely, how many drill holes did they assume might be located near seeps and springs? None? Several? It appears that the USFS's determination about impacts assumes no drill holes will be located near springs; however, nothing in the SEA and Draft SDN/FONSI prohibits CuMoCo from locating drill holes near springs.

Similarly, with regard to Sacajawea's bitterroot, the SEA admits that this rare plant species is likely to be adversely affected in numerous ways by many Project activities if they occur in or near the Plant Conservation Area (PCA). Alternatives A and B would involve substantial use of existing roads, as well as the construction, use, maintenance, and rehabilitation of roads and drill pads, within the PCA. And while the USFS added mitigation, monitoring, and the checklist process to the Project, nothing prohibits CuMoCo from ultimately undertaking substantial amounts of activity in the PCA if needed. Yet the USFS simply claims there is not likely to be much impact to Sacajawea's bitterroot, pointing to the mitigation, monitoring, and checklist. In reaching this conclusion, how many acres of surface disturbance did the USFS assume CuMoCo would cause in the PCA? And how many vehicle trips did the USFS assume CuMoCo would make within and through the PCA? It appears that the USFS's conclusion was based on assuming CuMoCo will not undertake these activities in the PCA; however, CuMoCo's original proposal shows that the company plans to locate roads, drill pads, and sumps in the PCA, and nothing in the Draft SDN/FONSI prohibits CuMoCo from

locating these things in the PCA. As a result, the SEA fails to evaluate and disclose the direct impacts of the Project.

The Project Record indicates that CuMoCo apparently has already received prior approvals for certain roads and drill pads that have yet to be built, and has already submitted additional checklists seeking approval of more roads and drill pads.<sup>1</sup> Notably, many of the approved or requested roads and pads appear to be in the Sacajawea's bitterroot PCA, Riparian Conservation Areas, and landslide prone areas. But the SEA Draft SDN/FONSI fail to disclose these roads and pads and fail to assess their specific impacts, and instead, the Forest Service falls back on the results-driven nature of the Project and the checklist process to avoid taking a hard look.

For these reasons, and additional reasons set forth in our specific objection issues in Section IV, the USFS has failed to take a hard look at direct, indirect, and cumulative impacts of the Project. To remedy these violations, the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein before the USFS can consider approving any operations at the site.

### 3. The USFS Has Failed to Consider a Reasonable Range of Alternatives

As set forth in further detail in Section IV below, the SEA and Draft SDN/FONSI fail to consider a reasonable range of alternatives.

The USFS evaluated only one action alternative to CuMoCo's proposal. While Alternative B (the Reduced Roads Alternative) reduces the total miles of road CuMoCo would construct, it fails to address many of the other major issues raised for the Project, including RCA incursions, wildlife impacts, fuel transportation, landslides, groundwater, and Sacajawea's bitterroot. Furthermore, Alternative B fails to meaningfully address the issue it was developed to alleviate. Alternative B was developed to address "concern over potential erosion and sedimentation to Grimes Creek." SEA at 27. While Alternative B eliminates a 0.62 mile segment of new road along Grimes Creek, it allows for more drill pads and drill holes, which are themselves sources of erosion and sedimentation. Notably, the FS itself admits in the response to comments that there is very little difference in the effects that result from the two action alternatives. *See, e.g.*, SEA at 27 (noting that other than a reduction in the length of new roads, the two Alternatives are "identical").

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<sup>1</sup> We are troubled that the USFS appears to be reviewing new checklists for approval, given the court decision, the fact that no final decision has been issued yet, and that CuMoCo does not have an approved PoO. *See* Project Record, Jan. 6, 2014 E-mail from B. Petersen to C. Hood (indicating that the USFS has done work to review Checklists #11 and #12 which were submitted in November of 2013). It appears that these Checklists may have involved site visits by CuMoCo and/or its contractors post court decision. *See, e.g.*, Project Record, Checklists #11 and #12 (documenting and discussing observations made on October 14, 2013 site visits).

In light of new information that has surfaced regarding Sacajawea's bitterroot subsequent to the comment period on the Draft SEA, the USFS should consider a new alternative to avoid and minimize impacts to Sacajawea's bitterroot. The Whiskey Complex fire burned through the Project site in 2014. The fire burned in the PCA, and a dozer line was plowed through the PCA, including through the largest known concentrations of Sacajawea's bitterroot in the world. This is a major issue that should be considered through an alternative in the SEA. While the USFS has added Sacajawea's bitterroot monitoring and mitigation to the Project, nothing precludes CuMoCo from undertaking exploration activities in Sacajawea's bitterroot habitat, including building and using roads, drill pads, and sumps. The Forest Service could consider an alternative that keeps all ground disturbing activities out of suitable and occupied Sacajawea's bitterroot habitat, or at least out of key populations.

The USFS 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 USFS should develop an alternative now to strategically locate roads and drill pads so as to minimize incursions into RCAs while still meeting CuMoCo's needs.

For these reasons, and additional reasons set forth in our specific objection issues in Section IV, the USFS failed to consider a reasonable range of alternatives. To remedy this violation, the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein before the USFS can consider approving any operations at the site.

#### 4. The USFS Must Prepare a Full EIS

As set forth in further detail in Section IV below, the SEA and Project Record disclose that the Project may have a significant impact on the environment, requiring the preparation of a full EIS.

For example, impacts to groundwater may be significant and require an EIS. The SEA acknowledges that drilling near seeps and springs may have impact flows and cause water quality concerns. However, it is not known where CuMoCo would drill, and the USFS has not identified the locations of seeps and springs at the Project site. But there are no limits to the number of drill holes that can be located near seeps and springs.

As another example, the rich populations of Sacajawea's bitterroot at the Project site are a unique and significant feature of geographic area, and impacts to this rare plant are highly uncertain and controversial and require an EIS. This rare plant is known to exist in only a handful of counties, all in Central Idaho. The largest known populations of Sacajawea's bitterroot in the world are found at the Project site. The SEA acknowledges that ground disturbance impacts Sacajawea's bitterroot and its habitat, but it is not known how many acres of habitat CuMoCo would disturb and the SEA does not set any limits on the amount of ground disturbance that can occur within occupied and suitable habitat.

Little is known about this species. It is unknown whether and to what degree the SEA's mitigation measures will work to protect Sacajawea's bitterroot. It is also unknown what the precise impact the recent forest fire at the site, including the fire line constructed through Sacajawea's bitterroot habitat, has had and will have on the species' viability at the site, though it appears likely to be significant. It is also unknown how other populations of Sacajawea's bitterroot located outside the site have fared after recent wildfires. As a result, impacts to this unique population of a rare species are involve unknown risks and are highly uncertain. By preparing an EIS, the Forest Service could resolve these and other uncertainties and tailor the Project as needed.

In the Draft SDN/FONSI, the FS says no EIS is needed because this action will not significantly affect the quality of the human environment. This determination is based on the assertion that the project area is relatively small (less than one percent of the Ranger District) and that approval of the project does not involve any highly uncertain, unique, or unknown risks. Draft SDN/FONSI at 25–26. The FONSI is additionally based on conclusions that the project will result in no significant impacts to public health or safety, any unique characteristics of the geographic or cultural resources, or endangered or threatened species or their habitat.

However, in numerous responses to comments, the USFS acknowledges that it does not know where and when CuMoCo will conduct its activities, and that the agency will monitor CuMoCo's activities to see whether they fall within the impacts disclosed in the SEA. The USFS thus admits that—depending on where and when CuMoCo decides to construct and use roads, drill pads, and sumps—the impacts are uncertain but may in fact exceed those disclosed in the SEA. And because there are no clear limits on where and when CuMoCo can conduct many of its activities, the USFS needs to assume the worst case in its analysis, which would show that impacts may be significant.

For these reasons, and additional reasons set forth in our specific objection issues in Section IV, the USFS must prepare an EIS. To remedy this violation, the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein and prepare an EIS before the USFS can consider approving any operations at the site.

## **B. The USFS Has Failed Minimize Impacts Under the Organic Act**

As set forth in further detail in Section IV below, the SEA and Draft SDN/FONSI fail to minimize adverse environmental 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). USFS's mining regulations require that “all [mining] operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest resources.” 36 C.F.R. 228.4(c)(3). “Although the Forest Service cannot categorically deny a reasonable plan of operations, it can reject an unreasonable plan and prohibit



mining activity until it has evaluated the plan and imposed mitigation measures.” *Siskiyou Regional Education Project v. Rose*, 87 F.Supp.2d 1074, 1086 (D.Or. 1999) citing *Baker v. U.S. Dept. of Agriculture*, 928 F.Supp. 1513, 1518 (D. Idaho 1996).

The USFS has failed to minimize impacts primarily by allowing highly result-driven drilling instead of requiring more advance planning and restrictions, by failing to reasonably protect the Project sites unique and large populations of Sacajawea’s bitterroot, by failing to minimize incursions into protected Riparian Conservation Areas, and by failing to avoid locating roads and drill pads on landslide prone areas.

For these reasons, and additional reasons set forth in our specific objection issues in Section IV, the SEA and DN/FONSI violate the Organic Act. To remedy these violations, the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein before the USFS can consider approving any operations at the site.

### **C. The USFS Failed to Act Consistently with the Forest Plan under NFMA**

As set forth in further detail in Section IV below, the SEA and Draft SDN/FONSI fail to comply with all requirements of the Boise National Forest Land and Resource Management Plan, Revised 2010 (the “Forest Plan”) in violation of the National Forest and Management Act (NFMA), 16 U.S.C. § 1601 *et seq.*

Congress enacted NFMA in 1976 to establish a new legal framework for managing natural resources on Forest Service 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 certain 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).

The Forest Plan for the Boise National Forest contains numerous binding standards, including BTST01, WIST02, WIST03, WIST05, MIST08, and MIST09. Section IV below includes additional detail regarding violations of these Forest Plan standards. However, generally, by authorizing CuMoCo to choose later where and when to build roads, drill pads, and sumps, where and when to transport fuel, and where and when to conduct drilling operations, approval of the Project would fail to comply with these standards.

For example, MIST08 requires that roads, structures, and support facilities should not be located in RCAs, and if no alternatives exist to locate and construct them in ways that minimize degrading effects. Similarly, MIST09 prohibits locating mine waste in RCAs unless no alternative exists, in which case the FS should analyze the material, monitor operations, and require a bond adequate to ensure successful reclamation and revegetation of the site after operations are completed. The USFS must work with CuMoCo to review where the company proposes to locate roads, drill pads, sumps, and

other structures, support facilities, and waste facilities and to then evaluate alternatives that would avoid locating as many in RCAs. While we recognize that it may be appropriate to afford CuMoCo some degree of flexibility in completing its drilling program, and that the checklist process may be an appropriate process for reviewing and approving future site specific activities, allowing complete flexibility is unreasonable and precludes the USFS from meeting its obligations under the Forest Plan.

For these reasons, and additional reasons set forth in our specific objection issues in Section IV, the SEA and DN/FONSI violate NFMA. To remedy these violations, the Forest Supervisor must remand the SEA and Draft SDN/FONSI back to the Boise National Forest with instructions to correct all errors noted herein before the USFS can consider approving any operations at the site.

#### **IV. SPECIFIC OBJECTION ISSUES**

##### **A. Sacajawea's Bitterroot**

As stated in our previous comments (SEA Comment Letter 899S at 30–31), we have concerns that the USFS has not conducted sufficient analysis of impacts to *Lewisia sacajawean*a (“LESA” or “Sacajawea’s bitterroot”) populations and habitat, nor adequate avoidance and mitigation of adverse impacts to protect this species and ensure against a loss viability and to avoid ESA listing.

In response (Draft SDN/FONSI Attach. C at 190), the USFS refers to SEA Section 2.3.5 and says that mitigation measures will reduce impacts to Sacajawea’s bitterroot. The FS also says Figures 10b and 10c in SEA Section 3.3.2.1.5 have been updated to reflect data obtained during the 2011 Sacajawea’s bitterroot surveys. The FS says the March 31, 2011 Rare Plant Inventory/Monitoring Guidelines identify the procedures and protocols for subsequent surveys. The FS also says survey results are included in the 2012 Monitoring Plan: Final Report and in an updated SIR for LESA issued April 12, 2012, both of which are in the Project Record.

We appreciate the added and updated information; however we still have substantial concerns, particularly in light of new circumstances since the public comment period, including the 2014 Whiskey Complex Fire. The SEA paints a grim picture for this rare species. See SEA pp. 145–150. Over its entire range, the Forest Service notes its susceptibility to climate change, wildfires, and other threats. In fact, the SEA states: “Given the current degraded conditions at the CuMo site plus the inherent issues with pollination, climate change, and genetic factors, further reductions in the CuMo LESA population size and/or impacts to pollinators would be expected to result in reduced reproduction and population persistence.” SEA, p. 155. And the SEA admits that many of CuMoCo’s proposed activities could cause such reductions in population size, including road and drill pad construction, drilling activities, road maintenance, reclamation, vehicle travel, and others.

Yet the SEA and SDN/FONSI claim that the Project will have hardly any impact on Sacajawea's bitterroot and its habitat both at the Project site and rangewide. This conclusion is unreasonable and unsupported for numerous reasons.

### 1. Unknown Baseline

Key to evaluating effects is an adequate understanding of baseline conditions. In the light of the 2014 fire, it is unknown what baseline conditions are now at the site. The SEA and documents in the Project Record acknowledge that the USFS does not know baseline habitat and population conditions for Sacajawea's bitterroot at the Project site because the impact that the fire and dozer line had on known populations and suitable habitat at the site. *See* SEA pp. 150 & 159. This is critical information, as the fire and dozer line runs through some of the largest populations of Sacajawea's bitterroot in the world. According to the SEA, the fire and fire line construction were in a portion of the PCA that includes 75 percent of the known population of this species. SEA p. 149. Furthermore, "several other LESA populations [outside the Project Area] have been affected by recent wildfires and fires suppression activities." SEA, p. 149.

The SEA says that "the baseline will be reestablished prior to reinitiation of drill pad or road construction in support of exploration activities". SEA, p. 159. But NEPA requires sufficient baseline information to be gathered before a project is approved. Without knowing the status of these populations and areas of suitable habitat, it is impossible for the USFS to evaluate the impacts of the Project to Sacajawea's bitterroot at the Project site and across its entire range, and impossible to appropriately avoid and mitigate impacts. The Forest Service, thus, should not approve the Project until it has "reestablished" the baseline and used that baseline to evaluate the Project.

### 2. Failure to Evaluate Effects

The SEA and Draft SDN/FONSI also fail to appropriately disclose and assess the direct, indirect, interrelated, and cumulative effects of the CuMo Project on Sacajawea's bitterroot. The evaluation of effects to Sacajawea's bitterroot suffers from numerous shortcomings.

First, the SEA fails to adequately consider the impacts of activities CuMoCo already performed subsequent to the Project's initial approval up until the court decision. It appears that CuMoCo constructed and operated roads and drill pads within the PCA, but the SEA fails to adequately describe these activities or assess the impacts they had on Sacajawea's bitterroot. It appears that some of these activities that were already conducted occurred in or near Sacajawea's bitterroot habitat. *See, e.g.*, Project Record # 984, Aug. 30, 2011 E-mail from J. Moeller to R. Hayman (attaching Checklist #3 for "proposed drill pads within the Bitterroot monitoring area, within identified LESA habitat, and where some individual plants were identified in our field survey effort(s)."); Project Record # 712, Checklist #7 (indicating additional disturbance proposed in suitable and occupied Sacajawea's bitterroot habitat). How many drill pads and miles of road were built and used within the PCA, within or near suitable habitat, and within or near

occupied habitat? What reclamation occurred at these sites? What monitoring and mitigation occurred, and what were the results? The SEA must include this information.

Second, the SEA fails to adequately disclose and assess the potential impacts of the Project. While the USFS claims that much is unknown because the Project is result driven and would go through the checklist process, CuMoCo did propose specific locations for all roads and drill pads. Many maps in the SEA and Project Record depict these road and drill pad locations. *See, e.g.*, Amended Biological Assessment for CuMo Exploratory Mineral Operation, p. 56, Fig. 12 (map depicting new roads and drill locations under Alternative B). And many sections of the SEA use these proposed roads and drill pad locations to evaluate the Project's potential effects. *See, e.g.*, SEA, p. 197, Table 15a (table showing acres of source habitat for sensitive terrestrial and avian wildlife species and showing the acres and percent of such source habitat impacted by each action alternative), p. 151 (estimating total acres of vegetation cleared at the Project site under each action alternative). But the SEA fails to do this for Sacajawea's bitterroot. While the Sacajawea's bitterroot maps (SEA, pp. 142 & 143, Figs. 10b & 10c) show proposed roads, they fail to show proposed drill pads. Furthermore, the SEA fails to present the total acres of suitable and occupied Sacajawea's bitterroot habitat at the site compared to how many acres of suitable and occupied habitat would be disturbed by roads and drill pads under Alternatives A and B. The USFS did this for other sensitive species. The SEA must include this information and analysis.

Notably, the USFS recognized the need and ability to obtain such information. *See* Project Record, "Lewisia sacajawean (LESA), Sacajawea's bitterroot- Criteria for Pad and Road Approval (8/3/11 draft by Edna R-V and Kay B.)" ("In order for us to evaluate the magnitude of impacts to this LESA population, we request that you provide us with detailed maps that clearly show road and drill pad locations and the spatial extent/numbers of plants within these proposed impacted areas.").

In addition to failing to adequately assess the effects from surface disturbance from road and drill pad construction, the SEA fails to adequately assess effects to Sacajawea's bitterroot from other Project activities which the USFS admits would have an adverse impact. For example, the SEA notes that dust from vehicle travel has an adverse impact on pollinators; yet, the SEA fails to estimate the number of vehicles that drive in proximity to Sacajawea's bitterroot populations and habitat or the amount of dust they may generate. The SEA also notes that fragmentation of habitat is a problem, but fails to evaluate increased fragmentation caused by CuMoCo's proposal. The SEA also identifies other Project activities that could occur within the PCA and that would have adverse affects to Sacajawea's bitterroot, but dismisses these impacts without any real evaluation of the impacts, including impacts caused by reclamation, the spread of invasive weeds, and soil compaction. The SEA must disclose and evaluate these impacts.

Third, the Forest Service has failed to appropriately consider cumulative impacts. The USFS must consider the impacts of CuMoCo's activities when added to the impacts of recent fires and other cumulative impacts affecting Sacajawea's bitterroot, and provide a quantified assessment of impacts. For those cumulative impacts the SEA does discuss

(including recent fires and fire suppression activities at the CuMo site and in other locations of known Sacajawea's bitterroot), the USFS has failed to provide any quantitative analysis, such as the number of plants or acres of habitat on site impacted by fires and fire suppression and by CuMoCo's proposed activities. The SEA must include a quantitative analysis of cumulative effects to Sacajawea's bitterroot.

Furthermore, the SEA fails to consider all cumulative impacts. For example, the Project Record indicates that the Forest Service recently learned that sheep trailing occurs at the Project site and may be adversely impacting Sacajawea's bitterroot. *See* Project Record, Nov. 28, 2014 E-mail from E. Visgirdas to M. Miller. But the SEA fails to disclose and assess these impacts.

### 3. Failure to Comply with Forest Plan

Forest Plan Guideline WIGU05 requires source habitat to be identified for sensitive plant species, and WIGU07 requires actions in occupied sensitive species habitat to be modified or relocated if effects would contribute to a trend toward ESA listing. Forest Plan Standard BTST01 requires that actions within occupied sensitive plant habitat "must incorporate measures to ensure habitat is maintained where it is within desired conditions, or restored where degraded." (Emphases added).

The SEA states that "the cumulative amount of earth disturbance remains relatively small compared to the modified Project Area size" to conclude that the potential cumulative effects on rare plants, including Sacajawea's bitterroot "may impact individuals, but would not likely contribute to a trend toward federal listing or loss of viability of populations or species." SEA, p. 172. This is unsupported.

First, the SEA admits: "Because the Boise NF includes the majority of the range of LESA, and because the CuMo population in the Project Area is the largest known LESA population, impacts to the CuMo population can affect the viability of the species." SEA, p. 139. Furthermore, the fire and dozer line just impacted the species, and may have an impact on viability on its own, particularly since the fire and dozer line ran through the largest populations in the world. Additionally, CuMoCo's proposed activities, including building and using roads and drill pads, would further threaten viability. Finally, as the SEA acknowledges, "several other LESA populations have been affected by recent wildfires and fires suppression activities." SEA, p. 149.

Second, as already explained, despite the design features regarding Sacajawea's bitterroot, nothing prohibits CuMoCo from disturbing a significant portion of occupied and suitable Sacajawea's bitterroot habitat. The design features, monitoring, and mitigation, while they may lessen some impacts, fail to ensure habitat will be maintained or restored, and in fact would still authorize building roads and drill pads and authorizing other activities that would degrade habitat. Furthermore, the SEA fails to evaluate the amount of earth disturbance compared to occupied and suitable habitat, among other shortcomings in analyzing baseline conditions and potential effects.

Thus, unless the USFS modifies the Project to substantially prohibit activities in and near occupied and suitable Sacajawea's habitat at the site, and to prevent fragmentation of such habitats, the Project threatens viability and would contribute toward a trend of federal listing, and the Project fails to include measures to ensure that habitat is maintained where it is in desired conditions and restored where it is degraded.

#### 4. Unreasonable Conclusions About Impacts

The SEA acknowledges that Sacajawea's bitterroot faces many ongoing threats, including "climate change, genetic factors such as genetic erosion, pollinator limitation, grazing/trailing, and weeds, which can affect LESA survival and reproduction" which "apply to the CuMo population as well as the entire range of the species." SEA, p. 171. "Across the range of the species, LESA populations are likely to be lost over time due to climate change impacts and reductions in pollinator availability, combined with ongoing threats from human activities." SEA, p. 172. And the SEA explains how research on Sacajawea's bitterroot suggests that genetic exchange between sites is lacking and that "LESA habitat is likely to become more restricted in the future with eventual loss of populations and little to no chance of recolonization from adjacent sites." SEA, p. 172.

Furthermore, the SEA explains that "the Boise NF includes 80 percent of LESA populations and the population within the project area is the largest known LESA population, supporting nearly 40 percent of the individuals for this species. Given the numerous threats . . . that pertain[] to to the CuMo site, as well as the range of the species, actions that reduce the population size and/or genetic diversity of the CuMo LESA site (including pollinators) could impact conservation of this species." SEA, p. 172.

Yet the SEA concludes that, based on the design features and mitigation combined with effectiveness monitoring, "the cumulative effects on this species would be avoided in many cases, and where avoidance is not possible, impacts would be minimized to the [maximum extent practicable]." SEA, p. 172.

The information available, and the actual terms of the USFS approve of the CuMo Project, do not support these conclusions. As already explained above, the SEA admits that baseline conditions are currently unknown, the SEA fails to adequately assess impacts, and the design features, while potentially helpful, place no hard limits on the amount of damaging activities CuMoCo may undertake with the PCA.

An EIS is required to evaluate these potentially significant impacts, and/or additional measures to prohibit impacts to Sacajawea's bitterroot and its habitat at the Project site.

#### 5. Uncertain Results of Monitoring, Design Features, and Mitigation

We also have concerns that due to the limited understanding of this plant, and the limited window in which it can be located, there is much uncertainty as to how effective the Project Design Features, monitoring program, and checklist process will be in monitoring

and mitigating impacts. Checklist approvals found in the Project Record demonstrate that in reviewing and approving drill pads, difficulties arose regarding understanding when and how each site had been surveyed for Sacajawea's bitterroot or where the site was in relation to known populations of Sacajawea's bitterroot. Also, it is unclear whether CuMoCo was willing to agree to all the mitigation measures and design features that the USFS thought were needed in the PCA. *See* Project Record, USFS "Response to CuMoCo proposal dated 1/23/2015".

Where impacts to Sacajawea's bitterroot cannot be avoided, the checklist process seems to contemplate CuMoCo will try to minimize or mitigate impacts, but there do not appear to be clear plans or strategies for what is to be done, nor is it known how successful such efforts would be.

We are also concerned about invasive weeds, which are spread by building and using roads and drill pads. While the SEA includes some design features and mitigation, it is unclear how the invasion of weeds will be minimized for the long term, and equipment washing appears to exclude requirements to wash motor vehicles that would regularly travel in and out of the Project site.

The USFS needs to adequately create and evaluate monitoring, mitigation, and design features to ensure impacts are minimized.

## **B. Transportation of Hazardous Fuel**

As stated in our previous comments (SEA Comment Letter 899S at 3–12), we have concerns about the water quality, public safety, and other impacts from regularly hauling large quantities of fuel to the Project Area. To conduct the extensive drilling proposal, CuMoCo plans to make four fuel truck deliveries to the Project Area every day during the April 15 to December 15 operating season, or nearly 1,000 fuel deliveries per year. Each fuel delivery would be made by a pickup truck carrying a 100-gallon capacity sliptank with diesel fuel in the bed of the truck.

There are four access routes into the Project Area, one from Idaho City, one from Horseshoe Bend, and two from Garden Valley. Each route includes some portions of travel near and over streams in the Payette and/or Boise River watersheds. Each route eventually travels adjacent to Grimes Creek on County Road 382 to reach the Project Area.

The Boise River currently provides over 22 percent of the City of Boise's drinking water supply, 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 proposed fuel delivery routes, as are other drinking water supplies, including people with drinking water wells only a few miles downstream of the Project site. The stretches of the Boise River and its tributaries which could be impacted

by a fuel spill, including Lucky Peak Reservoir and the Boise River through the City of Boise, are popular destinations for water sports, fishing, and other recreational activities.

The South Fork of the Payette River is a popular recreational river and is designated critical habitat for bull trout. It is also listed in the Boise Forest Plan as eligible for designation under the Wild and Scenic Rivers Act.

Of particular concern is the route from Garden Valley by way of County Road 382, which follows the south bank of the South Fork of the Payette River and then winds along Sweet Creek. The road is steep, windy, and single-lane with only the occasional pullout. Additionally, the route from Idaho City, while not directly adjacent to large streams, is a popular route with high traffic levels.

Given the large number of fuel deliveries to be made in proximity to streams in the Boise River and Payette River watersheds, it is important that the risks of accidents and fuel spills are assessed and suitable precautions are taken. However, the SEA and Draft SDN/FONSI fail to adequately address these issues as set forth below.

In our scoping comments, we asked the Forest Service to analyze the threats to public health and the environment from a spill of hazardous or toxic materials at multiple points along the transportation corridor. We asked the Forest Service to analyze for worst-case scenarios of multiple vehicles carrying full loads of hazardous materials and low stream and reservoir volumes.

In response (Draft SDN/FONSI Attach. C at 6, 108–09, 162, 175), the USFS says that a Spill Prevention and Control Countermeasure Plan (SPCC) has been developed, environmental protection and mitigation measures have been added to Section 2.3.8 of the SEA, the Fuel Transport Memorandum has been incorporated into the documents in the Project Record, and a petroleum release which exceeds 25 gallons or results in a sheen on surface water must be reported to the Idaho Department of Environmental Quality (IDEQ) per Idaho's rules (IDAPA 58.01.02.851). The USFS says that the Fuel Transport Memorandum shows the crash rate would be less than 1 crash in a five-year period on each access route from State highways to the Project Area and that the probability of an effect to an RCA or stream channel that would affect fisheries is even lower.

While we appreciate that additional information that the USFS has provided, we still have many concerns.

First, the accident analysis fails to consider whether accident rates will increase as a result of CuMoCo's added traffic, particularly on windy, steep, narrow roads that currently may have very low levels traffic. The SEA should disclose baseline traffic levels on each access route and estimate the increase in traffic that would result from the CuMo Project, as well as the resulting affect this would have on accident rates.



Second, it is unclear when CuMoCo would use which of the four access routes to haul fuel, and for other trips to and from the site, and how these trips would be accomplished. In order to evaluate and minimize impacts, the USFS should consider and establish criteria for when, where, and how the different routes will be used. For example, some or all of the access routes may not be appropriate for fuel haul and other travel during inclement weather, when roads are snowy, icy, or muddy, or at night, but the SEA does not appear to assess or restrict travel during such variable road conditions. Additionally, the Fuel Transport Memorandum suggests vehicle collisions are less likely because fuel will not be transported in convoys; however, for other nearby minerals projects (Golden Meadows and Golden Hand), the USFS determined that convoys are safer than scattered individual trips, but the SEA fails to consider or require fuel haul convoys. Similarly, it may be safer to have a single designated fuel haul route, with appropriate warnings signs, maintenance, and restrictions on fuel haul timing, but instead the SEA and SDN/FONSI appear to allow CuMoCo to choose to haul fuel, and make other vehicle trips, on whichever of the four routes whenever it so chooses.

Third, as stated in our previous comments (SEA Comment Letter 899S at 6), 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 (Supplemental EA p. 238) 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.

Fourth, we are still concerned (SEA Comment Letter 899S at 4-6) about road maintenance on the Garden Valley Route to the site by way of Forest Road 382. While we understand that CuMoCo and Boise County would have to complete a new road maintenance agreement, this does not relieve the USFS of its duty to ensure sufficient impacts will be minimized and to evaluate the impacts of the maintenance and use of the road. Grimes Pass road is under Forest Service authority, even if it is maintained by the county (*See Idaho Rivers United v. US Forest Service*, No. 11-cv-95-BLW, 2013 WL 474851 (D. Idaho 2013) (holding USFS has authority over highway through National Forest under multiple authorities, including NFMA, even though the State of Idaho operates the highway pursuant to an easement with the Forest Service). Furthermore, for purposes of NEPA, it does not matter who maintains the road. The USFS must consider impacts of using and maintaining this steep, windy, and narrow road, and the USFS should take a hard look at what additional procedures and protocols can be implemented to ensure that the road is safely maintained and used.

Fifth, we are still concerned (SEA Comment Letter 899S at 4), with the use of Forest Road 382 from Garden Valley to the site, since a stretch of South Fork of the Payette River along this route is eligible for Wild and Scenic River status. Daily fuel hauls and 30 trips per day threaten several of the Outstandingly Remarkable Values that make this stretch of river eligible for designation including scenery, recreation and ecology.

In response (Draft SDN/FONSI Attach. C at 71-72), the USFS acknowledges that the Forest Plan does identify this segment as eligible and directs the USFS to protect the free-flowing values, river-related values, and the classification of the corridor; however, the USFS says mitigation measures associated with fuel hauls and other activities proposed in the SEA protect these values. The USFS says there will be no affect to free-flowing values, and no management and development has been proposed that would affect the classification of the corridor. The USFS acknowledges a fuel spill would have impacts to river-related values, but discounts these impacts as short-term and does not consider other impacts to river-related values from CuMoCo's proposal.

Thirty one-way vehicle trips per day, particularly larger vehicles carrying fuel and other supplies, might have a large affect on the wild and scenic character of the area because the scenic and recreational river-related values would be diminished for up to seven years by the proposed activities. While the risks associated with a possible fuel spill were determined to be short-term, an assertion that is questionable depending on the nature of the spill, the mere presence of 30 large vehicle trips traveling along the river corridor will result in impacts to the scenic and wild character of the river for as long as the project persists.

Finally, we remain concerned (SEA Comment Letter 899S at 5) about the potential impacts to ESA-listed bull trout from hauling fuel to the Project site. And now, with the recent discovery of bull trout eDNA in Grimes Creek, we are concerned that fuel haul, and other vehicle trips, create the risk of a fuel spill and increase sedimentation, and other activities at the Project site also pose a risk of contamination and increased sedimentation.

Previously, we noted that the ESA consultation for the Project had failed to consider the impacts from hauling fuel to the site. In response (Draft SDN/FONSI Attach. C at 72), the USFS issued a Revised Biological Assessment (BA) on February 25, 2015, which considered the access routes to the Project Area and made a "may affect, not likely to adversely affect" determination for bull trout. FWS has since issued a Letter of Concurrence, dated April 24, 2015. The Letter of Concurrence states, with respect to effects to bull trout in Grimes Creek, that drill pads, road construction, and fuel haul "will not occur along or within the riparian conservation area of Grimes Creek, and no significant effects will be realized." LOC, p. 2. This is inaccurate.

Fuel haul would occur along and within the RCA of Grimes Creek to access the site using the different fuel haul routes, but the LOC fails to recognize this. Additionally, the LOC fails to consider that drill pads, road construction, and fuel haul will occur along and within RCAs of streams that flow into Grimes Creek. Thus, we are concerned that the potential impacts to bull trout in Grimes Creek from fuel haul, road building, and drilling have not been adequately evaluated. Furthermore, we are concerned that the USFS would approve this Project without yet understanding the extent and significance of bull trout in the Grimes Creek drainage in light of the recent eDNA discovery.

### **C. Hazardous Materials Handling**

As stated in our previous comments (SEA Comment Letter 899S at 12–13), we have concerns about the handling of hazardous materials. In response (Draft SDN/FONSI Attach. C at 250), the USFS says that SEA Sections 2.1.1 and 2.1.2 describe measures that would reduce and respond to spills and that CuMoCo prepared and submitted a Spill Prevention, Control, and Countermeasure Plan (SPCC) in the Project Record.

While the SPCC is a welcomed improvement to managing hazardous material in the Project Area, its implementation suffers from uncertainty. The USFS should oversee the implementation of the SPCC if this project goes forward to ensure that CuMoCo develops and implements mitigation measures appropriate to the specific areas where drilling occurs.

Furthermore, Forest Plan Standard SWST11 requires fuel and other hazardous materials to be stored outside of RCAs unless there is no alternative. The Forest Plan Consistency Documentation (Project Record #1271) simply refers to the SPCC and acknowledges that fuel may need to be stored onsite, but fails to indicate where it would be stored, if it would be stored in RCAs, and if so, whether there is no alternative to doing so.

#### **D. Location of Roads & Drill Pads**

As stated in our previous comments (SEA Comment Letter 899S at 14), we have concerns about where roads and drill pads would be located. In response (Draft SDN/FONSI Attach. C at 218, 257), the FS explains that because the drilling is result driven, it does not know where and when roads would be built. The USFS goes on to reference 2.3 of the SEA and notes that a Mineral Administrator and resource specialist (as needed) would monitor the project to ensure that effects remain within the ranges disclosed in the SEA, while still allowing for the dynamic nature of the project.

This response fails to address our comment that roads and drill pads can be located optimally to decrease environmental impacts (by avoiding landslide prone areas, Sacajawea's bitterroot habitat, seeps and springs, and RCAs as much as possible) while still meeting project needs if the FS would provide some level of pre-authorization guidance on new road construction and drill pad siting. This response highlights a major concern we have regarding results-driven Project using the post-approval checklist process. It is hard to understand how the USFS is minimizing impacts, and evaluating impacts prior to Project approval, if it is not proactively working with CuMoCo prior to project approval to identify optimal locations for surface disturbing activities to meet CuMoCo's needs while minimizing impacts to the environment. This can be done while still affording CuMoCo a fair amount of flexibility to make the Project results driven.

#### **E. Landslide Prone Areas**

As stated in our previous comments (SEA Comment Letter 899S at 14–18), we have concerns that the USFS has failed to adequately assess the risks of landslides at the Project site, and failed to properly avoid locating surface disturbing activities in landslide prone areas. The 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 system will destabilize slopes substantially more than a single pass across the hillside, affecting both the tensile strength and compressive strength of the hillside.

As pointed out in our previous comments (SEA Comment Letter 899S at 16), the SEA states that 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 LSP areas below roads.

As further stated in our previous comments (SEA Comment Letter 899S at 15), we feel the Forest Service has failed to ascertain and disclose important information regarding the potential for landslides as a result of road construction activities. Also, the FS should reassess potential for landslides in an EIS now that the Whiskey Complex fire of 2014 has changed slope stability in parts of the Project Area. As a result, the Forest Service analysis is insufficient and underestimates both hazards and risks, in violation of NEPA.

In response (Draft SDN/FONSI Attach. C at 162–63), the USFS references SEA Sections 2.1.1 and 2.1.2 and says natural routes and topographic features would be used for new roads and roads would be located on ridges whenever possible, but that the drilling program will be result-driven, so road locations are not known, and the USFS would monitor the implementation of the Project to assure that resource effects remain within the ranges disclosed in the SEA. Additionally (Draft SDN/FONSI Attach. C at 176), the USFS points out that the BMP checklist procedure will allow the agency to field verify potential hazards upon CuMoCo proposing to construct new roads.

This response shows that the USFS recognizes that, depending on where CuMoCo locates its roads, the impacts might be more than what is disclosed in the SEA. But instead of evaluating and minimizing these potential impacts now, the FS apparently plans to simply wait and see what happens.

This response also fails to address concerns the USFS expressed about locating roads in landslide prone areas at the site that have since been swept under the rug. As stated in our previous comments (SEA Comment Letter 899S at 16), the Forest Service itself identified landslide prone areas as a potentially significant issue and looked for ways to relocate roads or assure that risks identified by SINMAP were incorrectly predicted:

Since roads may be the big issue, should look at this carefully to see if can relocate roads out of these areas, or do more field work to support that what SINMAP predicted as LSP areas, are actually not.  
Project Record #253.

Interestingly, the Forest Service discovered that there were areas slated for temporary road construction that have a moderate probability of slope failures:

Groundwater seeps and saturated surface soils were also observed, particularly at the location DK-Chute 1 indicated in Figure 8. This area was also characterized by relatively immature plant growth. Based on these observations, this area is considered to represent a moderate hazard, i.e. the area exhibits a moderate probability of slope failure. . . . Not sure how we justify putting any roads on a landslide prone area. Usually we avoid these areas. Check with engineering to see if have any road standards and guides on this.  
Project Record #820.

But even though proposed temporary road locations include landslide prone areas, the USFS has not acted to relocate these roads. Instead, the Forest Service states that simply because landslides have not happened in the past, they cannot happen in the future.

Additionally, the 2008 draft Geologic Hazards and Soil Reports calculated that there were specific risks for landslide potential. The report calculated that there were 1.1 miles of road in Moderate Risk Landslide Prone Areas and 1.6 miles in High Risk Landslide Prone Areas for Alternative B:

A total of 2.7 miles of new temporary roads will traverse areas which were predicted to have moderate and high risk landslide potential... The construction of roads under Alternative B results in an inherently higher risk or potential for landslides than the No Action Alternative.  
Project Record #1734.

However, in the SEA, the miles of roads crossing medium or high risk landslide prone areas have been reduced to 0. It is unclear from the SEA why these concerns about road construction in landslide prone areas have suddenly been alleviated. Even if the Forest Service road surveys concluded that there was no evidence of historic landslides or recent landslide activity, this does not automatically remove the area from being designated "landslide prone."

The Forest Service further justifies allowing road construction in landslide prone areas by distinguishing between areas of landslide "hazard," where there is a possibility of a landslide occurring, from landslide "risk" in which the effects from such a landslide may cause harm to forest resources, public property or other socio-economic consequences:

Areas of moderate landslide hazard identified in the Activity Area do not constitute a risk, as they are far from populated areas and are located sufficiently distant from Grimes Creek that slope failures in these areas are unlikely to impact aquatic ecosystems.  
SEA, p. 91.

The Forest Service provides no modeling or data to support the assertion that slope failures are unlikely to impact aquatic ecosystems. Without this information, we are particularly concerned that road construction in landslide prone areas could result in significant levels of sediment reaching Grimes Creek or tributaries. In addition, even if the Forest Service is correct in assuming that debris could not reach Grimes Creek, the loss of vegetation could reduce the shading of either nearby tributaries or on Grimes Creek itself, leading to increased water temperatures and adverse environmental impacts.

A landslide could also impact Sacajawea's bitterroot, as suitable and occupied habitat is located on and near landslide prone areas that may be intersected with roads, but the SEA fails to evaluate this. In fact, the Project Record shows inconsistencies in the USFS's view of landslide risk in areas of Sacajawea's bitterroot habitat. *See* Project Record, Jan. 22, 2015 E-mail from R. Hayman to E. Vizgirdas et al. (recommending cutting the following language from the BE for rare plants: "Given the numerous roads, steep slopes, and the 2014 wildfire, the LESA PCA is likely to may [sic] be impacted by unstable slopes and landslides in the future.").

In response (Draft SDN/FONSI Attach. C at 179–80), the FS again defers to the post-decision checklist process, instead evaluating and avoiding potential impacts now. Landslide risks, their impacts, and feasible ways to avoid them need to be assessed before activities are authorized with public review, not on an ad hoc basis as BMP checklists are submitted by CuMoCo.

Furthermore, Forest Plan Standard SWST12 requires site specific or field verification of broad-scale analysis for landslide prone areas, and based on this verification, requires the Forest Service to design actions to avoid the potential for triggering landslides. The Forest Plan Consistency Documentation (Project Record #1271) for the CuMo Project says "management actions were designed to avoid the potential for triggering landslides (EA section 3.1.2)." How has the action been designed to avoid landslides in compliance with SWST12? It appears that CuMoCo would create an extensive network of new roads in landslide prone areas found by the USFS to be of moderate landslide hazard, and it does not appear that the project has been designed to avoid the risk of building this network of roads through these areas. In fact, the SEA (Section 3.1) does not indicate that landslide prone areas will be avoided; rather, the SEA analysis appears to acknowledge that there is a risk of triggering landslides. The SEA dismisses this risk based on the idea that the impacts would not be significant due to not being too close to populations or waters. The SEA does not, however, describe how the Project would avoid the potential for triggering landslides as required by SWST12.

## **F. Locating Roads, Drill Pads, Sumps and Other Structures, Support Facilities, and Waste Facilities in RCAs**

As stated in our previous comments (SEA Comment Letter 899S at 21–22), we note how Forest Plan standards MIST08 and MIST09 prohibit locating roads, drill pads, and other structures/facilities in Riparian Conservation Areas (RCAs) unless the USFS makes a determination that there is no alternative to doing so. We raise this point again here. The Supplemental EA still appears to allow CuMoCo to locate roads and drill pads in RCAs; however, the Forest Service has not made a determination that there was no alternative, which is inconsistent with the Forest Plan standards.

As described in our appeal of the 2010 Decision Notice, one of the most important Standards in the Boise Forest Plan concerns the protection of Riparian Conservation Areas (“RCAs”). *See* Appendix B of the Boise Forest Plan. As the EA discloses: “Numerous small ephemeral, intermittent and perennial tributaries of Grimes Creek dissect the Project Area.” *See* SEA, at 52.

RCAs are designed to help protect streams from increased sediment and temperature, both of which have been identified by the State of Idaho as pollutants. The width of RCAs vary depending on the type of stream (*e.g.*, forested vs. non-forested, perennial vs. intermittent). Based on the Forest Plan, the width of protected RCAs for the perennial reaches of Grimes Creek and its tributaries is 600 feet (300 feet on either side), and 300 feet (150 on either side) for intermittent streams. Boise Forest Plan at B-33.<sup>2</sup> The reach of Grimes Creek within the project area is listed by EPA and the State of Idaho as water-quality impaired under Section 303(d) of the Clean Water Act because of higher-than-standard water temperature; and 303(d) listed for sediment farther downstream.

In response (Draft SDN/FONSI Attach. C at 73), the USFS states that Section 2.3.10 of the SEA provides that the USFS would use the Checklist Supporting Approval of Proposed Temporary Road and Drill Pad construction/reconstruction found in Appendix C to ensure CuMoCo is complying with mitigation and monitoring requirements set forth in Sections 2.3.1 – 2.3.9; CuMoCo would be required to complete the checklist prior to implementing any ground disturbing activities that have been authorized under the approved PoO; and the checklist asks whether proposed roads or drill pads within RCAs and, if so, whether alternatives to locate the facility outside the RCA were considered to the maximum extent practicable.

As stated above, we have serious concerns about the USFS’s reliance on the checklist procedure in that it does not satisfy NEPA and places too much discretion in CuMoCo to proceed as desired. There is little, if any, discussion of how roads, drill pads, structures, etc., will be precluded from RCAs; nor is there discussion of alternatives for siting roads, drill pads, and other structures within the RCAs. These required analyses are left for some day in the future when CuMoCo submits a checklist to the FS for approval, a checklist that asks CuMoCo to consider alternatives instead of requiring the FS to make

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<sup>2</sup> The 600 and 300 foot RCA widths are subject to slight variation based on local conditions, such as amending the width based on tree-heights. Boise Forest Plan at B-33.

that determination. According to the Forest Plan, only when “no alternative exists” can the agency consider approving roads, structures, etc. in an RCA. Blindly trusting that CuMoCo will consider and appropriately discount all available alternatives is an abrogation of the USFS’s duty.

This whole checklist scheme is an approve first, study later issue that allows the project as a whole to avoid NEPA and Forest Plan requirements. More thorough, bigger picture planning at the beginning of this project, while leaving some room for CuMoCo’s desired flexibility, would enable the USFS to keep RCA incursions to the minimum necessary and minimize environmental impacts. For the FS to do almost no upfront planning to reduce RCA incursions and impacts is not reasonable and violates law and the Forest Plan. Since Alternative B still approves numerous roads, structures, support facilities, and stream crossings within various RCAs, *see* SEA map at 28, the USFS should provide more detailed analysis of potential impacts to RCAs in an EIS and through that analysis establish hard limits as to what CuMoCo may reasonably do in RCAs as the project progresses.

In response (Draft SDN/FONSI Attach. C at 74–75), the USFS again refers to the checklist process, and notes that the Responsible Official has authority to deny a request for a proposed drill pad or road locations if the effects would result in effects outside the range of the impacts analyzed in the SEA and identified in the Decision Notice.

Again, this response fails to address our concerns because it allows the FS to avoid NEPA duties to consider impacts now, and shows that the FS has not considered the full potential impacts of the proposal prior to approval.

As stated in our previous comments (SEA Comment Letter 899S at 26–27), the leading federal court decision dealing with RCAs and mining is Hells Canyon Pres. Council v. Haines, 2006 WL 2252554 (D. Or. 2006). 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. Here, the agency did not consider that it had to meet this Standard; and did not require the location of all roads outside the RCAs. At a minimum, the agency did not determine whether there was no alternative to locating each road within a RCA. This duty, while similar to the overall NEPA alternatives analysis for the entire Project, is much more rigorous, as it applies a duty on the agency to determine that absolutely no alternative exists to locating roads within RCAs. As it did in Hells Canyon, the Forest Service failed to meet these strict requirements.

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.

The situation is very similar in this case. Here, the EA admits that “lined mud pits” and other structures and support facilities will be located at most, if not all, of the over 200 drilling sites. However, there is no discussion about locating these structures/facilities

outside the RCAs. Further, and similar to the above discussion regarding roads, there is no analysis as to whether “no alternative exists” to locating these structures within a given RCA. As noted above, simply considering the “less roads” Alternative B does not come close to satisfying the strict requirements of Forest Plan Standard MIST08.

In response (Draft SDN/FONSI Attach. C at 76–77), the FS acknowledges that sumps/mud pits are support facilities for drill pads and are subject to MIST09, but simply says the sumps fall under the checklist requirements.

In addition, as stated in our previous comments (SEA Comment Letter 899S at 28), 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.*

None of these requirements have been met for the waste materials associated with the drilling operations approved here. There is no discussion in the SEA or DN/FONSI of placing these materials outside RCAs, nor any review of alternative locations for disposing of the waste from a given drilling site.

As stated in our previous comments (SEA Comment Letter 899S at 28), aside from the nature and effects of drilling materials themselves, there is no substantive discussion of the chemical and biological properties of the materials which are to be deposited in the “mud pits” or dumped back into the wells – all in violation of MIST09. At most, the SEA states that drilling fluids are non-toxic and biodegradable.

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 Project Record reveals that Forest Service staff recognized these issues, raising questions including:

This information needs to be part of the project record and an effects analysis to fisheries. Are these drilling additives toxic to fish? Is there a potential link with ground water and Grimes Creek, especially within the RCA?

Project Record # 2119. And:

My understanding of additives is that these products will be down the drill hole. I am uncertain of the depth of the drill holes and where ground water may be. Question is, would these additives (down the drill hole) reach fish or fish habitat via groundwater? If so, would there be an effect to fish

and/or fish habitat?

Project Record #1261. However, these questions are not answered, or even addressed in the SEA and DN/FONSI, showing that the Forest Service summarily rejected evaluating these impacts, in violation of NEPA and NFMA. In fact, Appendix H of the SEA admits that some amount of drill fluid is normally “lost” to surrounding aquifers during drilling operations. As such, we recommend that the Forest Service consider an alternative action reducing the number of incursions into RCAs.

In response (Draft SDN/FONSI Attach. C at 121), the USFS describes the drilling fluid (mud) as sodium bentonite, water, and “minor amounts of additives,” and says the Standard Drilling Procedures in SEA Appendix H minimize the potential for groundwater to mix. The USFS also points to SEA Section 3.2.2.2 as analyzing the effects to groundwater. The USFS also says implementation of the PoO with the BMP Checklist and that the agency’s monitoring will address these issues.

However, reviewing the SEA, the USFS still failed to undertake a detailed analysis of possible “additives” that concludes with a list of approved/disapproved products that CuMoCo may use. Additionally, the USFS has not done a detailed analysis of the likelihood of drill fluid mixing with groundwater and what the effects of such mixing would be to surrounding groundwater and Grimes Creek, instead simply noting that an experienced drill operator will know when loss/gain is occurring and can act accordingly. The USFS should include such an analysis and provide a list of drill fluid additives that will be allowed, as well as more detailed procedures for drill operators to follow to ensure a minimum interaction of groundwater and additives during drilling operations.

Also, the FS’s response fails to address our comment suggesting the USFS consider an action alternative that would reduce the number of potential RCA incursions.

### **G. Groundwater Hydrology**

We continue to have concerns that drilling around 250 drill holes from 1,500-3,000 feet deep may alter groundwater hydrology and have adverse impacts to water quality. Judge Lodge found the USFS had “not address[ed] concerns regarding the lack of baseline data, analysis, and monitoring of groundwater.” *Idaho Conservation League, et al., v. U.S. Forest Serv.* (1:11-cv-00341-EJL), Mem. Decision and Order (Aug. 29, 2012), pp. 35–36. Judge Lodge provided: “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 36.

As stated in our previous comments (SEA Comment Letter 899S at 39), Judge Lodge asked for not just an analysis of effects, but also a description of mitigation measures. The Forest Service needs to describe how impacts to groundwater would be mitigated if the design features do not function as anticipated and water quality or quantity is impacted. The Forest Service also needs to ensure that the water monitoring and

mitigation measures are enforceable if they form the basis for finding that impacts will be insignificant. In response (Draft SDN/FONSI Attach. C at 244), the USFS says only that mitigation measures included as part of the decision are enforceable.

This response fails to provide any analysis of efficacy of the mitigation measures. The USFS also fails to provide adequate support for its reliance on these mitigation measures, as mentioned throughout these objections. For example, if a drill operator does not respond appropriately to stop drill fluid loss into groundwater, the USFS identifies no impacts analysis in the SEA or enforcement mechanism that would ensure a similar mistake was not made again. The USFS should include explanations of both failed mitigation impacts analysis and concrete enforcement mechanisms.

Also, in our previous comments (SEA Comment Letter 899S at 39), we noted that while we appreciate the additional information added to the SEA regarding groundwater, we found the information to be inadequate. Primarily, we are concerned that no actual studies were conducted at the CuMo site to establish baseline conditions. *See, e.g.*, Project Record # 87 (including 2013 e-mail from Shaun Dykes clarifying that “CuMoCo has done no surface mapping at all on the property, we have checked some info that’s it”). This continues to be a problem in the SEA and Draft SDN/FONSI. The only data are from the “standpipe” in Drill Hole #12, and it appears that this standpipe may have only been sampled once. SEA, pp. 110–11. And the references to groundwater baseline is all very general and speculative. SEA pp. 109–111. The SEA must gather a sufficient baseline to comply with Judge Lodge’s order and NEPA.

Subsequent to the prior comment period, the USFS drafted the August 2014 “Working Guide: Evaluating Groundwater Resources for Mineral Exploration Drilling”. *See* Project Record. The stated purpose of the guide “is to enable field units to conduct adequate analyses of groundwater resources and potential effects to those resources using local expertise.” Working Guide, Preface. We are concerned that the USFS has failed to follow important parts of the Working Guide. For example, it states: “A description of the type of drilling proposed . . . , the drilling materials/fluids that will be used, and the anticipated location, number, depth, and spacing of drill holes is essential for understanding the potential effects on groundwater.” Working Guide, p. 2. It does not appear that SEA or any of its supporting documents identify the anticipated location and spacing of drill holes. The Working Guide also notes that seeps and springs mapping should be used to explain groundwater depths; that past drill logs likely miss information regarding vertical aquifers; that fractured rock settings may have flow systems that are quite complex; and that inventories of springs and wetlands and gaining and losing reaches of streams are useful. Working Guide, pp. 3–7. Based on these ideas, it does not appear that the groundwater baseline in the SEA is supported by sufficient information.

The Working Guide Appendix B presents BMPs for exploration drilling, including: selecting drill hole abandonment procedures based on specific hydrogeologic information; preventing spills by having a spill kit at each drill rig and putting preventative measures in place to address effects on and beyond the edge of the pad; casing and sealing bore holes; mechanisms to address drilling fluid loss; mechanisms to

address artesian flow; sealing drill holes; using abandonment materials; capping drill cuttings to dispose of them; and pre-collaring holes drilled in areas where artesian aquifers are known to exist. The USFS must ensure the BMPs for the CuMo Project comply with these recommendations.

We are also concerned about the potential to encounter seeps and springs when drilling, and the impact this may have on groundwater and surface water, which has not been adequately assessed in the SEA. We note that the Idaho Department of Environmental Quality expressed some concerns about exploratory drilling:

While the [Ground Water Quality Rule] GWQR does not legally require ground water monitoring for the exploration phase of the CuMo Mine project, DEQ remains concerned about the potential risks the exploratory drilling poses to groundwater. CuMoCo would prepare a Quality Assurance Project Plan (QAPP) and Ground Water Sampling Plan p. 7

One of the sources for these concerns is a Preliminary Site Assessment Report for the Enterprise Mine Group, which is adjacent to the project area:

Although no wells were sampled, IDEQ did collect a sample from the adit seep and surface water samples from the creek in Charlotte Gulch. The seep water exceeded IDEQ's Drinking Water Standard and Ground Water Standard for cadmium and lead, though downstream samples did not show elevated levels of these metals.

The level of arsenic in all of the soil sample locations poses an excess cancer risk and a hazard for all residential receptors and a moderate risk for non-residential receptors. All of the soil/sediments samples showed elevated arsenic, cadmium at mill site, and lead concentration, particularly at the former millsite. Seepage from the lower adit contained elevated lead and zinc concentrations, though down gradient surface water samples indicate that the heavy metal constituent levels were below the permissible limit.

[https://www.deq.idaho.gov/media/553987-\\_newinternet\\_waste\\_data\\_reports\\_mining\\_waste\\_enterprise\\_group\\_pa\\_1208.pdf](https://www.deq.idaho.gov/media/553987-_newinternet_waste_data_reports_mining_waste_enterprise_group_pa_1208.pdf)

In an effort to address these concerns, the SEA contains a Quality Assurance Project Plan and Ground Water Sampling Plan. The purpose is described below:

CuMoCo would prepare a Quality Assurance Project Plan (QAPP) and Ground Water Sampling Plan. The objective of the QAPP would be: 1) to increase the knowledge of ground water chemistry in the Project Area; 2) to provide knowledge of natural variability in ground water geochemistry as a function of seasonal and meteoric conditions; and 3)

provide knowledge of potential impacts of diamond core drilling activities to ground water.

The initial groundwater monitoring locations include local streams and creeks like Charlotte Gulch and Grimes Creek, and various springs and seeps around the mountain. Samples would be collected before, during and after drilling operations.

This Plan fails identify the sampling locations ahead of time and fails to establish baseline conditions during different times of the year. The Plan says that because this is a “results driven” Project, that it is no feasible to identify sampling locations ahead of time:

Because a final decision on the locations and sequence of drilling has not been made, the locations of seeps and springs have not been identified at this time. The intent is to first determine which drill pads will be used during the field season, and subsequently determine from which springs, seeps and/or streams it would be appropriate to sample. Once the EA is complete, CuMoCo will begin preparation for field work including finalization of drilling locations. Once this is done we will be able to identify the locations of appropriate sampling locations...

Whether the sampling location is a seep, spring, or stream will depend on which, if any, of these hydrologic features exist in the drainage proximal to the drilling activity...

If flowing seeps and/or springs cannot be readily found in the vicinity of active drilling activities, no samples will be collected in the respective area.

Quality Assurance Project Plan, p. 11

The groundwater monitoring locations include Charlotte Creek, Grimes Creek and Mohawk Creek, with the assumption that these are gaining reaches fed by groundwater. However, there have not yet been surveys for seeps or springs that would be useful for monitoring purposes. In fact, the USFS does not appear to have any idea of how many springs or seeps there may be in the project area or where they are located.

Instead, the QAPP simply provides that once an individual drilling area has been located, CuMoCo will choose an appropriate number of springs and seeps to sample. This precludes the public from reviewing the monitoring program, and prevents the USFS from adequately evaluating and minimizing impacts from this Project. Furthermore, there are no assurances that baseline monitoring will capture a reasonable range of seasonal and meteoric conditions, meaning the baseline conditions may miss significant seasonal fluctuations in surface water or groundwater. Regarding the timing for sampling, the CuMo groundwater plan only mentions that samples will be taken “before, during and after drilling activities,” but does not provide any guidance regarding this time

period.

We note that the Kilgore North Exploratory Mining Project on the Caribou-Targhee National Forest made an effort to identify all springs and seeps in advance and included these in the draft Environmental Assessment for public review. In fact, they even added an additional sampling point following the objection period for that project. Furthermore, the company already has samples from 2012 and 2013 and will collect samples monthly during the operating season and for one year following completion of drilling activities. In addition, the company also agreed to monitor the quality of water produced by drilling activities. See Appendix E, Water Quality Monitoring Plan available at [http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/94028\\_FSPLT3\\_2408066.pdf](http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/94028_FSPLT3_2408066.pdf); and [http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/94028\\_FSPLT3\\_2408067.pdf](http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/94028_FSPLT3_2408067.pdf).

Without a sufficient baseline of groundwater conditions, as well as prior identification and monitoring of seeps and springs throughout the Project Area, the USFS has failed to take a hard look potential impacts, cannot support its conclusions about groundwater impacts, and has not taken measures minimize impacts.

## **H. Other Water Quality Issues**

Our previous comments (SEA Comment Letter 899s at 18, 19, 20, 21) raised numerous water quality concerns, some of which remain unaddressed in the SEA and Draft SDN/FONSI.

We remain concerned about sedimentation caused by CuMoCo's heavy use of the vehicle access routes. First, the SEA admits that baseline sedimentation is unknown: "Currently an undetermined amount of sediment generated from these access/haul routes reaches nearby creeks and rivers." SEA, p. 121. The SEA does not explain why this amount of sedimentation cannot be determined. Second, the SEA then claims CuMoCo's use of the access routes "would not change the most important factors that generate road surface erosion, thus the amount of sediment generated from these roads is not expected to [cause a] measureable change." SEA, p. 121. This analysis fails to account for the fact that vehicle use is an important factor in sediment generation. CuMoCo would make around 1,000 fuel haul trips per year, plus even more other vehicle trips. The USFS must assess the increased sedimentation caused by this additional vehicle traffic. CuMoCo traffic may be much higher traffic than baseline levels, and CuMoCo appears to be authorized to access the site even during wet and muddy conditions when road damage and sedimentation can be substantially increased. The analysis in the SEA also fails to recognize that road maintenance itself can be a significant factor in generating sediment. Without assessing these impacts, the SEA fails to adequately consider sediment impacts to water quality, bull trout, and other aquatic life.

We also remain concerned about sediment generated by road construction and exploratory drilling by CuMoCo at the Project site. The SEA relies heavily on BMPs to

assert sediment will not be a problem and assumes 90 percent BMP effectiveness. However, e-mails in the Project Record indicate multiple instances during just the first year of operations for this Project showing that controlling water and sediment has been difficult at this site. *See* Previous Comments, pp. 19–20. *See also, e.g.*, Project Record Nov. 8, 2011 E-mail from B. Campbell to R. Esperance et al. (regarding “severe violation of current Plan of Operations” saying “Implications of the violation have potential to be far-reaching and damaging” and “must be addressed immediately.”). In response, the USFS says that CuMoCo worked with the Forest Service to address these types of issues. While we appreciate that the USFS and CuMoCo have apparently been able to resolve each problem that has come up, it does not mean that these types of issues will not continue to happen, nor does it mean they did not cause a substantial amount of sedimentation. The SEA, thus, should include more robust reevaluation of sediment and turbidity impacts.

We also remained concerned about water quality impacts related to nearby historic mining properties. *See* Previous Comments, p. 31. While the SEA now includes additional water quality samples taken in 2012, the SEA fails to disclose information about this sampling. It is not clear when the samples were taken during the season and under what conditions. DEQ reports on the old mining sites indicate that contaminated adit discharges and seepage appear to vary dramatically depending on flow, which varies by season and weather. So while we appreciate the 2012 water quality samples, the results and the conclusions the Forest Service draws from them may have little value.

Finally, it is unclear from the SEA and Project Record what the status is of required Clean Water permits and related approvals. It appears that CuMoCo has had a Construction General Permit as well as a Multi Sector General Permit for the discharge of industrial stormwater, and corresponding 401 Certifications from DEQ. It does not appear that there is a current 401 Certification covering the Project, and it is not clear what current coverages CuMoCo does have.

## **I. Water Use & Rights**

As stated in our previous comments (SEA Comment Letter 899S at 37–38), insufficient information is included about 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 USFS should examine alternate water sources that have fewer environmental effects; and we are concerned that diversions from Grimes Creek and Charlotte Gulch will have adverse impacts on local fish populations, potentially including bull trout.

Also, the SEA states that water sources will meet State water quality standards. Regular water quality monitoring is needed to ensure that these standards will be maintained.

CuMoCo is authorized to utilize water from Drill Hole #12, Charlotte Gulch, and Grimes Creek, but the Forest Service does not disclose which water source will be used when. 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.

In response (Draft SDN/FONSI Attach. C at 193, 251), the USFS describes the Rental Agreement CuMoCo entered into with IDWR, which is in the Project Record, and mentions some terms and conditions of that agreement. According to the USFS, the Agreement has a maximum diversion rate of 0.67 CFS. The USFS claims that because of the design features and conditions from the State, there “would not be any adverse effects to fish and aquatic resources in Grimes Creek.”

However, the Rental Agreement expires at the end of 2016, and the conditions on water use are aimed at ensuring CuMoCo does not injure the rights of other water users—not to minimize adverse impacts to bull trout and other aquatic resources. Therefore, the USFS should undertake a thorough assessment of potential impacts of water diversion to aquatic species and ecosystems both in the Project Area and downstream, instead of relying on the terms and conditions in the temporary Rental Agreement.

Also in response (Draft SDN/FONSI Attach. C at 186–87), the USFS says that, per the Rental Agreement with IDWR, and because of the Project is result driven, the USFS does not know where and when each water source will be used. The USFS also says the State may terminate the diversion of water, if it determines supply is insufficient for priority, and that CuMoCo would use a measuring device and lock. The USFS further says that CuMoCo has agreed to voluntarily monitor groundwater (SEA Section 2.3.8) and that the USFS would “evaluate the resulting impacts to determine if they would be within the range of the impacts analyzed in the SEA.”

This response is inadequate because the terms of the rental agreement may ensure water rights are not violated, but they do not ensure environmental impacts are minimized, nor do they excuse the USFS from evaluating the potential impacts. Without knowing where and when the water may be withdrawn means the impacts may be significant, and the USFS seems to acknowledge this when it says it will review the voluntary monitoring in the future. While we support CuMoCo’s voluntarily post-approval monitoring, that monitoring is no substitute for the USFS’s obligations to assess and minimize impacts pre-approval.

## **J. Water pumping from Grimes Creek**

As stated in our previous comments (SEA Comment Letter 899S at 38), we are 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 in the SEA and confirmed by a Forest Service fisheries biologist to avoid siting 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 response (Draft SDN/FONSI Attach. C at 226–27), the USFS references measures to reduce the risk of and respond to spills in SEA Sections 2.1.1 and 2.1.2 and the SPCC and says that the risk of water contamination would be minimized. The USFS also notes that under the BMP Checklist the USFS would field verify potential hazards of road and pad construction.

This response fails to address our concern about disclosing the location of water pumping stations and having sites reviewed to avoid siting in sensitive areas. Since the water pump is not tied spatially to drill pads the way other equipment is, there is no reason why CuMoCo cannot disclose the sites where these pumps will be used while also maintaining the flexibility needed to achieve project needs. We also express, again, our concern with the USFS's reliance on the post-approval checklist procedure as the primary means of ensuring that CuMoCo follows BMPs and that the USFS is aware of potential hazards and impacts.

Also, the SPCC relied on by the FS does not sufficiently address our concerns regarding water pumps located adjacent to Grimes Creek. The SPCC notes the potential for discharges from a water pump but is unable to identify two of the four qualities of such a discharge (direction of flow and rate of flow). SPCC at 20. The SPCC simply states that “[t]he pump will be contained within a constructed berm to contain an accidental release.” *Id.* Additionally, the SPCC does not specifically include inspection of these water pumps in the Monthly Checklist. SPCC at App. C. The USFS must identify appropriate site-specific mitigation measures to ensure impacts from a potential spill are minimized.

#### **K. Bull trout**

As stated in our previous comments (SEA Comment Letter 899S at 35–36), we have concerns that the USFS has failed to appropriately assess impacts to bull trout and provide sufficient mitigation measure to reduce potential impacts. Some bull trout concerns these concerns have already been raised above.

In the last several years, Trout Unlimited, private property owners, and hundreds of volunteers have been doing extensive stream restoration work in the area between New Centerville and Centerville and has reconnected approximately 2 miles of habitat that may have served as a thermal barrier to bull trout. It is possible that bull trout have utilized these improved conditions and occupy Grimes or Charlotte Creek:

While bull trout are thought to be particularly sensitive to environmental change, their dispersal capabilities afford them the opportunity to potentially re-colonize these disturbed streams once conditions become suitable.... Bull trout have the capability to colonize all tributaries of the subbasin that do not contain impassable barriers.

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

In response (Draft SDN/FONSI Attach. C at 193), the USFS says habitat conditions below Centerville as well as in the headwaters of Grimes Creek are “deficient” and that stream temperatures within the bull trout patch are “below desired conditions” and concludes that this coupled with high densities of non-native brook trout “indicate there is a low probability of bull trout repopulating the subwatershed.”

This fails to consider the potential progress being made by these restoration efforts. Furthermore, as the Revised BA notes, bull trout eDNA was discovered in Grimes Creek in 2014. BA, p. 69. We are concerned that the USFS would approve this Project without yet understanding the extent and significance of bull trout in the Grimes Creek drainage in light of the recent eDNA discovery. The Revised BA acknowledges the presence of bull trout eDNA in Grimes Creek, but says that further investigation is needed to see if there is a reproducing populations. Since this discovery, the USFS has not revised the mitigation measures or checklist procedures that supposedly ensure this project is not likely to adversely affect the species or individuals. Based on this new information, the USFS should reassess the potential impacts to bull trout from increased sedimentation by new roads and stream crossing and use of existing vehicle access routes, and reassess potential increases in water temperature from decreased shade along tributaries to Grimes Creek.

## **L. Wildlife**

### **1. Game Animals**

As stated in our previous comments (SEA Comment Letter 899S at 32), analysis of impacts to wildlife should take into account increased vehicle collisions with mule deer, elk, amphibians, and other wildlife. Hunting Unit 39 is one of the most popular hunting units in Idaho. Hunting and fishing revenues in Idaho top \$540 million dollars annually and are an important economic driver for local communities. We are concerned about loss of these opportunities as a result of permitted or unpermitted activities.

In response (Draft SDN/FONSI Attach. C at 138–39), the USFS points to SEA Section 3.4, as well as the Wildlife Report and Biological Assessment in the Project Record, as documenting impacts to special status species. The USFS also says that for big game, deer, and elk, direct mortality is not anticipated due to the slow moving nature of the equipment and because, for the fuel transport routes, vehicles already use these roads and game species already avoid the area. The USFS also says that the Project Area comprises 0.2 percent of IDFG Big Game Unit 39, that most open roads would remain open, and that foot or horseback travel would remain possible within the Project Area but that hunters would need to avoid active exploration sites.

This response fails to consider baseline traffic levels compared to increased traffic levels caused by the CuMo Project, which may be significant and have not been disclosed.

The SEA also fails to properly account for impacts from disturbance caused by noise, lights, and activity associated with 24/7 drilling. Furthermore, it fails to consider the cumulative effects on wildlife due to the longterm disturbance produced by the undefined extensive time line of the mining project's exploration. It is long established that increases in road building and the noise level from human activities affect the security of elk populations. While the geographical area of Unit 39 is expansive and the current estimate of the exploratory phase of the project is to comprise 0.2 percent of the hunting unit, to date the actual impacts that can affect wildlife and the respective habitat remains unknown.

The ten plus year study of deer and elk in Unit 39 conducted by the Idaho Department of Fish and Game can likely provide useful information to drawn upon for developing the most accurate biological assessment and overview of probable impacts on wildlife populations living in the unit. While Idaho Department of Fish & Game concludes that Alternative B plan has fewer roads than Alternative A, and fewer roads could result in fewer disturbances to wildlife and respective habitat and waterways, specific mitigation goals and monitoring activities requests were made pertaining to the reclamation process. IDFG, Cumo Exploratory Project Draft EA Letter August 30, 2010. The mitigation goals include prospective recovery of habitat from building new roads through revegetation, protecting sensitive species, and negating the potential side effects of invasion weed species, or any increase of sediment delivery to waterways due to roadway disturbance. A basic mitigation goal for example could provide consistent oversight and routine assessment of habitat restoration through revegetation. The seedlings resurgence rate is measured over specific intervals of time and contingency plans for any delayed resurgence of vegetation efforts are ready and in place to be implemented. These types of mitigation goals require incremental planning and far sightedness which is a particular concern as the mining project has been defined as "results driven."

## 2. Great Grey Owl & Northern Goshawk

As stated in our previous comments (SEA Comment Letter 899S at 32), we appreciate the use of a buffer surrounding identified northern goshawk and great gray owl nests, but the 150' radius does not seem sufficient. We point out that the Golden Meadows Project on the Payette National Forest is utilizing a ¼ mile buffer around all raptor nests with no project activity allowed until fledglings have left the nest,<sup>3</sup> making the 150' buffer for the CuMo Project appear arbitrary and capricious. The analysis for the Golden Meadows project represents new information on this issue, thus the Forest Service has to revisit this analysis in more detail.

In addition to increasing this buffer, the Forest Service should consider seasonal restrictions and phasing the development in a way that avoids impacts entirely. Given the large area of the project and multiple roads, this mitigation measure is practicable.

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

In response (Draft SDN/FONSI Attach. C at 191–92), the FS says that the SEA has been updated to clarify how the buffer would be delineated and that the intent of the buffer is to prevent impacts to forest structure and components immediately surrounding the nest tree. The FS acknowledges that individual goshawk and great grey owl may be impacted by direct habitat modifications and disturbance, but says that this will not contribute toward listing or cause a loss of viability and that the buffer is consistent with Forest Plan direction WIST03. Also in response (Draft SDN/FONSI Attach. C at 139), the FS references SEA Section 3.4, the Wildlife Report, and the BA, and points to SEA Sections 2.1.1, 2.1.2, and 2.3.3 regarding operations, mitigation, and monitoring.

These responses fail to explain why CuMoCo cannot utilize a quarter-mile buffer until all fledglings have left the nest. Seeing as the Payette National Forest has determined this to be an appropriate buffer, it should be considered as an alternative that would minimize impacts to these important species. This lack of sufficient mitigation is not consistent with WIST03, which requires the USFS to: “Mitigate management actions within known nesting or denning sites of sensitive species if those actions would disrupt the reproductive success of those sites during the nesting or denning period. Mitigation measures shall be determined during project planning.” The USFS should consider other alternatives that may actually avoid or further minimize these risks.

This is particularly important with respect to Northern goshawk. While the on-site monitoring has not located goshawk nests, Project Record documents show that it is believed that goshawk have been nesting in or adjacent to the Project area (based on the regular goshawk sitings that have occurred), and that while the surveys have identified goshawk in the area, the surveys are not designed to locate adjacent nests. *See* Project Record, Mar. 30, 2012 E-mail from M. Feiger to R. Hayman (noting five years of consecutive goshawk sitings in the area, mentioning a “mystery nest”, and stating that the USFS is currently just “band-aiding” the situation by doing the annual surveys). Additional or revised monitoring to geared toward locating nests, not just species presence, in areas impacted by the Project need to be incorporated.

As stated in our previous comments (SEA Comment Letter 899S at 33-34), regarding great gray owls and goshawks, both species have been documented during the 2011 and 2012 monitoring work. But in the SEA, the USFS maintains that documented presence of these species does not change the analysis. The USFS should incorporate Northern goshawk and great gray owl surveys, effects of project activities on wildlife behavior and efficacy of measures to minimize and mitigate impacts in a Supplemental Information Report.

We recommend that the monitoring protocol be expanded to a reasonable distance beyond the project area to better identify an active goshawk nest in an unknown location adjacent to the project area as suggested by USFS staff:

Given the concerns and possible conflicts timing wise associated with the northern goshawk habitat (occupied) and the location of the still mystery nest, I’d offer this up for consideration.... As we are currently functioning, we are

essentially band-aiding that issue with the annual surveys, essentially surveying to, as best we can, assure absence in potential nesting habitat in the project area. We functionally have 5 years of consecutive sightings information within or adjacent to the CuMo project area. either within, or adjacent to the project area, there is a nest that is producing offspring.

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

Email from Michael Feiger to Randy Hayman, Subject LH-2011-098 –ROC Kyle Fend, Friday, March 30, 2012.

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

The USFS should address this surveying problem, and develop appropriate mitigation measures, before allowing the Project to proceed in order to comply with Forest Plan Standard WIST03, which requires actions within known nesting or denning sites of sensitive species that would disrupt reproductive success to be mitigated. Furthermore, WIST05 requires that in goshawk territories with known active nest stands, the USFS identify alternate and replacement nest stands.

### 3. Wolverine

As stated in our previous comments (SEA Comment Letter 899S at 35), we appreciate the Supplemental Information Report regarding wolverines and the additional monitoring requirements and adaptive management trigger. Wolverines have been reported near the project area. Although wolverines are extremely wide-ranging, some additional BMPs would help reduce negative impacts. These measures could include shortening the seasons of operation and clumping drilling operations in certain areas as opposed to spreading them throughout the project area.

In response (Draft SDN/FONSI Attach. C at 140–41), the USFS says that it updated both the SEA and an Addendum to the 2011 Wildlife Report to reflect wolverine’s status as sensitive species and says that SEA Section 3.5.2.2.3 analyzed the direct, indirect, and cumulative effects to wolverine, finding the Project may impact individuals but is not likely to contribute toward federal listing or cause a loss of viability. The USFS also says that shortening the season of operation and modifying the operations would not meet the purpose and need for the action and would not substantially alter the impacts to wolverine and wolverine habitat.

This response is inadequate. We do not see how shortening the season or modifying operations would not meet the need of the Project, and the USFS provides no reasoning as to its conclusion. These measures would reduce impacts, which the USFS has a duty to minimize. The USFS is incorrect in claiming it need only consider changes that would “substantially alter the impacts” to this sensitive species.

#### 4. Wolves

As stated in our previous comments (SEA Comment Letter 899S at 35), wolves were relisted under the Endangered Species Act and are under the management jurisdiction of the US Fish and Wildlife Service, and under Section 9, the USFS must complete formal consultation with the USFWS to determine that there are no significant impacts to wolf populations in the area.

In response (Draft SDN/FONSI Attach. C at 141), the USFS says that the SEA was updated to identify the change in status of grey wolf to a sensitive species and points to the SEA Section 3.4, the Wildlife Specialist Report, and the Biological Assessment as supporting the finding that the Project may impact individuals but is not likely to contribute toward listing or loss of viability.

While we recognize this response and the fact that the gray wolf is no longer federally protected in Idaho, we note that the SEA fails to apply the appropriate standard for impacts to this important species. The SEA states that either Alternative would “not be likely to jeopardize the continued existence” of gray wolves. SEA at 214. Instead the USFS should have applied the “not likely to contribute to a trend toward federal listing or cause a loss of viability to the population or species.” The USFS needs to clarify its conclusion as to impacts to gray wolves in the project area.

#### 5. Wildlife Alternative or Additional Design Features to Mitigate Impacts

Additionally, the USFS should develop an alternative, or impose additional project design features, aimed at addressing impacts to wildlife. In response (Draft SDN/FONSI Attach. C at 113), the USFS points to SEA Section 3.4 and documents in the Project Record (the Wildlife Report and the Biological Assessment), and says these document the impacts to special status species and other important species identified as having or potentially having habitat within the Analysis Area, and says effects and impacts would “generally be temporary to short-term, and/or small in scope.” The USFS also says

Terrestrial and Avian Wildlife was identified as a preliminary issue that would be addressed in the effects analysis, rather than as a major issue, so no wildlife alternative was developed.

There are however viable alternatives, and feasible procedures, that can be employed to better address wildlife issues, some of which were already discussed above. The USFS fails to provide any rationale for its determination that impacts to special status species were not major issues warranting consideration of alternatives.

As stated in our previous comments (SEA Comment Letter 899S at 40), we are concerned about the noise from drilling operations on wildlife. The Forest Service needs to describe the volume (decibels) and regularity of noise from drilling and transportation activities and analyze how visitors and wildlife will be affected. Alternatives and design features 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 incorporates both mufflers on equipment and sound-dampening pads around drill rigs.

As stated in our previous comments (SEA Comment Letter 899S at 36), regarding additional alternatives, as the Forest Service proceeds with the analysis, we believe that reducing the number of drill rigs from 4 to 2 will help ameliorate 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.

In response (Draft SDN/FONSI Attach. C at 112), the FS explains why it developed Alternative B, and says that because Alternative B would reduce certain impacts, it was determined that there was no need to develop additional alternatives.

This response fails to explain why scaling back the number of drill rigs, or other similar alternatives, are not reasonable and should not be included to address major wildlife issues. Many concerns with the Project relate to disturbance effects from traffic, light, noise, and other impacts related to the amount of drilling activity occurring. The FS should include an appropriate analysis of alternatives that reduce a broader range of impacts.

Furthermore, as stated in our previous comments (SEA Comment Letter 899S at 33), drill pads can have a disproportionate effect on the environment compared to access roads. These negative effects are particularly relevant to wildlife. While drill pads are typically 60' long by 25' wide and are constructed within the roadway, drill pads are generally wider than the roads and have a disproportionate impact on environment (soils, wildlife, recreation) compared to roads. 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. The large amount of equipment stored on site and foot traffic increases soil compaction. These factors are much 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 disruptions around the clock.

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. Furthermore, the EA does not contain maps showing the different locations of drill pads in each alternative. The distribution of drill pads across the landscape needs to be factored in to 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. Such an alternative would better address the series of relevant wildlife issues raised in section 1.9 of the SEA. This discrepancy needs to be addressed.

In response (Draft SDN/FONSI Attach. C at 166–67), the USFS simply points to multiple sections of the SEA describing the project. This response fails to respond to our contention that the way the USFS compared Alternatives A and B, by focusing primarily just on the difference in road lengths, failed to take a hard look at the two alternatives and failed to develop appropriate alternatives to address other major resource concerns like impacts to wildlife. While road miles are reduced under Alternative A, the total area affected by drilling increases under Alternative B, which may have a larger impact on wildlife due to the disturbances associated with constructing drill pads and operating drill rigs 24/7.

Specifically responding to drill pad impacts (Draft SDN/FONSI Attach. C at 82), the USFS again says road and drill pad locations are unknown because the Project is “result driven”. The USFS also points to SEA Section 3.4 and says wildlife impacts are documented and found to “generally be temporary to short-term, and/or small in scope,” and claims without explanation that shortening the operating season or modifying the distribution of drilling operations would not meet the purpose and need for the action and would not substantially alter the impacts to elk and mule deer. Draft SDN/FONSI Attach. C at 82. The USFS has not explained why shortening the season and/or modifying the distribution of drilling would not meet the purpose and need of the Project. In fact, it may be easier for CuMoCo to concentrate drilling in smaller areas as this would allow for more efficient resource allocation across multiple operational drills.

### **M. Additional Alternatives**

The Forest Service inappropriately failed to analyze several additional viable alternatives. In particular, the USFS arbitrarily concluded that the only major issue that warranted a review of alternatives was road length. As pointed out above, impacts from increased drill pads in Alternative B are actually likely to increase in some respects. The USFS

should include an assessment of additional alternatives that could reduce impacts to wildlife, Sacajawea's bitterroot, RCAs, and others, as already discussed in sections above. There are other viable alternatives for other major issues to.

For example, as stated in our previous comments (SEA Comment Letter 899S at 36), in dismissing an alternative for full concurrent reclamation, the USFS has not provided a satisfactory response as to why this is not a viable alternative. 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 unenforceable and is no longer consistent with best management practices. Timelines for reclaiming temporary roads should be enforceable.

#### **N. Noxious weeds**

As stated in our previous comments (SEA Comment Letter 899S at 40), the USFS proposes washing construction equipment, but does not include passenger vehicles that regularly travel between the construction site and residences. It is these vehicles that have the greatest potential to spread weeds. In particular, large outbreaks of rush skeletonweed are occurring in the Garden Valley area. And the presence of noxious weeds along each transportation route needs to be factored in when selecting routes. Also, to reduce noxious weed expansion, all vehicles and equipment should be cleaned before entering the site. 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, CuMoCo should be required to control or eliminate all noxious weeds along the access roads.

In response (Draft SDN/FONSI Attach. C at 206), the USFS acknowledges scattered instances of rush skeletonweed were observed along CR 382 and NFS road 382C in and out of the Project Area and says that CuMoCo is to notify their engineer consultant if noxious weeds are observed in the Project Area who would then notify the District Weed Specialist. The USFS also points to mitigation measures regarding noxious weeds in SEA Section 2.3.5. Additionally, the USFS points to mitigation measures in SEA Section 2.3.5 and in CuMoCo's FPM in the Project Record, and says that the USFS "would analyze potential impacts to weeds when evaluating potential transportation routes."

These responses fails to address all of our specific concerns. Baseline weed conditions along each transportation route should be gathered now and used to evaluate impacts of different routes as well as to develop appropriate practices to avoid impacts. And washing all vehicles, as well as boots and shoes, should be considered or required.

#### **O. Operating Season**

As stated in our previous comments (SEA Comment Letter 899S at 41), we think the USFS 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, CuMoCo 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.

In response (Draft SDN/FONSI Attach. C at 143), the USFS refers to SEA Sections 2.1.1, 2.1.2, and 2.3 and says that the operating season would be approximately April 15 – December 15 with USFS review of special circumstances. The USFS also references mitigation and monitoring measures, including BMPs to help minimize erosion and sediment transport.

Considering the danger associated with transporting 100 gallons of diesel fuel along steep windy road in snowy conditions, the USFS has failed to alleviate our concerns by simple restating the approximate season of operations. The USFS needs to establish thresholds for snow cover, muddy roads, and other conditions that would require CuMoCo to cease operations and/or fuel haul at the end of the season, and to delay operations at the beginning of the season. Since the USFS relies on the Fuel Transport Memo’s assertion that accidents are unlikely, and therefore such transports do not need serious consideration, the USFS must ensure safe driving conditions during active operations for public safety and protection of forest resources. Other nearby mining exploration projects are being developed to have variable operation dates, due to seasonal conditions, such as the Midas Gold and Golden Hand projects on the Payette National Forest. Also, the USFS should set these thresholds to ensure that appropriate mitigation measures are completed before winter conditions potentially make such “winterizing” impracticable.

#### **P. Cumulative effects**

As stated in our previous comments (SEA Comment Letter 899S at 43), it is unclear if the USFS has recently updated its cumulative impacts analysis for past, ongoing or anticipated future activities. In response (Draft SDN/FONSI Attach. C at 199), the USFS says that it is not aware of any new actions since February 2011, except the Grimes Fire, that would need to be included in the cumulative effects analysis. The USFS says the SEA has been revised to include the August 2014 Grimes Fire in the cumulative effects analysis for Sacajawea’s bitterroot, Canada lynx, great grey owl, flammulated owl, and northern goshawk in Sections 3.3 and 3.4.

The USFS must disclose what work CuMoCo has done on both national forest and private property over the last few years, particularly what activities have occurred between the 2010 EA and now. But it does not appear that the SEA fully discloses these activities or evaluates the impacts of CuMo Project when added to these activities.

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 and must provide a quantified estimate of cumulative impacts.

### **Q. Mitigation & Need for EIS**

As stated in our previous comments (SEA Comment Letter 899S at 43–44), it is unclear if the USFS is relying on the proposed mitigation measures to avoid significant environmental impacts and thus an Environmental Impact Statement. In order for a mitigated FONSI to be considered, the proposed mitigation measures must be enforceable, which these do not appear to be.

If the Forest Service is relying on the suite of proposed mitigation measures in order to make a finding of no significant impact, it is plausible that without these mitigation measures, there may be a significant impact requiring an EIS. Even if these mitigation measures are enforceable, they need to be effective at preventing the potentially significant impacts they aim to avoid. For example, best management practices to protect water quality during culvert removal and RCA bridge construction (see Pat Trainor Daily Diary in the project record), were either ineffective or were not properly implemented. The Forest Service clearly needs to describe the degree of impacts if mitigation measures are ineffective or improperly applied and conduct an Environmental Impact Statement if needed.

In response (Draft SDN/FONSI Attach. C at 20), the USFS points to other responses regarding the culvert removal action, the purpose of the SIR, and BMP effectiveness, and says the Responsible Official will decide whether the implementation of the selected alternative would not result in significant environmental impacts.

As stated in our previous comments (SEA Comment Letter 899S at 44), due to lack of enforceability regarding reclamation efforts, we believe the current Plan of Operations is flawed and should be rejected. Also, an Environmental Assessment does not provide the in-depth analysis that is warranted for such a lengthy and large disturbance as proposed. In response (Draft SDN/FONSI Attach. C at 84–85), the FS says “anticipated” reclamation requirements would be an integral part of any approvals associated with the PoO and that reclamation measures identified in the NEPA process would be incorporated into the PoO. This response fails to address our primary concerns that mitigation and reclamation is not clearly enforceable, and that the length and scope of this project makes it inappropriate for an EA.

Furthermore, in approving this results driven project, the USFS admits that depending on where roads, drill pads, and sumps are located, there may indeed be significant impacts. Repeatedly in response to comments, the USFS says it will use the BMP Checklist and monitor project implementation to see if the project remains within the disclosed impacts. But instead of preparing an EIS, the USFS is segmenting the project, saying they intend to let CuMoCo proceed until impacts do become significant (at which point the FONSI is

no longer accurate). The USFS is improperly assuming that the checklist process does in fact prevent or mitigate potentially significant impacts, when it does not.. Under the worse case scenario, CuMoCo may need to locate many roads, drill pads, and sumps in RCAs, in Sacajawea's bitterroot habitat, in landslide prone areas, and near seeps and springs, which would result in significant impacts. Nothing in the USFS decision forecloses this possibility. A more tailored exploration project with hard limits on these activities may indeed have insignificant impacts, but the SEA and SDN/FONSI give CuMoCo the flexibility to ultimately locate many roads and drill pads in these sensitive locations.

The SEA, Project Record, and other available information disclose that the CuMo Exploration Project is a major federal action which may have significant impacts on the human environment; therefore, the FS must prepare a full EIS in order to comply with its duties under NEPA.

## V. CONCLUSION

In conclusion, as detailed above and in the previous comments submitted by all Objectors, the SEA and Draft SDN/FONSI fail to fully comply with numerous federal laws, regulations, policies, and other requirements. As such, the Forest Supervisor's Office must remand both documents and correct all errors noted herein. The USFS cannot approve any of the action alternatives described in the SEA and Draft SDN/FONSI, or any other alternative, unless and until all laws, etc., noted herein are satisfied. Please direct all communications regarding this Objection to the undersigned attorneys.

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