www.wildidaho.org

Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6933

Anthony Botello
District Ranger
Krassel Ranger District
500 N. Mission
McCall, ID 83638

comments-intermtn-payette-krassel@fs.fed.us

January 2, 2014

**RE: December 2014 Environmental Assessment for the Golden Meadows Exploration Project**

Dear Anthony,

Thank you for considering our enclosed comments on the December 2014 Golden Meadows Mineral Exploration Project Environmental Assessment. Since 1973, the Idaho Conservation League has worked to protect and Idaho's clean water, wilderness, and quality of life through citizen action, public education, and professional advocacy. As Idaho's largest statewide conservation organization, we represent over 20,000 supporters who have a deep personal interest in protecting our drinking water, fish, wildlife, and watersheds from the impacts of mining and mineral exploration activities. There is no other permitted use of our public lands that has such a dramatic and permanent impact on the landscape, soils, water and wildlife than mining. Even exploration activities can have significant, long term water quality impacts from road and drill pad construction in sensitive areas.

We appreciate having had the opportunity to tour the project area in the South Fork Salmon River watershed with the Forest Service and Midas Gold over the last several years. Our members utilize the South Fork Salmon River drainage for recreational activities including camping, boating, fishing, fish watching, birding, and botanizing. Our members also seek to protect and restore the South Fork Salmon River watershed so it can continue to provide habitat for salmon, steelhead, and bull trout recovery.

While we appreciate the additional impact analyses and fine-tuning of the Project that has occurred since the Forest Service first tried to analyze and permit Midas Gold's Golden Meadows Plan of Operations, we remain concerned that the Project's impacts are still not adequately understood and may be significant, requiring preparation of a full Environmental Impact Statement (EIS). The difficulty the Forest Service has had up to now in approving the Project using only an EA illustrates how unsuitable this approach has been. Twice now, the Forest Service has attempted to analyze the project using EAs and has had to withdraw its approval for the Project both times, citing the need for additional analysis. As evident by the first two attempts, an EA is not appropriate for this project because of the complexities of the Project and the unique importance of the South Fork Salmon River watershed. ICL urges the Forest Service to prepare an EIS to fully evaluate the Project, along with developing reasonable alternative proposals and suitable mitigation measures to minimize the Project's impacts, instead of continuing to piece together an EA.

The Project involves constructing drill pads and drilling near contaminated areas and in riparian areas adjacent to streams. Midas Gold would haul substantial quantities of fuel in trucks on narrow, windy, dirt roads for many miles adjacent to streams essential to the recovery of threatened fish species. Considering the Project's potential impacts, particularly when added to potential impacts from Midas Gold's private land operations at the site and from other activities to occur on the Forest, the impacts may be significant. And despite Midas's and the Forest Service's efforts to lower some impacts and risks associated with the Project, nothing can change the fact that this large-scale exploration would occur in such ecologically-important and sensitive habitat.

The South Fork Salmon River watershed (including the East Fork of the South Fork of the Salmon River, South Fork Salmon River, Johnson Creek and associated tributaries) provides uniquely important habitat for threatened Chinook salmon, steelhead, and bull trout. Notably, in the Forest Plan for the Payette National Forest, the Forest Service recognizes this watershed "has a rare and significant assemblage of wild Chinook salmon, steelhead trout, bull trout, and westslope cutthroat tout" and describes the watershed as an "aquatic stronghold and recovery area for these species." Forest Plan, p. III-242. The Forest Plan also provides that the Project area is highly sensitive to Forest management actions due to fisheries and proximity to wilderness. Forest Plan III-262. Nevertheless, the Forest Service proposes to approve Midas Gold's Project through an EA instead of a more comprehensive EIS.

As set forth in our attached comments, we have numerous remaining concerns with the December 2014 Environmental Assessment. Even though the Forest Service has added information regarding water quality and aquatic impacts from groundwater contamination, sediment delivery, and fuel spills since its first EA, these potentially significant impacts are still not sufficiently disclosed and assessed. Additionally, as more information has become available and the Project has been refined, we have identified additional concerns with the EA. Finally, the new EA still fails to address other concerns we have raised on multiple occasions throughout the Forest Service's consideration of the Project. For example, the Forest Service has never considered any action alternatives to Midas Gold's Proposal. In light of the many remaining, substantial concerns ICL and others have concerning the potential impacts of this Project, the Forest Service should consider at least one reasonable alternative, if not more, to Midas Gold's proposal, such as alternatives that scale back the proposed operations or impose other restrictions or limitations to address unresolved concerns with the Project. While the Forest Service may not have the discretion to deny the permit, it does have an obligation to mitigate for surface resources that may be affected by development.

Please include all of ICL's previously submitted comments, our 2012 administrative appeal of the Golden Meadows Exploration Project, our 2013 comments and subsequent objection, and all legal filings related to our lawsuit challenging your prior approval of the Project (*Idaho Conservation League and Nez Perce Tribe vs. U.S. Forest Service, et al*., No. 14-cv-156-EJL (D. Idaho)) as part of the administrative record for consideration.

Our specific comments are included below.

Sincerely,

John Robison
jrobison@idahoconservation.org
(208) 345-6942 x 13

# Idaho Conservation League comments on the 2014 Environmental Assessment for the Golden Meadows Exploration Project

## I. Sedimentation & Fuel Spills from Vehicle Travel on the Access Routes

We appreciate the additional information and analysis in the 2014 EA on access route issues and vehicle accidents; however, we still have a number of concerns.

### A. Traffic Counts

Do the daily traffic baseline counts presented in Table 3-11 (and elsewhere) include Midas Gold traffic (either under previous or existing authorizations, or for Midas Gold's private land activities at the site)? If so, it would be more appropriate to compare Midas's traffic counts to baseline traffic levels without any Midas-related traffic on the access routes.

Do the baseline traffic counts include one-way traffic only or do they include return trips? The EA quantifies Midas's traffic as one-way. To accurately compare Midas's increased traffic to baseline traffic, the Forest Service must ensure it uses the same measure for both the baseline and Midas's traffic. If the baseline traffic counts are for all vehicle travel, but Midas's Project traffic measures only one-way trips, then the Forest Service has failed to capture half of the increased traffic attributable to the Project.

How did the Forest Service determine Midas Gold's increased traffic levels? All Midas traffic to the site must eventually take FR 412 EFSFSR (Yellow Pine to Stibnite). In Table 3-11 (and elsewhere) the EA indicates that Midas will average only 4 vehicles per day throughout the year, including 0.4 fuel trucks, on FR 412. This totals 1,460 vehicle trips per year to the site (or 4,380 vehicle trips over the three-year project) and 146 fuel truck trips (or 438 fuel truck trips over three years). The data provided in the prior EA showed that Midas proposed to make 10 times this number of one-way vehicle trips per year and approximately double the number of one-way fuel truck trips. Thus it appears that the Forest Service has grossly underestimated the number of vehicle and fuel haul trips to the site, which also calls into question the analyses on sediment delivery and fuel spill risk.

The Forest Service needs to evaluate the impact of the maximum number of vehicles authorized to travel to and from the site. At a minimum, the Forest Service needs to clarify what is included in the baseline traffic counts, ensure that the same metrics are being used (single trips or round trips), and provide more detailed information documenting Midas Gold's proposed traffic (fuel truck and non-fuel truck) to and from the site.

### B. Traffic During Spring Breakup

The EA recognizes that driving on recently thawed gravel roads (usually late March to late May) can increase the amount of sediment that could enter streams. As such, the 2014 EA has proposed some transportation restrictions during this time. However, the EA is confusing regarding the exact definition of spring "break up," the duration of spring "break up" and the exact types of activities that will be allowed. For example, the spring break up period appears to be limited to a 3-week period (or at least the surface water quality baseline turbidity monitoring is limited to 3-weeks). EA p. 2-32. However, meteorological conditions may last longer than anticipated or may reoccur, as in the example of a late spring snowstorm. As such, limitations during spring break may need to exceed 3-weeks. The EA states that exploration drilling would not occur during spring "break up" conditions and that associated transportation

requirements would be limited during this time (2014 EA p. 2-32, 2-46, 2-47, 2-48, 2-49, 2-50), but the EA also states that convoys would occur during this time (EA p. 2-49). Page D-2 states that no hauling of fuel is anticipated during this time period of the year, but page 2-50 states that 500-gallon dump trucks would haul fuel during this time and Table 3-11 indicates 0.4 fuel trucks per day are expected during spring. If no exploration drilling is occurring, then it is unclear why additional fuel haul (even with smaller 500-gallon fuel trucks) will still be needed during this time.

In addition, while the spring break up provision would utilize lighter trucks to transport fuel, it appears that more vehicle trips would be made during this time. While the weight of the individual vehicles might be lighter, the greater number of vehicle trips may lead to greater sediment production reaching streams. The EA needs to clarify whether fuel convoys and exploration drilling will still be allowed during spring break up, and whether the Johnson Creek road can be used during spring breakup. Should any vehicular traffic occur during spring break up, the Forest Service should analyze which alternative has the least environmental impacts: fewer trips with larger vehicles or more numerous trips with smaller vehicles. Factors to be assessed include consistency with the Forest Plan regarding fuel haul along the South Fork Salmon River, the risk of a fuel spill, and sediment delivery into streams. We also note that Figure 1, Fuel Transport to Project Site on p. D-3, is blank.

C. Impacts From Increased Sediment Delivery

While the EA acknowledges sediment delivery is likely to increase due to Midas Gold's use and maintenance of the access routes, the EA finds any increases to be small and have no impact. We feel that the Forest Service has failed to recognize that even small increases in sediment can have significant impacts to aquatic resources, particularly in watersheds like that of the South Fork Salmon River. Both the Forest Service and NOAA Fisheries have described this watershed as highly erosive where many streams are listed as "impaired" under the Clean Water Act and/or "functioning at risk" by the Forest Service due to high sediment. The EA refers to sediment TMDL implementation projects and revised monitoring targets (P. 3-23), but does not provide any details regarding the results of these efforts. The EA needs to provide additional information regarding the goals, compliance status, and trends of sediment production relative to meeting the sediment reduction goals for pertinent stream reaches as established by the TMDL limits. In addition, the EA needs to describe how the Plan of Operations is consistent with the TMDL allocations and develop a mitigation program designed to offset any increases.

We acknowledge the new proposal to place a seasonal gate within 300 feet of the bridge just east of Profile Gap Road to prevent access to full-sized public vehicles during spring break-up. This step should help reduce additional sediment production, but still does not constitute as mitigation or an offset for increased sediment production.

D. Fuel Haul on the South Fork Salmon River Road

ICL still questions the Forest Service's decision to allow fuel haul on the South Fork Salmon River Road, particularly in large 4,000-gallon trucks during winter. Nearly 25 miles of this 31.7-mile road segment is within close proximity to the river. EA, Table 3-7. In coordination with NOAA Fisheries in the 1990s, the Forest Service amended the Forest Plan to include road maintenance and transportation management plans to reduce adverse impacts to fish from sediment delivery and the risk of a fuel spill from use of the South Fork Salmon River Road. The Forest Service, in its 1990 Record of Decision for the EIS for the South Fork Salmon River Road Project, described that the "South Fork Salmon River (SFSR) contains the most important remaining habitat for summer chinooks salmon in the Columbia River Basin." *Id.* at 1. Ultimately, among other restrictions, the Forest Service limited all commercial fuel haul on the South

Fork Salmon River Road to a maximum of 500 gallons at one time, explaining that "[t]he basic intent is to eliminate all fuel and other hazardous material haul on the South Fork road unless absolutely necessary." *Id.* at E-1.

The Forest Service now proposes to deviate far from this basic intent to eliminate fuel haul on the South Fork Salmon River Road, and is not only allowing a large number of fuel haul trips, but is substantially increasing the maximum quantity of fuel allowed and throughout the winter months for this Project for as many as three years. The Forest Service has not explained why it is necessary to haul fuel on the South Fork Salmon River Road, nor explained how allowing 4,000-gallon deliveries during winter complies with the Forest Plan, such as Standard TEST06 ("Management actions shall be designed to avoid or minimize adverse effects to listed species and their habitats.") as well as other goals, objectives, and standards developed for the Management Area 12 (South Fork Salmon River) aimed at maintaining and improving water quality, riparian areas, and fish habitat. *See Forest Plan* at III-250–III-253.

The Forest Service has also failed to complete a suitability study for the Wild and Scenic eligible South Fork Salmon River, as required by Forest Plan Standard WSST01. WSST01 provides: "When management actions are proposed that may compromise the outstandingly remarkable value, classification, or free-flowing character of an eligible Wild and Scenic River segment, a suitability study must be completed for that eligible river segment prior to initiating the actions." Forest Plan, p. III-75. The South Fork has been found eligible for designation under the Wild and Scenic Rivers Act. Forest Plan, p. III-242. The Record of Decision (ROD) for the Final EIS and Revised Land and Resource Management Plan for the Payette National Forest recommends the South Fork Salmon River for designation under the Wild and Scenic River Act because the South Fork "represents a premier example of a river with outstandingly remarkable recreational, scenic, geological, cultural, botanical and fisheries values within the region of comparison." ROD, p. 24. The ROD explains:

> As a major tributary to the already designated Salmon River, the South Fork supports whitewater recreation opportunities from around the nation. It also supports prime examples of federally listed anadromous fish species populations. The river is a major fishery for the Nez Perce and Shoshone-Bannock Tribes. It also contains some of the most remarkable cultural and historic properties in Idaho. Populations of rare plants and plant communities exist along the river corridor. There are also outstanding geological features through the river corridor. The river offers highly unique and rare values within its region of comparison, and is worthy of national recognition within the National Wild and Scenic Rivers System.

*Id.* We do not believe Midas's stream of fuel convoys along the South Fork Salmon River, particularly in winter, is compatible with the river's outstandingly remarkable values. The Forest Service must evaluate the compatibility of allowing fuel convoys with 4,000-gallon trucks, posting warning signs, and undertaking other operating measures in the South Fork corridor with the corridors outstandingly remarkable Wild and Scenic values.

E. Fuel Haul on Both Haul Routes

The EA explains that driving conditions are a major factor determining the likelihood of an accident and fuel spill. Poor road and driving conditions can occur during spring break up, during winter, and during storms year-round. While certain Standard Operating Procedures (SOPs) are designed to reduce fuel haul during spring break up, the restrictions do not appear to be enforceable, are not well defined, and are not inclusive enough. For example, NOAA's "Biological Opinion for Authorizations for Stibnite Mining Inc. Commercial Road Use Permits and Garnet Pit Mining" (June 29, 1995), NOAA not only prohibited

hauling fuel on the Johnson Creek Road during any inclement weather and road hauling conditions, but also prohibited any fuel haul on the South Fork Salmon River Road, and prohibited hauling fuel on Johnson Creek beginning October 1 of each year due to weather conditions. The EA provides no rationale for dropping these protections and for dramatically increasing the risks for the current project.

F. Fuel Spill Risk Analysis

The EA notes that Midas Gold completed around 45 fuel convoys in 2012 and 2013 without incident. EA, p. D-7. To better understand the significance of this, the Forest Service should provide information on the routes, time of year, and quantity of fuel Midas hauled.

One SOP in Appendix A of the 2014 EA provides that three sections of roadway would be repaired where erosion and sloughing has created "narrow roadway widths and unsafe travel conditions." The EA needs to identify where these roadway segments are located, provide an estimate of when will they be repaired, and ensure that Midas Gold will not haul fuel along these segments before these unsafe travel conditions are fixed.

G. Road Maintenance

Although road maintenance is important for minimizing impacts from road use, road maintenance itself can have impacts on adjacent streams and aquatic habitat. The EA says road maintenance would occur, but it is unclear if, how, and when road maintenance will occur and what the impacts of maintenance will be and whether additional or different road maintenance would reduce impacts. The EA needs to provide clarity and detailed information on what road maintenance is needed and if, how, and when it will occur on each stretch of the access routes to the site. For road sections that are maintained by Valley County to these specified standards, it is important that the required funds for this level of maintenance are available.

## II. Water Quality At and Near the Project Site

We appreciate the additional information added to the EA on groundwater flow and water quality at the site, but we are still concerned about unknown water contamination issues at the Project site.

A. Drill Fluids and Lost Circulation

We acknowledge the additional information in the EA regarding closed drilling groundwater technology. The Forest Service should further develop the graphics to show the differences between all the proposed drilling activities. The Forest Service should also clarify if this analysis applies to all types of drilling used on site (small diameter exploration core, rotary, single wall reverse circulation drilling, double wall reverse circulation drilling, sonic drilling and drilling for groundwater monitoring wells). While drill holes for geologic sampling would be open for a period of 5-9 days, the EA states that groundwater monitoring wells will stay open for an undetermined period of time. Groundwater monitoring is an important component for obtaining baseline data and tracking any changes, but the Forest Service needs to be clear about the risks from this technology as well.

We understand that, if used properly, the drilling fluids are not expected to violate state or federal drinking water standards. The Forest Service mentions that chemical reactions do take place when two chemically distinct waters such as mud filtrate and groundwater are mixed but that it is important to know the scale and duration of chemical effects when assessing the potential impacts. The Forest Service states

that the only fluid that will migrate into groundwater is a negligible amount of the filtrate from non-toxic drilling fluids and that risks are low due to low permeability rates in bedrock.

However, there are circumstances in which fluid pressure is lost and unknown volumes of fluid have been lost into fissures, cracks, voids and to surface expressions. While steps can be taken to condition the drill hole to limit fluid loss and prevent future loss of pressure, the Forest Service notes that approximately 25 gallons per 1,000 foot hole *or more* may be lost before the driller could be aware of the new inflow/outflow condition. This implies that more significant losses may occur in the future before corrective steps are taken.

The Forest Service states that there have been a "couple" of instances during recent exploration activities in which a substantial loss of circulation have resulted in drilling mud discharging at the ground surface downslope of the drill hole. In order to determine if the cumulative effects of this loss of circulation are significant and to assess the likelihood of this occurring the future, the Forest Service needs to describe how many instances of significant circulation losses occurred during past drilling for this project, provide an estimation of the quantity of fluid lost, and analyze any environmental effects of these discharges on surface and water resources when this occurs.

We have also been informed of a circumstance in which a loss of circulation resulted in a discharge occurring under the waterline at the Glory Hole and a cloud of drilling mud and sediment were observed in the water. We are concerned that future discharges could have adverse effects on water quality, violate the TMDL for sediment in the East Fork South Fork Salmon River and harm listed fish species. The Forest Service should analyze the possibility and effects of this type of discharge occurring in the East Fork South Fork Salmon River in the future. The Forest Service should also reinitiate consultation with the US Fish and Wildlife Service and NOAA fisheries on this issue.

The December 2014 EA notes that that drilling areas to the east of the Glory Hole are the most likely locations where a loss of drilling fluids and surface expression may occur. The EA notes that there will be staff on site to visually examine the hillside in order to detect any discharges. More information is needed on the ability for the operator to detect discharges and respond appropriately to protect water quality in the East Fork South Fork should such an event occur in the future.

We are also concerned that aquifers with artesian conditions have been encountered during previous exploration activities. As with the surface discharges, the Forest Service should analyze the possibility of encountering additional artesian flows, the likelihood of addressing them in a timely fashion through drill hole conditioning, and the effects if these flows are uncontrolled for various periods of time. While the EA states that any artesianal flows will be directed into the sump, the sump has a limited capacity and no analysis is provided if and when the sump overflows.

In addition, the hole conditioning procedures described are most successful in bedrock and are less successful in shallow alluvial deposits which overlay much of the valley floor. According to the Forest Service, the water table throughout most of the Meadow Creek valley is less than 30 feet in depth. This aquifer is likely hydologically connected to seeps and surface streams. The Forest Service should also analyze the effectiveness of drill hole conditioning in this strata and the effects should more than incidental fluids leave the confines of the bore hole.

The Forest Service should also ensure that the quality of water used for drilling does, in fact, exceed the quality of the groundwater likely to be encountered. No degradation of groundwater resources should be allowed. The Forest Service mentions that naturally occurring arsenic levels were found at 2600

micrograms/liter and mentions that high levels of arsenic were found in association with mill tailings, but does not mention the actual arsenic levels recorded at this site. This information is important because the water source used for drilling activities meets both groundwater and surface water standards. In addition, there needs to be a clear record of the baseline conditions to determine if exploration activities have any impact on surface or groundwater resources.

B. Baseline Conditions for Water Quality

While we appreciate the Forest Service's efforts to better understand water quality issues at the Project site, we are concerned that basic information about sources of water pollution at the site has not been gathered or disclosed in the EA. The Project site itself includes an area that was eligible for Superfund listing due to its significant, ongoing environmental problems. While some remediation has occurred in the watershed, water quality problems persist and continue to impact aquatic resources at the site and downstream. The EA needs to document these conditions and factor them into its evaluation of Midas Gold's proposed project.

The Project area contains a vast network of tunnels, adits, abandoned bore holes, and other underground workings from previous mining activities. The EA needs to evaluate how these underground workings affect the geology, soil, groundwater hydrology, and other environmental conditions in the Project area, as this information is important for understanding the impacts of Midas Gold's exploration project.

The EA states that the highest levels of dissolved arsenic and antimony were associated with groundwater that had been in contact with mill tailings and that reclamation projects have been implemented. The EA should describe the actual levels of dissolved arsenic and antimony from these locations and note if the levels have changed as a result of reclamation activities.

The USGS documents attached to our comments describe this problem in further detail. As part of its baseline monitoring, the Forest Service needs to identify the sources of these pollutants. It is our understanding that some of these pollutants come from point sources but neither the Forest Service nor Midas Gold has obtained Clean Water Act NPDES permits for any of these discharges. The Forest Service cannot accurately predict the potential impacts of Midas Gold's activities (particularly drilling) without identifying and characterizing these pollution sources.

In addition, Sugar Creek has significant sediment issues related to the road paralleling the creek. The Forest Service portion of this road is officially closed on the Payette National Forest Motor Vehicle Use Map, but recreational use continues to occur along this route. As part of the baseline analysis, the Forest Service should quantify the amount of unauthorized vehicle use occurring at the Sugar Creek fords and estimate the potential impacts. The Forest Service needs to better evaluate and disclose baseline and potential impacts from the current, proposed and future uses of the road, drill pad construction and drilling activities in this drainage.

C. Effects of Drilling and Groundwater Hydrology

While the EA contains information stating how impacts to groundwater are going to be avoided or mitigated, there is still insufficient analysis of the potential harmful effects of the proposed action. The EA should provide more details on what the effects would be should contamination occur, how listed fish species might be affected, and what steps could be taken to clean up and mitigate these impacts so that surface resources are protected. While Midas Gold is preparing a baseline study, this study has not yet fully informed this analysis. We recommend further analysis on the groundwater issue.

## III. Water Withdrawals

In analyzing the impacts of water withdrawals, the Revised EA contemplates 10% withdrawals each from Hennessy and West End Creeks and a total of 0.45 cfs combined from the Yellow Pine Pit, Fiddle Creek, Sugar Creek and Midnight Creek. (See Revised EA Table 2-7, pg. 2-38). We are concerned that even a water withdrawal limit of 10% may still adversely affect aquatic organisms, particularly during low water months of September-February. (see EA table p. 3-19). We believe that an EIS is needed to analyze the cumulative effects of these additional withdrawals as well as the effects of the proposed uses for the water in these applications, which include the following activities: "Mining-all aspects of exploration and mining activities including dust control, exploration drilling, reclamation, construction, mineral extraction, processing." We are also concerned that the withdrawal of water and associated impacts from mineral exploration may violate the Forest Service's duty to protect water quality and fisheries under the Clean Water Act, the 1897 Organic Act and 36 CFR Part 228 mining regulations. In addition, the project may violate the MM standards in the Payette Forest Plan.

We are also concerned that environmental DNA samples from West End Creek show bull trout presence in West End Creek. We believe that additional design features are needed to protect water quality and water quantity in West End Creek.

## IV. Drilling and Other Activities in Riparian Conservation Areas (RCAs)

Thirteen drilling areas would still be located within RCAs. These drill areas and associated roads, drill pads and structures are subject to Forest Plan Standard MIST08, which requires new structures, roads, and support facilities to be located outside of RCAs. *Forest Plan*, p. III-49. Only where no alternative exists can these be located in RCAs. *Id.* And when a facility is located in an RCA, it must be located and constructed so as to avoid or minimize degrading effects to RCAs and streams and adverse effects to TEPC species. *Id.* The Forest Service proposes to allow Midas Gold to construct drill pads in RCAs without ensuring first in the EA that no alternative exists. We acknowledge that sumps would be located outside or RCAs, but there may be other effects from drilling activities within RCAs. The Forest Service should seek to further avoid or minimize the degrading effects to RCAs, streams, and TEPC species from Midas Gold's drill pads in RCAs.

While drill pads in RHCAs would be located in previously disturbed areas where possible, the lack of vegetation in some of these impacted areas means that additional buffers or best management practices may be needed. The Forest Service provides information that a 300' buffer is sufficient to prevent sedimentation to streams. However, several drill pads are going to be between 100' and 300' from streams. In order to be consistent with the Forest Plan, the Forest Service needs to provide additional assurances that all alternative sites have been exhausted and that the existing distance between drill pads and streams will be sufficient to prevent impacts.

We acknowledge that number of drill pads in RCAs has been reduced and that these sites will be accessed by helicopter instead of by road, but we believe that impacts to RCAs from the remaining drill operations is an unresolvable conflict that warrants the development of an additional alternative. Winter drilling, while complex, helps prevent soil disturbance because of frozen or snow-covered ground conditions and that fact that surface water flows and groundwater levels are also lowest during this time. The EA includes winter drilling as an option but the Forest Service does not require this. In its February 6, 2013 letter to the Forest Service, Midas Gold offered to drill only in winter in the Box, Fiddle and Sizzle areas and to consider utilizing winter drilling operations at other RCA sites on a case by case basis.

We acknowledge that Midas Gold is offering to conduct upstream and downstream turbidity monitoring during RCA drilling activities and recommend that this monitoring be incorporated into the Plan of Operations, but note that our first preference would be to avoid any entries into RCAs. Before RCA drill areas are approved, the Forest Service should ensure that this activity is indeed consistent with the Forest Plan provisions for protecting water quality and riparian areas. The Forest Service should then develop an alternative in which all RCA drilling occurs in the winter or, alternatively, modify the Plan of Operations so that winter drilling is required.

## V. ESA-Listed and Other Special Status Species

### A. Impacts to Threatened Fish Species

The EA fails to fully consider the impacts to ESA listed fish, native fish species such as westslope cutthroat trout and Pacific lamprey, and their habitat from Midas Gold's activities. The Environmental Assessment process provides a limited and piecemeal analysis that fails to look at the big picture: this area is uniquely important for listed fish; the watershed has been and continues to be impacted by contamination from previous mineral-related activities; water quality conditions are in the process of recovering from these impacts; there are a number of ways fish will be impacted by the proposed Plan of Operations (including water withdrawals, potential fuel spills and increased sediment delivery from access roads and work at the Project site, ongoing contamination of water at the Project site, and any potential new contamination from drilling, particularly constructing drill pads and drilling in RCAs and on or near contaminated soils). The EA needs to acknowledge and account for the importance of the area to these species, provide more information on the health of these species and their habitat in the action area, and consider how Midas Gold's Project as whole impacts these species and how it aligns with the goals and objectives to maintain and recover these species set in the Forest Plan and under the ESA. We note that the Forest Plan classifies the immediate project area and larger area of analysis as MPC 3.1 (Passive Restoration) and MPC 3.2 (Passive Restoration) but the current proposal contains only contains measures to mitigate adverse impacts, but no measures to restore aquatic conditions as required by the Forest Plan.

### B. Bull Trout

In addition to being a threatened species listed under the Endangered Species Act, bull trout are a Management Indicator Species for the Payette National Forest. But the EA includes very little information about bull trout populations and habitat conditions at the Project site and along the transportation routes. Forest Plan Objective SWOB15 directs the Forest to "Maintain and update species occurrence and habitat maps for Forest species (e.g. MIS and Region 4 Sensitive species) during fine and site/project scale analyses." *Forest Plan*, p. III-20. But the Forest Service has failed to present, and may be relying on outdated, species occurrence and habitat maps for bull trout. For example, recent DNA samples from West End Creek show bull trout presence in West End Creek, but the EA does not acknowledge the presence of bull trout here. The Forest Service needs to update its bull trout information, and also needs to describe bull trout populations in the area and their trends, and evaluate the impacts of Midas's Project on these populations. We are particularly concerned about impacts to a unique adfluvial population of bull trout that has formed in the last several decades that use the Glory Hole as part of its life cycle.

### C. Goshawk

The EA should include a map showing the identified active goshawk nest tree and any previously identified nest trees in the area. We acknowledge some design features to avoid impacting goshawk, but additional information is needed on the adequacy of these efforts. We note that the Blackfoot Bridge Mine on the BLM's Idaho Falls District had several additional design features developed to avoid and monitor potential disturbance to a pair of bald eagles that nest nearby. These design features included visually monitoring the bald eagle pair to see how mine development activities such as blasting affected the eagles and adjusting the timing of activities accordingly.

D. Bent Flowered Milkvetch

We acknowledge that no seeding or mulching would be conducted in areas with bent flowered milkvetch. While we acknowledge efforts to salvage individual plants affected by drilling operations, the Forest Service should analyze the success of replanting efforts in the field versus in a nursery environment. The EA states that affected plants would be dug up and set aside with the topsoil until the topsoil can be used in reclamation. The Forest Service is directed to maintain or restore known populations and occupied habitats of threatened, endangered, proposed or candidate plants, including bent flowered milkvetch. In order to be consistent with NEPA and NFMA directions, the Forest Service should provide additional information that this salvage technique is effective and needs to develop a rare plant strategy as part of this proposal.

We acknowledge efforts to implement a nursery program for displaced bentflowered milkvetch and a modified roads reclamation program tailored for this species, but these efforts need to be part of a more comprehensive rare plant program. In order to be consistent with the Forest Plan, this program would also look at additional surveys, the success rates of replanting individuals, the role of pollinators, seed collection and dispersal. The Forest Service needs to reassess the risks to this Sensitive species and conduct additional surveys in these drill areas and in surrounding areas on the Payette National Forest.

## VI. SOPs, BMPs, and Mitigation Measures

A. SOPs and BMPs in the EA

The EA relies on a substantial number of SOPs and BMPs that Midas Gold has suggested. While we support developing and implementing these practices and procedures, we are concerned that Midas may not be required to comply with them, they are not well defined, and that the Forest Service has improperly relied upon them to conclude all impacts will be insignificant.

We appreciate the effectiveness ratings described in the Standard Operating Procedures but note that several categories were rated as low effectiveness rating. These categories include not using chemicals on roads, coordination between Midas Gold and the Forest Service regarding air flight operations, maintaining access to existing NFS roads, and the use and removal of biodegradable flagging. The EA should review and revise these to increase the effectiveness rating to moderate or create additional design features to avoid, minimize and mitigate any adverse effects should an objective not be met.

B. Additional measures offered by Midas Gold

We also note that Midas Gold has offered to upgrade certain Standard Operating Procedures regarding transportation, noise and light, and groundwater issues. While we cannot verify that these measures will meet all NEPA and NFMA requirements (particularly regarding fuel transportation), they do appear to provide additional environmental safeguards compared to the previous Plan of Operations. We request

that the Forest Service review these measures for consistency with the Forest Plan and NEPA requirements. If these measures are consistent with these requirements, we ask that the Forest Service incorporate them into the Plan of Operations so they are enforceable and can be incorporated into the monitoring program. In the event that these measures cannot be incorporated into the Plan of Operations, the Forest Service cannot rely on voluntary measures to reduce impacts and must analyze the effects of this project as though these measures are not being implemented.

Based on the February 6, 2013 letter from Midas Gold to the Forest Service, we understand that some of the drill rigs to be used have a smaller footprint, are lighter, are more fuel-efficient, have smaller core holes and have lower fluid flow rates than many other drill rigs. The Forest Service should compare this technology with best management practices to ensure that other technologies are not available to further reduce environmental impacts. If the proposed technologies reduce impacts compared to previous technologies and are consistent with the Forest Plan, NFMA and other environmental regulations, we request that the Forest Service amend the Plan of Operations to incorporate the proposed technology.

We appreciate the fact that in its February 6, 2013 letter to the Forest Service, Midas Gold has offered to incorporate third party monitoring into the surface and groundwater monitoring plans. The Forest Service should analyze this proposal for consistency with federal laws, standards and guides and, if the provision is sound, then incorporate it into the Plan of Operations so this provision is enforceable.

In its February 6, 2013 letter to the Forest Service, Midas Gold offered to suspend exploration activities during spring breakup. While this provision is not as protective as we would like, it does appear to be less damaging than the original proposal. The Forest Service should analyze this proposal for consistency with federal laws, standards and guides and, if the provision is sound, then incorporate it into the Plan of Operations so this provision is enforceable.

The continuous noise and lights from drilling activities may impact wildlife, other user groups and recreationists. In its February 6, 2013 letter to the Forest Service, Midas Gold offered to incorporate additional design features to reduce noise and light-impacts related to drilling activities. While these procedures do go as far as we would like, they do appear to minimize impacts to a greater extent than the previous Plan of Operations. These include the following provisions:

- A temporary wooden structure with sound-absorbing panels
- Mufflers or sound control devices on all engines at the drill rigs
- Scheduling noise-producing activities concurrently when possible
- The use of Whisper Quiet light plants
- Night shields on outside lights
- Monitoring of the effectiveness of noise reduction measures
- Additional wildlife monitoring program

We note that this wildlife-monitoring program has already indicated several occurrences of a wolverine on the project site.

We support Midas Gold's request to consider these procedures for incorporation into the Plan of Operations. The Forest Service should analyze these proposals for consistency with federal laws, standards and guides and, if the provision is sound, then incorporate it into the Plan of Operations so these provisions are enforceable. We also request that the Forest Service assess the implementation and effectiveness of these design features in the monitoring plan.

C. The Forest Service Should Impose Additional Mitigation Measures

The Forest Service has the authority and the responsibility to require additional mitigation measures when warranted. We believe that additional mitigation measures should be included to help offset increased sedimentation from transportation and exploration activities. We note that FR 474/674 SFSR Road, FR 579 Warm Lake Highway, FR 412 EFSFSR (Yellow Pine to Stibnite) are all Functioning at Risk (Table 3-7 on EA p. 3-21). The EA should provide additional information on the revised TMDL sediment targets and successes to date. Mitigation measures could include closing, obliterating, signing and enforcing currently closed routes in the area that are contributing to sedimentation problems in the South Fork drainage.

D. Additional Water Quality Monitoring

Additional details are needed for the water quality monitoring plan described in Appendix C. Water reaches to be monitored should include the South Fork Salmon River, East Fork South Fork Salmon River, and Johnson Creek. Metrics to be monitored should include turbidity, temperature, dissolved oxygen, conductivity and pH. Sufficient data needs to be collected to establish baseline conditions during spring, summer, winter and fall. Monitoring should also include pre and post-convoy sampling.

## VII. Cumulative Effects

According to Midas Gold, the company has drilled over 120 miles of holes in the area. The Forest Service should analyze the cumulative effects of this past drilling, including instances of lost circulation. The Forest Service should also provide a more detailed analysis of how legacy issues from previous mining efforts may or may not be exacerbated by the proposed action.

In particular, ongoing water quality violations at the Project site should be included in the analysis.

We appreciate the inclusion of the action roads in the area of analysis and the additional information provided in the 2014 EA regarding Midas Gold's impacts along these roads. However, the EA needs to provide additional information regarding cumulative effects, such as fuel haul and vehicle traffic, and any other activities in the activity area.

While the Cumulative Effects section in the 2014 EA provides a narrative it does not include any quantification of effects. In December of 2014 the Forest Service released a Draft Record of Decision for the Golden Hand 1 and 2 Mine Claims Project, also located in the Krassel District. The Golden Hand project would also utilize the Johnson Creek Road for access, including fuel haul. Neither the 2014 Golden Meadows EA nor the Golden Hand DEIS examined the cumulative effects of both projects occurring concurrently on issues such as fuel spill risk, sediment delivery or road maintenance issues. In addition, the Big Creek Road Plan of Operations is another project on the Krassel District which was scoped in the fall of 2014 which is also likely to have cumulative effects which need to be quantified. The EA also refers to the Morgan Ridge project and data collection at multiple mine claims in the upper Big Creek watershed. This surge of concurrent activity highlights the need for a robust analysis in an EIS.

## VIII. Alternatives

The Forest Service should evaluate one or more action alternatives including reduced or modified exploration to further lower the impacts. Despite our repeated requests to consider alternatives over the

years, this third EA still evaluates only Midas Gold's proposal and a no action alternative which cannot be selected by the Forest Service. The Forest Service should develop all reasonable alternatives to address the concerns we have raised including fuel haul, drilling in Riparian Habitat Conservation Areas, winter drilling, temporary road construction in landslide prone areas, storage of drill cuttings, bent flowered milkvetch replanting, and water withdrawals.

As part of a mitigation program, the Forest Service should consider an alternative where no drilling occurs in the Sugar Creek drilling areas and the Sugar Creek Road is decommissioned.

The Forest Service should also consider an alternative fuel haul plan. The quantity and frequency of fuel haul shipments has been an irresolvable problem from the beginning. Fuel haul alternatives which should be considered include: no fuel haul on the South Fork Salmon River Road; limiting fuel haul on the South Fork Salmon River Road to 500-gallons or less; no fuel haul during spring breakup; or no fuel haul from October 1 through spring breakup. Should any vehicular traffic during spring break up and authorized under the Forest Plan, the Forest Service should analyze which alternative has the least environmental impacts: fewer trips with larger vehicles or more numerous trips with smaller vehicles.

## IX. Additional Issues

### A. Landslide Prone Areas

The EA notes that a few locations within the activity area are rated as medium or high for landslide potential and that four landslides were identified within or adjacent to Proposed Action activities (2014 EA p. 3-8). The EA needs to provide additional information on how activities will be designed to avoid, minimize and mitigate for landslide risks and what the impacts might be if a landslide were to occur at the medium and high-rated locations.

### B. Site Suitability Review

We acknowledge that a site suitability review for each drill hole location will be conducted as a form of micro-siting. We believe the very best way to avoid impacts is to locate the drill pads outside RHCAs or to utilize winter drilling. We appreciate the taking of photos of each site during snow-free periods before drilling so that the impacts to vegetation and the success of reclamation efforts can be assessed.

### C. Drill Cuttings

While the amount of drill cuttings of native geologic materials is expected to be relatively small, some of the material brought to the surface has the potential to release contaminants of concern into surface or groundwater resources. The Forest Service should provide more information about the potential impacts and describe alternatives for disposal such as hauling this material away and properly disposing of it.

### D. Concurrent Reclamation

The Forest Service needs to provide additional information on the definition of concurrent reclamation and be more explicit that the timeline for reclamation should be as soon as practicable after drilling is complete. The Forest Service also needs to specify a definite timeline for road and drill pad decommissioning. While concurrent reclamation is emphasized, the Forest Service should require that a minimum number of drill pads is in constructed an in operation at any one time. The use of concurrent reclamation will reduce both surface disturbance and bonding costs. Reclamation should include

stockpiling topsoil and coarse woody debris ahead of time, reseeding the disturbed areas, and monitoring for noxious weeds.

The EA states that all temporary roads would either be decommissioned immediately or slated for future decommissioning. The EA should require concurrent reclamation, including decommissioning, after drilling is complete. Leaving a provision that roads may be left open if the project proponent requests so invalidates this entire concept of immediate decommissioning and concurrent reclamation. The Forest Service needs to place additional sideboards on whether a road can be considered for delayed reclamation. Furthermore, the EA states that unauthorized public use of roads will be discouraged by spreading brush and woody debris *upon project completion*, but this action should occur immediately after drilling has concluded.

E. Sumps

The Forest Service does not state how many sumps may be located in steep slopes, how many will be relocated and how many will be lined. While sumps in areas with potential slope failure may be moved farther away from steep slopes when practical, it is unclear how often this will occur. In addition to fencing, sumps should contain escape ramps for both large and small animals.

F. TMDL

As stated in our previous comments, the Idaho Department of Environmental Quality has found that portions of East Fork South Fork Salmon River in the project area are impaired due to high metal loading and sediment. The TMDL sediment includes a 25% reduction in from human activities and sets a load limit of 1,590 tons/year. The EA states that several sediment implementation projects have been completed but contains no analysis of the success of these efforts, the current sediment load, the projected sediment load during exploration activities and the projected sediment load following reclamation. In fact, the EA states that if considerable sedimentation occurs under the Proposed Action, impacts could be short-term (3-15 years) or even long-term (greater than 15 years). The Forest Plan can allow for projects that increase sediment over the short term as long as the project will realize long term benefits for the watershed. In this instance, there are neither short nor long term benefits to watershed condition indicators. The TMDL sediment load should be the basis for additional alternatives based on limiting the number of active drill pads in Riparian Habitat Conservation Areas (RHCAs) at any one time, requiring concurrent reclamation activities in RHCAs, and necessitating winter drilling in RHCAs.

G. Wildlife

Human activity within the project area will likely displace wildlife such as elk, deer, moose, lynx, fisher, wolverines, raptors, and other wildlife. This displacement may have started with initial exploration several years ago and is likely to continue for at least the next three years. In addition, mine development after this time period is a reasonably foreseeable activity. Unlike other types of human activity, the bright lights and loud noise from exploration drilling can operate 24 hours a day, 7 days a week. Five or more years of year-round activity may well have significant impacts on wildlife that warrant additional analysis and more protective measures. We acknowledge the design features proposed by Midas Gold and ask that the Forest Service analyze them for compliance with applicable laws and assess their effectiveness. If these design features are acceptable and provide value, the Forest Service should incorporate them into the Plan of Operations.

H. Impacts From Road Construction and Use

To help mitigate for new road and drill pad construction, we strongly recommend that the Forest Service further reduce the number of drill pads and decommission additional high-risk, low-use roads in this area as an integral part of this project. Drill pads and roads should be relocated outside of moderate landslide prone areas as well as high landslide prone areas. The Forest Service should develop an alternative to the proposed temporary road located in a high potential landslide area (EA at 3-8).

I. Amphibians

As noted in our previous comments, certain springs in the area contain high levels of arsenic. Springs also provide important habitat for amphibians such as Columbian spotted frogs and other organisms. We are not only concerned about predators that prey upon Columbian spotted frogs such as birds, but also about the frogs themselves. In addition, several drilling sites are located near to Areas of Recognized Environmental Conditions such as tailings and mine dumps which can contain contaminants of concern. Pressurization from drilling activities could increase spring flows and arsenic levels, or alternatively decrease these flows. The Forest Service should conduct a baseline study not only examining water quantity and quality but also the levels of arsenic in amphibians and other organisms in the area. Project monitoring would track these metrics throughout the project implementation and reclamation.

J. Connected Actions

The Forest Service should examine the effects of drilling and fuel storage on private property. We recommend that the Forest Service work with Midas Gold on placing groundwater monitoring wells downgradient from both the aboveground storage tanks. Leak detection and removal technology should be incorporated. The Forest Service should also determine the suitability of spoil material from the borrow pit as a soil amendment filler as part of this analysis. The Forest Service should also insure that an Underground Injection Control Permit has been acquired.

K. Surface Occupancy

As stated in our previous comments, within the mancamp, noise and lights should be regulated to minimize impacts to recreationists and wildlife.

L. Fire Safety

We also recommend developing an evacuation plan and identify potential safe zones in the event of a wildfire. Only completely combustible items should be burned (with special attention paid to foil-lined packages). All trash, including microtrash, needs to be disposed of properly on a regular basis, not just at the completion of activities.

Regularly inspected fire extinguishers need to be placed in all vehicles. In case of a vehicle fire, each vehicle should be required to contain a Pulaski axe, fire rake, McLeod fire tool, fire flag, and shovel.

In the event of a wildfire, protection of the operator's equipment should be the responsibility of the operator and a point protection plan with appropriate fire suppression equipment should be detailed. During the summer fire season, the operator must comply with all regulations to avoid and to curtail fire starts.

M. Monitoring

As stated in our previous comments, while the EA states that the Forest Service will make regular site visits to ensure compliance with mitigation measures, the frequency of these visits is not clear. The Forest Service should also engage in spot inspections without prior notification. Design features developed by Midas Gold that are incorporated into the Plan of Operations should be incorporated into the monitoring program to assess implementation and effectiveness.

N. Noxious Weeds

A noxious weed monitoring and treatment program needs to be implemented as part of this project.

O. Inventoried Roadless Areas

Even though the EA states that the proposed activity is consistent with the Idaho Roadless Rule, we are concerned about negative impacts to the Sugar Mountain Inventoried Roadless Area and recommend dropping the Sugar and South Sugar drilling areas from the analysis. This area is at the northern extreme of the project area, close to the East Fork of the South Fork of the Salmon River, and any mining development in this location would be extremely problematic. In addition, the specific locations for the drill pad have not been disclosed or analyzed, despite being situated within an Inventoried Roadless Area and within an RCA. The Forest Service has a clear obligation under NEPA to analyze and disclose this information now.

P. Maps

As mentioned before, we appreciate the fold out maps in the EA and found them helpful. We also appreciate the opportunity to discuss this project with the Forest Service staff and with Midas Gold staff. We would like an opportunity to tour the project area again this summer.

## X. The Forest Service Must Prepare an EIS

An agency must prepare an EIS when there are substantial questions about whether a project "may" significantly degrade the environment. *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1239 (9th Cir. 2005) (emphasis in original). "[T]his is a low standard." *California Wilderness Coal. v. U.S. Dep't of Energy*, 631 F.3d 1072, 1097 (9th Cir. 2011) (quoting *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006)) (emphasis added). The Council of Environmental Quality's (CEQ) implementing regulations for NEPA set forth 10 intensity factors for considering whether environmental impacts may be significant. 40 C.F.R. § 1508.27(b). The presence of any one of these factors may require an EIS. *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2005). Midas Gold's exploration triggers many of the intensity factors.

The following two intensity factors are related here and show an EIS is required: (1) "Unique 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"; and (2) "The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973. 40 C.F.R. § 1508.27(3) & (9). The South Fork Salmon River watershed is uniquely important both historically and today for ESA-listed fish and their critical habitat, particularly Chinook salmon. The area is adjacent to the Frank Church-River of No Return Wilderness Area. The Forest Service has identified segments of the South Fork of the Salmon River as suitable for Wild and Scenic River designation. These critical features of the area alone require an EIS to properly evaluate a project of the scale and complexity of Midas Gold's exploration.

NEPA also requires the preparation of an EIS for action if it is "highly controversial" or where "possible effects on the human environment are highly uncertain or involve unique or unknown risks". *See* 40 C.F.R. § 1508.27(b)(4) & (5). The difficulty the Forest Service has had up to now in seeking to approve this project shows that impacts are highly controversial and involves unique or unknown risks.

In deciding whether to prepare an EIS, an agency must consider not only the proposed action but also "whether the action is related to other actions with individually insignificant but cumulatively significant impacts." 40 C.F.R. § 1508.27(b)(7). Here, the Forest Service lists a number of other activities that may have cumulative impacts (e.g. Golden Hand), but fails to adequately analyze the cumulative impacts. The cumulative impacts of Midas Gold's drilling activities and fuel haul, when added to its private land activities at the site, and other actions on the haul routes and near the Project site, may be significant.

An EIS is required when a proposed action "may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration." 40 C.F.R. § 1508.27(6). The Forest Service is setting precedent for allowing fuel haul on the South Fork Salmon River Road in 4,000-gallon trucks during winter, something which was previously not allowed. This alone is significant and requires an EIS.

An EIS is also required where an action "threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment." 40 CFR 1508.27(10). As already explained, USGS studies show that Meadow Creek and the EFSFSR gain a lot of metals as they run through the stibnite site. The Forest Service management of the site may be causing violations of state water quality standards in violation of the Clean Water Act. And there may be from point source discharges which have not been permitted under the Clean Water Act.

**Water quality protections**

As stated in our previous comments and above, the operator must comply with all applicable federal and state water quality laws and regulations, including sections 303, 401, and 404 of the Clean Water Act. Even though chemical use may be limited, we are still concerned about the use of fuels, lubricants, solvents, and other toxic chemicals in intermittent streams and drainages. The use of these hazardous materials must be carefully evaluated and all fuel storage should be greater than 300' from live water.

While Midas Gold has previously offered to limit fuel haul and drilling activities during spring break up, these measures may not apply to the latest version and, if so, they are voluntary. Such design features should be incorporated into the Plan of Operations so they are enforceable.

The Petroleum Risk Assessment and Risk Reduction Procedures states that "If future logistics, weather conditions, fish and wildlife protection needs, or other conditions dictate that snow removal take place on Johnson Creek Road throughout the winter, then the SOP would be revised accordingly." (Petroleum Risk Assessment and Risk Reduction Procedures p. 2).

We believe that additional analysis is needed now on circumstances that would dictate the required use of the Johnson Creek route in winter. Westslope cutthroat trout are already a Forest sensitive species and Bull trout, Steelhead, and Chinook salmon are already all listed under the Endangered Species Act. It is unclear what additional fish and wildlife needs would need to occur to consider an additional analysis under the ESA. These criteria need to be developed as part of this analysis.

The EA states that areas of high avalanche danger will be avoided or that avalanches will be controlled. The EA does not describe the likely locations for control efforts or if avalanche control will entail placing explosive charges via snowshoe or snowmobile or using cannons from fixed or mobile locations or the frequency of control efforts. This information is important because nitrates from the explosives used for avalanche control can have adverse impacts on fisheries.

This additional analysis is critical because the Johnson Creek route in winter may have a shorter length within Riparian Habitat Conservation Areas but is not without risk or potential complications. Snow plowing along Johnson Creek road would involve plowing a mountain pass, winter driving conditions could be challenging, the avalanche risk is unclear, and there are likely conflicts with recreationists such as snowmobilers who use this route.

The December 2014 EA states that a winter hauling route along Johnson Creek was eliminated for a variety of reasons, including the fact that snow plowing would necessitate more fuel. However, the Forest Service has not done a detailed analysis to assess if additional fuel for snow plowing along 16 miles of Johnson Creek poses fewer environmental risks than winter hauling along 25 miles of the South Fork. While the EA states that fuel for snow plowing efforts would likely be stored in Yellow Pine, it would also be possible to store the fuel in Landmark, a potentially less sensitive area.

Another alternative which has not been developed is the use of a snowcat modified to transport diesel fuel along the Johnson Creek route, which would avoid several of the afore-mentioned issues. Another factor which has not been addressed is the requirement to cluster fuel trips in the summer months and stockpile the fuel on site to further reduce winter fuel transportation needs. With an estimated winter use of 500 gallons a day, the current 45,000 gallon or proposed 55,000 gallon Aboveground Storage Tanks would be sufficient to support exploration operations for 90 or 110 days, respectively. It is likely that some winter fuel hauling would still be needed.

Analyzing these factors now would make it easier to develop the terms that would dictate use of the Johnson Creek route and to resolve these issues ahead of time. If fuel haul along the South Fork of the Salmon River Road is not allowable, it would seem to make sense to provide additional analysis regarding the Johnson Creek route.

Fuel storage on site, even though it is located on private property, is not without risk and not beyond the scope of this analysis. Even with the EPA requirements, a fuel risk or fuel leak is possible and could impact ground and surface waters in the immediate area, which also supports listed fish species. The Forest Service should analyze the pros and cons of requiring increased fuel capacity on site sufficient to eliminate winter fuel transportation and the increased risks of a leak from the Aboveground Storage Tank. The Forest Service should also analyze the safety of the Aboveground Storage Tanks in the event of a wildfire or fire at the facility.

Well-engineered pullouts are an integral part of the fuel transportation plan. We acknowledge that road monitors are going to recommend that traffic to find a pull-out location to avoid the convoy, but there is no information on the number, location, or capacity of pullouts. Each road monitor should have a map to hand out to other drivers showing the exact mileage and location of each pullout so they can inform various forms of vehicles, ranging from ATVs to RVs, on where they can safely pull over to avoid the convoy. This map should be included in the project NEPA analysis document. It may be less convenient but more prudent for road monitors to hold traffic until the convoy passes that location.

The Petroleum Risk Assessment and Risk Reduction Procedures state that it may be necessary to sand the road in advance of the convoy (3/8 inch washed rock, no fine sand is allowed) but even this material may negatively affect fish spawning, thus warranting additional analysis and guidelines on which areas may be sanded, when and under what conditions.

Convoys and other exploration-related traffic will increase the amount of dust generated. This dust can have negative impacts on both riparian vegetation in terms of reduced photosynthetic ability and fish from increased fine sediments. This analysis should examine the need for increased dust control measures with water or magnesium chloride and the limitations of each. The EA states that maintenance measures may include the application of binding products to the roadbed surface in selected areas but fails to identify these areas.

The Procedures document states that convoys will travel at safe speeds at or below posted speed limits but leaves it up to the convoy leader to determine what that speed is. We recommend that the Forest Service work with the project proponent and contractors to define these speeds ahead of time.

As stated in our previous comments, although all drivers will participate in a safe-driver training course specific to the Midas Gold fuel convoy, the drivers should be required to drive the route with unloaded trucks to gain practice before driving fuel. The Procedures states that the emergency response vehicle will follow in between or behind fuel trucks. From a water quality protection standpoint, the Forest Service should require that this vehicle be on the downstream side of the convoy for a better chance of deploying booms in the event of a spill into the river. This would entail being toward the lead down Johnson Creek/South Fork of the Salmon and then being toward the back along the East Fork South Fork Salmon River. In addition to having the emergency vehicle accompany the convoy, oil-absorbent booms and other spill cleanup materials should be strategically placed and secured at several places so they can be quickly deployed in the event of a transportation accident. We acknowledge that a sea-curtain will be at the Midas Gold site for deployment at the Glory Hole, but recommend that the boom be stored at a secure location near the Glory Hole itself.

Regarding reducing the risk of collisions with wildlife, the Forest Service should work with the Idaho Department of Fish and Game to identify the location of wildlife crossings and require further speed reductions at these locations.