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Title: Public Lands Director

Comments: Attn: Piper Goessel

Krassel Ranger District

Payette National Forest

500 North Mission Street

McCall, ID 83638

Via email: comments-intermtn-payette-krassel@fs.fed.us

August 22, 2016

Re: Idaho Conservation League Scoping Comments on the Morgan Ridge Exploratory Drilling Plan of Operation Environmental Assessment

Dear Piper:

Since 1973, the Idaho Conservation League has been Idaho's voice for clean water, clean air and wilderness-values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters who have a deep personal interest in ensuring that mineral exploration projects are designed to avoid, minimize and mitigate impacts on our water, wildlands, and wildlife.

The Payette National Forest is considering a Plan of Operations to conduct exploratory drilling in the Big Creek watershed approximately 11 miles from Yellow Pine, ID. The project would include four 20x20' drill pads and six core holes up to 1,500 feet deep. Water drilling would be sourced from Government Creek under an existing temporary water right. The project would authorize approximately 3.1 miles of road for mechanical vehicle access to drill pads in the North Fork of Logan Creek drainage. Fuel storage, equipment, and housing would be on private property near Logan Creek. Approximately 200 gallons of fuel per day would be required. Sediment control structures would be installed on the down slope side of pads. Three stream crossings would be improved with armored fords to minimize downstream listed fish habitat. The project would require two summer field seasons.

Although a permitted use of our public land, mining can temporarily and potentially permanently alter the landscape, soils, water and wildlife. We want to ensure that the Forest Service designs and manages the project to prevent water quality degradation and disturbance of wildlife and habitat.

The proposed project is located in anadromous habitat and in the headwaters of Big Creek, flows into the Frank Church River of No Return Wilderness. We are concerned that several aspects of this project may present short and long-term environmental risks to these resources. We also recommend including an alternative that considers a more limited motorized vehicle access, which we believe, will reduce the environmental impacts. Specific comments and recommendations are included below.

Once again we thank you for the opportunity to submit scoping comments on this project.

Please keep us on the mailing list for all documents related to this project and upcoming projects. Feel free to contact me if you have any questions about our comments.

Sincerely,
John Robison
Public Lands Director
jrobison@idahoconservation.org
(208) 345-6933 x 13

Attachment:

Idaho Conservation League scoping comments on the Morgan Ridge Exploratory Drilling Project

Scoping information

We appreciate the fact that the Forest Service has the scoping notice, the location of the project, and additional information published through Morgan Ridge Exploratory Drilling Project website. We also appreciate that maps of the project location, the access road, and proposed activity sites are included in the scoping document. We recommend including as applicable the following mapping layers in the future scoping notices of any similar projects and in the Morgan Ridge draft EA to assist with the public's understanding of project planning efforts: RCAs, Inventoried Roadless Areas, patented mining claims, Wilderness, Recommended Wilderness, and critical habitat for sensitive ESA-listed species such as bull trout, Chinook salmon and Snake River steelhead.

General concerns

We believe that there is the potential for this operation to have both short and long-term consequences on water quality and wildlife. The Forest Service needs to conduct an analysis of potential groundwater effects, including baseline conditions onsite and within the streams both upstream and downstream of the drilling sites and river fords. The EA must include a complete analysis of all baseline conditions and potential impacts for public review and comment.

This project must also comply with all federal and state laws including but not limited to the National Forest Management Act standards and guidelines, the Payette National Forest Plan, Endangered Species Act, Riparian Conservation Area direction, and the Clean Water Act.

The project area appears to be within Payette National Forest's Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources Management Area Prescription Category (MPC 3.2). The objective of MPC 3.2 is to "actively restore or maintain conditions for TEPCS fish, wildlife, and botanical species, or 303(d) impaired water bodies through a combination of management activities and natural processes." If proposed activities are not consistent with this objective, we recommend that the proponent develop a mitigation program to offset any impacts so there is a net environmental benefit consistent with management direction in MPC 3.2.

Mining Exploration Activities

The scoping document does not disclose the location of mining claims or validity of operator's mining claims. All mining claims relevant to the project should undergo validation studies. Specifically, it is unclear if subject mineral properties are covered by the 1872 Mining Act, Weeks Act, or related requirements. The Forest Service should also validate each claim based on land acquisition history. Mining claims under the Mining Act of 1872 are only applicable to public land acquired from original public domain land. If the National Forest acquired parcels of public land by purchase or other means, other authorities may apply to specific mining claims. The Forest Service should clarify whether or not the 1872 Mining Law covers all properties.

Access & Transportation

The operator is requesting mechanized vehicle access to the proposed drill pad sites. The Forest Service must also describe the types of vehicles used to transport equipment, the number of trips per week, the volume of hazardous materials hauled, and the details of a Spill Prevention Plan in its analysis. The Forest Service should also consider placing safety signs in the area and requiring the operator to inform the County and members of the public about the timing for transporting equipment.

We strongly recommend that the Forest Service fully evaluate an alternative that restricts the size of the vehicle and drilling equipment to the minimum level needed to complete the level of mineral activity proposed. The scoping document only indicates motorized access to drilling sites and it is unclear if access will include full-sized vehicles. There are numerous environmental benefits to limiting the vehicle size. The use of smaller vehicles and/or non-motorized transportation may be both reasonable, less likely to cause environmental harm, require fewer mitigation measures, and reduce the reclamation bond required. Non-motorized vehicle use (such as pack stock or foot traffic) and smaller vehicle use (UTVs, ATVs <50 inches) should be considered in the EA's alternatives.

The Forest Service must justify access to these sites in compliance with federal law. Under U.S. Forest Service Mining regulations, approval of proposed access "shall specify the location of the access route, design standards, means of transportation, and other conditions reasonably necessary to protect the environment and forest surface resources, including measures to protect scenic values and to insure against erosion and water or air pollution." Additionally, in accordance to the Payette National Forest Management Plan's objectives, the Forest Service should "develop a plan to provide for reasonable access to an occupancy of National Forest System lands for mineral-related activities" (see MIOB03). We recognize that if each of the claims is determined to be valid, the Forest Service has to allow reasonable access. However, the Forest Service does have discretion to determine the level of appropriate access and activities approved relative to water quality, wildlife habitat, scenic values, and other environmental values. Motorized vehicles may not be the only reasonable access option to proposed drilling sites.

If the proposed routes are upgraded, managed and maintained to accommodate full-size vehicles, the width and weight of these vehicles and required maintenance activities (such as additional brushing, vegetation removal, etc.) could cause greater negative environmental impacts than smaller vehicles or non-motorized transportation. We are also concerned about the slope failure on one of the routes. The scoping document states that the route will be addressed with a mechanically stabilized earth (MSE) wall to accommodate equipment. The EA should include the short and long-term environmental impacts of placing and maintaining this structure, as well as engineering options that are most sustainable and correspond to small vehicle or non-motorized route alternatives. Smaller vehicles or non-motorized transportation would reduce the negative impacts of road reconstruction and maintenance activities. As such, one potential alternative could be to designing the project so that the MSE wall is not needed.

Bonding

We appreciate that the project will include a reclamation bond, as required by 36 CFR § 228. The bond should be sufficient to ensure that reclamation would be completed in the event of abandonment of the project. The Forest Service should detail the amount, scope, and form of the financial assurance in the NEPA process to make certain that such a critical issue is subjected to public review and comment. This is also consistent with the Management Direction for Mineral and Geological Resources under the Payette National Forest Plan.

Bonding costs need to be detailed for each alternative. The reclamation bond must be independent of the bond covering any other exploration activities. The bond must be substantive enough to cover the worst possible impacts to the area's ecosystem as well as the area surrounding the transportation route. Bonding should also be provided for possible spills of fuels and other hazardous materials along the roadsides. The bonding should reflect the impacts to the sensitive nature of this site and the listed species inhabiting the area. Bonding costs should be calculated according to FS pricing, including the cost of renting and transporting equipment and wages for all workers and supervisors.

We encourage the Forest Service to utilize a phased bonding strategy for the proposed Plan of Operations. Portions of the bond should be released according to each successful stage of restoration, including road and habitat improvements. The bond could be increased as the operator moves into more sensitive areas. The entire

bond should only be released once the Forest Service concludes that reclamation and maintenance activities have met all necessary requirements, including the successful establishment of vegetation and shade where relevant. We recommend not releasing the bond until predetermined revegetation and restoration goals have been met.

Water Quality Protection

Mining activities have a well-documented history of adversely impacting water quality and fish populations. Sediment control devices are critical components but also have the potential to introduce weeds and invasive plant species. The Forest Service should clarify that any applicable sediment control devices will be weed free. The effects of mining activities on surface water and groundwater quantity and quality need to be determined for a full range of flow conditions. This geochemical analysis should include the following factors:

*Preexisting water quality baseline conditions (from springs, seeps and surface water expressions in Logan Creek above and below the project area). This analysis should include a map showing the stream, spring and groundwater sampling locations as well as the monitoring schedule as well as a table showing data from previous samples. The Forest Service should consider requiring an additional season to collect baseline information.

- ?Any preexisting water quality issues from previous mining activities
- ?sedimentation from roads and trails
- ?transportation of hazardous or toxic materials near streams
- ?on-site water needs
- ?source of water used for drilling activities
- ?the depth and flow of water table
- ?the potential for chemicals and toxins to leach into surface and ground waters
- ?water capture and subsequent leakage by trenches
- ?waste water discharge from site
- ?storm water runoff

We recommend conducting a baseline water quality analysis in Government Creek, Logan Creek, and any other water sources in the project area, as well as a baseline analysis downstream from the location. A baseline analysis should be conducted during low flows when the river is most vulnerable. Analyses in these locations will help the Forest Service more accurately identify risks to water quality and quantity, as well as monitor for contamination during the project activities. A groundwater hydrology report should also be prepared in advance of the issuance of a decision. Factors to consider include any springs and seeps in the project area, adits or other historical mine features, areas of steep topography where process fluids may discharge to the surface.

The Forest Service must ensure that proposed drill sites and processing areas comply with the Payette National Forest Management Plan's Mining Standards. Degradation to RCAs should be minimized as much as possible (see MIST03, MIST08, and MIST09).

Water Withdrawal

We are concerned about the risks of water withdrawal from Government Creek, including water quality degradation. The scoping document indicates that water will be sourced from an existing temporary water right not exceed 10 percent of water base flow. Removing up to 10% of water base flow could still adversely affect fisheries and we recommend that the Forest Service incorporate additional design features such as seasonal limits, timing restrictions, and reducing on-site water needs. The Forest Service should also analyze whether there are other water drawing points in the area that accessible by a water truck that would potentially be less sensitive to water withdrawals.

Water management

The Forest Service needs to describe the location of the drill sumps, what materials and contaminants may be in

the water, how long the water will be retained, if the sumps will be lined, how it will be retained, how water quality will be assessed, and how the wastewater will eventually be discharged. Drill pads and sumps should be located outside Riparian Conservation Areas.

Threatened and Endangered Species

According to the Payette National Forest Plan's description, the area includes a "rare and significant fish species mix of Chinook salmon, steelhead, bull trout, and westslope cutthroat trout, the first three of which are listed as Threatened species under the Endangered Species Act, and the latter is a Region 4 Sensitive species. Some streams or portions of streams within the management area are designated critical habitat and Essential Fish Habitat for Chinook salmon." The Forest Service must submit a biological assessment on all possible threats to listed species and the USFWS and NMFS must approve the report with a "no jeopardy" finding. No incidental takings permit should be allowed.

We are particular concerned about the proximity of the project area to Logan Creek and Government Creek and the use of three river fords to access the sites, as vehicles can increase erosion and sedimentation in streams. Although the scoping notice indicates that impacts will be improved with armored fords, the Forest Service needs include impacts to downstream listed fish habitat based on the anticipated number of vehicles and river crossings in its assessment. No vehicle crossings should be allowed during sensitive fish spawning, and consultation with the U.S. Fish and Wildlife Service should address any potential impacts from the ford on all listed fish species. We also encourage the Forest Service to utilize eDNA technology to detect the presence of sensitive fish species.

Wildlife & Plants

The Forest Service needs to assess the potential impacts to wildlife in the area. This assessment should include surveys for sensitive species, game species, and rare plants. If any such species are found, the Forest Service should develop seasonal or daily restrictions and additional design features to avoid, minimize and mitigate these impacts. These studies need to be conducted as part of the current analysis.

Based on water quality analysis and wildlife and plant surveys, the Forest Service should develop alternatives (including motorized vehicle restrictions) that further limit impacts

Hazardous Materials

We also have concerns about the risk of a fuel spill into Logan Creek, Government Creek, Profile Creek, the East Fork South Fork Salmon River, Johnson Creek, and various tributaries to these streams. The use of fuels, lubricants, solvents, and other toxic chemicals could contaminate intermittent streams and drainages. The operator must comply with not only EPA regulations, but also all applicable federal and state water quality laws and regulations, including sections 303, 401, and 404 of the Clean Water Act. The use of these hazardous materials must be carefully evaluated and all fuel storage should be greater than 300 feet from live water. This is particularly important since critical habitat for Chinook salmon, steelhead, and bull trout occur in a significant portion of the Big Creek Watershed. Additionally, critical habitat for Chinook salmon includes adjacent riparian zones.

An appropriate sized spill kit should be on site and that no fueling should take place in an RCA. Substance-specific spill kits should be available in all operating areas, staged along transportation routes, and be inspected regularly. These kits should include fuel containment equipment, including chemical absorbers and booms.

All motorized equipment should have mufflers and/or spark arrestors and fire-ready tools should be made available on-site. We recommend that all electrical equipment be properly insulated. Additionally, fire extinguishers should be inspected regularly throughout the project period and located in all vehicles. Handheld implements (shovels or axes) should be accessible at all operating locations. Hazardous wastes including grease, lubricants, oil, and fuels need to be disposed of off-site in an environmentally appropriate manner on a

weekly basis.

Fire Safety

We also recommend developing an evacuation plan and identify potential safe zones and evacuation routes in the event of a wildfire. 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.

Noxious weeds

Even with precautions, the proposed action increases the possibility that noxious weeds will infest the area. These risks should be addressed in the EA. Once noxious weeds become established, it becomes far more expensive to control these species. Furthermore, treatments such as herbicides and biological control agents may further compromise the ecological integrity of these areas.

We recommend that any disturbed soil and waste rock piles be reseeded with native plants, and weeded to prevent expansion of noxious weeds. We also recommend that during the reclamation process, the Forest Service evaluate the option of natural recovery in disturbed areas.

Although the Forest Service has limited jurisdiction on this matter since supplies and equipment will be stored on private property, we recommend that the operator treat noxious weeds using best management practices on private property.

Cumulative Effects

The Forest Service must analyze and disclose the direct and indirect cumulative effects of this project in conjunction with all past, present and reasonably foreseeable future actions, including additional mineral exploration projects in the area, reclamation and restoration requirements, noxious weed management, travel management, and wildlife & fisheries protections. The proposed project could increase mining activity beyond the existing and future projects.

Inventoried Roadless Areas & Wilderness Areas

The project area does not appear to be within wilderness areas, proposed wilderness areas, or Inventoried Roadless Areas. However, the EA should confirm this information in order to help the public better understand the location and environmental assessment process.

Length of Operations

The Forest Service needs to ensure that the project will not be extended beyond the proposed time frame. If additional exploration work is needed, the FS should conduct additional NEPA review.

Interim Closure

The Forest Service should clarify specific requirements for stabilizing the site during seasonal layoffs (winter conditions).

Mercury

The Forest Service needs to clarify procedures should the operator encounter mercury.

Historic Aspects and Cultural Resources

The EA should identify cultural artifacts in the proposed project area. In order to comply with the National Historic Preservation Act, Section 106, we also recommend that the Forest Service clarify cultural artifacts to include historical and potentially historical artifacts. We recommend consulting with SHPO if any of the project activities have the potential to affect these artifacts. The Forest Service archeologist, Idaho State Historic Preservation Office (SHPO), and potentially affected Indian tribes should also be consulted.

Mitigation measures

As mentioned previously, we recommend developing a series of mitigation measures to help offset negative environmental impacts. Below are a series of measures to consider:

*To reduce impacts on both terrestrial and aquatic resources, reclaim non-system roads and trails or reduce sedimentation from existing system roads

*To reduce impacts on wildlife, incorporate sound and light dampening technology as recommended by the Forest Service wildlife biologist and as consistent with 40 CFR § 1508.20. We note that these measures have been successfully applied for similar mineral exploration projects on Forest Service lands, including the Hall Mission to Drill Project on the Panhandle National Forest and the Golden Meadows Project on the Payette National Forest. Please see specifications listed below:

a. Erect a temporary wooden structure around portions of the drill, pumps and heaters, but so as not to create worker safety issues related to exhaust vapor build-up. The drill engine will be located inside the structure, and acoustic absorbent panels will be placed on the inside walls of the structure to absorb noise. Please see attached specifications in Figure 1 below.

b. Contractually, the proponent will be required to install mufflers or similarly effective sound control devices on all engines at the drill rig as well as generators.

c. If more than one drill rig is to be used at a time, the proponent will schedule noise-producing activities at the same time when feasible to reduce the total duration of noise produced.

d. Whisper quiet light plants will be used to mitigate visual impacts from exploration operations during low light conditions.

e. Light shields will be placed over outside lights, confining light to the immediate area in order to further limit visual impacts.

f. Utilize a contained system instead of a sump. Please see specifications below on the System 360 Total Fluids Management System from Baroid Industrial Drilling Products. The Baroid Industrial Website

<http://www.baroididp.com/idp/products-applications/equipment-line/equipment-line.page?node-id=hlz0i2yg>

If sumps are to be used, they should be surrounded by netting to deter wildlife from falling in and becoming entrapped. We are concerned about both large mammals and amphibians. Sumps should be surrounded with silt fences to deter wildlife from entering and also be equipped with escape ramps for wildlife that still fall in.

The Forest Service minerals administrator who has worked with this technology on the Hall Mission to Drill Project is Josh Sadler who can be reached at (208) 765-7206, tjsadler@fs.fed.us.

Also attached are the Decision Notice and FONSI for the Cougar Gold Paramount drilling exploration project within the BLM-managed Bodie Wilderness Study Area. While the environmental issues are different, some of the mitigation measures, design features and general approaches may be applicable in this situation.

Figure 1. Acoustic panels on the drilling rig used at the Hall Mission to Drill Project on the Idaho Panhandle National Forests. Photo by Brad Smith, Idaho Conservation League. [SEE ATTACHED FILE]

For additional information on the acoustical shielding, please see link below and the following page. [SEE ATTACHED FILE]

http://www.environmental-noise-control.com/product_specs

Recreational Activities

The EA should address the risk of unauthorized ATV or vehicle on the proposed access routes. We are concerned that the concentration of use, particularly unauthorized ATV or vehicle use, in the Big Creek watershed and surrounding area will have adverse impacts on Chinook salmon, steelhead, bull trout, and westslope cutthroat trout, and other sensitive wildlife. Limiting route access to the minimum level needed to accomplish the mineral work for each route would also help mitigate these impacts.

The EA should also address impacts to existing authorized recreational routes, including hiking and equestrian use. For many mineral projects, the Forest Service may limit public motorized use but often allows continued non-motorized recreational use provided that public safety issues can be properly managed around the mineral activities. We recommend that the Forest Service work with the local community and increase its outreach, education and enforcement efforts so that other non-motorized areas remain free of unauthorized motorized intrusions. If applicable, non-motorized trails that will not be affected by the project should receive increased trail maintenance to help ensure that recreationists who may be displaced by the mineral activities have reasonable trail access and a quality recreational experience on remaining non-motorized routes.

Monitoring

The Forest Service and other relevant agencies must monitor or approve project activities. The EA should include a detailed monitoring plan, including the frequency of monitoring. The Forest Service should also engage in spot inspections without prior notification.

Implementation Website

We also recommend that the Forest Service create an Implementation Website for this project to post project implementation, inspection results, monitoring reports. The website could be similar to the one for Golden Meadows and scaled down to the level of work.