



January 29, 2026

Mr. Jonathan Leblanc
North Fork District Ranger
Salmon-Challis National Forest
11 Casey Rd.
North Fork, ID 83456

Electronically submitted: <https://cara.fs2c.usda.gov/Public/CommentInput?Project=68909>

RE: Idaho Conservation League's Scoping Comments for the Proposed Cardinal Exploration Drilling Project

Dear Mr. Leblanc:

I am writing on behalf of the Idaho Conservation League (ICL) to provide our scoping comments and recommendations for the proposed Cardinal Exploration Drilling project.

Founded in 1973, the mission of ICL is to create a conservation community and pragmatic, enduring solutions that protect and restore the air you breathe, the water you drink, and the land and wildlife you love. ICL's seven strategic initiatives include confronting climate change, recovering Idaho's wild salmon and steelhead, cleaning up the Snake River, protecting public land, restoring abundance and diversity of Idaho's wildlife, safeguarding North Idaho lakes and waters, and reducing pollution. ICL achieves these goals through public outreach and professional advocacy. With offices in Boise, McCall, Ketchum, and Sandpoint, the organization is a consistent, statewide voice for conservation in Idaho and represents more than 30,000 members and supporters. ICL's members and supporters care deeply about protecting and restoring the environment.

Although a permitted use of our public land, mining can permanently alter the landscape, soils, water, and wildlife. While the project is currently limited to exploration activities, these activities are a precursor to a potential open or underground mining operation. If there were not the hope of mining this area, the exploration drilling would not be taking place. We want to ensure that the Forest Service adequately evaluates potential environmental impacts and includes safeguards to reduce water quality degradation and the disturbance of wildlife and habitat. All mining activities and explorations should be stringently regulated and monitored.

Given the past history of negative water quality impacts from mining throughout the West, heightened vigilance and scrutiny are important in this and other similar projects. We appreciate that the Forest Service is requiring the project proponent to adhere to National Marine Fisheries Service requirements for screening and drafting. We recommend that the Forest Service further

require the project proponent to submit drilling records and report any intersections with groundwater sources. However, none of those stipulations or other Design Features were included in the scoping document. Since this project, and an increasing number of other similar proposed undertakings, are being analyzed as potential Categorical Exclusions (CEs), scoping is the sole opportunity for the agency to provide relevant information to the public and for the agency to receive public comment. Although the mining exploration project may appear limited, even small projects can have adverse effects from the unintended release of mine wastes. And as we noted above, an exploration project is the precursor to potential full-scale mining undertakings. We are also concerned that the scoping documents do not contain meaningful references to bonding issues, such as anticipated reclamation cost, including an itemized breakdown of reclamation expenditures.

Thank you for the opportunity to provide comments regarding the Cardinal Exploration Drilling Project. Please keep ICL on the mailing list for all documents related to this undertaking. We look forward to the opportunity to work with the North Fork Ranger District on this, and any future projects.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Randy Fox", with a stylized flourish at the end.

Randy Fox
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Idaho Conservation League's Scoping Comments for the Proposed Cardinal Exploration Drilling Project

Baseline information on water quality and quantity

ICL appreciates the Salmon-Challis National Forest committing to requiring the mine exploration drilling project proponents to adhere to National Marine Fisheries Service requirements for screening and drafting. However, we believe the Forest Service should do more to ensure water sources are not impacted by exploration activities. Over the last decade, federal courts have repeatedly held that the Forest Service violates NEPA when it approves a mine exploration project like the Cardinal Drilling Exploration project without first gathering sufficient baseline groundwater hydrology information to take a “hard look” at the potential impacts drilling may have on groundwater and surface water. *Cascade Forest Conservancy v. Heppler*, No. 3:19-cv-00424-HZ, 2021 WL 641614, *17–20 (D. Oregon Feb. 15, 2021); *ICL v. U.S. Forest Serv.*, 429 F. Supp. 3d 719, 730–32 (D. Idaho 2019) (same when the Forest Service approved the 5-year Kilgore exploration project); *Gifford Pinchot Task Force v. Perez*, No. 03:13-cv-00810-HZ, 2014 WL 3019165, *25–33 (D. Or. July 3, 2014) ((Forest Service violated NEPA by failing to gather baseline groundwater data and by relying on monitoring during the project that only includes a portion of the exploration project site in approving Goat Mountain exploration)); *ICL v. U.S. Forest Serv.*, No. 1:11-cv-00341-EJL, 2012 WL 3758161, *14–17 (D. Idaho Aug. 29, 2012) (Forest Service violated NEPA by failing to gather baseline groundwater hydrology data necessary to understand potential impacts of drilling and improperly relied on post-approval monitoring in approving a 5-year CuMo exploration project).

Here too, the Forest Service must gather baseline groundwater hydrology information and use that information in the public NEPA process before it can approve the project. At a minimum, the Forest Service must sample surface and groundwater quality and quantity from multiple locations throughout and adjacent to the project site multiple times to establish an existing baseline. It must also survey for seeps, springs, and other hydrologic features throughout the site. *The Forest Service must also locate existing mine features and any other potential sources of water contamination.*

The Forest Service has a July 2020 guidance document, titled “Working Guide[:] Evaluating Groundwater Resources for Mineral Exploration Drilling” (hereafter “*Working Guide*”). We have submitted the document with our comments on previous projects. The preface to the *Working Guide* states: “Growing recognition of the ecological and socio-economic importance of groundwater and groundwater-related resources (springs and groundwater-supported wetlands and streams) has emphasized the need for the Forest Service to ensure adequate analysis of potential effects on groundwater from mineral exploration drilling” The Forest Service created the *Working Guide* to provide guidance on how to gather baseline data and to evaluate the potential effects of mineral projects like the Cardinal Drilling Exploration should follow the direction in that document.

ICL believes that initiating water quality monitoring concurrently with exploration activities falls short of the standards necessary for a fully developed mine exploration plan, and we

recommend that Idaho Strategic Resources obtain 2-3 years of baseline data prior to drilling and exploration activities. The scoping document contains neither existing water quality or quantity baseline data, nor a plan for monitoring water quality/quantity during the course of the project.

Mineralized areas often contain naturally occurring contaminants of concern such as arsenic. These contaminants may be securely bound within the surrounding rock matrix or may be leaching into groundwater. In previous mineral exploration projects, the Forest Service acknowledged that exploration drilling can affect groundwater resources. Aquifers can be vulnerable to degradation during and following exploration drilling in the following ways:

- Contamination through open boreholes by run-off water from the surface
- Separate aquifers could become interconnected through drillholes
- Cross-flow between aquifers may be induced by natural pressure differences or pressure differentials induced by pumping
- Contamination by certain types of drilling fluids (Golden Meadows EA at 3-31/ Attachment #3)

The pressure from a water column in deep drill holes, such as those proposed for the Sinclair Drilling Exploration project with drill holes reaching a maximum depth of 1,000 feet, may be sufficiently pressurized to cause hydraulic fracturing, especially with fractures already present in the rock. If water loss occurs in the lower part of the hole, it is unclear which aquifer(s) it contaminates. We note that high pressurized drilling activities in the vicinity of the Glory Hole at the Stibnite area on the Payette National Forest resulted in at least one case in drilling fluids moving laterally through fractured bedrock, exiting the sides of the abandoned mine pit, and entering the East Fork South Fork Salmon below. The close proximity of Papoose Creek, Bia Po'i Naokwaide Creek and ultimately the Salmon River to the drill sites raises concerns that a similar event could occur here. The Forest Service should incorporate additional design features to address this. The agency would be remiss to leave this potential adverse effect unaddressed.

The Forest Service needs to assure that there will be no changes or impacts to groundwater as a result of drilling operations and, as a result, that there is a need for a groundwater baseline study. The Forest Service should require basic design features such as drill logs tracking the depth to bedrock, the water table and any losses in drilling fluid from bedrock fractures because of the assumption that proper well closing would eliminate contamination issues. The Forest Service also needs to address contamination that could occur during drilling operations and before the boreholes are sealed.

The Forest Service and operator need to establish baseline surface and groundwater water quality sampling upgradient of, within, and downgradient of the project area. The Forest Service should describe the monitoring locations, the frequency of testing, the triggers for additional actions, and the protocols if these triggers are tripped. It is important to establish baseline water quality sampling well in advance of drilling operations and encompass both annual and seasonal variations. Groundwater could be mapped and sampled through an investigation of springs and seeps in the area.

Without baseline data, the impact to groundwater remains uncertain because there is no presented information as to the current conditions of the actual Project Area. Thus, it is

impossible to know if the proposed exploration activities will impact water quality. “Without establishing the baseline conditions which exist ... before [a project] begins, there is simply no way to determine what effect the [project] will have on the environment and, consequently, no way to comply with NEPA.” *Great Basin Resource Watch v. BLM*, 844 F.3d 1095, 1101 (9th Cir. 2016) (quoting *Half Moon Bay Fishermans' Mktg. Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988)).

In May 2020, a federal court in Idaho vacated the Decision Notice and EA for the Kilgore Exploration Project on the Caribou-Targhee National Forest because—even though the Forest Service conducted thorough baseline groundwater studies and setup ongoing groundwater and surface water monitoring for 85% of the project site—the Forest Service failed to do the same for the other 15% of the project area. *Idaho Conservation League v. U.S. Forest Service*, No. 1:18-cv-504-BLW, 2020 WL 2115436 (D. Idaho May 4, 2020). The Court held that the Forest Service failed to take a hard look at potential impacts to groundwater from drilling in violation of NEPA, and ruled that the Forest Service could not permit any exploration activities until this error was corrected on the 15% of the site. *Id.*

Ongoing monitoring and mitigation for water quality and quantity

In addition to an adequate baseline before any project approval, the Forest Service must require a robust monitoring and mitigation plan to detect and correct any changes in water quality or quantity caused by the Cardinal Exploration Drilling project.

ICL raised a similar objection to Newcrest Resources' Jarbidge Exploration Project in northern Nevada when the Forest Service released a draft decision authorizing the project in 2020. ICL and the Forest Service agreed to an objection resolution that included the following condition regarding groundwater monitoring (Jarbidge Objection Resolution Letter):

Newcrest will be required to collect information on the background conditions of groundwater, including the presence and elevation of ground water in each drill hole. Background data collection methods could include the use of grouted piezometers, and groundwater sampling from within strategically located exploration drill holes where the water table is encountered. After the collection of background data in the first two operating seasons, Newcrest will develop a groundwater monitoring program outlining the location of groundwater monitor wells for installation during the third operating season. Monitoring, groundwater sampling, and reporting will be coordinated with NDEP-BMRR and the Forest Service. If routine, scheduled monitoring detects abnormal deviation from background and the Forest Service determines that the deviation may be the result of project exploration activities, Newcrest will consult with NDEP-BMRR and the Forest Service to determine if and where additional groundwater monitoring and investigation is needed.

We request that the Forest Service require something similar of Idaho Strategic Resources as a condition of this project. The Forest Service should follow the guidance found in their *Working Guide - Evaluating Groundwater Resources for Mineral Exploration Drilling* (Release 4 - July 2020).

The Kilgore North Project also incorporated a design feature that if water quality analysis indicates water quality has degraded based on the state and federal water quality standards for surface and groundwater, operations will cease until mitigation can be implemented to protect surface and groundwater. The Idaho Department of Environmental Quality will be notified and informed of the situation.

The Cardinal Exploration Drilling project should contain more protective requirements than those used at Kilgore. We recognize that there may already be some baseline water quality and quantity monitoring in many areas from past mining and exploration activities. However, until the operator collects three or more years of this baseline sampling in all drainages where drilling is occurring, proceeding with the NEPA analysis is premature.

Sumps

The scoping document indicates the project proponent intends to use sumps to contain produced drilling fluids and cutting materials. However, no Design Features outlining the parameters for sump construction and use were included. We recommend that the Forest Service requires Idaho Strategic Resources to line sumps with a 6 mil or greater plastic liner. We strongly recommend that all liners be removed during reclamation, not just if the project proponent believes removal is feasible. If the liner can be installed and breached for permeability, there are no circumstances that would prevent the removal of a sump liner.

The scoping document fails to describe what tests will ensure that the sumps are not located in areas where groundwater levels could rise above the bottom of the sump. We respectfully request that the Forest Service include this data in the final analysis document.

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

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

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

We are also concerned about bats, birds, and amphibians becoming trapped in the sumps on site. To prevent this problem, we recommend skirting the sumps at a sufficient height to prevent

amphibians and mammals from accessing these ponds and providing escape ramps if animals should fall in.

Noise and light pollution

We appreciate the project proponent stating that drilling activities will take place during daylight hours unless scheduling demands 24-hour drilling. We were disappointed to learn that the Cardinal Exploration Drilling project scoping documents failed to describe any Design Features that either the project proponent proposed or the Forest Service requires to mitigate a variety of impacts, from noise and light pollution. We are concerned that the scoping document does not address the light pollution that would result from a potential 24-hour, 7 day a week work schedule. We believe the project proponent could strengthen the proposal through a variety of measures. The Forest Service should consider the impacts that artificial noise and lighting will have on the surrounding environment. This is particularly important given Idaho Strategic Resources potential work schedule to operate 24 hours per day. Exploration activity within the project area will displace wildlife such as elk, deer, raptors, bears, and others. We note that this area of Central Idaho is within one of the largest areas in the United States largely unaffected by light pollution. In addition to diminished aesthetics, light pollution can have a host of negative impacts on wildlife, including disruption of nocturnal animals and migrating birds¹.

We request that the Forest Service implement noise and light-reducing features for all activities for every stage of this project. Examples of effective techniques that should be considered as part of this project include:

- Mufflers or sound control devices on all construction vehicles
- Scheduling noise-producing activities concurrently when possible
- Restrictions on hours of operations
- Installation of night shields on outside lights if work is to be performed at night
- Using amber or yellow lights to reduce light pollution impacts
- Monitoring light pole height to ensure light shields achieve maximum effectiveness and do not negate shield use due to excessive pole height
- Monitoring of the effectiveness of noise reduction measures

¹ See: <http://www.darksky.org/light-pollution/wildlife/>

Additionally, the project will include the use of generators during exploration operations. If a generator is allowed, decibels should be regulated, and fuel adequately contained with secondary containment systems.

Fisheries, wildlife, and plants

The Forest Service should consult with the U.S. Fish and Wildlife Service and NOAA Fisheries to evaluate the effects of this exploration project on fish and amphibian species inhabiting this watershed, particularly for Endangered Species Act (ESA) listed salmon and steelhead.

We are disappointed that the scoping document does not list any ESA-listed species or Forest-listed sensitive or indicator species that may be impacted by this proposal. Further, the scoping document indicates that, “if individuals or sign of an ESA-listed terrestrial wildlife species (Canada lynx or North American wolverine) or active raptor nest are observed within 0.50 miles of project activities, the Forest Service will be notified within 24 hours, and appropriate measures would be determined,” (p. 3). However, the scoping document fails to

describe how site workers will gain the knowledge and experience to identify ESA-listed, Forest Sensitive, or Species of Greatest Conservation Concern. The same applies to sensitive plant and insect species. We recommend that the Forest Service determine if ESA-listed, Forest Sensitive, or Species of Greatest Conservation Concern are found within the project area and provide Design Features to mitigate any adverse effects or impacts to the species.

Heritage resources

All Section 106 compliance work needs to be completed and documented prior to the advent of any ground disturbing activities, regardless of the project proponent intending on operating within disturbed areas. The Forest Service should be mindful that buried heritage resources can appear in road beds and cuts and are not limited to historic mining activities. Further, much of the previous mining activity in the area is older than 50 years and is therefore potentially eligible for inclusion in the National Register of Historic Places (NRHP). Although Section 106 compliance and the National Historic Preservation Act (NHPA) allows for the phased identification, eligibility recommendations, and mitigation of heritage resources for large-scale undertakings, this scope-limited exploration project does not meet those standards. Therefore, we recommend the Forest Service require Idaho Strategic Resources to meet their obligations to satisfy Section 106 compliance prior to beginning any ground disturbing activities and prior to project approval.

Previous evidence of mining

The project area has long been the focus of mining activities and evidence of mining operations are found throughout the Central Idaho mountains. The scoping document makes no mention of previous mining activity in the project area despite the abundant evidence in the region.

The *Working Guide* directs the Forest Service, when evaluating potential effects of exploration drilling like the Kilgore Project, to answer: “Are there any abandoned or active mine features in the area? Will drilling intercept underground workings? Are there any known natural or anthropogenic sources of water quality contamination in the project area?”. Answering these questions is important because: “These features can provide conduits to groundwater flow and/or increase the risk of groundwater and surface water contamination.”

The Forest Service needs to locate and identify any historic mining adits, tunnels, or other infrastructure that drilling operations associated with the Cardinal Exploration Drilling project could intersect or otherwise interact with. An unintentional intersection of an exploratory drilling shaft with an adit or other historic mining infrastructure could result in the lateral movement of toxic mine waste. These features should be identified and drill pads should be appropriately located to avoid any such intersections.

Wildfire risk and prevention

Given the extreme fire risk Central Idaho is experiencing, and especially following the significant fires of 2024, we are highly disappointed to see that the scoping document fails to contain a wildfire prevention program. We recommend that the Forest Service require Idaho Strategic Resources to develop a fire prevention program, which should include: carrying a fire extinguisher (an ABC chemical/powdered device is preferred in order to have the best available tool for combating the widest range of potential fire) and hand tools, such as a shovel and/or pulaski/person in each vehicle is a wise approach. We further recommend that the project proponent be required to develop an evacuation plan and identify potential safe zones in the event of a wildfire.

Noxious weeds

We applaud the detailed Design Features outlined in the scoping document that address invasive species and noxious weeds. The operator is required to wash all equipment, including the undercarriage of vehicles, before entering the National Forest. We also recommend that all equipment, including boots and pant cuffs, need to be brushed before entering the site. Disturbed soil areas need to be reseeded with native plants, and weeded to prevent expansion of noxious weeds. A long term noxious weed monitoring and treatment program needs to be implemented as part of this project.

Reclamation and bonding

We are pleased that the Forest Service requires Idaho Strategic Resources to complete reclamation and drill hole plugging concurrently, with holes being plugged as drilling is completed at the pad site. In our experience, numerous exploration and mining companies have failed to adequately reclaim disturbed areas following project completion. Therefore, we recommend that the reclamation bond is sufficient to cover reclamation costs for *all* disturbances as a unit. We also encourage Idaho Strategic Resources and the Forest Service to continue exploring collaborative remediation of any abandoned mining areas while equipment is on-site or unauthorized roads within the identified project area.

We recommend that Idaho Strategic Resources re-vegetate disturbed areas using native plants and seed and implement an invasive and noxious weed monitoring and removal program that continues for 3 years following reclamation.

Mitigation

The Forest Service and project proponent should consider a suite of mitigation measures designed to offset impacts of noise and light pollution, surface disturbance and wildlife displacement. Such mitigation measures could include the complete decommissioning of unauthorized routes, as was done in the original Kilgore Exploration decision on the Caribou-Targhee NF or the surfacing of existing routes to prevent sedimentation as was done with the Golden Meadows Exploration Project. Decommissioning and/or obliterating the segments of unauthorized or non-system routes, as are proposed for use during the Cardinal Exploration Drilling project, would provide benefits to total soil commitment, road density, and water quality through sediment reduction.