

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF IDAHO

IDAHO CONSERVATION LEAGUE,
and GREATER YELLOWSTONE
COALITION,
Plaintiffs,

v.

U.S. FOREST SERVICE,
Defendant.

And

OTIS CAPITAL USA CORP., a Nevada
Corporation,
Defendant Intervenor

Case No. 1:18-CV-504-BLW

**MEMORANDUM DECISION AND
ORDER**

INTRODUCTION

The Court has before it motions for summary judgment filed by plaintiffs Idaho Conservation League and Greater Yellowstone Coalition (collectively referred to as ICL), defendant Forest Service and intervenor Otis Capital USA Corp. The Court held oral argument and took the motions under advisement. For the reasons expressed below, the Court will grant each motion in part, and remand the case to the Forest Service to consider the impact of the Project on (1) groundwater in the Dog Bone Ridge area and (2) how that groundwater from Dog Bone Ridge drainage will impact Corral Creek and the Yellowstone cutthroat trout in Corral Creek.

FACTS

For several years the Otis Capital USA Corp has been exploring for gold on its mining claims held on public lands near the Idaho-Montana border. Otis filed a proposal to expand its current operations, known as the Kilgore Project, and it was approved by the Forest Service following an Environmental Assessment (EA) and a Finding of No Significant Impact (FONSI).

Eventually, if the Project identifies sufficient gold deposits, Otis would propose a mining plan to build an open-pit cyanide heap leach mine, but that is not yet determined and is not before the Court. The only issue before the Court is whether the Forest Service's approval of Otis's expansion of the existing exploratory project was proper. The Idaho Conservation League (ICL) has filed this lawsuit challenging that approval as violating the National Environmental Policy Act (NEPA), the National Forest Management Act (NFMA), and the Organic Act.

Forest Service Approval

The proposal by Otis, approved by the Forest Service, would involve a five-year exploration in the Caribou-Targhee National Forest. The goal of the Project is to assess the grade and extent of minerals underlying four target areas: (1) Mine Ridge; (2) Gold Ridge; (3) Prospect Ridge; and (4) Dog Bone Ridge.

In September 2017, the Dubois Ranger District received Otis's proposed plan of operations to expand its operations on its mining claims in the National Forest. Underground gold mining occurred in the Project area as early as the 1930s and continued sporadically into the 1990s. Otis began its strategic exploration drilling program in 2008.

After receiving comments during a scoping period, the Forest Service analyzed the potential environmental effects of the proposed action in an environmental assessment (EA). The EA considered the Project's potential effect on a variety of resources, including surface water, groundwater, plants, and wildlife, and did so in part by incorporating separate more detailed specialist reports.

Based on all of this information, the Forest Service issued a draft Decision Notice and FONSI. This initiated an objection period during which ICL submitted objections. The Forest Service responded to those objections and then approved the Project in a final Decision Notice/FONSI dated August 20, 2018.

The Decision Notice/FONSI incorporated various management requirements and best management practices (BMPs) to "eliminate or minimize potential resource impacts," and explained that an environmental impact statement (EIS) was not warranted because the Project would not significantly affect the environment. *See AR_009139-41.*

The Approved Project

The Project approved by the Forest Service involves the construction of 10.5 miles of new roads and 140 drill stations. Each year Otis would be authorized to operate 3 motorized drill rigs from July 16 through November, 24 hours a day, 7 days a week, to drill up to 420 exploratory holes by Project completion. On average, drill holes would extend 1,300 feet underground; the drill pads would be 50 feet long and generally as wide as the road where they are located. To obtain drill water, and other water needed for the Project, Otis is authorized to pump water from an existing on-site well and to pump water directly from West Camas and Corral Creeks. Every day of operations, Otis would

shuttle workers and supplies – including hazardous fuels and drilling fluids – to and from the Project site. About 23 total acres of surface would be disturbed over five years by the Project, and Otis would be responsible for reclaiming all roads to match pre-existing topography at the end of that time.

The Project site is located in terrain consisting of many steep slopes. There are numerous headwater streams in the Project site area, all of which flow into West Camas Creek or Corral Creek. These creeks both flow into Camas and Beaver Creeks.

The Project site has suitable habitat for numerous species, including grizzly bear, whitebark pine, Yellowstone cutthroat trout, and Columbia spotted frog, each of which is designated as a Forest Service “sensitive species.”

Grizzly Bear

The Project is located in an area known as the “High Divide,” an east-west migration pathway for grizzly bears that connects two areas important for their recovery: The Greater Yellowstone Ecosystem (GYE) and the Bitterroot Ecosystem (BE). The Project is about 18 miles from the nearest recovery zone “but is within the Centennial Bear Analysis Unit (BAU), an area identified as biologically suitable for grizzly bears.” *See AR010698.*

The Forest Service assessed the potential environmental effects of the Project on the grizzly bear in the EA, a Biological Assessment (BA) and a wildlife report. In those documents, the Forest Service examined the Project’s impacts on the quantity and quality of grizzly bear habitat, and also attempted to estimate the number of grizzly bears that would be in the Project’s impact zone. With regard to the quantity of habitat, the Forest

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Service's analysis showed the Project's roads would reduce habitat by about 250 acres, constituting about 4% of the habitat in the Centennial BAU. *See AR005134*. With regard to the quality of habitat, the Forest Service found that the main denning areas were outside the Project area, and also found that the Project would not affect foraging habitat. *See AR005134*.

To determine the numbers affected, the Forest Service studied radio-collar information from the U.S. Geological Survey-Interagency Grizzly Bear Study Team (IGBST). The IGBST study concluded that "the data for 2000–2016 show moderate and consistent occurrence of grizzly bear use in the area of influence around the proposed site for the Otis gold mining project." *See AR005965*. In terms of numbers, six radio-collared male grizzly bears were identified on the east side of the Dubois District in six years between 2000 and 2017. Of the 228 radio-collar locations of grizzly bears on the east side of the Dubois Ranger District, only one was observed adjacent to the Project area. *See AR010698*. The remaining 227 radio-collar locations occurred east of the East Camas Creek drainage. *Id.*

The IGBST study also stated that there were "[n]o observations [outside of radio collar data] of solitary grizzly bears or females with young . . . in the area of influence during 2000-2016." *Id.* There have been observations in June and July of 2018 – one was a wounded bear in the West Camas Creek drainage, *see AR010385*, and the other was trapped in the Dry Creek drainage near Kilgore after killing a calf. *See Exhibit A (Dkt. No. 30-3)*.

The Forest Service recognized that “[n]ot all grizzly bears are radio-collared, so not all the locations of all grizzly bears are known.” This observation combined with the data showing some minimal grizzly presence over the last 18 years led the Forest Service to conclude that the Project “may affect but is not likely to adversely affect” the grizzly bear. *See AR005136*. In light of this finding, the Forest Service consulted with the U.S. Fish and Wildlife Service (FWS).

The FWS, in a report issued a few months after the FONSI, concurred with the Forest Service’s determination, finding that it is “highly unlikely” that Project activities would “disturb and temporarily displace[] individual grizzly bears,” and that any “effects to grizzly bears from changes to habitat caused by the proposed action are anticipated to be unmeasurable.” *See AR010699*. The FWS stated that “[t]he action area does not contain important habitats for grizzly bears, such as denning areas or the four major food resources” *See AR010698*. The FWS also examined the Project’s impact on the High Divide corridor:

The most likely passages for connectivity adjacent to the action area are to the north and northwest and do not appear to be impeded by the action area. For these reasons, the action area is unlikely to be used by grizzly bears as a habitat corridor between the . . . GYE [Greater Yellowstone Ecosystem] and the BE [Bitterroot Ecosystem].”

See AR101698-99.

Whitebark Pine

The Forest Service analyzed the potential effects of the Project on whitebark pine in the EA and a separate biological evaluation (BE). Whitebark pine is a candidate species for ESA-listing and is a sensitive species. The seeds from the tree are an

important food source for grizzly bear. At the Project site, surveys show a “high number of well-distributed individual whitebark pine seedlings and saplings,” and populations “appeared to be healthy.” *See AR009096-97.*

Surveys show high densities of whitebark pine on the west side of the Project with lower densities on the east side. The Forest Service acknowledged that “[r]emoval of some seedling and sapling individuals for road placement is likely unavoidable due to the high number of well distributed individuals found during project surveys.” *See AR000462.* At most, the Forest Service estimated 500 seedlings or saplings would be affected of the estimated 88,000 in the Project area. *Id.* And the Forest Service anticipated little or no effect on mature whitebark pine because of the Best Management Practices (BMPs) that provides for avoidance of healthy mature whitebark pine when flagging routes for temporary road construction. The EA and DN/FONSI do not require any replanting of whitebark pine at the Project site.

Water Quality – Surface Water

Most streams within and downstream of the Project are classified by the Idaho Department of Environmental Quality as “impaired” because they fail to meet applicable water quality standards for temperature, sediment, and other criteria designed to protect cold water aquatic life. *See AR009086–87 at Table 2.* The Forest Service evaluated surface waters in the EA and a supporting water specialist report.

These analyses showed that Project activities will “disturb 22.7 acres within the various drainages of headwater intermittent streams and along short sections of Allen and McGarry Creeks in the Project area.” *See AR009087.* The EA explained that Project

activities “may produce some sediment loading, slight hydrological runoff shift, water drafting contamination, increased water temperature, and sediment suspension from vehicle traffic.” *See AR009087*. But the EA goes on to find that all of these potential impacts would be mitigated through best management practices (BMPs) and design features that were approved by the Forest Service, the Idaho Department of Environmental Quality (IDEQ), and other collaborating agencies. *See AR009087*.

The BMPs include: (1) provision of all state and federal permits required for the Project; (2) no drill holes or sumps within aquatic influence zones (AIZs); (3) avoidance of road construction in AIZs where possible; and (4) if roads are constructed in AIZs, they must use previously disturbed areas as much as possible, cross stream channels at a right angle, be constructed to minimize sediment input at stream crossings, be obliterated at any crossings as soon as they are no longer needed, and be approved by the Forest Service hydrologist or fish biologist before construction. *See AR009107, AR009109*.

Groundwater

The Forest Service examined the Project’s potential impacts on groundwater in the EA, a hydrogeological assessment, and a groundwater review questionnaire. *See AR_009093-96 (EA); AR_001131-63 (assessment); AR_001102-30 (questionnaire)*. In the EA, the Forest Service found that drilling could encounter groundwater, could alter groundwater quality, and could discharge drilling fluids to subsurface zones. *See AR009085*. This was based in part on the past experience of Otis’s exploration activities, and the Forest Service had been depending on Otis’s monitoring of stream flow and water quality to ensure that these potentials for groundwater contamination did not occur.

Accordingly, a crucial factor in the approval of this most recent expansion of drilling was the monitoring that would be done by Otis. To “ensure any potential changes in water quality [will] be quickly identified,” the Forest Service required Otis to monitor water quality and flows during drilling. *See AR009091*. The Forest Service explained that “any significant changes to field parameters, water quality constituents, or spring discharge would be reported to [Forest Service] personnel” and appropriate steps would then be taken to address the problem. *See AR009095.26*.

The EA contains a map of the monitoring sites showing that the past and ongoing water quality and flow monitoring, and the seep and spring surveying, include only drainages on the east side of the Project (in and/or downstream of the Gold Ridge, Mine Ridge, and Prospect Ridge drilling areas). *See AR008595; AR009114*. On the west side where drilling will occur – Dog Bone Ridge and its drainages – there is no past monitoring or surveying, and no ongoing Project monitoring. *See id.* On this west side, water drains into Corral Creek, which makes its way to Camas Creek.

Despite this, the EA, based on the information in the assessment and questionnaire, explained that the Project would have little potential effect on groundwater because (1) “the quantity of groundwater used is a small percentage of the total groundwater hydrological basin covered by the project area,” (2) there would be “minimal mixing of groundwater and drill water,” (3) drill holes that encounter groundwater will be plugged before the drill rig leaves the site, (4) sumps would be used to contain drilling fluids, and (5) all roads and other disturbances would be reclaimed to

“re-establish project area topography and natural precipitation run-off patterns.” *See AR009095.*

Yellowstone Cutthroat Trout

The Yellowstone cutthroat trout is a sensitive species native to the Project area and surrounding watersheds. *See AR000909.* Surveys in 2018 and 2008 found Yellowstone cutthroat trout in Corral Creek and West Camas Creek. *Id.* And although Yellowstone cutthroat trout were not found in Allan Creek, McGarry Creek, or the East Fork of Rattlesnake Creek, these are all fish-bearing streams at the Project site that could support Yellowstone cutthroat trout. *Id.*

The Forest Service assessed the potential effects of the Project on the Yellowstone cutthroat trout in a Biological Evaluation (BE) and a fisheries specialist report. In the BE, the Forest Service found that the Project’s water drafting, spills, sediment delivery, and the spread of aquatic invasive species could adversely impact Yellowstone cutthroat trout. *See AR000917.* But the two creeks where the species exists – Corral Creek and West Camas Creek – are not near any of the Project’s ground-disturbing activities. While Allen Creek is nearby, it is not known to contain any Yellowstone cutthroat trout.

Moreover, the fisheries report explained that drafting supplemental water from West Camas and Corral Creeks would be done consistent with criteria from the National Marine Fisheries Service that “would prevent fish entrainment and protect any accidental loss to Yellowstone cutthroat trout and other fish species.” *See AR000911.* In light of this, together with the low risk of harmful effects related to potential spills of hazardous material and the lack of sediment delivery generally (and to streams containing

Yellowstone cutthroat trout in particular), the fisheries report found no impact on the Yellowstone cutthroat trout. *See AR000912, 000917.*

The Forest Service also acknowledged that all fish-bearing streams and fish habitat in the Project area fail to support cold water aquatic life and salmonids spawning “due to sediment/siltation, combined biota/habitat bioassessments, and temperature impairment issues.” *Id.* The Forest Service recognized that this poor water quality and habitat contribute to Yellowstone cutthroat trout barely surviving in the West Camas Creek watershed. *Id.*

Columbia Spotted Frog

Columbia spotted frog is a sensitive species and a management indicator species (MIS) that inhabits streams, wetlands, and riparian areas at the Project site. *See AR005056.* The Forest Service considered the impacts to frogs in the wildlife report prepared for the Project. *See AR005061.*

The Forest Service found that road construction and vehicle traffic, can cause direct mortality to frogs. *See AR005087.* “Frogs are very susceptible to road mortality because they are a slow-moving species.” *Id.* Frogs could be killed on the road by the Project’s use of two to six pickup trucks daily and a water truck as needed. *See AR005087-89.* But the wildlife report also noted that Columbia spotted frogs are “common on the district and it is reasonable to expect their presence in most aquatic habitats.” *See AR005088.* The Forest Service had been surveying frog numbers forest-wide since 1992 and found no indication of any decline. This was a factor the Forest Service noted in reasoning that the prevalence of Columbia spotted frogs and the limited

scope of Project activities meant that while the Project may affect individual spotted frogs and their habitat, it “will not likely contribute to a trend towards federal listing or loss of viability to the population or species.” *See AR005090*.

LEGAL STANDARDS

NEPA

The purpose of NEPA is twofold: “(1) to ensure that agencies carefully consider information about significant environmental impacts and (2) to guarantee relevant information is available to the public.” *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1072 (9th Cir. 2011). In reviewing an agency’s decision not to prepare an EIS, “the court must determine whether the agency has taken the requisite ‘hard look’ at the environmental consequences of the proposed actions, based its decision on a consideration of the relevant factors, and provided a convincing statement of reasons explaining why the Project’s impacts are insignificant.” *Idaho Conservation League v. U.S. Forest Serv.*, 2012 WL 3758161 at *7 (D.Id. Aug. 29, 2012). If the EA is deficient under NEPA, then the agency’s Decision Notice and FONSI relying on the EA is necessarily arbitrary and capricious under the Administrative Procedures Act. *Id.*

NFMA

NFMA and its implementing regulations “provide for forest planning and management by the Forest Service on two levels: (1) forest level and (2) individual project level.” *Native Ecosys. Council v. Weldon*, 697 F.3d 1043, 1056 (9th Cir. 2012). First, the Forest Service develops a Land and Resource Management Plan (forest plan), containing “broad, long-term plans and objectives for the entire forest.” *Id.* It then

implements the forest plan through site-specific projects that must comply with the forest plan. *Id.* The Forest Service’s “interpretation and implementation of its own forest plan is entitled to substantial deference.” *Id.*

Organic Act

The Organic Act imposes a dual mandate on the Forest Service to protect National Forests while allowing mineral exploration and development under federal mining law.

The protection mandate is contained in § 551:

The Secretary of Agriculture shall make provisions for the protection against destruction by fire and depredations upon the public forests and national forests . . . ; and he may make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction.

See 16 U.S.C. § 551. The mandate to allow mineral exploration and development, consistent with applicable rules and regulations, is contained in § 478:

Nothing in section[] . . . 551 of this title shall be construed as prohibiting . . . any person from entering upon such national forests for all proper and lawful purposes, including that of prospecting, locating, and developing the mineral resources thereof. Such persons must comply with the rules and regulations covering national forests.

16 U.S.C. § 478. The Forest Service has set up those rules and regulations “through which use of the surface of National Forest System lands in connection with the operations authorized by the United States mining laws . . . shall be conducted so as to minimize adverse environmental impacts on National Forest System surface resources.”

See 36 C.F.R. § 228.1; *see also* 30 U.S.C. § 21-54 (mining laws).

Administrative Procedures Act

Agency decisions are reviewed under the standards of the Administrative Procedures Act (APA). *See San Luis v. Jewell*, 747 F.3d 581, 601 (9th Cir. 2014). Under the APA, “an agency action must be upheld on review unless it is ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’ ” *Jewell*, 747 F.3d at 601 (quoting 5 U.S.C. § 706(2)(A)). A reviewing court “must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.” *Id.* The reviewing court’s inquiry must be “thorough,” but “the standard of review is highly deferential; the agency’s decision is entitled to a presumption of regularity, and [the court] may not substitute [its] judgment for that of the agency.” *Id.*

Although a court’s review is deferential, the court “must engage in a careful, searching review to ensure that the agency has made a rational analysis and decision on the record before it.” *Nat’l Wildlife Fed. v. Nat’l Marine Fisheries Serv.*, 524 F.3d 917, 927 (9th Cir. 2007). “[T]he agency must examine the relevant data and articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’ ” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

ANALYSIS

Grizzly Bear

As discussed above, the FWS concurred with the Forest Service’s conclusion that while the Project had the potential to disturb and displace grizzly bears, “these effects are highly unlikely to occur.” *See AR 010699*. The changes to habitat were determined to be

minimal as the area “does not contain any important grizzly bear habitat (denning or the four primary food resources)” *Id.* Overall, the FWS agreed with the Forest Service’s analysis of the impacts of the Project on the grizzly bear. This independent confirmation signals that the Forest Service’s own finding was the product of a “hard look” under NEPA.

ICL complains that the EA did not discuss the High Divide corridor. But as discussed above, the FWS did discuss the corridor and found that the Project would have no impact on grizzly bear migration across the corridor.

ICL argues that the Forest Service relied too heavily on radio collar data. However, that data was not a brief snapshot of grizzly activity – it offered instead a substantial long-term look at 18 years of grizzly migration patterns. It is reasonable to rely on data this substantial. Moreover, the Forest Service recognized (as discussed above) that uncollared bears could frequent the area and so examined other criteria as well. For example, the Centennial BAU has high numbers of livestock grazing but relatively few depredations, and the Wildlife Report attributes this to low grizzly bear density in the area. *See AR005099.* The FWS’s finding that there is no important habitat in the Project area supports an inference that the radio-collar data does not underestimate the presence of grizzly bears – the Project area is not desirable for denning or foraging.

This record shows that the Forest Service closely examined the impacts of the Project on grizzly bear habitat and numbers. It took the required hard look under NEPA and did not violate NFMA or the Organic Act.

Whitebark Pine

The Forest Service's Whitebark Pine Biological Evaluation shows that the agency carefully considered impacts on the whitebark pine. The record discussed above demonstrates that only a small percentage of seedlings or saplings of whitebark pine will be removed and mature trees will be avoided. Based on the survey data collected, the record shows that a majority of mature trees in the Project area would not be cut down. Mitigation measures will ensure additional protections. The Court can find no violation of NEPA, NFMA or the Organic Act.

Columbia Spotted Frog

The record shows that the frog is prevalent in the area. There will be some road kill but it was reasonable for the Forest Service to conclude that the limited scope of the Project will ensure that the number of frogs killed will be insignificant. The Court cannot find any violation of NEPA, NFMA or the Organic Act with regard to the Columbia Spotted Frog.

Soils, Sediment & Stream Temperatures

The Forest Service determined that the Project would not have a significant impact on the sediment delivery or stream temperatures in the area for a variety of reasons, including the density of the existing road network, the intermittent and ephemeral nature of the streams, the lack of fish in the project area, and the minimal disturbances to Aquatic Influence Zones ("AIZ"). *See AR009087-009093.*

Turning next to the evaluation of soils and road slopes, the Court finds that the Forest Service adequately determined that the proposed roads would not pose a significant risk of landslides, slope failures, or erosion. The soil specialist report detailed

all of the soils present over the Project area, including references to existing roads. *See AR005055*. Slope stability was calculated as a measure of the soil type present on the area compared to the elevation. The soil specialist report considered the Targhee Revised Forest Plan standards and guidelines specific to slope stability. *See AR005053*. Based on this, the Forest Service determined that the area is not at risk of significantly unstable soil characteristics.

The Court can find no violation of NEPA, NFMA or the Organic Act in the Forest Service's evaluation of these factors.

Fuel Spills

The Court finds that the Forest Service adequately evaluated the risk of fuel spills from trucks in the Project area. The agency found that the risk of a spill was unlikely because trips in and out of the Project site will be limited, and further found that hazardous fuels would be limited in both type and quantity. *See AR010666, 009077, 010603-04, 005121*. A hazardous fuels handling plan was developed and released with the Decision Notice prior to issuance of the FONSI. *See AR010583*. This plan was developed to accompany personnel on site in case of a spill and includes all remediation measures necessary to control any incident. *See AR010664-010669; see also AR009139*.

The Court cannot find any violation of NEPA, NFMA, or the Organic Act in the Forest Service's evaluation of the risk of fuel spills.

Dog Bone Ridge Groundwater

As discussed above, the EA highlights the importance of groundwater monitoring to ensure that drilling does not cause contamination of the groundwater. At the same

time, baseline data is crucial to the monitoring program to provide a basis for comparison – without a baseline the agency will not know when conditions are deteriorating.

In the Dog Bone Ridge area – where drilling will occur – there is no groundwater monitoring. *See AR009114* (map labeled “Water Monitoring Sites” showing none in Dog Bone Ridge drainage). Dog Bone Ridge is on the west side of the slopes but all the monitoring is occurring on the east side slopes. *Id.* The record shows that water from the Dog Bone Ridge drainage will flow into Corral Creek that contains the Yellowstone cutthroat trout, a sensitive species.

With regard to a baseline study of the hydrogeologic features of the Dog Ridge area, the EA states that “Otis completed the Groundwater Review Questionnaire for the proposed project that describes the characteristic of the groundwater system as well as a preliminary hydrogeological assessment of the project area.” *See AR009093*. That Review was done by an engineering firm retained by Otis called Klepfer Mining Services LLC. *See AR 001102*. With regard to the Dog Bone Ridge area, the Review concludes as follows:

The Dog Bone area groundwater gradient likely flows southerly to Corral Creek. The location and extent of these features is generally understood, and shown on the attached map, *but the extent to which the structure(s) are water-bearing is not understood.*

See AR001119 (emphasis added). In other words, the Forest Service does not know how groundwater will drain from Dog Bone Ridge to Corral Creek. That is troubling given the lack of monitoring on the west side and the potential for groundwater contamination caused by drilling.

A similar situation was faced by Judge Lodge in *ICL v. U.S. Forest Service*, 2012 WL 3758161 (D.Id. Aug. 29, 2012). He reviewed the Forest Service approval of a mining exploration plan involving drilling that could encounter groundwater. Judge Lodge found that “there is no monitoring mechanism in place for groundwater” and no “baseline hydrogeologic study to examine the existing density and extent of bedrock fractures, [to examine] the hydraulic conductivity of the local geologic formations, and [to] measure[] the local groundwater levels to estimate groundwater flow directions before making a determination of no impact.” *Id.* at *16. *See also, Gifford Pinchot Task Force v. Perez*, 2014 WL 3019165 at *25, *31 (D. Or. 2014) (holding that Forest Service violated NEPA by failing to gather baseline groundwater hydrology data and by relying on post-approval groundwater monitoring that did not include all areas where exploration drilling would occur).

The Forest Service could, consistent with its NEPA obligations, use its expertise to conclude that Dog Bone Ridge had similar hydrogeology to the east side. *See Concerned Citizens & Retired Miners Coal.*, 279 F. Supp. 3d at 933 (holding that an agency may “estimate baseline conditions using data from a similar area, computer modeling, or some other reasonable method”). The EA in this case did describe the general hydrogeology of the region as consisting of “highly porous rock where [groundwater] finds flow pathways through geological contacts and/or structural features.” *See AR001107*. It would have been proper for the Forest Service to use its expertise to determine whether this general hydrogeology was actually present in the Dog Bone Ridge drainage or to estimate its presence by comparison to, say, the east side hydrogeologic conditions.

However, that analysis is absent from this EA. The Forest Service never addressed whether the lack of monitoring on Dog Bone Ridge was proper because its hydrogeologic conditions were similar enough to the east side drainage that monitoring on the east side would accurately estimate conditions on the west side.¹

That absence is fatal to the “hard look” requirement of NEPA, especially given the finding, quoted above, that “the extent to which [Dog Bone Ridge’s hydrogeological] structure(s) are water-bearing is not understood.” *See AR001119*.

For these reasons, the Court finds that the Forest Service failed to take the required hard look at the Project’s impacts on groundwater quality in the Dog Bone Ridge drainage.

Yellowstone cutthroat trout – Surface Water in Corral Creek

The Court’s finding on the Dog Bone Ridge groundwater issue carries over to the issue whether the Forest Service took the required hard look at the Project’s impacts on Corral Creek and the Yellowstone cutthroat trout. Because the Forest Service did not do a baseline study on the Dog Bone Ridge area, and is not requiring any monitoring there, the agency does not know whether drilling will cause contaminated groundwater to flow into Corral Creek, habitat for the Yellowstone cutthroat trout, a sensitive species. Thus,

¹ There is some indication in the record concerning the *geology* of the Dog Bone Ridge drainage. *See AR001156; 009093*. But there is no *analysis of the hydrogeology* of the Dog Bone Ridge drainage demonstrating that monitoring on the east side will accurately estimate conditions on the Dog Bone Ridge side – the west side – so that no monitoring of groundwater needs to be done on the west side. There is also a reference in Otis’s briefing that it is now monitoring *surface* water in the Dog Bone Ridge drainage. *See Reply Brief (Dkt. No. 44)* at pg. 11. That is something that the Forest Service can consider on remand.

the Forest Service has failed to take a hard look at the impacts of the Project on Corral Creek and the Yellowstone cutthroat trout under NEPA.

Cumulative Impacts

Except for the discussion above regarding Dog Bone Ridge, Corral Creek, and the Yellowstone cutthroat trout, the Court finds that the Forest Service adequately discussed and resolved the cumulative impacts of the Project. The EA addressed and considered the effects of past exploration operations and other activities in the area. *See e.g.*, *AR009103*, *010583*, *009071-73*, *005097-005101*. An agency “may satisfy NEPA by aggregating the cumulative effects of past projects into an environmental baseline, against which the incremental impact of a proposed project is measured.” *Cascadia Wildlands v. Bureau of Indian Affairs*, 801 F.3d 1105, 1111 (9th Cir. 2015). That is what the Forest Service did here, and so the Court rejects the challenge to the cumulative effects analysis.

Conclusion

The Court finds that the Forest Service acted arbitrarily and capriciously under the APA when it failed to take the hard look mandated by NEPA at the impacts of the Project on (1) the groundwater of Dog Bone Ridge, and (2) how that groundwater from Dog Bone Ridge drainage will impact the Yellowstone cutthroat trout in Corral Creek. It necessarily follows that ICL is also entitled to summary judgment on its claims for violation of NFMA and the Organic Act for the same two reasons.

With regard to all other issues raised by the motions, the Court will deny ICL's motion for summary judgment and grant summary judgment to the Forest Service and Otis.

The Court will remand the case to the Forest Service. The remand is limited in scope. The only issue that the Forest Service must review on remand concerns an evaluation of the Project's impacts on the Dog Bone Ridge groundwater and the consequential impacts on Corral Creek and the Yellowstone cutthroat trout in Corral Creek.

ORDER

Based on the Memorandum Decision set forth above,

NOW THEREFORE IT IS HEREBY ORDERED, that the motion for summary judgment filed by plaintiff (docket no. 30) is GRANTED IN PART AND DENIED IN PART. The motion is granted to the extent it seeks a ruling that the EA, Decision Notice and FONSI violate NEPA, NFMA and the Organic Act for failing to adequately consider two issues: (1) the groundwater of Dog Bone Ridge, and (2) how that groundwater from Dog Bone Ridge will impact the Yellowstone cutthroat trout in Corral Creek. The motion is denied in all other respects.

IT IS FURTHER ORDERED, that the motions for summary judgment filed by the Forest Service and Otis (docket nos. 34 & 37) are GRANTED IN PART AND DENIED IN PART. The motions are denied to the extent they seek dismissal of the NEPA, NFMA and Organic Act claims involving (1) the groundwater of Dog Bone Ridge, and (2) how

that groundwater from Dog Bone Ridge will impact the Yellowstone cutthroat trout in Corral Creek. They are granted in all other respects.

IT IS FURTHER ORDERED, that this action be remanded to the Forest Service to take the required hard look at the two issues addressed above: (1) the groundwater of Dog Bone Ridge, and (2) how that groundwater from Dog Bone Ridge will impact the Yellowstone cutthroat trout in Corral Creek.



DATED: December 18, 2019

A handwritten signature in black ink, reading "B. Lynn Winmill".

B. Lynn Winmill
U.S. District Court Judge