



May 12, 2021

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electronic submission: cara.ecosystem-management.org/Public//CommentInput?Project=59294

Re: Long Valley Exploratory Drilling Project

Dear Colleen Garcia,

Please accept these comments on the Long Valley Exploratory Drilling Project from the **Sierra Club Range of Light Group, Friends of the Inyo, Californians for Western Wilderness, Western Watersheds Project, WildEarth Guardians, INYO350, the Center for Biological Diversity, and Basin and Range Watch**. First and foremost, we ask that at least an Environmental Assessment be completed for the Project, as the project does not qualify for a Categorical Exclusion.

The Scoping Letter lacks significant information about the drilling activities to fully evaluate all the impacts of the project or to develop mitigations. The point of the National Environmental Policy Act (NEPA) is for the Forest Service to make an informed decision and to facilitate public involvement. Without the needed information, it is impossible for the Forest Service or the public to determine if all potentially significant environmental impacts have been identified and considered. The attachments and references cited in these comments are being provided in electronic format via jump drive to the Forest Service and are incorporated herein by reference as well.

I. The Project Does Not Qualify for a Categorical Exclusion

The Forest Service cannot use a categorical exclusion (CE) to approve the Project for at least three reasons: (1) the Project cannot be completed in “one year or less;” (2) the Project will likely adversely affect a designated sensitive species (Bi-State Sage Grouse) and thus presents an “extraordinary circumstance” precluding the use of a CE; and (3) the Forest Service failed to properly evaluate the cumulative impacts of the Project and other activities prior to proposing to rely on a CE as required by its scoping regulations.

1. The Project Does Not Fit Within the One-Year Limit

The Forest Service proposes to exclude the Project from detailed NEPA review based on its belief that: “It is anticipated that this project can be completed under a categorical exclusion under the category established under 36 CFR 220.6 (e)(8), because it is a ‘short term (1 year or less) mineral investigation and incidental support activities.’” Scoping letter at 2. At the outset, the agency must show that all aspects of the Project operations will be completed within one year, not just that it is “anticipated” that all operations “can be completed” within one year from starting. In this case, the agency cannot meet this standard.

When an agency’s action does not comport with its chosen CE category, courts must invalidate the action. See West v. Dep’t of Transp., 206 F.3d 920, 928-29 (9th Cir. 2000); High Sierra Hikers Ass’n v. Blackwell, 390 F.3d 630, 641-48 (9th Cir. 2004). Courts must review “whether the path taken to reach the conclusion was the right one in light of NEPA’s procedural requirements.” West, 206 F.3d at 929 (citation omitted). Here it clearly is not.

The scoping letter acknowledges that the Project, including required reclamation, is expected to take at least three years. “After drilling is complete, the drill pads would be reclaimed by spreading the reserved topsoil, recontouring to approximate original landforms and planting with a Forest Service-approved native seed mix. Temporary access routes would be reclaimed using a spring-tooth harrow, or similar device, to relieve surface compaction and then seeded with the same approved seed mix. **Monitoring of the revegetation success would continue for three years after seeding.**” Scoping letter at 1 (emphasis added). Because completion of reclamation would require waiting until the three-year monitoring was completed, it is entirely possible that additional site work would be done in the event that reclamation was not successful.

Kore’s Plan of Operations also acknowledges that the Project will not be fully completed within one year. “KORE is requesting this EPO be approved for a period of 1 year from the approval date. **Revegetation monitoring and reclamation maintenance will continue after the one year period**, as required.” Plan at 25 (emphasis added).

Further, according to the Plan: “Seeding will be completed in late summer, early fall or will be modified to the time of year recommended by the US Forest Service. All reclamation shall be completed within 1 year of the conclusion of operations per 36 CFR Sec. 228.8(g).” Plan at 23. Because the Forest Service has indicated that the Project is expected to start this coming July or August of 2021 (per the Inyo National Forest’s Schedule of Proposed Activities, <http://data.ecosystem-management.org/nepaweb/current-sopa.php?forest=110504>), this means that reclamation/seedling will not occur until late summer/early fall of 2022 – well beyond the CE category time limit. This also admits that since reclamation can only occur after drilling/road work is completed, the additional year of reclamation further precludes use of the proposed CE.

As the agency knows, monitoring and reclamation are considered part of “operations.” 36 C.F.R. §228.3(a). As such, they must be included in the time period for the Project. The agency cannot argue

that all work will undoubtedly be “completed” within one year, because that would essentially admit that the three-year monitoring requirement is worthless, as the company would be under no obligation to conduct any additional reclamation, reseeding, etc. if the monitoring was unsuccessful. The USFS must also require the company to post a bond to cover, among other costs, “the estimated cost of stabilizing, rehabilitating, and reclaiming the area of operations.” 36 C.F.R. §228.13(b).

Kore’s Plan admits that on-the-ground reclamation work might be needed for 3 years, depending on the success of the reclamation/seeding: “KORE’s Project Biologist will inspect the drill pad annually for three years following the winter season to see if disturbed areas are revegetating and other reclamation measures need repair or modification.” Plan at 24.

Under these regulations, all aspects of the Project, including monitoring and reclamation, are considered part of the authorized “operation,” defined as: “All functions, work and activities in connection with prospecting, exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto.” 36 C.F.R. §228.3. Thus, whether or not drilling may finish in one-year, other Project operations “in connection with” and “reasonably incident” to the actual exploration will not be completed until up to three years or more after drilling is completed. As such, the Project, taken as a whole as mandated by the agency regulations, does not meet the “1 year or less” requirement of the CE utilized by the agency here.

This was the exact ruling in Defenders of Wildlife v. U.S. Forest Service, Order, 4:14-cv-02446-RM (D. Ariz., 2015). On very similar facts, the federal court held that since monitoring of reclamation success would last three years, and that reclamation based on that monitoring “may be required during the three-year monitoring period” – the situation here – the agency could not use the “short-term” mineral exploration category for a proposed mineral exploration project.

Defendants argue that this three-year monitoring period should not be considered part of the project’s duration because all ground-disturbing project activities will be completed before the monitoring period begins; however, the Decision Memorandum anticipates that additional ground disturbing reclamation activities **may be required** during the three-year monitoring period. USFS’s determination that the project can be completed in one year or less is unsupported by the record.

Defenders, Order at 8 (emphasis added). “USFS argues that, if additional reclamation work is required during the three-year monitoring period, the additional reclamation work would be reviewed under NEPA. However, the reclamation work is already contemplated in and authorized by the Decision Memorandum, with no indication in the record that the already-approved reclamation design features would require a new Plan of Operations or further review and approval.” Order at 8, n.5

“Therefore, USFS’s approval of the project using the categorical exclusion for short-term mineral explorations pursuant to 36 C.F.R. § 220.6(e)(8) was arbitrary and capricious.” Order at 8.

Further, the scoping letter is vague on how long the actual drilling would take. This is especially problematic because site operations are prohibited for large portions of the year as required to protect the Bi-State Sage Grouse and its habitat. According to the Inyo Forest Plan Standards, the agency must:

06 Establish a limited operating period for the sage-grouse breeding season (which current best available science indicates is March 1 to May 15) within suitable breeding habitat for any activities that would cause disturbances during this time. These dates can be adjusted based on current nesting conditions or risk assessment.

07 Establish a limited operating period for the sage-grouse nesting season (which current best available science indicates is May 1 to June 15) within suitable nesting habitat for any activities that would lead to disturbances during this time. These dates can be adjusted based on current nesting conditions or risk assessment.

SPEC-SG-STD, Forest Plan at 39. As noted herein, under the National Forest Management Act (NFMA), 16 U.S.C. §1604 (i), the agency cannot approve the Project that would not strictly comply with all Forest Plan standards, guidelines, objectives, and desired conditions.

Thus, as admitted by the agency and Kore's Plan of Operations, it is clear (certainly possible under the Court's "may" last more than one year test in Defenders) that all drilling and initial reclamation work will not be completed within a year, and thus the Project does not qualify under the 36 C.F.R. § 220.6(e)(8) category.

2. Extraordinary Circumstances Preclude Use of a CE

The Forest Service has identified "extraordinary circumstances" that make the use of a CE inappropriate and which indicate the proposed action warrants an EA or EIS. 36 C.F.R. §§ 220.6(a), (b); Forest Service Handbook ("FSH") § 1909.15, Ch. 31.2. These extraordinary circumstances include consideration of whether "[f]ederally listed threatened or endangered species or designated critical habitat, or Forest Service sensitive species" are in the project area. 36 C.F.R. § 220.6(b)(1)(i); FSH § 1909.15, Ch. 31.2(1). When a project area contains extraordinary circumstances related to the proposed action, the use of a categorical exclusion may be inappropriate and the Forest Service should consider preparing an EA or EIS instead. See 36 C.F.R. §§ 220.6(a), (b). However, the mere presence of one or more of the extraordinary circumstances resource conditions does not preclude the use of a categorical exclusion. Rather it is the existence of a cause and effect relationship between a proposed action and the potential effect on these resource conditions. If such a cause and effect relationship exists, the degree of the potential effect of the proposed action on these resource conditions determines whether extraordinary circumstances exist. 36 C.F.R. § 220.6(b)(2). See also FSH § 1909.15, Ch. 31.2 ("If the degree of potential effect raises uncertainty over its significance, then an extraordinary circumstance exists, precluding use of a categorical exclusion.").

Under USFS CE regulations:

Categorical exclusions.

(a) General.

A proposed action may be categorically excluded from further analysis and documentation in an EIS or EA only if there are no extraordinary circumstances related to the proposed action and if:

- (1) The proposed action is within one of the categories established by the Secretary at 7 CFR part 1b.3; or

(2) The proposed action is within a category listed in § 220.6(d) and (e).

(b) Resource conditions.

(1) Resource conditions that should be considered in determining whether extraordinary circumstances related to a proposed action warrant further analysis and documentation in an EA or an EIS are:

(i) Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species;

(ii) Flood plains, wetlands, or municipal watersheds;

(iii) Congressionally designated areas, such as wilderness, wilderness study areas, or national recreation areas;

(iv) Inventoried roadless area or potential wilderness area;

(v) Research natural areas;

(vi) American Indians and Alaska Native religious or cultural sites; and

(vii) Archaeological sites, or historic properties or areas.

36 C.F.R. § 220.6. Here, at a minimum, due to the potentially significant impacts to the Bi-State Sage Grouse (a USFS designated Sensitive Species) and its habitat, as well as to un-inventoried religious or cultural sites, these extraordinary circumstances prevent using a categorical exclusion for the Project.

Regarding the Bi-State Sage Grouse, the Project would be located in the designated South Mono Population Management Unit (PMU) and very near critical breeding and nesting habitat. It will be impossible not to have substantial impacts to this protected species and its habitat as detailed below.

Regarding Native American religious or cultural sites, the agency has yet to fully consult with all potentially affected Tribes under the National Historic Preservation Act (NHPA) and applicable Executive Orders. As such it is impossible for the agency at this time to determine whether impacts to these sites may be significant.

3. *The Agency Must Analyze All Cumulative Impacts to Determine If a CE Can Be Used*

NEPA's statutory framework, as well as USFS's own regulatory policies enumerated in the Forest Service Handbook (FSH), Section 1909.15 et seq., require the agency to consider potentially significant environmental effects, including cumulative impacts, before deciding to invoke a categorical exclusion and moving forward with a proposed action in the absence of an EA or EIS. If the proposed action may have a significant effect, USFS must prepare an EIS. See 36 C.F.R. § 220.6(c). If, in contrast, USFS is uncertain whether the proposed action may have a significant effect, it must prepare an EA. *Id.* The Forest Service cannot rely on a NEPA categorical exclusion if the action may have significant impacts. The Forest Service's NEPA Handbook provides that if "the proposed action may have a significant environment effect, prepare an EIS," and not a categorical exclusion. NEPA Handbook § 31.3

As the Ninth Circuit has held, plaintiffs "need not show that significant impacts will in fact occur, but raising 'substantial questions' that a project **may** have significant impacts is sufficient." Ocean Advocates v. U.S. Army Corps of Engineers, 402 F.3d 846, 865 (9th Cir. 2005) (emphasis in original); Citizens for a Better Forestry v. Dept. of Agriculture, 481F.Supp.2d 1059, 1090 (N.D. Cal. 2007)

(“invocation of any CE is inappropriate if the agency action may have significant effects on the environment as defined by the CEQ regulations.”).

Under the 2020 CEQ NEPA regulations, the agency’s required analysis of all “effects” or “impacts”

[M]eans changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives.

40 C.F.R. § 1508.1(g). Thus, although the precise definition of “cumulative impacts” was removed from the 2020 CEQ NEPA regulations, they still have to be analyzed as the CEQ emphasized that the new rules “retain requirements to analyze all activities and environmental impacts covered within the scope of the statute,” 85 Fed. Reg. at 43,355.

As provided in the Forest Service Handbook:

If the responsible official determines, based on scoping, that it is uncertain whether the proposed action may have a significant effect on the environment, prepare an EA. If the responsible official determines, based on scoping, that the proposed action may have a significant environmental effect, prepare an EIS. (36 C.F.R. 220.6(c))

FSH 1909.5, Section 31.3.

Scoping is required for all Forest Service proposed actions, including those that would appear to be categorically excluded [...]. Scoping is important to discover information that could point to the need for an EA or EIS versus a CE. Scoping is the means to identify the presence or absence of any extraordinary circumstances that would warrant further documentation in an EA or EIS. Scoping should also reveal any past, present, or reasonably foreseeable future actions with the potential to create uncertainty over the significance of cumulative effects.

Id.

Thus, the Forest Service’s first step in analyzing the proposed mining exploration plan is to determine what type of NEPA analysis is appropriate. Before the agency begins to consider whether a proposed activity fits within the specified criteria in which a CE was promulgated, the first question is whether there might be significant effects necessitating an EIS, or if there is uncertainty, an EA. “[A]ll that is required to render the CE inappropriate is the possibility of significant effects.” Citizens for Better Forestry, 481 F.Supp.2d at 1087-88.

NEPA’s statutory framework, as well as the Forest Service’s own regulatory policies enumerated in the Forest Service Handbook (“FSH”), 1909.15 et seq., requires the agency to consider potentially significant environmental effects, including cumulative impacts, before deciding to invoke a CE and to move forward in the absence of an EA or EIS. *See Sierra Club v. United States*, 255 F. Supp. 2d 1177, 1182 (D. Colo. 2002) (“In determining whether an action requires an EA or EIS or is categorically

excluded, federal agencies must not only review the direct impacts of the action, but also analyze indirect and cumulative impacts.”).

The duty of the Forest Service to analyze cumulative impacts in determining whether the proposed project may have significant impacts was confirmed in Hells Canyon Preservation Council v. Connaughton, 2013 WL 665134, *6-8 (D. Or. 2013), where the court relied on the scoping sections of 36 C.F.R. §220.6(c) and FSH 31.3 as the basis for requiring the USFS to do at least an EA to determine whether their “may be significant impacts.”

Thus, only where the potential effect on the resource condition is known to be insignificant, and scoping does not reveal otherwise or raise uncertainty, does the action comply with USFS’s policy on extraordinary circumstances. Accordingly, only where the potential effects of a proposed action are certain to be insignificant may USFS invoke a categorical exclusion. The determination of the significance of the potential effects requires USFS to consider the cumulative effects and impacts of past, present, and reasonably foreseeable future actions. See FSH 1909.5, Section 31.3.

Hells Canyon, * 6.

That was also the ruling from the federal court in Arizona, in a very similar case, where it found that the Forest Service failed to analyze the impacts related to nearby reasonably foreseeable activities when it relied upon CE category #8, especially in light of a reasonably foreseeable mining operation whose impacts had not been reviewed by the agency.

In determining whether a proposed action has “significant” environmental effects, an agency should consider whether the action is related to other actions with individually insignificant but cumulatively significant impacts. See 40 C.F.R. § 1508.27(b)(7); Forest Service Handbook § 1909.15, Ch. 31.3 (“Scoping should . . . reveal any past, present, or reasonably foreseeable future actions with the potential to create uncertainty over the significance of cumulative effects.”); *Alliance for the Wild Rockies v. Weber*, 979 F. Supp. 2d 1118, 1129 (D. Mont. 2013) (the “extraordinary circumstances analysis includes consideration of whether a normally excluded action may have cumulatively significant environmental effect”); *Sierra Club v. United States*, 255 F. Supp. 2d 1177, 1182 (D. Colo. 2002) (“In determining whether an action requires an EA or EIS or is categorically excluded, federal agencies must not only review the direct impacts of the action, but also analyze indirect and cumulative impacts.”).

Defenders of Wildlife v. U.S. Forest Service, Order at 13-14 (D. Ariz., Sept. 15, 2015).

Thus, the Forest Service must consider possible significant effects, and, in particular, the cumulative impacts of nearby current and reasonably foreseeable mining/mineral, agriculture, water withdrawals/use, grazing, traffic, energy development, and all other such activities in the area (including along/near access and truck routes).

Lack of and Need for More Public Involvement

The public's concerns with the proposed project were foreseeable based on the negative public response to exploratory drilling by Royal Gold in 1997. The public concerns are the same now as they were then.

As of May 10, 2021 the agency's reading room for the project had over 1,200 original comments, mostly opposed to the agency's proposed use of a categorical exclusion for a drilling exploration project that could lead to an open pit, cyanide heap leach mine. Comments raise significant concerns about issues ranging from impacts to natural resources to negative economic impacts related to tourism. Both Mono County and the Town of Mammoth Lakes voted unanimously to oppose the use of a CE. Mono County is a member of the Bi-state Sage Grouse Local Area Working Group that is protecting the Bi-state Sage Grouse through collaborative means. Both the Town of Mammoth Lakes and Mono County are concerned with the economic impacts to recreational fishing, tourism, and the many other recreational uses of the USFS lands in and around the Project area.

The natural resources on the public lands are assets for the Town of Mammoth Lakes and Mono County. This Project and what may follow will affect the visitor experience and harm the natural resources. The Forest Service should at minimum prepare an EA and in that process is required to provide a social and economic overview that addresses "the social, historical, and economic context of a Forest Service Unit and identifies problems, opportunities, and potential sources of controversy" related to the specific project that can be relied on in determining whether an EIS will be needed (FSH 1909.17.30).

II. Because Use of a CE for the Project Is Prohibited, the Agency Must Prepare, at a Minimum, a NEPA-Compliant EA, or Based on the Facts, an EIS

"An agency cannot avoid its statutory responsibilities under NEPA merely by asserting that an activity it wishes to pursue will have an insignificant effect on the environment. The agency must supply a convincing statement of reasons why potential effects are insignificant." Public Service Co. of Colorado v. Andrus, 825 F.Supp. 1483, 1496 (D. Idaho 1993) *citing* The Steamboaters v. FERC, 759 F.2d 1383, 1393 (9th Cir. 1985).

"[T]o prevail on the claim that the federal agencies were required to prepare an EIS, the plaintiffs need not demonstrate that significant effects will occur. A showing that there are 'substantial questions whether a project *may* have a significant effect' on the environment is sufficient." Anderson v. Evans, 371 F.3d 475, 488 (9th Cir. 2004) (italics in original, citations omitted). *See also* Western Land Exchange Project v. BLM, 315 F.Supp.2d 1068, 1087 (D. Nev. 2004) (same).

The agency cannot avoid preparing an EIS by making conclusory assertions that an activity will have only an insignificant impact on the environment. *See* Alaska Ctr. for Env't v. United States Forest Serv., 189 F.3d 851, 859 (9th Cir.1999). If an agency, such as the USFS, opts not to prepare an EIS, it must put forth a "convincing statement of reasons" that explain why the project will impact the environment no more than insignificantly. Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1212 (9th Cir.1998).

In considering the severity of the potential environmental impact, a reviewing agency may consider up to ten factors that help inform the "significance" of a project, such as the unique

characteristics of the geographic area, including proximity to an ecologically sensitive area; whether the action bears some relationship to other actions with individually insignificant but cumulatively significant impacts; the level of uncertainty of the risk and to what degree it involves unique or unknown risks; and whether the action threatens violation of an environmental law. (Citations omitted). We have held that one of these factors may be sufficient to require preparation of an EIS in appropriate circumstances. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 731 (9th Cir.2001).

Ocean Advocates v. U.S. Army Corps of Engineers, 402 F.3d 846, 864-65 (9th Cir. 2005)(EA and FONSI inadequate when agency fails to prepare adequate cumulative impacts analysis) (emphasis in original).

An EIS that is prepared (or at a minimum, a draft EA prepared for public comment) must fully review all reasonable alternatives, provide for mitigation and an analysis of the effectiveness of all mitigation measures, review all direct, indirect, and cumulative impacts, and fully analyze all baseline conditions of the potentially affected environment, among other NEPA requirements.

In addition, the agency must fully comply with the following NEPA requirements.

1. *The EA/EIS must fully analyze all baseline conditions prior to approving the exploration proposal*

The establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process:

“NEPA clearly requires that consideration of environmental impacts of proposed projects take place before [a final decision] is made.” *LaFlamme v. FERC*, 842 F.2d 1063, 1071 (9th Cir.1988) (emphasis in original). Once a project begins, the “pre-project environment” becomes a thing of the past, thereby making evaluation of the project's effect on pre-project resources impossible. *Id.* Without establishing the baseline conditions which exist in the vicinity ... before [the project] begins, there is simply no way to determine what effect the proposed [project] will have on the environment and, consequently, no way to comply with NEPA. *Half Moon Bay Fisherman's Mark't Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988). “In analyzing the affected environment, NEPA requires the agency to set forth the baseline conditions.” *Western Watersheds Project v. BLM*, 552 F.Supp.2d 1113, 1126 (D. Nev. 2008). “The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process.” Council of Environmental Quality, *Considering Cumulative Effects under the National Environmental Policy Act* (May 11, 1999). Such baseline information and analysis must be part of the EA/EIS and be subject to public review and comment under NEPA.

Here, at a minimum, prior to considering or approving any exploration, the Forest Service must first obtain this required baseline information and subject the information and analysis to public review and comment in an EA/EIS. “NEPA requires that the agency provide the data on which it bases its environmental analysis. Such analyses must occur before the proposed action is approved, not afterward.” *Northern Plains v. Surf. Transp. Brd.*, 668 F.3d 1067, 1083 (9th Cir 2011) (concluding that an agency's “plans to conduct surveys and studies as part of its post-approval mitigation measures,” in

the absence of baseline data, indicate failure to take the requisite “hard look” at environmental impacts).

This requirement applies not only to ground and surface waters, but also to any other potentially affected resource such as air quality, recreation, cultural/religious/historical, soils, and wildlife. For example, here the Forest Service must provide baseline information regarding the number of Bi-state Sage Grouse in the “neighborhood” and habitat use¹. Baseline information is also needed for native vegetation, the level of cheatgrass, the number and location of cultural sites, and many other resources.

2. *The agency must include an adequate mitigation plan under NEPA and USFS mining regulations*

Under NEPA, the agency must have an adequate mitigation plan to minimize or eliminate all potential project impacts. NEPA requires the agency to: (1) “include appropriate mitigation measures not already included in the proposed action or alternatives,” 40 CFR § 1502.14(e); and (2) “include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(e)).” 40 CFR § 1502.16(a)(9). NEPA regulations define “mitigation” as a way to avoid, minimize, rectify, or compensate for the impact of a potentially harmful action. 40 C.F.R. §§1508.1(s). “[O]mission of a reasonably complete discussion of possible mitigation measures would undermine the ‘action-forcing’ function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects.” Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989). NEPA requires that the agency discuss mitigation measures, with “sufficient detail to ensure that environmental consequences have been fairly evaluated.” Methow Valley, 490 U.S. at 352, 109 S.Ct. 1835.

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. Compare Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1381 (9th Cir.1998) (disapproving an EIS that lacked such an assessment) with Okanogan Highlands Alliance v. Williams, 236 F.3d 468, 477 (9th Cir.2000) (upholding an EIS where “[e]ach mitigating process was evaluated separately and given an effectiveness rating”). The Supreme Court has required a mitigation discussion precisely for the purpose of evaluating whether anticipated environmental impacts can be avoided. Methow Valley, 490 U.S. at 351–52 (citing 42 U.S.C. § 4332(C)(ii)).

A mitigation discussion without at least some evaluation of effectiveness is useless in making that determination. South Fork Band Council v. Dept. of Interior, 588 F.3d 718, 727 (9th Cir. 2009) (rejecting EIS for failure to conduct adequate review of mitigation and mitigation effectiveness in mine EIS). “The comments submitted by [plaintiff] also call into question the efficacy of the mitigation measures and rely on several scientific studies. In the face of such concerns, it is difficult for this Court to see how the [agency’s] reliance on mitigation is supported by substantial evidence in the record.” Wyoming Outdoor Council v. U.S. Army Corps of Eng’rs, 351 F. Supp. 2d 1232, 1251 n. 8 (D. Wyo. 2005). *See also* Dine Citizens v. Klein, 747 F.Supp.2d 1234, 1258-59 (D. Colo. 2010) (finding “lack of detail as the nature of the mitigation measures” precluded “meaningful judicial review”).

¹ Coates et al. 2021.

3. *The agency must fully review all reasonable alternatives*

NEPA requires the agency to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 4332(E); 40 CFR § 1502.14. It must “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9th Cir. 1990).

The alternatives analysis should present the environmental impacts in comparative form, thus sharply defining important issues and providing the public and the decisionmaker with a clear basis for choice. Id. The lead agency must “rigorously explore and objectively evaluate all reasonable alternatives” including alternatives that are “not within the [lead agency’s] jurisdiction.” Id. “While a federal agency need not consider all possible alternatives for a given action in preparing an EA, it must consider a range of alternatives that covers the full spectrum of possibilities.” Ayers v. Espy, 873 F.Supp. 455, 473 (D. Colo. 1994).

In this case, the agency must consider, at a minimum, the following reasonable alternatives: (1) access to each activity without the construction or reconstruction/improvement of new or improved roads, including helicopter access; (2) reduction in the amount, scope, and impact of each activity or group of activities including drilling waste disposal; (3) timing restrictions to protect wildlife; (4) preclusion of any impact to cultural/religious/historical resources, (5) moving the activities further from wildlife core/home ranges.

III. The Exploratory Drilling Project Is Part of Kore Mining’s Larger Mine Project and Must Be Considered Together

The agency proposes to review the proposed exploratory drilling as a stand alone project not related in any way to Kore Mining’s planned large scale mine at the site. Yet under NEPA, as noted herein, the agency cannot piecemeal or segment its review of connected or cumulative actions, nor ignore that the mine is a “reasonably foreseeable activity” under NEPA.

NEPA prevents a project from being implemented as smaller separate projects to avoid an environmental review of the cumulative impacts and to avoid triggering the California Surface Mining and Reclamation Act (SMARA). The earlier Royal Gold project at this site had nine phases of exploratory drilling in the 1990s. Each one was incorrectly defined as an unconnected project and classified as a Categorical Exclusion. However, these were connected actions. Treating them as separate and small, unconnected projects at that time undermined NEPA review and appropriate application of the SMARA regulations.

If this is the first of several actions by Kore Mining, then this project should be considered the start of subsequent connected actions. The Kore Mining website under exploration highlights has a map showing several zones of relative degrees of gold concentrations (slide 7, Attachment A). The zone in the western-most area with the highest concentration (Hilton Creek Zone) matches up with the drill sites on the map in the Forest Service scoping letter. Exploratory drilling projects for the other zones will follow starting with those of the highest concentration zones: eastern-most area of high concentration (the South East Zone) or at the northern area (South Zone). This means Kore Mining plans to have more exploration projects and this is just the start of a series of at least three connected

projects. Next Steps of a Kore PEA presentation states, “Drilling planned in H1 2021” (meaning the first half, which is the Project), “Follow-up with *second* drill program in 2021” (slide 13, Attachment A).

The Kore Mining’s EA NI-43 101 Technical Report dated 10/27/2020 (Attachment B) says that exploration costs over 3-5 years leading up to a production decision are not included in the economic analysis. The report states on page 154, “The Long Valley Project will elect to expense exploration expenditures under Section 617(a) as incurred. Long Valley will deduct mine development costs as incurred under Section 616(a) for Phase I and 616(b) for Phase II.” More exploration can be expected and the USFS Kore Mining Long Valley Exploration Project is just one part of a larger action. The Forest Service must prepare an EIS now to analyze the cumulative impacts of connected exploratory drilling projects. This project will not be the only exploratory drilling project before they move to actual mining. On that basis and others, it does not qualify as a CE.

Kore’s 10/27/2020 Technical Report on page 9 identifies the current drilling as part of Phase 1 of the larger mine project, as Phase 1 includes:

- Collection of geotechnical, hydrology, and hydrogeology data
- Conduct geotechnical testing of the pit wall
- Improve metallurgical understanding of the orebody through additional metallurgical sampling.

The proposed drilling is within the already-projected mine pit area. Report Figure 16-18. Thus, the proposed drilling is Phase 1 activities to “collect geotechnical, hydrology, and hydrogeology data,” “conduct geotechnical testing of the pit wall, or “Improve metallurgical understanding of the orebody through additional metallurgical sampling.” Report at 10. In 2017 Kore Mining conducted a magnetotelluric study followed by geophysical studies in 2019 and 2020 (Attachment B, pg 2). Kore hired EnviroMINE, Inc. to prepare an environmental document. Kore has undertaken actions that show that the next stages of this project are already planned and not speculative.

The Kore Mining 10/27/2020 Technical Report shows the details of its planned mine operation, including a Mineral Resource Estimate. It outlines a plan for a mining operation complete with maps, economic information, risk analysis, infrastructure, mining method, etc. Kore has completed a Preliminary Economic Assessment as well, as part of that report. Kore Mining is obviously promoting a Long Valley gold mine. The Report and Kore Mining and Mining Data Online websites are promoting this project as a simple, low cost, open pit, heap leach project. <https://www.koremining.com/long-valley> (viewed April 28, 2021).

The fact that Kore has yet to formally submit the mine proposal to the Forest Service does not mean that it is not a “reasonably foreseeable activity” or connected action that must be fully considered under NEPA.

Kore’s 10/27/2020 Technical Report already outlines the extent of the ore body, mine pit, and all project facilities. Figure 16-18 (page 122). The Report also details the mineralization of the delineated ore body, as well as expected mining costs and revenues. Thus, the agency cannot assert that the project is speculative.

[P]rojects need not be finalized before they are reasonably foreseeable. “NEPA requires that an EIS engage in reasonable forecasting. Because speculation is ... implicit in NEPA, [] we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as crystal ball inquiry.” *Selkirk*, 336 F.3d at 962 (internal quotation marks and citation omitted). As the Environmental Protection Agency (EPA) also has noted, **“reasonably foreseeable future actions need to be considered even if they are not specific proposals.”** EPA, Consideration of Cumulative Impact Analysis in EPA Review of NEPA Documents, Office of Federal Activities, 12–13 (May 1999), available at <http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf>.

Northern Plains Resource Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067, 1078-79 (9th Cir. 2011)(emphasis added). Additionally, the federal courts have routinely required the agencies to review the impacts from future, not-yet-proposed mineral activity when preparing EAs or EISs for mineral leasing projects.

BLM finally argues that at this stage, the exact scope and extent of drilling that will involve fracking is unknown, so NEPA analysis, if any, should be conducted when there is a site-specific proposal. But “the basic thrust” of NEPA is to require that agencies consider the range of possible environmental effects before resources are committed and the effects are fully known. “Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as ‘crystal ball inquiry.’”

Center for Biological Diversity v. Bureau of Land Management, 937 F.Supp.2d 1140, 1157 (N.D. Cal. 2013) citing City of Davis v. Coleman, 521 F.2d 661, 676 (9th Cir.1975) and Northern Plains, 668 F.3d at 1079. *See also* Connor v. Burford, 848 F.2d 1441 (9th Cir. 1988)(future impacts of drilling must be analyzed when preparing NEPA document for oil and gas lease); Colorado Environmental Coalition v. Office of Legacy Management, 819 F.Supp.2d 1193, 1209-09 (D. Colo. 2011)(impacts from future, as-yet-unproposed mining must be considered when preparing NEPA document for leasing decision).

In New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 718-19 (10th Cir. 2009), the Tenth Circuit determined that future mineral activity was “reasonably foreseeable” due to the fact that “considerable exploration has already occurred on parcels adjacent to the [challenged] parcel,” a developable mineral deposit “is known to exist beneath these parcels,” and the company “has concrete plans to build” a mineral project on these lands.

In the hardrock mining context, the federal courts have held that mineral examinations conducted as part of an anticipated larger mine cannot be piecemealed and segregated from review of the larger project. Ksanka Kupaqa Xa’lcin v. U.S. Fish and Wildlife Service, 2021 WL 1415255, *8 (D. Mont. 2021)(since the mining company “planned for the construction of a mine following a proposed mineral exploration project” it must be considered at the time of the agency’s review of the exploration). As that Court noted, when mineral investigations such as the drilling project proposed at Kore’s mine site are part of an anticipated mine, it is very different from the situation where there has been no previous mineral examinations and no plans by the company for a mine. Id.

All of these conditions requiring review of the mine are present here – as acknowledged by Kore’s Report. The Report details the mineral deposit at the site and that the proposed drilling Project here is just part of Phase 1 to “Improve metallurgical understanding of the orebody through additional metallurgical sampling.” Report at 10. This evidence is not only contained in the company’s Report, it is attested to under penalties in the securities regulations noted in the Report.

Further, under the Endangered Species Act, the NFMA, 1897 Organic Act, and NEPA, the agency must fully review the impacts from the Project, along with Kore’s main mine, to Hot Creek, which contains listed species under the ESA. *See Ksanka Kupaqa Xa’lecin* (Forest Service approval of drilling for first phase of large mine violated the ESA for failing to analyze effects of the mine).

Lastly, Kore’s mining project and its impacts, must be fully reviewed as a connected action under NEPA, and/or at a minimum, for its cumulative impacts, along with the other reasonably foreseeable future activities in the area.’

IV. Impacts to Biological Resources

1. Bi-state Sage Grouse

The Bi-state Sage Grouse in the area in and around the Project site are part of the Long Valley sub-population in the South Mono Population Management Unit. The Long Valley Bi-State Sage Grouse sub-population is the second largest and second in importance. The USGS Greater Sage Grouse Hierarchical Monitoring Framework (Coates et al. 2020, figure 22 pg. 35) shows that it has been in decline over the last 17 years (footnote 1). It is critical that it not be disturbed or stressed. Declines in this sub-population could force the species to be listed as threatened or endangered. The proposed Kore Mining Exploratory Drilling Project is likely to cause it to decline even further. The impacts are unavoidable if this project is approved. Mitigations can help lessen the impacts, but not eliminate them.

The Bi-state Sage Grouse is a sagebrush obligate, which means it relies upon large expanses of intact sagebrush habitat to survive. As noted on page 3 in the 2012 Bi-State Action Plan² for the Bi-state Sage Grouse, the species is under significant threats to survival:

Factor A: Urbanization, infrastructure (fences, powerlines, and roads), mining, energy development, grazing, invasive and exotic species, pinyon-juniper encroachment, recreation, wildfire, and the likely effects of climate change were the major threats to current and future destruction, modification, or curtailment of habitat in the Bi-State area. FWS acknowledged that individually, any one of these threats appears unlikely to severely affect persistence across the entire Bi-State DPS. Cumulatively, however, these threats interact in such a way as to fragment and isolate populations.

The Scoping Letter fails to mention the presence of the Bi-state Sage Grouse in the Project area and the Plan of Operations dismisses the Greater Sage Grouse from further consideration. However, the Bi-state Sage Grouse (BSSG) is a distinct population, which has been recognized as being in need of significant protections through the 2012 BSSG Action Plan (footnote 2), funded through the NRCS, USDA Farm Bill. There is a two-state effort to protect their habitat: countless hours of agencies’ time

² 2012 BSSG Action Plan

(USGS, USFWS, USFS, and the BLM), NGOs, private landowners and concerned citizens, plus additional funding geared directly toward land preservation. The Inyo National Forest is a member of this collaborative working to “maintain and *improve* habitat and species viability for the Bi-state Distinct Population Segment of the Great Sage Grouse.”³ The goal of the cooperative is to prevent having to list this species as threatened and endangered through management efforts. It is projects like this that will force a listing. The Forest Service has directed \$4.8 million toward these efforts between 2014-2018 and more since. It is part of the Executive Oversight Committee, the Technical Advisory Committee, and the Local Area Working Group. The goals and objectives of the 2012 BSSG Action Plan (footnote 2) have been incorporated into the 2019 Inyo NF Land Management Plan. The plan states goals and objectives to protect BSSG habitat (see pages 37-41).⁴

The Inyo National Forest commitments to BSSG conservation are exemplified in the Inyo National Forest Land Management Plan (2019) with multiple plan components (pg 37-41) including standards and guidelines to protect the species from proposed projects within BSSG habitat.

The INF Land Management Plan states:

The greater sage-grouse Bi-State distinct population segment (*Centrocercus urophasianus*) is currently a proposed threatened species under the Endangered Species Act but a final determination has not yet been made. With this status, it is not on the current SCC list. We retained the persistence analysis here in case the species is not listed and is put back on the SCC list.⁵

The INF Record of Decision states:

In May of 2018, the bi-state sage-grouse status changed to "candidate for listing", due to a court ruling, and is undergoing a new review for listing. Therefore, it no longer meets the criteria to be a species of conservation concern, and has been removed from that list. It may be added back as a species of conservation concern if it is found not to be warranted for listing, and therefore the persistence analysis still includes findings for the bi-state sage-grouse.⁶

Because BSSG were not listed under the protection of the Endangered Species Act, the species is now again on the Species of Conservation Concern (SCC) list. SCCs require analysis for any activity that could have an adverse impact to the species, including analysis of the significance of any adverse impacts on the species, its habitat and overall population viability, and an evaluation under the Persistence Analysis should be conducted.

³ USFS 2018

https://bistatesagegrouse.com/sites/default/files/fileattachments/general/page/918/usfs_commitment_letter.pdf

⁴ USFS 2019. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd664404.pdf

⁵ USFS 2019 Inyo National Forest Land Management Plan, Persistence Analysis for Species of Conservation Concern (2019)
https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd662709.pdf

⁶ USFS Inyo National Forest Land Management Plan Record of Decision, October 2019. pg 15

Regarding designated Sensitive Species, such as the Bi-state Sage Grouse, the agency must fully implement its Sensitive Species policy for each species. The 2012 BSSG Action Plan (footnote 2) (pg 68) states:

USFS sensitive species policy provides that the National Forests shall:

1. Assist States in achieving their goals for conservation of endemic species.
2. As part of the National Environmental Policy Act process, review programs and activities, through a biological evaluation, to determine their potential effect on sensitive species.
3. Avoid or minimize impacts to species whose viability has been identified as a concern.
4. If impacts cannot be avoided, analyze the significance of potential adverse effects on the population or its habitat within the area of concern and on the species as a whole. (The line officer, with project approval authority, makes the decision to allow or disallow impact, but the decision must not result in loss of species viability or create significant trends toward Federal listing.)
5. Establish management objectives in cooperation with the States when projects on National Forest System lands may have a significant effect on sensitive species population numbers or distributions.
6. Establish objectives for Federal candidate species, in cooperation with the FWS or NMFS and the States.

As noted herein, the Bi-State Plan was enacted to provide conservation for the species in order to avoid the need to list the Bi-state Sage Grouse under the ESA. Thus, the agency must “Avoid or minimize impacts to species whose viability has been identified as a concern” and “the decision must not result in loss of species viability or create significant trends toward Federal listing.” Id. Further, under this policy, a biological evaluation must be prepared to determine the impacts to the BSSG “As part of the National Environmental Policy Act process, review programs and activities, through a biological evaluation, to determine their potential effect on sensitive species.” Id.

This project is located in the middle of Bi-state Sage Grouse territory. According to the lek location data available from the Bureau of Land Management (BLM, Bishop Field Office), the proposed project area is entirely or partially within the three-mile buffer of seven primary and six satellite sage grouse leks. The closest primary lek is located 0.4 miles from the project area boundary and its satellite lek is located within the project site itself. Piles of fresh and older BSSG scat at drill site 6 and the area to the south of drill site 6 indicate that sage grouse are using the area and have been before this winter. There is also BSSG scat at drill site 14. Photos and GPS points for 26 locations of BSSG scat are provided (Attachment C). There are nesting and brooding locations strung out from 1-4 miles from the drill sites per the USGS data presented in the LADWP BSSG Adaptive Management Plan (Attachment D). Antelope Springs Road bisects the brooding locations so tank trucks, equipment, and crews traveling to/from the project site coming from the Owens River Road will pass through the brooding area multiple times per day. The USGS data shows there are early and late nesters and broods. Late nesters/broods go through mid-September, indicating the company’s proposal to operate after June will be inadequate to avoid impacts to the species. As a result, the proposed activities including site access by heavy equipment along roads in the area may significantly affect the BSSG and the use of a CE is inappropriate.

The Forest Service recognizes that these impacts may be significant and can, and is, imposing restrictions per the 2012 BSSG Action Plan (footnote 2) from March 1-June 15 per the Inyo NF Land Management Plan under SPEC-SG-STD #06 and 07:

06 Establish a limited operating period for the sage-grouse breeding season (which current best available science indicates is March 1 to May 15) within suitable breeding habitat for any activities that would cause disturbances during this time. These dates can be adjusted based on current nesting [breeding] conditions or risk assessment.

07 Establish a limited operating period for the sage-grouse nesting season (which current best available science indicates is May 1 to June 15) within suitable breeding habitat for any activities that would cause disturbances during this time. These dates can be adjusted based on current nesting conditions or risk assessment.

However, that is not sufficient to ensure that impacts to the BSSG will not be significant. For example, the time restrictions are not long enough to cover the nesting season. Kore Mining is planning on clearing brush July 1 according to the Plan of Operations. In other areas, restrictions near leks extend to July 15. The Humboldt-Toiyabe USFS imposed seasonal restrictions from Feb 1-July 15 on OceanaGold due to drilling near a Bi-state Sage Grouse Lek near Spring Peak, NV. Further, USGS data shows there are early and late nesters near the project area through September 15. The road to the project site, Antelope Springs Road, bisects the nesting area. Therefore, the seasonal restriction should be extended beyond June 15 and well into the summer to protect BSSG nesting. These and other impacts and potential mitigation need to be thoroughly examined under NEPA before the Forest Service makes any decision on the proposed Project.

The 2012 BSSG Action Plan (footnote 2) specifies road closures for those leks on page 95 to reduce human disturbance:

Action HIR1-1-SM: *Continue to implement and enforce seasonal road closures designed to reduce human disturbance on public lands in the vicinity of Lek 1, Lek 5, and Lek 8 in the Long Valley portion of the South Mono PMU.*

Leks 1, 5, and 8 are within three miles of the project area.

A 2012 research paper⁷ shows noise impacts the Greater Sage Grouse. It can make the sage grouse leave the area, interrupt their communication with one another, reduce their breeding success and increase stress to the point that they die. The recommendations are that noise not exceed the natural ambient noise level + 10 db. The ambient noise level at the drill site is near 0. It is silent out there. Even air traffic at the Mammoth-Yosemite Airport is faint at the project site. Based on this research, the drilling will surely cause substantial harm.

Not only will there be noise from the drilling, but also vibrations and ground shaking from drilling and transporting heavy equipment. The proposed project will clearly impact Bi-state Sage Grouse habitat and BSSG use of the habitat. BSSG may leave the area even though they have high site fidelity, because this project is right on top of their breeding and nesting habitat. They may not return and may not survive resettlement. If there are more exploratory drilling projects, it may test the duration of their fidelity.

⁷Patricelli et al 2013; Blickley et al. 2012..

According to the Plan of Operations, the Project fencing will be 4 feet high around each drill pad and will stay up until the end of the drilling. This is in conflict with the standard in the Inyo NF Land Management Plan and will impact the Bi-state Sage Grouse. From the available data it appears that the proposed project site will be within 3 miles of many leks and next to a possible wintering site or lek as indicated by the presence of scat in the Project area. There should not be any fencing except for safety and it should be flagged. The Inyo NF Land Management Plan SPEC-SG-STD #11 states:

11 Subject to valid and existing rights, no new tall non-utility structures (e.g. fences, barriers, signs, buildings, water tanks, other structures necessary for resource management) that protrude noticeably above the dominant shrub layer will be installed in suitable sage-grouse habitat within 4 miles of an active lek except where the structure is necessary for safety or improvement of habitat and ecological conditions. All fences and other barriers constructed or replaced within 4 miles of an active lek in suitable habitat must be wildlife friendly with features to reduce impacts to sage-grouse (e.g. let-down fences, marked with fence markers or other fence types such as buck and rail). Installing any new fences within 1.2 miles of an active lek should be avoided whenever possible.

All temporary fencing should be flagged to prevent strikes. The Inyo National Forest Species of Conservation Concern and Persistence Analysis for BSSG, Standard (SPEC-SG-STD) 10 states all fencing within 4 miles of a lek should be marked and avoided if within 1.2 miles of an active lek. Remove fencing as soon as the drilling activities at a drill site are completed so it doesn't stay up until the end of the entire drilling project.

Other BSSG mitigations must also be considered in the NEPA review in order for the Forest Service to protect this species. For example, some potential additional mitigations could include:

- Route all traffic to/from the site from the west end of Antelope Springs Road. This would prevent run-ins with grouse on the road, it would prevent dust blowing into the nesting/brooding areas, and it would prevent traffic noise and bustle that would disturb them.
- No drilling from 9pm-6am when noise impacts Bi-state Sage Grouse the most.
- Move the drill sites 1-8 further north, away from the lek site or don't approve those drill sites. The Inyo National Forest Species of Conservation Concern and Persistence Analysis for BSSG, Standard 10 states no new structures protruding above the vegetation within 4 miles of a lek should be authorized. This is to prevent nest predation by ravens. Ravens are numerous in this region.
- The risk of fire could be very high this summer and fall. If this is the case, then impose a halt to all activity in the area: drilling, dispersed camping, etc., A fire would burn across the plateau and destroy this entire brooding area. We cannot take that risk. The minerals aren't going anywhere. Kore Mining might have to postpone this project until the fire risk is low.

USFS 220.6 (c) Scoping states, "If the [responsible official](#) determines, based on scoping, that it is uncertain whether the proposed action may have a significant effect on the environment, prepare an EA. If the responsible official determines, based on scoping, that the proposed action may have a significant environmental effect, prepare an EIS." From the available information it is clear that this proposed exploratory drilling project (and the ones to come) will cause significant impacts to the BSSG and may even cause unmitigable harm. Therefore, a CE is inappropriate and most likely an EIS is needed for this project. In order to know the impacts of this project on the Bi-state Sage Grouse, there should be a baseline survey of this area to determine the number of Bi-state Sage Grouse that live

in and near enough to the project area to be impacted by it. If the proposed project is approved (which we oppose), monitoring and additional surveys will need to be required each year to determine impacts on the BSSG including how many either left the area or died because of the proposed project.

Cumulative Impacts to the BSSG

There are also cumulative effects on the Bi-state Sage Grouse population as a whole with three other exploratory mining projects underway also in Bi-state Sage Grouse territory. Radius Gold is exploring in two locations, in close proximity to each other, near leks in the Bodie Hills and OceanaGold is exploring near a lek in another location in the Bodie Hills. The collective impact is likely to reduce numbers in the Bodie Hills Population Management Unit (PMU), the Mt. Grant PMU, and the South Mono PMU.

This is in addition to cumulative impacts from other activities that may impact all of the Bi-state Sage Grouse sub-populations such as Kore's planned mine, grazing, traffic, energy development, agriculture, water withdrawals, etc.

Because the Forest Service is a signatory to the Bi-State Plan, it must fully review the impacts to the Bi-state Sage Grouse from the Project (and Kore's mine plan), and protect against adverse cumulative impacts under the Bi-State Plan, the agency's sensitive species requirements, the Organic Act, the NFMA and their implementing regulations.

2. Sierra Nevada yellow-legged frog and endangered Owens tui chub

For all species listed under the federal Endangered Species Act (ESA), pursuant to ESA section 7(a)(2) the Forest Service must consult with the U.S. Fish and Wildlife Service regarding the impacts of the exploratory mining and the proposed mine on listed species in the area. California state listed species require the Forest Service to consult with the California Department of Fish and Wildlife. Falling squarely under this mandate is the endangered Sierra Nevada yellow-legged frog and endangered Owens tui chub and its designated critical habitat to ensure against jeopardy or adverse modification of critical habitat. 16 U.S.C. §1536(a)(2). *See Ksanka Kupaqa Xa'lcin* (Forest Service approval of drilling for first phase of large mine violated the ESA for failing to analyze effects of the mine, relying on a Fish and Wildlife Service biological opinion that unlawfully ignored foreseeable impacts to listed species from the proposed mine). Here, the Forest Service fails to demonstrate how the exploratory mining and proposed mine will not jeopardize the survival and recovery of ESA-listed species and designated critical habitat in the area. The Forest Service should discuss and analyze how the exploratory mining and proposed mine – including increased use of roads for truck hauling and heavy equipment – will affect Sierra Nevada yellow-legged frog and endangered Owens tui chub. This should include analysis of impacts to both within the project area as well as other known habitat surrounding the project area.

The endangered Sierra Nevada yellow-legged frog and endangered Owens tui chub and its designated critical habitat are found in Hot Creek and adjacent streams and would be adversely affected by surface or groundwater use and by any degradation of water quality including siltation or contamination due to surface runoff from mining activities. The company's technical report states that the mining operation would need large amounts of water—up to 600 gallons per minute for the life of the mine—but there is no indication as to the source of water that the company anticipates utilizing in this very arid area.

For example, Kore's plans for the heap leach operation over the estimated mine life indicates that operation of the HLF [heap leach facility] requires a water supply with an approximate average flow rate of 450 gpm (100 m³/hr). An additional 150 gpm (34 m³/hr) is required for mine, shop, and office water consumption. 10/27/2020 Technical Report at 134, *see also id.* at 135-37 (modeling water consumption and water use but not source is listed). Any groundwater extraction or surface water use in this area could affect Hot Creek and thereby impact the survival and recovery of the endangered Sierra Nevada yellow-legged frog and endangered Owens tui chub and adversely modify designated critical habitat. Therefore, the Forest Service must initiate consultation and once consultation is initiated the Forest Service cannot make any irreversible or irretrievable commitment of resources that could foreclose formulation and implementation of any reasonable and prudent alternative measures to ensure the survival and recovery of listed species. 16 U.S.C. §1536(d).

Importantly, we encourage the Forest Service to be transparent about the consultation process and affirmatively post all consultation documents, including any Forest Service Biological Evaluations or Assessments, any letters seeking concurrence, and any responses or Biological Opinions from the Fish and Wildlife Service. Without these records, we are unable to assess the agency's analysis of impacts to wildlife in light of FWS's expert opinion. Providing this information will allow the public to view these critical documents, and other documents in the project record, without the need to submit a formal Freedom of Information Act request. Without this information being publicly available during the notice and comment period, we are unable to meaningfully comment on the agencies' determinations or analysis. To the extent the Forest Service claims this project will have "no effect" on these listed species or designated critical habitat, that determination is arbitrary and capricious because, *inter alia*, it fails to consider key factors, ignores best available science, and is not supported by the record. In the very least, the Forest Service should initiate consultation with FWS to assess in detail the potential effects to all listed species and designated critical habitat that may be present in the project area.

3. *Long Valley speckled dace*

The Long Valley speckled dace is one of the most critically imperiled non-listed fishes in California, according to the California Department of Fish and Wildlife.⁸ The dace population is in danger of imminent extinction due to fluctuations in high snowpack, drought, and other factors affecting this local population. Fish surveys in recent years have revealed severely declining numbers (Steve Parmenter CDGW, personal communication to L. Cunningham 2018).

The extremely small global range of this endemic Long Valley taxon nearing extinction has recently come to light. The Long Valley speckled dace (*Rhinichthys osculus* ssp.) is a yet-undescribed local taxon, probably a new subspecies of speckled dace endemic to a Long Valley, only found in outflow springbrooks and marshes at Whitmore Hot Spring. The entire native range of this rare dace lies within the 700,000 year-old Long Valley volcanic caldera, just east of Mammoth Lakes, Mono County, including Hot Creek and various isolated springs and ponds. The formation of the caldera likely led to their isolation long before other populations of the northern Owens Basin were isolated from one another. Long Valley speckled dace have been extirpated from all but one of their historic collection sites, including Hot Creek. The sole remaining population within the native range is in Whitmore Hot Springs. The global population of this imperiled taxon may be less than one acre of alkali marsh below

⁸ CDFW N.D.

the spring. Long Valley speckled dace were extirpated from Hot Creek after 1962 likely due to alterations to the system (*id.*). Mining is listed as a threat.

Fishery biologists at the University of California at Davis describe the plight of this species as highly vulnerable to extinction in their native range because they exist in a single spring complex fed by the chlorinated outflow of a public swimming pool.⁹

This taxon is highly vulnerable to habitat modifications, which may include altered hydrology from mine exploratory drilling as it hits the regional water table. In 2020, the Center for Biological Diversity petitioned the Long Valley speckled dace for protection under the Endangered Species Act.¹⁰ The threats to this rare fish from mine drilling to the regional aquifer needs to be analyzed in an EIS.

4. Other Plants and Wildlife

Below is a list of special status species in the area that may be impacted by the mining exploration and the mine proposal and therefore must be considered under in the NEPA analysis:

Common Name	Scientific Name	Federal/State Status
Plants		
Long Valley milk-vetch	<i>Astragalus johannis-howellii</i>	S/SR, 1B.2
Lemmon's milk-vetch	<i>Astragalus lemmonii</i>	S/1B.2
Mono milk-vetch	<i>Astragalus monoensis</i>	S/SR, 1B.2
Smooth saltbush	<i>Atriplex pusilla</i>	--/2B.1
Masonic rockcress	<i>Boechera cobrensis</i>	--/2B.3
Upswept moonwort	<i>Botrychium ascendens</i>	S/2B.3
Scalloped moonwort	<i>Botrychium crenulatum</i>	S/2B.2
Mingan moonwort	<i>Botrychium minganense</i>	S/2B.2
Inyo County star-tulip	<i>Calochortus excavatus</i>	S/1B.1

⁹ <https://pisces.ucdavis.edu/content/rhinichthys-osculus-subspecies-1>

¹⁰ Miller J. 2020

Fiddleleaf hawksbeard	<i>Crepis runcinata</i>	--/2B.2
Tall draba	<i>Draba praealta</i>	--/2B.3
Booth's evening-primrose	<i>Eremothera boothii ssp. boothii</i>	--/2B.3
Blandow's bog moss	<i>Helodium blandowii</i>	S/2B.3
Dwarf monolepis	<i>Micromonolepis pusilla</i>	--/2B.3
Suksdorf's broom-rape	<i>Orobanche ludoviciana var. arenosa</i>	--/2B.3
Small-flowered grass-of-Parnassus	<i>Parnassia parviflora</i>	--/2B.2
Scalloped-leaved lousewort	<i>Pedicularis crenulata</i>	--/2B.2
Naked-stemmed phacelia	<i>Phacelia gymnoclada</i>	--/2B.3
Inyo phacelia	<i>Phacelia inyoensis</i>	S/1B.2
Alkali tansy-sage	<i>Sphaeromeria potentilloides var. nitrophila</i>	--/2B.2
Slender-leaved pondweed	<i>Stuckenia filiformis ssp. alpina</i>	--/2B.2
Little bulrush	<i>Trichophorum pumilum</i>	--/2B.2
Marsh arrow-grass	<i>Triglochin palustris</i>	--/2B.3
Golden violet	<i>Viola purpurea ssp. aurea</i>	--/2B.2
Fish		
Owens sucker	<i>Catostomus fumeiventris</i>	--/SSC
Lahontan cutthroat trout	<i>Oncorhynchus clarkii henshawi</i>	FT/--

Owens speckled dace	<i>Rhinichthys osculus ssp. 2</i>	--/SSC
Long Valley speckled dace	<i>Rhinichthys osculus ssp. 5</i>	--/SSC
Owens tui chub	<i>Siphateles bicolor snyderi</i>	FE/SE
Insects		
Morrison bumble bee	<i>Bombus morrisoni</i>	Tracked by State
Travertine band-thigh diving beetle	<i>Hygrotus fontinalis</i>	Tracked by State
Amphibians		
Yosemite toad	<i>Anaxyrus canorus</i>	FT/SSC
Sierra Nevada yellow-legged frog	<i>Rana sierrae</i>	FE/ST
Birds		
Northern goshawk	<i>Accipiter gentilis</i>	S/SSC
Greater sage-grouse	<i>Centrocercus urophasianus</i>	S/SSC
Willow flycatcher	<i>Empidonax traillii</i>	S/SE
Loggerhead shrike	<i>Lanius ludovicianus</i>	--/SSC
Mammals		
Pygmy rabbit	<i>Brachylagus idahoensis</i>	S/SSC

Federal Designation

FE Federally listed as endangered.
FT Federally listed as threatened.
S - Forest Service Sensitive Species.

State Designation

SE – State listed as endangered.
ST State listed as threatened. Species that although not presently threatened in California with extinction are likely to become endangered in the foreseeable future.
SSC California Department of Fish and Game "Species of Special Concern." Species with declining populations in California.
1B.1 Plant rare, threatened or endangered in California and elsewhere, and very threatened.
1B.2 Plant rare, threatened or endangered in California and fairly threatened in CA.
2B.1 Plant rare, threatened or endangered in California, but more common elsewhere, and very threatened in CA
2B.2 Plant rare, threatened or endangered in California, but more common elsewhere, and fairly threatened in CA.
2B.3 Plant rare, threatened or endangered in California, but more common elsewhere, and not very threatened in CA.
Tracked by state – insects of concern

4. Impacts to other Sensitive Species

The project location is within the spring and fall range of the Round Valley and Casa Diablo Mule Deer herds as they transition from their winter and summer ranges. The Kore Mining project area contains dense cover of Bitterbrush, a highly nutritious food source for deer. Deer migration trails, tracks and scat are present throughout the drill locations. During site visits conducted on April 29 large groups (30+) of mule deer were observed traveling through drill sites 9-13. Local citizens and hunters can also attest to their presence at the Project site. The Project site is within the CDFW X9a Deer Hunt zone. Deer use the same migratory paths year after year. To force them to change their route can be fatal. It can expose them to new dangers. CDFW may also be able to provide data on collared mountain lions in the project area that follow deer migration routes. We recommend a seasonal restriction be imposed on drilling or preparation activities during the spring and fall deer migration.

Pygmy Rabbits are a sagebrush dependent species found in Long Valley and possibly in the project area and are a California state sensitive species¹¹. Pygmy's cannot run as fast as other rabbits and therefore rely heavily on sagebrush canopy cover and burrows for protection from predators. As sagebrush cover is reduced, from projects such as mining exploration, dispersal of individuals is reduced. Recent research by Larrucea et al (2018)¹² found that Pygmy Rabbits sampled between the Bodie Hills and Crowley Lake are a geographically disjunct and genetically distinct population from other populations in Nevada. Ongoing research is occurring in the Mono Basin and Long Valley. Because of the nocturnal habitats, small size and secretive nature, biological surveys conducted by consulting firm, EnviroMINE, may miss surveying for this species altogether. An analysis of potential impacts to pygmy rabbits is something that could occur through an EA or an EIS, but is very unlikely to be incorporated into a CE analysis.

The high quality sagebrush habitat within and adjacent to drill site locations also supports a variety of sagebrush bird species, including nesting loggerhead shrikes, another California state sensitive species and a US Fish and Wildlife Service sensitive species¹³. A 1990 study on avian use in the area related to the Casa Diablo Geothermal project, showed high avian biodiversity in the area due to presence of

¹¹ California Department of Fish and Wildlife (CDFW) . 2021 and 1998.

¹² Larreucea, et al. 2018.

¹³CDFW 2008.

multiple habitat types/wetlands along with thermal springs that provide open water for waterfowl and shorebird use during winter¹⁴. In addition to sagebrush species, there were bald eagles and peregrines in the area and a small population of willow flycatchers, presumably now extirpated. Comprehensive bird surveys, during the breeding season, need to be conducted by independent contractors and/or Forest Service specialists.

V. Additional Inadequacies and Review Requirements

The Scoping Letter does not provide sufficient information to evaluate serious aspects of the project and raises many questions, which if answered, might expose environmental impacts.

1. Undisclosed Source of Water

To start, where will the water needed to operate the drills come from and how much water will be needed? Any water that is brought in needs to be fresh water. Most water rights in Long Valley belong to the Los Angeles Department of Water and Power. They cannot sell outside of their rate payers without changing their charter. This is a drought year. The Mammoth Community Water District is imposing water restrictions on its own customers this year due to the low snowpack this past winter. They will not be able to sell water to Kore Mining this year. The extraction of any water from the nearby hot creeks/springs or groundwater in that area could affect other aquatic resources and that water will have chemicals that might harm the vegetation or wildlife if used at the proposed site. The Forest Service needs to consider these water-related issues carefully.

2. Undefined Location and Method of Muds Disposal

The USFS Scoping Letter states the waste will be captured in a tank, hauled off-site, and disposed of at an appropriate site. It is clear in the Plan of Operations that it will not be disposed of on USFS land, but the plan doesn't say where the muds/cuttings will be disposed of. The disposal site needs to be a government approved site if there are toxic chemicals mixed in with the wastewater, not just an "appropriate" site. The Plan of Operations merely says, "The drilling contractor will be required to clean up and properly dispose of any spills of drilling muds outside the sediment separation unit that might occur during the drilling process. Drilling muds will consist of water and fine particles of geologic materials produced from the drilling." Plan at 18. Further, there is no discussion of the chemical nature of these "fine particles of geologic materials."

The sludge needs to dry out in ponds or pits.

- Where will this be?
- Is Kore able to estimate based on past experience how much sludge will be produced?
- What procedure will be used for drying the sludge?
- Will drying pits/ponds need to be constructed for this purpose?
- If ponds or pits are needed, can Kore give an estimate on how many will be built?
- Will they be lined?
- What precautions will be taken to ensure wildlife exclusion?
- Will the sludge be tested and cross checked to the DTSC/RCRA list?

¹⁴ Strauss, E. 1990.

The fact that this disposal may occur off of USFS land does not mean that the agency does not have to review all these baseline conditions and impacts, as they clearly are effects under NEPA.

Non-thermal groundwater has arsenic in it and well water in the area is not drinkable. Thermal groundwater will contain a whole host of toxic chemicals. More chemicals dissolve in hot water. Depending on how deep Kore Mining drills, if they hit thermal water, the muds could be laced with Lithium, Boron, Chlorine, Arsenic, Sulfides, etc. Based on their website, it is probable that they will intersect both thermal and non-thermal water. USGS studies of the hydrology of the Long Valley Caldera¹⁵ show that Boron and Chlorine show up in both Hot Creek and Little Hot Creek. If Kore Mining is drilling into the sulfide-rich rock, which is highly likely, then there is a lot more risk of water mixing and creating sulfuric acid. There isn't an RCRA disposal facility in the Eastern Sierra to deal with toxic sludge. There should be a plan worked out in the event that the muds/cuttings are toxic. The muds/cuttings should be tested after drilling at the first drill site is completed before going on to the next to determine if it is toxic.

If the muds are left to dry in the open air, the toxic chemicals could be airborne on the many windy days we have in the Eastern Sierra. The Great Basin Air Quality Control Board should be reviewing this project. Disposal raises questions that need to be disclosed to the public.

The agency must fully review the baseline conditions of, and impacts to, all potentially affected resources from this disposal, as well as the related truck traffic/transportation – such as wildlife, air quality, water quality and quantity, recreation, cultural/historical, etc.

3. Boundary of Drilling/Drilling in Relation to Hot Creek

This project site is near the boundary of the USFS land and non-USFS land. Drilling has to stay within the boundaries of the USFS land and within the claim boundaries. Will any directional drilling be used? This cannot be validated from the information in the Scoping Letter. How close will the drilling come to Hot Creek or if it will go under it, should be disclosed. The Kore Mining project requires additional, in-depth analysis of the impacts of drilling below the water table, the potential to come into contact with thermal subsurface water, impacts to Hot Creek and ESA listed species, and disposal of toxic “muds/cuttings”.

4. Risks of Reaching Sub-Surface Water and of Seismic Activity Not Evaluated

Any drilling below the water table should raise red flags related to water quality, water chemistry, impacts to Hot Creek, Little Hot Creek, and the surrounding springs and wells. In the 1990s Royal Gold drilled to 250-300 feet to find the boundary between the zone of oxidized rock and the zone of sulfide rock below it. According to their website, Kore Mining wants to drill beyond the oxide/sulfide boundary i.e., deeper and off to the sides, to find higher concentrations of gold and feeders. The drill sites in this project are over the “target feeder structure” (slide 9, Attachment A) and Kore is trying to explore this feeder structure.

¹⁵Hildreth and Fierstein 2017.

The Plan of Operations says Kore will be drilling to depths of 850-1,424 feet. Those are the depths to which Ormat drills for their power plants. The brine has to be 300 degrees for Ormat to generate power and they have several wells that reach that temperature at 500 feet close to the Resurgent Dome. The groundwater that Kore will be intercepting will be very hot and under pressure. The Kore Mining 10/27/2020 Technical Report (Attachment B) states that Royal Gold sometimes hit the water table 200-300 feet below the surface and when they drilled below the water table to 250'-300', they met with "significant flows". The 10/27/2020 Technical Report (Attachment B) also states that Royal Gold did contact hot water. This is an active geothermal area.

The Long Valley Caldera has been studied extensively, especially the Resurgent Dome. This project site is on what the USGS Geologic Field Trip Guide to the Long Valley Caldera (footnote 15) identifies as the eastern edge of the Early Rhyolite section of the Resurgent Dome where it interfingers with caldera lake sediments. The Early Rhyolite is permeable and fractured. Several faults run through the site that was considered inactive until a swarm of earthquakes hit in 2014. Ormat and the Long Valley Hydrological Advisory Committee should be reviewing this project.

Included in the USGS report is a section called the "Overview of the Long Valley Hydrothermal System After Decades of Study by W. C. Evans (footnote 15). This hydrological report indicates that there is a sub-surface flow of geothermal water at fairly shallow depths running under the project site (Figure 1). The Early Rhyolite is permeable and sub-surface water flows through it from Hot Creek to Little Hot Creek. Depending on how deep Kore Mining drills, Kore Mining could cross a fracture and hit thermal water or hit thermal water flowing under the project site. Tapping into the geothermal water should not be taken lightly. It could change the pressure underneath, release gases, bring hot water to the surface, or impact springs in the area. The hydrologic research shows that what happens at one part of the caldera can affect another part farther away. For example, in 1997-98 there was a swarm of earthquakes on the west end of the South Moat that caused the water level at well CW-3 to rise. It was unexpected. CW-3 is near the south-west corner of the project site. Using another example, a mining company in Nevada drilled through a layer of rock between two aquifers and drained a pit lake in the area and the North Fork of the Humboldt River in the Toiyabe National Forest. It cost over \$1 million for the company to plug the drill hole.

The risk of tampering with the geothermal waters, without proper evaluation from those who have studied the volcanic and hydrological dynamics of the area is dangerous. Expert evaluation is needed from the experts who would look at the whole caldera system.

5. Wildfire and Contingency Concerns

As noted above, the proposed drilling project is in an area heavily used by wildlife and near a world-class fishing stream. Spills could mix with snowmelt or rain runoff into Hot Creek impacting all aquatic resources including listed fish and frogs. If the drilling equipment runs on diesel and lubricants, then there will be small spills. Some spillage is unavoidable. If there is a big spill, how will it be handled? Emergency contingency measures need to be considered in the NEPA review as well.

Welding gases are on the supply list in the Plan of Operations. Welding at the Project site this summer and fall is a fire risk. This is going to be an exceptionally dry summer and hotter than usual. The fire danger will be high especially if they are drilling into the fall. The prevailing winds would carry any fire across the Bi-state Sage Grouse nesting/brooding sites. In an emergency, any fire must be put out

as quickly as possible and contingency measures must be considered before a decision is made. For example, providing additional water for emergency use at all times, positioning the water truck in such a way that it could leave the pad quickly to put out a fire and not be blocked, ensuring water trucks have a hose capacity for fire suppression, etc. These and other fire emergency contingencies and alternatives need to be considered in a NEPA review.

6. Surface Disturbance Misrepresented-SMARA permit required

To clarify, all the road segments and drill pads must be considered new ground disturbances regardless of being on top of the roads and pads of Royal Gold's drilling project in the 1990s. Royal Gold reclaimed their land disturbances. Now, 23 years later, the vegetation has healed over and the region is covered in tall, healthy, mature sagebrush and bitterbrush interspersed with tufts of grass. Use of all road segments and pads for the proposed project will cause new disturbances. In addition, all road segments for drill sites 9-13 will not be on top of roads created by Royal Gold, because only one road was cut in that area in the 1990s and the road segment to drill site 9 is not on top of it. This is clearly visible from Google Earth satellite maps of the area 7/1993, 8/1998 and 9/2002 (Attachment E). Certainly, it would be better to cut a road to drill site 9 that would be the shortest distance from USFS road 3S142, not the longest---this and other alternatives need to be considered in a NEPA document. Satellite photos show that it took most of the 20 years for the vegetation to grow back. Sagebrush and bitterbrush are slow growing and any new scars from the proposed drilling project will remain for at least another 20 years.

The surface disturbance will be greater than 1 acre. The Scoping Letter calculates the road and pad disturbance correctly as 0.93 acres. However, that is not all of the surface disturbance. Turnaround spaces for the large trucks, wider roads for heavy equipment, and overburden have not been included in that calculation.

USFS roads 3S142 and 3S07E are only 8' wide and even narrower in places. However, the use of these roads would be the same as other road segments, which are 10' wide to accommodate the water truck and the drilling rig flatbed. Eight feet is wide enough for a Subaru Outback, but not a water truck. If larger vehicles drive over the sagebrush on both sides of the road crushing the brush and widening the road that disturbance should also be accounted for in the total. It is 0.9 miles along the road 3S412 to drill sites 9-13. $1' \times 0.9 \text{ mi} \times 2 \text{ sides} = 0.22 \text{ acres}$. That alone pushes the disturbance acreage over the 1-acre threshold and shows that SMARA review is needed. The vehicles going up and down this road throughout the day will need to be carefully choreographed so they don't need to pass each other because there is no room for two vehicles on that road or the road would need to be widened even further to allow two trucks to pass adding additional disturbance to the total.

Trucks will be backing out of the road segments leading to the drill pads into a road. USFS Road 3S142 is curved and narrow at drill sites 9-13 making backing up difficult without cutting corners. More vegetation will be run over and damaged at the corners of all 5 drill sites 9-13. Some of the road segments will need to run part of the length of the pad to allow three vehicles room to enter or leave the pad. A more realistic pad size might be 40' or 50' x 53'.

Most of the drill sites are sloped, particularly sites 9-13. To create a flat drill pad or road segment, dirt will be pushed to the sides of the pad or road covering up vegetation. The more slope, the deeper the cut, the wider the dirt apron will be on the sides. This is land disturbance and should be factored in too.

If the apron adds just 3 feet to the pad dimensions so the pads are 33'x 56', the total disturbance would exceed 1 acre.

The scoping letter says there will not be an additional staging area because Kore Mining plans to fit everything on the drill pad. Supplies will stay on the unused drill pad. Where will the monitors park? Where will the many bags of core samples be? There is no electricity at the site so is the rig with the portable diesel-powered generator an additional vehicle at the drill pad? Any areas cleared for the sample bags and generator should be factored into the surface disturbance too. Any areas covered in sprayed fines should be added in as well. This is not just speculation, recent exploratory activities at Conglomerate Mesa exceeded the anticipated amount of disturbance even where a more thorough analysis was done.

Realistically, the ground disturbances will exceed the 1-acre cap and SMARA requires the company to apply for a permit from Mono County.

Furthermore, since more than “1 mile of low standard road, or use and minor repair of existing roads” (USFS 220.6 (e)(8)) applies with the need to widen 3S142 and 3S07E and since the road segments exceed 1/3 mile and the vegetation cleared exceeds 1 acre (USFS 220.6 (e)(8)(vii)), this project does not qualify for a CE.

7. Traffic and Air Pollution Impacts

There will be increased traffic with Kore Mining's water trucks coming and going and with the tanks hauling the muds/cuttings coming and going. Plus, crews will come and go and the drilling equipment and supplies need to be brought in and then removed. This information is needed in order to evaluate the impacts on the environment, wildlife, and the health of those in the region.

- What route will Kore Mining use?
- Which roads will be wetted?
- How many trips return per day for water trucks, mud tanks, crews, equipment?
- Where will these trucks start from?
- Where will they be parked when not in use?
- Will they transport noxious weeds on their routes?
- Will any roads be closed to the public?

During the summer, the Benton Crossing area gets a lot of traffic from visitors, campers, bicyclists, fishermen, and dump trucks. While that is the route to the project site that has the widest roads and might be the best route for Kore Mining's traffic, it will impact the visitors and locals the most. Alternatively, if Kore Mining project traffic comes in from the Ormat geothermal plant, it would lessen the dust and volume of traffic along Benton Crossing Road. It is a less dusty road as well. These issues need to be fully examined in a NEPA review.

The greenhouse gas emissions need to be calculated. There will be a lot of truck traffic, diesel consumption, and exhaust. This project only adds to the increase in GHGs and climate change.

8. Impacts of Light Pollution and Loss of Night Skies

If the drilling at each drill site is to be a 24/7 operation, it will disturb the Bi-state Sage Grouse, campers, those living on the Utu Utu Gwaitu property in the Hot Creek flood plain below the project site and the visitors and staff at the Hot Creek Ranch on the south side of Hot Creek directly across from the drill site. The drill site is in plain view from the heavily visited Hot Creek Geologic Site. Mono County has a night sky ordinance: <https://www.monocounty.ca.gov/generalplan/chapter-23-dark-sky-regulations> . Flood lights all through the night would violate it. The impacts from night lighting also need to be fully identified and analyzed in a NEPA review.

9. *Vegetation Reclamation*

The project area is densely covered in tall, mature Big sagebrush (*Artemisia tridentata*) and Antelope bitterbrush interspersed with grasses and Rubber rabbitbrush. There are *Viola purpurea* plants throughout the area as well. Some species of concern listed in the CNDBB database that could be in the project area, but were not mentioned in the Plan of Operations are: *Atriplex pusilla*, *Crepis runcinata*, *Boechea cobrensis*, and *Astragalus lemmonii*. When the environmental review is undertaken, the biological survey must look for these and other known rare plants during the appropriate blooming season.

Cheatgrass is a prevalent, invasive species in the Eastern Sierra that is useless to local wildlife and a significant problem across the West. Currently, there is little or no cheatgrass in the area and little to no other invasive species. There should be an inventory of weeds pre-ground disturbance to establish a baseline to establish that cheatgrass is not present now. The Inyo National Forest Management Plan of 2019 on pages 37-41 lists desired conditions, standards and goals to keep non-native species, especially cheatgrass out of priority BSSG habitat: SPEC-SG-DC #06, 07, SPEC-SG-STD #09, SPEC-SG-GDL #04 apply to this project. Cheatgrass could move in and get established before native seed takes hold, especially along the road edges of 03S142 and 03S07E as they are widened by use. These roads need to be reseeded as well and monitored. The Forest Service must require measures to prevent any introductions of cheatgrass onto the site, for example, by requiring fully cleaning and removing any plant matter from all equipment, including vehicles prior to the equipment/vehicles accessing the site. The Forest Service should also require restoration of any excessive cheatgrass that comes in after the reseeded or a fire that is related to the proposed project. Cheatgrass should be removed by hand while it is green, bagged, and properly disposed of. Herbicides should not be used. This is Bi-state Sage Grouse territory. The Forest Service should require monitoring for and removal of cheatgrass annually. Cheatgrass will increase the fire risk there. Any cheatgrass that comes up should be pulled while it is green each year.

If the proposed project doesn't start by July, then the reclamation won't start until December, a timeframe that may be too late to do the reclamation and seeding. Seeding is best in the fall, in this case drilling pads would remain bare until the following fall, increasing the risk of cheatgrass and other invasives moving in, especially if there is not a grazing rest period following the drilling disturbance.

The Forest Service was faulted for not ensuring that reclamation was complete after Royal Gold's phase 8 project. The Mono County Mining Committee surveyed each drill site in the fall of 1997 and found drilling mud had been discharged on the ground when it was to be contained in a closed system. They found downed, crushed, and dead vegetation left at the drill site, soil compaction in the areas reseeded. The Committee points out the need for a formal monitoring procedure.

While reclamation can be done, it is rarely done well and project areas are usually left in a more degraded state than how it was before the project started. We recommend that as part of the NEPA review the Forest Service consider the following mitigation requirements:

- Prohibit blading of road segments or the staging area. Mow or hand cut vegetation to within inches of the ground on the road segments and then drive over them to the drill pad, creating a 2-track path and leaving the roots intact. Vegetation will grow back faster from root stock than from seed.
- Prohibit tracked vehicles and require only vehicles equipped with oversized, balloon tires to minimize soil compaction and to speed revegetation.
- Top soil is thin in Long Valley and what is scraped off for reclamation may blow away, if not covered. That topsoil needs to be protected by stockpiling at appropriate height to prevent composting from occurring which would kill off propagules and soil fauna.
- Add weed-free soil amendments and microorganisms to create an effective growth medium. It might be better to have thicker topsoil in islands rather than spread it evenly across the pads or roads.
- Plant seedlings and require reseeding only in the fall. Do not use hydroseeding methods.
- The seed source for reseeding must contain *locally*-sourced native species only. The grasses should be grasses that are native to Long Valley.
- The Forest Service or an independent botanist needs to survey all of the drill sites and roads to them in the fall each year starting after the drilling ends, to determine whether Kore Mining has complied with the reclamation requirements. This information should be shared with the public. Issue a notice of violation if the results are substandard.
- Require an annual report in the fall on how the revegetation is progressing and the presence of noxious weeds.
- Establish criteria for “successful reclamation”. How many plants/sq. ft. the density/percentage of each of the predominant species: sagebrush, bitterbrush, rabbitbrush, desert peach, rice grass, Great Basin rye, etc. What does “establish” mean, a 1-inch seedling or a 1-foot shrub or when the plants are mature enough to produce seed and reproduce?
- Require irrigation and reseeding if plants aren’t established after three years.
- Identify who will be responsible for the monitoring after three years if the goals have not been met and funding from the project proponent to be sure it continues.
- Clean vehicles before entering the project site if they have been driven where they could pick up cheatgrass in their tire treads.
- Provide a plan for how cattle will be kept from the disturbed areas.

VI. Compliance with the Forest Plan and NFMA is Required

It also appears that approval of the project would violate the National Forest Management Act (NFMA). The NFMA requires all site-specific actions authorized by the Forest Service to be consistent with Forest Plan standards and guidelines. Friends of Southeast’s Future v. Morrison, 153 F.3d 1059, 1068 n.4 (9th Cir. 1998). Forest Service authorization of mining and mineral exploration must comply with all Forest Plan and NFMA requirements. Save Our Cabinets v. U.S. Dept. of Agriculture, 254 F.Supp.3d 1241, 1259-60 (D. Mont. 2017)(rejecting approval of mining plan for failing to ensure compliance for the “Desired Conditions” for water quality in the Forest Plan). *See also Hells Canyon Preservation Council v. Haines*, 2006 WL 2252554, *7-*10 (D. Oregon 2006)

(finding ROD and PoO approval for mining violated Forest Plan); Rock Creek Alliance v. U.S. Forest Service, 703 F.Supp.2d 1152, 1187, n. 23 (D. Mont. 2010)(same).

Here, the Inyo Forest Plan has detailed requirements that must be met by any proposed activity, including the proposed Project. *See e.g.* Inyo Forest Plan at 82-87 (for Riparian Conservation Areas (RCAs) requirements. As noted herein, the Inyo Forest Plan and Bi-State Sage Grouse plans and agreements also require protection of habitat (which the Project does not do).

Project operations will significantly affect RCAs protected under the Forest Plan by either proximate location of drilling operations or access crossings. For example, drill sites 6-8 are very near an RCA that feeds into Hot Creek, another RCA. Any residual chemicals from the drilling water, diesel spills, bentonite fines, could wash into the RCAs with a rain or snowmelt. Hot Creek is an eligible Wild and Scenic River. What measures will be taken to prevent runoff into the RCAs or Hot Creek? Attachment F shows the location of the RCAs that may be impacted and thus require NFMA compliance.

VII. The Forest Service Must Also Comply with the 1897 Organic Act and its Part 228 and FLPMA Requirements

On the National Forests, the Organic Act requires the Forest Service “to regulate their occupancy and use and to preserve the forests thereon from destruction.” 16 U.S.C. § 551. “[P]ersons entering the national forests for the purpose of exploiting mineral resources must comply with the rules and regulations covering such national forests.” Clouser v. Espy, 42 F.3d 1522, 1529 (9th Cir. 1994).

The USFS mining regulations require that “all [mining] operations shall be conducted so as, where feasible, to minimize adverse environmental impacts on National Forest resources.” 36 C.F.R. § 228.8. In addition, the operator must fully describe “measures to be taken to meet the requirements for environmental protection in § 228.8.” 36 C.F.R. 228.4(c)(3). “This court does not believe the law supports the Forest Service’s concession of authority to miners under the General Mining Act in derogation of environmental laws and regulations.” Hells Canyon Preservation Council v. Haines, 2006 WL 2252554, at *6 (D. Or. 2006)(finding violation of Organic Act in Forest Service’s failure to minimize adverse impacts to streams).

In addition to ensuring compliance with all applicable environmental standards under the 36 CFR Part 228 regulations, the USFS has a mandatory duty to require “all practicable measures to maintain and protect fisheries and wildlife habitat which may be affected by the operations” under 36 CFR § 228.8(e)). *See* Rock Creek Alliance v. Forest Service, 703 F.Supp.2d 1152, 1170 (D. Montana 2010) (Forest Service violated Organic Act and 228 regulations by failing to protect water quality and fisheries in approving the mining plan). This includes complying with all requirements to protect Sensitive Species and other protected species as noted herein.

Importantly, a simple and generalized reduction of impacts does not equate to the strict requirements for minimization of impacts and protection of resources. The Forest Service’s duty to minimize impacts is not met simply by somewhat reducing those impacts. Trout Unlimited v. U.S. Dep’t. of Agriculture, 320 F.Supp.2d 1090, 1110 (D. Colo. 2004). In interpreting the Federal Land Policy and Management Act (FLPMA)’s duty on the agency to “minimize damage to ... fish and wildlife habitat and otherwise protect the environment,” 43 U.S.C. § 1765(a), the court specifically stated the agency’s finding that mitigation measures would “reasonably protect” fisheries and habitat failed to meet its

duty to “minimize” impacts. *Id.* Also, the agency must comply with all of the requirements of Title V of FLPMA, which requires the agency to review the Project’s roads under the strict FLPMA requirements.

The agency must demonstrate that all feasible means have been required to minimize all adverse impacts to all potentially affected resources. For example, the Ninth Circuit Court of Appeals recently held that the Forest Service had the authority to strictly limit mining claimants’ vehicular access to mining claims. *Public Lands for the People v. U.S. Dept. of Agriculture*, 697 F.3d 1192 (9th Cir. 2012). As held by the court:

The Secretary of Agriculture has the right to restrict motorized access to specified areas of the national forests, including mining claims. [*Clouser v. Espy*, 42 F.3d at 1530 (citing 16 U.S.C. § 551)] (means of access “may be regulated by the Forest Service”). More specifically, we have upheld Forest Service decisions restricting the holders of mining claims to the use of pack animals or other non-motorized means to access their claims. *Id.* at 1536-38. Relatedly, we have rejected the contention that conduct “reasonably incident[al]” to mining could not be regulated. *United States v. Doremus*, 888 F.2d 630, 632-33 (9th Cir. 1989). Our precedent thus confirms that the Forest Service has ample authority to restrict motor vehicle use within the ENF [El Dorado National Forest].

Id. at 1197.

Thus, in this case, in order to minimize all adverse impacts, the agency must, among other restrictions to protect wildlife and the environment, limit project activities that do not expand existing roads. Also, as noted herein, the agency must fully consider such limitations as reasonable alternative(s) under NEPA. Additionally, to reduce cumulative impacts to wildlife species that are sensitive to light, noise, and other human activities incidental to mineral exploration, the USFS should consider the timing of the project in relation to other adjacent or nearby mineral projects and consider imposing timing restrictions so that these multiple projects in the same general area occur sequentially rather than at the same time. The same is true for other affected resources such as air quality.

Further, under FLPMA, access roads are not authorized by federal mining laws and thus require the company to submit right-of-way or other special use permit authorizations and require that all mandates of FLPMA Title V and its implementing regulations are adhered to (e.g., no permit can be issued unless it can be shown that the issuance of the permits is in the best interests of the public, payment of fair market value, etc.). This is required because the approval of an access road is not an absolute right covered by the 1872 Mining Law.

VIII. The Agency Must Comply with the National Historic Preservation Act (NHPA) and Other Requirements to Protect Native American Interests and Resources.

The USFS must comply with the NHPA and requirements regarding Native American interests and resources. Due to the potential that cultural and religious sites and resources will be adversely affected, it would be a violation of the NHPA and other laws (and NEPA as noted above) to approve the projects without the required review of, and protection of, cultural/historical resources.

[T]he fundamental purpose of the NHPA is to ensure the preservation of historical resources. See 16 U.S.C. § 470a(d)(1)(A) (requiring the Secretary to “promulgate regulations to assist Indian tribes in preserving their particular historic properties” and “to encourage coordination ... in historic preservation planning and in the identification, evaluation, protection, and interpretation of historic properties”); *see also Nat’l Indian Youth Council v. Watt*, 664 F.2d 220, 226 (10th Cir.1981) (“The purpose of the National Historic Preservation Act (NHPA), is the preservation of historic resources.”). Early consultation with tribes is encouraged by the regulations “to ensure that all types of historic properties and all public interests in such properties are given due consideration....” 16 U.S.C. § 470a(d)(1)(A).

Te-Moak Tribe of Western Shoshone v. U.S. Department of the Interior, 608 F.3d 592, 609 (9th Cir. 2010).

Under the NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties, 36 C.F.R. § 800.4(b); determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found, 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a); determine whether the effect will be adverse, 36 C.F.R. §§ 800.5(c), 800.9(b); and avoid or mitigate any adverse effects, 36 C.F.R. §§ 800.8[c], 800.9(c). The [federal agency] must confer with the State Historic Preservation Officer (“SHPO”) and seek the approval of the Advisory Council on Historic Preservation (“Council”). *See Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 805 (9th Cir. 1999). *See also* 36 CFR § 800.8(c)(1)(v)(agency must “[d]evelop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the EA.”)

The Advisory Council on Historic Preservation (“ACHP”), the independent federal agency created by Congress to implement and enforce the NHPA, has exclusive authority to determine the methods for compliance with the NHPA’s requirements. *See National Center for Preservation Law v. Landrieu*, 496 F. Supp. 716, 742 (D.S.C.), *aff’d per curiam*, 635 F.2d 324 (4th Cir. 1980). The ACHP’s regulations “govern the implementation of Section 106,” not only for the Council itself, but for all other federal agencies. *Id.* *See National Trust for Historic Preservation v. U.S. Army Corps of Eng’rs*, 552 F. Supp. 784, 790-91 (S.D. Ohio 1982).

NHPA § 106 (“Section 106”) requires federal agencies, prior to approving any “undertaking,” such as approval of the Projects, to “take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register.” 16 U.S.C. § 470(f). Section 106 applies to properties already listed in the National Register, as well as those properties that may be eligible for listing. *See Pueblo of Sandia v. United States*, 50 F.3d 856, 859 (10th Cir. 1995). Section 106 provides a mechanism by which governmental agencies may play an important role in “preserving, restoring, and maintaining the historic and cultural foundations of the nation.” 16 U.S.C. § 470.

If an undertaking is the type that “may affect” an eligible site, the agency must make a reasonable and good faith effort to seek information from consulting parties, other members of the public, and Native American tribes to identify historic properties in the area of potential effect. See 36 CFR § 800.4(d)(2). *See also Pueblo of Sandia*, 50 F.3d at 859-863 (agency failed to make reasonable and good faith effort to identify historic properties). Consultation “must be ‘initiated early in the undertaking’s planning’, so

that a broad range of alternatives may be considered during the planning process for the undertaking.” Pit River Tribe v. U.S. Forest Service, 469 F.3d 768, 787 (9th Cir. 2006).

The NHPA also requires that federal agencies consult with any “Indian tribe ... that attaches religious and cultural significance” to the sites. 16 U.S.C. § 470(a)(d)(6)(B). Consultation must provide the tribe “a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance, articulate its views on the undertaking’s effects on such properties, and participate in the resolution of adverse effects.” 36 CFR § 800.2(c)(2)(ii). “The agency official shall ensure that the section 106 process is initiated early in the undertaking’s planning, so that a broad range of alternatives may be considered during the planning process for the undertaking.” 36 CFR § 800.1(c) (emphasis added).

The NHPA requires that consultation with Indian tribes “recognize the government-to- government relationship between the Federal Government and Indian tribes.” 36 CFR § 800.2(c)(2)(ii)(C). See also Presidential Executive Memorandum entitled “Government-to- Government Relations with Native American Tribal Governments” (April 29, 1994), 59 Fed. Reg. 22951, and Presidential Executive Order 13007, “Indian Sacred Sites” (May 24, 1996), 61 Fed. Reg. 26771.

The USFS must also protect archeological and grave resources, Sacred Sites and Native American religious and cultural uses pursuant to the above laws and requirements as well as: (1) the American Indian Religious Freedom Act (AIFRA), 42 U.S.C. 1996 et seq.; (2) the Archaeological Resources Protection Act (ARPA), 16 U.S.C. 470aa-mm ; and (3) the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001 et seq.

Under NEPA, the NHPA, and the other laws, policies and requirements noted herein, the USFS cannot approve the Project until full government-to-government consultation with all potentially affected Tribes has been completed. It is our understanding that there has been inadequate outreach and consultation to date with the tribal nations of the Eastern Sierra.

Furthermore, any approved exploration activities must include the requirement of tribal monitors to be on site during drilling activities, at the expense of the project proponent. The tribal monitors should also be present during the archeological survey. The Project site is within an area that is known to have archeological and paleo-archeological resources going back 10,000 years B.P. The area should be surveyed as part of this project before drilling begins. It is our understanding that Royal Gold conducted a survey in 1995 that went beyond the drill pads and roads. Then the survey done now should be compared to the 1995 survey done by Royal Gold. The loss of cultural resources from the Royal Gold exploration activities, if any, should be documented to expose how vulnerable cultural resources are to exploration activities.

IX. Demonstrate compliance with the Clean Water Act.

Under the Clean Water Act (“CWA”), states are responsible for developing water quality standards to protect the desired conditions of each waterway within the state’s regulatory jurisdiction. 33 U.S.C. § 1313(c). Water bodies that fail to meet water quality standards are deemed “water quality-limited” and placed on the CWA’s § 303(d) list. The CWA requires all federal agencies to comply with water quality standards, including a state’s anti-degradation policy. 33 U.S.C. § 1323(a). The Forest Service must ensure all activities in this proposal comply with the CWA. In particular, it must ensure its proposal for exploratory drilling, including but not limited to the associated temporary roads, use of

heavy equipment and drill pads, and use of existing and new temporary roads, will not cause or contribute to a violation of water quality standards.

Conclusion

A Categorical Exclusion eclipses two important steps: 1) the environmental review and 2) Tribal Consultation. It would be extremely irresponsible to approve this project based on so little information regarding potentially significant impacts in such a geologically active area and in the known habitat of the critically at-risk Bi-state Sage Grouse and other imperiled species. This project requires an Environmental Assessment if not an EIS. It will have significant impacts even after mitigations.

Respectfully,



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Attachments:

Attachment A: Kore Long Valley PEA Presentation--Updated
Attachment B: Economic Assessment NI-43-101 Technical Report, Long Valley Project Mono County, California, USA, Effective Date: September 21, 2020, Issue Date: October 27, 2020. This document is on the Kore Mining website on the Long Valley-PEA webpage.
Attachment C: photos and GPS coordinates of BSSG scat in the Project area
Attachment D: LADWP BSSG Adaptive Management Plan December 20, 2020
Attachment E: Google Earth satellite views 7/1993, 8/1998, 9/2002, and 9/2019 (2)
Attachment F: Maps of RCAs and Species Locations

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