Via Email

State Mining and Geology Board c/o Jeffrey Schmidt, Executive Officer smgb@conservation.ca.gov; jeffrey.schmidt@conservation.ca.gov

June 18, 2024

Re: Agenda Item No. 13A. June 20, 2024 Board Meeting: Consideration of a request for an exemption to SMARA pursuant to Public Resources Code § 2714(f) for the Gold Discovery Group for an exploratory drilling project.

Dear Board members,

These comments are submitted on behalf of the Center for Biological Diversity, Earthworks, Sierra Club, Desert Tortoise Council, and California Native Plant Society (collectively "conservation organizations"), urging the State Mining and Geology Board ("Board") to **deny** the request for an exemption from SMARA under PRC 2714(f) for the Gold Discovery Group exploratory drilling project ("GDG Project"). The Board should not make a decision² exempting the GDG Project because it does not meet the standards of the statutory exemption. Instead, the Board must **deny** the request and declare that the GDG Project is required to obtain approval of its reclamation plan compliance in with SMARA and CEQA for the project as a whole.

As an initial matter, we are concerned that the Board website containing documents related to this matter for the June 20, 2024 meeting,³ appears to have fewer documents than were available when this item was previously scheduled for the April 2024 Board meeting, and this change which resulted in removing several documents was made at the request of the Applicant.⁴ As the Board is no doubt aware, under California law when the Board makes a decision

¹As detailed herein, the GDG Project meets the standards of a Project under CEQA because, taken as a whole, the mineral exploration project has the "potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment," and the Board's discretionary consideration of requested SMARA exemption or the county's discretionary approval under SMARA. 14 Cal. Code Regs. § 15378 (a),(c).

² Cal. Gov't Code § 11405.50 ("(a) "Decision" means an agency action of specific application that determines a legal right, duty, privilege, immunity, or other legal interest of a particular person.")

³ See Staff Report, Agenda Item No. 13A, June 20th, 2024, which provides public access to documents: "Documents related to Agenda Item No. 13A can be viewed and downloaded from this link: https://doc.box.com/s/afrsfrc20m8mp4y2bfp1dehxdjxp8az7"

⁴ See 2024-06-05 email from Sean Tucker to Jeffery Schmidt and Paul Fry ("Jeffrey, we already discussed this, but everything previously emailed by me to you in the months and years prior to this can be deleted. This email and its contents are all the staff and Board need to review for this upcoming hearing." (Emphasis added)). Some of the documents removed from the website for public access include: Feb. 22, 2023 GDG's Application for the exemption; two letters from the Applicant to Kern County in 2021; a letter dated February 5, 2024 from Applicant's attorney JMBM claiming the application of the exemption is a ministerial decision; several of the BLM documents; and the presentation by GDG to the Board from the December 20, 2023 meeting.

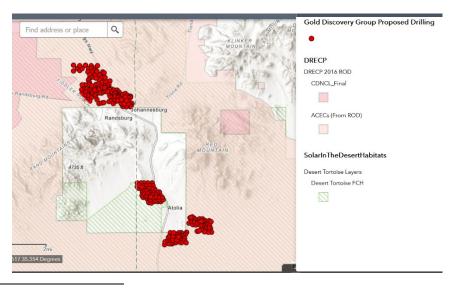
including the proposed decision to apply an exemption, all materials submitted to the Board or transferred from it are part of the administrative record before the Board.⁵ The Applicant cannot limit the record before the Board and should not have been allowed to limit the documents available to the public in relation to this item.

A. Factual Background

1. The GDG Project will result in direct physical change in the environment and a reasonably foreseeable indirect physical changes in the environment.

BLM's EA shows that the GDG Project includes drilling 293 holes on 32 unpatented placer claims in Kern and San Bernardino Counties (EA at 1). Drill sites will be accessed via off-road travel (EA at 9). BLM estimates total surface disturbance from the project to be 15 acres (EA at 9). The subset of drill sites listed in GDG's application materials is only within Kern County. Several conservation organizations commented on BLM's EA and noted deficiencies, those comments are incorporated herein by reference and attached (Attachments A, B, C). But even looking solely at the BLM's EA and the Biological Opinion (BO) Activity Form prepared for the EA (Attachment D), it is clear that the GDG Project will result in impacts to species and habitats and additional environmental analysis is needed to ensure these resources are adequately protected and restored if this proposed mining exploration goes forward.

The project site is high value habitat that is designated Desert Tortoise Critical Habitat, Mojave Ground Squirrel conservation area, and an Area of Critical Environmental Concern (ACEC). The Fremont-Kramer ACEC was established in 2006 to manage critical desert tortoise habitat. This habitat is "essential to the recovery of the federally listed Desert Tortoise" (EA at 16). Tortoise presence, burrows, and scat have all been observed in the project area (EA at 18).



⁵ See, e.g., Code Civ. Pro. §1094.5(c) (court will consider abuse of discretion "in light of the whole record"); Pub. Res. Code § 21167.6(e)(7)(pertaining to CEQA administrative records and expressly including "All written evidence or correspondence submitted to, or transferred from, the respondent public agency with respect to compliance with this division or with respect to the project.")

In April 2024, the California Fish and Game Commission voted unanimously to uplist the Mohave desert tortoise from threatened to endangered under the California Endangered Species Act (CESA) due to ongoing population declines and increased threats to the species.⁶ The EA fails to analyze the project's conformance with CESA and there is no indication that the Applicant has applied for permits from CDFW for its potential take of this endangered species.

Potential impacts to Desert tortoise and habitat include injury or mortality due to equipment and vehicle use (EA at 25), and vegetation lost. The EA fails to analyze the potential impacts of noise and dust on tortoise population. BLM lists multiple public comments about the importance of protecting the desert tortoise, however, responses only focus on direct mitigation measures, rather than mitigation of impacts to critical habitat (EA, Appendix E). BLM required mitigation only focuses on tortoise avoidance and removal (LUPA-BIO-2) but there is no mitigation of impact to tortoise habitat (EA, Appendix D).

2. Staff Report contains factual errors

Unfortunately, the Executive Officer's report for Agenda Item No. 13 A contains several factual errors pertaining to the Gold Discovery exploratory drilling project including regarding the amount of disturbance and the use of the site.

The staff report states that the GDG Project, according to GDG, would disturb 5.37 acres (Staff Report at 4), but this is limited to Kern County, In fact, the BLM estimated total project disturbance at 15 acres (EA at 9).

The staff report also states the end use of the project site will be to remain as "open space" (Staff Report at 5). However, facts show the project area is not just open space, but is high value habitat that is designated Desert Tortoise Critical Habitat (EA at 16), Mojave Ground Squirrel conservation area (EA at 19), and the Fremont-Kramer Area of Critical Environmental Concern (ACEC) (EA at 16).

B. Legal Background

1. The Legislature Intended Mineral exploration Project to be Covered by SMARA and that exemptions be limited.

In enacting SMARA the Legislature recognized that "that the reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety" and "the reclamation of mined lands as provided in this chapter will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land." (Cal. Pub. Res. Code § 2711(a),(b).) To achieve these goals, SMARA applies to **all** surface mining operation and explicitly includes "Prospecting and exploratory activities" in the definition of "Surface mining operations." Pub. Res. Code § 2735.

⁶ Documents available at https://fgc.ca.gov/CESA#adt re: Mohave (aka Agassiz's) Desert Tortoise; https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=220259&inline

SMARA also provides exemptions under Public Resources Code Section 2714, including an exemption for small projects where "the total surface area disturbed is less than one acre." (Pub. Res. Code § 2714(d).) The 2714(d) exemption often covers mineral exploration projects where the total surface disturbance from the entire project is less than one acre. SMARA also provides the Board with discretion to exempt other projects under section 2714(f) "Any other surface mining operations that the board determines to be of an infrequent nature and which involve only minor surface disturbances." (Pub. Res. Code § 2714(f).)

Here, the GDG Project clearly does not fit within the "less than one acre" limitation for a 2714(d) exemption and instead of complying with SMARA and obtaining approval from the lead agency, the Applicant asks the Board to apply the 2714(f) exemption to a mineral exploration project that includes over 15 acres of cumulative disturbance. If the Board were to apply the 2714(f) exemption in the manner requested, that Decision would risk undermining the application of SMARA to mineral exploration projects throughout the state. Such a result could undermine the important protections the Legislature put in place under SMARA and in a situation where the "exception swallows the rule."

2. CEQA Review is Required for SMARA compliance

Under CEQA, the lead agency must address the whole of the action in determining whether a proposal has the "potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment," and thus is a project requiring CEQA review. (14 Cal. Code Regs. § 15378 (a),(c).) The use of the "common sense" exemption⁷ applies only "where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." (14 Cal. Code Regs § 15061(b)(3).) As detailed below, that is not the case here as the GDG Project may have a significant effect on the environment and even under NEPA's less rigorous standards required mitigation.

Moreover, CEQA exemptions "are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant." (14 C.C.R §15300.2(b).) This exception to the application of exemptions is critical to ensure that needed CEQA review is not undermined by segmenting a larger project into smaller, seemingly less impactful pieces approved under categorical exemptions. CEQA prevents piecemeal review by defining the "project" broadly to include any "reasonably foreseeable indirect physical change in the environment." (San Joaquin Raptor Rescue Center v. County of Merced (2007) 149

Cal.App.4th 645, 654.) CEQA forbids "piecemeal" review of the significant environmental impacts of a project, and therefore, a public agency may not divide a single project into smaller individual projects in order to avoid its responsibility to consider the environmental impacts of the project as a whole. (Orinda Assn. v. Board of Supervisors (1986) 182 Cal. App. 3d 1145, 1171.) This rule derives, in part, from Public Resources Code section 21002.1, subdivision (d), which requires the lead agency to "consider[] the effects, both individual and collective, of all activities involved in [the] project." (Emphasis added.) CEQA prohibits piecemeal review because—absent such a prohibition—a series of sub-projects could be separately considered by

Iten 13A, June 20, 2024 Comments requesting denial of exemption

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⁷ See staff report page 5—regulation is miscited as "14 CCR section 1506(b)(3))".

an agency, such that a large project with cumulatively "disastrous consequences" could avoid review under CEQA. (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284.)

The Applicant asks the Board to ignore both SMARA and CEQA thresholds and instead allow the Applicant to segment the project by each "claim" to avoid needed CEQA review and SMARA requirements, 8 the Board should decline to do so.

C. The Board's Consideration of an Exemption Under Section 2714(f) is an Exercise of Discretion in the Application of Section 2714(f) to the Gold Discovery Group exploratory drilling project.

At its core, the Applicant seeks a discretionary Decision by the Board to exempt the GDG Project from SMARA and CEQA. Because there is no statutory or regulatory definition for "infrequent in nature" or "minor surface disturbance" as used in Section 2714(f), in considering the request the Board must apply its discretion to determine if the GDG Project as a whole fits within these broad categories.⁹

The Applicant's claim that the Boad's decision is ministerial¹⁰ is wrong. As mentioned above, there is no statutory or regulatory definition that the Board can rely on and, therefore, the Board's application of this exemption, by consideration of the statute's undefined qualitative standards, is by definition discretionary.

Further, the Applicant's statements that the board should look only at each "claim" or "location" separately in applying the exemption would undermine CEQA's mandate that the agencies must consider to the whole of the action. See Orinda Assn v. Bd. of Supervisors (1986) 182 Cal. App. 3d 1145, 1171 ("The requirements of CEQA cannot be avoided by chopping up proposed projects into bite-size pieces which, individually considered, might be found to have no significant effect on the environment or to be only ministerial."). The Board must consider the entire GDG mining exploration project, not each drill site alone, in order to properly consider the exemption the Applicant has requested.

⁸ See, e.g., Applicant's presentation dated June 20, 2024 at 7; Applicant's February 22, 2023 Application to the Board for Exemption at 2.

⁹ In fact several of the commenters asked the Board the SMGB to clearly define "infrequent nature" and "minor surface disturbance" in the ongoing rulemaking, but the Board has declined to do so in the most recent drafts of the rulemaking. *See* comments to the Board dated December 13, 2022 from Sierra Fund, Earthworks, and the Center for Biological Diversity.

¹⁰ See letter dated February 5, 2024 from Applicant's attorney JMBM.

¹¹ The Applicant's interpretation of the MOU from 1994, more than 30 years ago, and San Bernardino's application of that MOU (which was not made public), ignores Kern County's well reasoned response rejecting that interpretation and correctly requiring the project as a whole to be considered under SMARA.

1. Criteria No. 1: No Environmental Review Has Been Completed Under CEQA and the GDG Project is not exempt from CEQA.

The Staff Report correctly acknowledges that no CEQA review has been completed for the GDG Project by Kern County, but the Staff Report's statements regarding the environmental impacts of the GDG Project are inaccurate. The record shows that the GDG Project may in fact have a significant impacts on the environment. Indeed, even the BLM approval, which was flawed in many respects, required mitigation to avoid and minimize those impacts. Therefore, the GDG Project meets the standard as a "project" under CEQA and does not fit within the common sense exemption.

As detailed above, the BLM's EA shows that the project **may** have significant impacts on the environment and therefore BLM required adherence to Conservation Management Actions, mitigation measures, and performance standards from both BLM and USFWS (*see* EA at 2-3, 14-15, 24) in order to approve the project. While the conservation organizations do not believe that the BLM EA was accurate or adequate, even assuming for the sake of argument it were, because mitigation measures are needed to reduce the impacts ostensibly below the level of significance, the lead agency would need to prepare, at minimum, a Mitigated Negative Declaration under CEQA and could require an EIR. (*See* Pub. Res. Code § 21064.5 (a mitigated negative declaration may be relied on where "revisions in the project plans or proposals" "would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur.")) Importantly, the BLM's reliance on a "finding of no significant impact" (FONSI) under NEPA based on adherence to mitigation measures and other requirements cannot be the basis for a finding of no impacts under CEQA.

Moreover, because species that are protected under California's Endangered Species Act (CESA) may be impacted by the GDG Project, a permit may be required from California Department of Fish and Wildlife (CDFW) and additional mitigation measures may be required under CESA for impacts to species and/or for impacts to other resources such as rare plants protected under California laws. The Board cannot ignore these potentially significant impacts when considering whether CEQA review has been undertaken or is needed for the GDG Project as part of its review of the exemption request.

2. Criteria No. 2. The GDG Project has not been authorized by the Lead Agency.

The Staff report correctly notes that the GDG Project has not been authorized by Kern County which is the lead agency for SMARA compliance in this instance. In addition, the letters from Kern County on January 11, 2022 and July 14, 2023 both explained that additional information was needed before the County could process the SMARA application.

3. Criteria No. 3: The "end use" of these public lands is not "open space."

The Staff report at 5 states the following regarding how the "end use" of the public lands on which the GDG Project proposed is defined: "The end use of the area on which the activity is proposed will remain as open space." However, characterizing these public lands as merely being defined as "open space" is inaccurate. As the BLM EA explained and shown on the map above,

the area is designated as critical habitat for the Desert Tortoise, is designated as an ACEC for both tortoise and Mojave ground squirrel.

In sum, the Staff Report does not provide accurate factual information and its discussion of the legal standards is insufficient. If the Board chooses to apply the 2714(f) exemption to the GDG Project, that Decision will be unsupported by the record.

In light of the foregoing our conservation organizations ask the Board to **deny** the request for an exemption from SMARA under PRC 2714(f) for the Gold Discovery Group exploratory drilling Project.

Sincerely,

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Desert Tortoise Council

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Attachments:

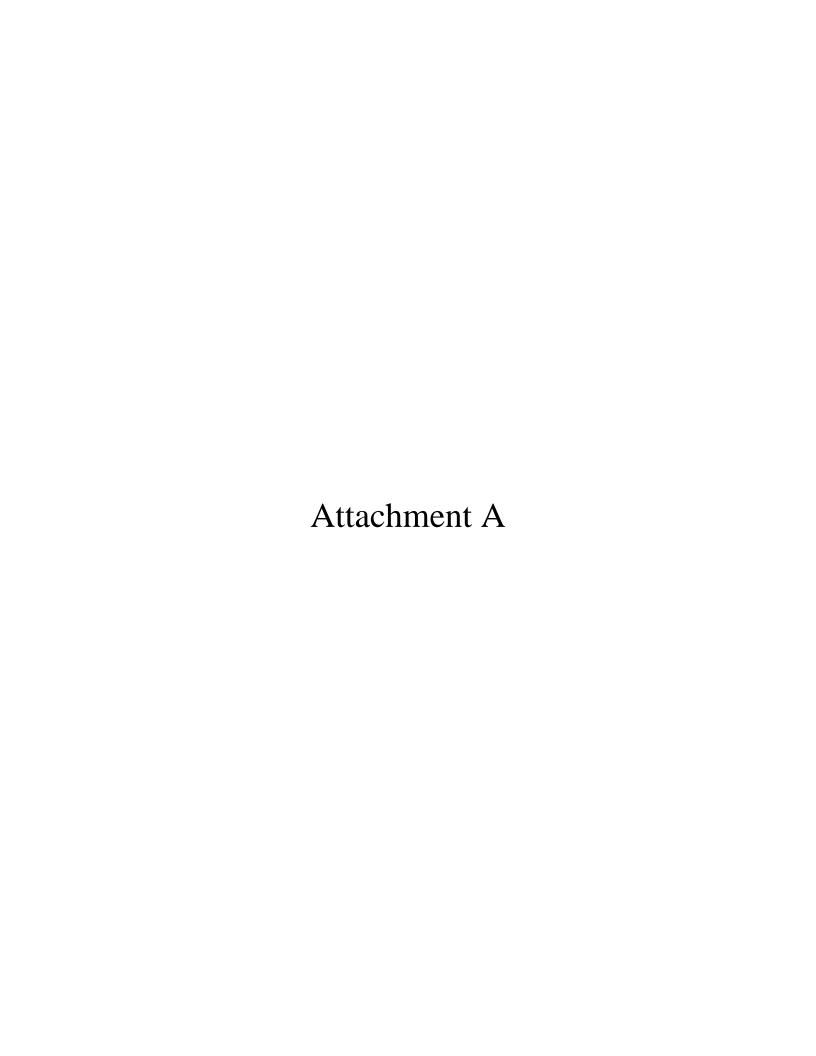
Attachment A: March 25, 2023, Desert Tortoise Council Comments to BLM

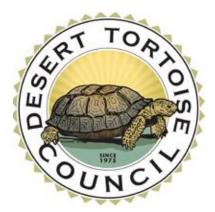
Attachment B: March 27, 2023, CNPS Comments to BLM

Attachment C: March 27, 2023, Center for Biological Diversity Comments to BLM

Attachment D: Biological Opinion Activity Forms (BLM to USFWS) (2 PDFS)

Attachment E: December 13, 2022 comments to the Board dated from Sierra Fund, Earthworks, and the Center for Biological Diversity





DESERT TORTOISE COUNCIL

3807 Sierra Highway #6-4514 Acton, CA 93510 www.deserttortoise.org eac@deserttortoise.org

Via email and BLM NEPA eplanning portal

March 25, 2023

Attn: Randy Porter Ridgecrest Field Office Bureau of Land Management 300 S. Richmond Rd. Ridgecrest, CA 93555 rporter@blm.gov

RE: Gold Discovery Group Drilling Exploration Project Environmental Assessment (DOI-BLM-CA-D050-2023-0007-EA)

Dear Mr. Porter,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

As of June 2022, our mailing address has changed to:
Desert Tortoise Council
3807 Sierra Highway #6-4514
Acton, CA 93510.

Our email address has not changed. Both addresses are provided above in our letterhead for your use when providing future correspondence to us.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments pertain to enhancing

protection of this species during activities funded, authorized, or carried out by the Bureau of Land Management (BLM), which we assume will be added to the Decision Record for this project as needed. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "... based on population reduction (decreasing density), habit loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses had been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units." It is one of three turtle and tortoise species in the United States to be critically endangered.

This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Desert Tortoise Council 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from threatened to endangered in California.

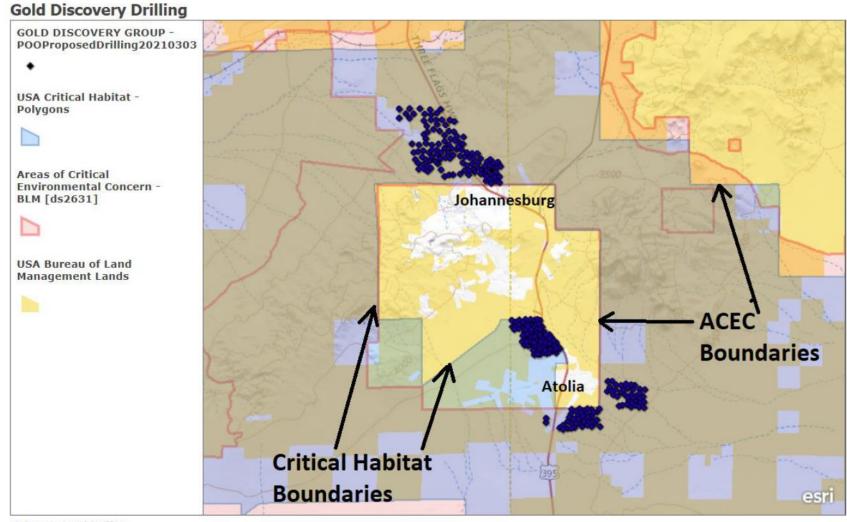
Description of Proposed Action and Alternatives

Gold Discovery Group, LLC (Proponent) has submitted a plan of operations for drilling and gathering samples near Johannesburg, Randsburg, and the former town of Atolia, California. Two alternatives are described in the EA, the Proposed Action Alternative and the No Action Alternative.

Proposed Action: The Proposed Action is to access mining claims for mineral exploration on land managed by the BLM.

The Proposed Action is located in the general vicinity of Johannesburg, Randsburg, and the former town of Atolia in eastern Kern County and western San Bernardino County, California. The drill sites appear to be within 3 miles of US Highway 395. The proposed project area is open to mineral entry under the Mining Law of 1872, but is within the Fremont-Kramer Area of Critical Environmental Concern (ACEC) and/or the Fremont-Kramer unit of Critical Habitat for the Mojave desert tortoise (please see Figure 1).

The Federal Land Policy and Management Act (FLPMA) requires BLM to respect the rights of locators established by the Mining Law of 1872, including a claimant's rights of ingress and egress, while also taking any action necessary to prevent unnecessary or undue degradation of the public



Ridgecrest Field Office

Figure 1. Relationship of drilling area(s) (black circles) to the Fremont-Kramer ACEC and Mojave Desert Tortoise Critical Habitat designated by U.S. Fish & Wildlife Service. The Kern – San Bernardino County boundary runs north-south through the middle of the figure.

lands, consistent with the mining laws. [impose closure during certain times of the year, monitoring by qualified biologists, etc.

Alternatives

BLM describes two alternatives in the EA, the No Action Alternative and the Proposed Action Alternative as described by the Project Proponent.

<u>No Action Alternative</u>: BLM would withhold authorization to implement the Proposed Action. Current land use in the area would continue.

Proposed Action Alternative: The Proponent would drill and gather samples at depth from 293 small drilling locations on BLM land. The proponent proposes to drive a four-wheeled mobile drill rig to each drill site, operating on large, heavy-equipment rubber tires each approximately 2 feet in width, would use existing county and BLM roads (including both active and inactive BLM designated routes), and would drive some cross-country. Off-road travel is estimated as 25.5 miles. One pickup truck or similar light-duty vehicle would follow the drill rig's tracks. Disturbance would consist of tire tracks and the direct drilling of 8-inch diameter hollow-stemmed auger drill holes. Average drill depth is estimated as 30 feet. Drill cuttings would be temporarily stockpiled on the tracks, then backfilled into the hole promptly after samples have been gathered from the cuttings. This Alternative would take about 2 years to implement.

Comments on the Environmental Assessment

Alternatives

To comply with section 102(2)E) of the National Environmental Policy Act (NEPA), there should be one or more additional action alternatives presented in the EA that are sufficiently broad and meet the purpose and need of the Proposed Action. This requirement is supported by BLM's NEPA Handbook (2008). The range of alternatives presented in the EA should be sufficiently broad and comply with and BLM's Handbook on NEPA (BLM 2008). The BLM NEPA Handbook directs BLM 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...".

In the EA, BLM said they "considered several additional alternatives requiring compliance with mitigation requirements deriving sole authority from Title II of FLPMA (e.g., certain DRECP CMAs); however, these alternatives were but eliminated from detailed analysis because the BLM lacks authority to impose such requirements for actions evaluated under the Mining Law of 1872, except to prevent undue or unnecessary degradation of public lands (43 USC 1732(b))." We request that BLM describe these alternatives that were dismissed in the EA.

The EA should include alternatives that "prevent undue or unnecessary degradation of public lands" such as those that alter the timing of the drilling and refilling so it occurs outside of tortoise active seasons/immediately following precipitation events and migratory bird breeding season, require vertical mulching or similar methods to obscure the routes the Proponent used/tracks the Proponent made to access the drill sites that are not open routes, test surface soil before and after

drilling for metals such as arsenic and mercury (see "Environmental Contaminants" below), etc. The inclusion of additional action alternatives is further supported by BLM's statement in the EA that "BLM will decide whether to approve, approve with modification, or deny the proposal for Gold Discovery Group LLC to gather drilling samples from certain unpatented placer mining claims. We request that BLM develop and add these action alternatives to the EA. The Proposed Action Alternative would be the alternative developed by the Proponent. Other action alternatives would be those that BLM develops with modifications to the Proposed Action Alternative.

We request that BLM select an action alternative that prevents undue or unnecessary degradation of tortoise habitat especially with respect to the release and spread of environmental contaminants/metals from drilling activities.

Segmentation

We presume the results from the samples collected from drilling would be used to determine whether additional drilling samples would be requested and/or a larger mining plan of operation would be proposed. While unknown at this time, we remind BLM that future exploration/mining activity should not be segmented under the National Environmental Policy Act (NEPA). BLM's analysis should include the past, current, and future proposed mining activities associated with this project. Please see "Cumulative Impacts" section below.

Section 1.4.1 of the EA lists several "Conservation Management Actions" (CMAs) that would be implemented during the proposed action. However, many of these CMAs are inconsistent in their wording and requirements. For example, LUPA-BIO-2 says, "Designated biologist(s) will conduct, and oversee where appropriate, activity-specific required biological monitoring during pre-construction, construction, and decommissioning to ensure that avoidance and minimization measures are appropriately implemented and are effective." However, LUPA-BIO-5 says, "All activities, as determined appropriate on an activity-by-activity basis, will implement a worker education program...carried out during all phases of the project (site mobilization, ground disturbance, grading, construction, operation, closure/decommissioning or project abandonment, and restoration/reclamation activities." The inconsistency is that biological monitoring is not required for all phases of the Proposed Action, specifically restoration/reclamation activities. We request these CMAs be amended to require monitoring during all phases of the Proposed Action.

In addition, the biological opinion issued by the U.S. Fish and Wildlife Service (USFWS 2017) for BLM's 2016 Land Use Plan Amendment (LUPA) for the California Desert Conservation Area says, BLM has "adopted numerous conservation and management actions, which it defines as the "specific set of avoidance, minimization, and compensation measures, and allowable and non-allowable actions for siting, design, pre-construction, construction, maintenance, implementation, operation, and decommissioning activities on (Bureau) land. The Bureau will apply these conservation and management actions to all future activities." We request that BLM list all conservation and management actions from the LUPA in the EA and require that they be implemented for the Proposed Action.

1.5 Relationship to Statutes, Regulations, and Other National Environmental Policy Act Document

<u>Section 7 of the Endangered Species Act</u>: In the EA, BLM says, "The proposed project is covered by the BLM 2017 Biological Opinion (BO) (USFWS 2017) for Activities in the California Desert Conservation Area, with tortoise conservation measures and reporting requirements." We reviewed this BO and were unable to find an analysis of the effects of mining activities to the tortoise or its critical habitat/habitats given the known environmental contaminants/metals that occur on the surface in the Project area because of past and ongoing mining activities.

In the biological opinion, the USFWS says, under "Construction of Non-Linear Facilities" where mines are mentioned once, "the Bureau will require the proponents to site activities in areas with lower densities and to implement measures that have proven effective in the past in reducing mortality and injury."

We were unable to find a discussion/analysis of effects of exposure to tortoises from mining activities that unearth, spread, and expose tortoises/tortoise critical habitat to environmental contaminants/metals including arsenic, from inhalation, ingestion, surface contact, etc. Please see the "Environmental Contaminants" section below. This analysis should include the effects of short-term and long-term exposure via these several exposure pathways from past, ongoing, and proposed mining activities and vehicle use in the area. Rather only the use of construction equipment and resulting direct effects of its use to tortoises and habitats were discussed/analyzed. Reinitiation of formal consultation is required (50 Code of Federal Regulations 402.16) "where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if... new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion..." We conclude the biological opinion did not analyze the impacts of environmental contaminants/metals to the tortoise and tortoise critical habitat/habitat and should not be use as the document for compliance with section 7(a)(2) of the Federal Endangered Species Act for this Proposed Action.

In addition, the USFWS conducted it analysis of effects to the tortoise with the understanding that BLM "will require project proponents to install fencing to preclude desert tortoises from entering work areas prior to removing all individuals that they can locate on the project site. During construction of the perimeter fencing and during other ground-disturbing activities that are outside of the fenced facility (i.e., access roads), the authorized biologists will perform pre-activity clearance surveys and move desert tortoises out of harm's way if they re-enter work areas."

We request that BLM reinitiate formal consultation with the USFWS for the Proposed Action. We request that BLM correct the EA to require fencing activities with clearance surveys and all other tortoise conservation measures and reporting requirements that were listed in the biological opinion.

<u>State and/or County Permit, Approval, or Clearance 1.5 State approvals</u>: In this section, we did not find a discussion of requirements to comply with the California Endangered Species Act or California Fish and Game Code 1600, Lake and Streambed Alteration Agreement. Please add to the EA that compliance with these regulatory requirements is required. BLM should also add that their authorization of the Plan of Operation for the Proposed Action is not valid until all other regulatory requirements are met.

1.6.2 Issues Identified for Detailed Analysis

BLM says "[w]here these [performance] measures may not mitigate impacts of the proposed action below significance, the following issues were retained for detailed analysis." BLM identified two resource issues for detailed analysis: 1) How would vegetation removal associated with the proposed exploratory drilling impact wildlife habitat (including special status animal and plant species) in the Fremont-Kramer Area of Critical Environmental Concern, and 2) How would this project affect cultural resources, Native American and/or religious concerns?

Given BLM's wording in this section, we interpret this to mean these impacts are significant. Consequently, BLM is required to analyze these impacts in an environmental impact statement, not an environmental assessment.

We suggest that BLM explain why they are not preparing an environmental impact statement when they consider these two resource issues as not mitigated below the level of significance.

1.6.3 Issues Not Presented in Detail

In this section, BLM says "An issue was dismissed from detailed analysis if the issue was not present, would not be impacted, or if potential impacts would be mitigated through implementation of Conservation Management Actions, Project Design Features (Section 2.1.1), and/or required performance measures." NEPA requires analysis if the impacts before implementing mitigation measures. There is no guarantee that the mitigation measures in the NEPA document will be implemented, and if implemented, will be successful. We request that BLM comply with NEPA and its implementing regulations especially with respect to analysis of direct, indirect, and cumulative impacts to the tortoise and tortoise critical habitat and the development of alternatives other than the Proposed Action and No Action alternatives.

Table 1.3. Issues Not Presented in Detail

BLM dismissed 1) the potential impacts from waste (hazardous materials) generated by the construction and operation of the proposed action, and 2) and the potential spread of noxious weeds and invasive plants. For the first issue, BLM must be unaware of the data and analysis on the presence of environmental contaminants/metals (e.g., arsenic, etc.) on the surface from past and ongoing mining activities in the Randsburg and Atolia mining areas. When drilling or excavation occurs, the rock is brought to the surface and arsenic and other metals/environmental contaminants are deposited where they are transported by wind, water, and vehicles. Please see the "Environmental Contaminants" section below for more information.

The Council request that BLM include in the EA a scientific analysis of the direct, indirect and cumulative impacts of these metals/environmental contaminants on the tortoise/tortoise critical habitat and other special status species and their habitats.

For noxious weeds and invasive plants, BLM provided information to dismiss noxious weeds as a resource issue. However, we did not find information in the EA that discussed/analyzed the

Proposed Action with respect to invasive plant species. The Council requests that BLM revise this section and provide information on the occurrence of invasive plant species in the project area. From photographs provided in the EA, we see *Schismus* sp. present in January 2021). After the above average winter rains of 2022-2023, there will likely be other invasive plants germinating and growing. The NEPA document should analyze how the proposed action is likely to contribute to the spread and proliferation of invasive plant species along 25.5 miles of off-road travel and additional areas traveled including turn-around areas, and the conservation measures BLM will require of the Proponent to ensure that invasive plant species are not brought to, spread around, and/or provided with a germination advantage over native species through surface disturbance and timing.

2.1.1 Project Design Features

LUPA-BIO-9 requires that BLM "[i]mplement measures to prevent leaks, spills, or releases which might impact water resources." However, this Conservation Management Action (CMA) does not apply to leaks, spills, or releases which might affect terrestrial resources or air quality. As BLM states in the EA, FLPMA requires BLM to respect the rights of locators established by the Mining Law of 1872, including a claimant's rights of ingress and egress, while also "taking any action necessary to prevent unnecessary or undue degradation of the public lands."

Please see the "Environmental Contaminants" section below for a discussion on the sources, presence, and spread of environmental contaminants including metals from mining activities in the Project area. We believe preventing leaks, spills, or releases of environmental contaminants during all phases of mining activities should be one of BLM's major priorities. BLM should require appropriate management actions and monitoring of environmental contaminants/metals to prevent unnecessary or undue degradation of the public lands including the tortoise and tortoise critical habitat/habitat.

We request that BLM require a trust fund or other funding mechanism to ensure that effective long-term post-mining restoration is implemented in tortoise critical habitat. BLM's Surface Management Manual and Handbook require that "BLM will require financial assurances, including long-term trusts, to ensure reclamation of the land" (BLM 2012a, 2012b). Please ensure this requirement is added to the EA and the document that authorized the Proposed Action.

LUPA-BIO-10 requires BLM to "[i]mplement measures to prevent the introduction or subsidy of invasive weeds and non-native species." However, it does not require monitoring of invasive weeds and non-native species in the action area to determine the effectiveness of LUPA-BIO-10 or implementation of actions to manage weedy to control these weeds/species in the action area. We request that this CMA be amended to require these monitoring and management actions.

LUPA-SW-1 Measures to protect soil and water resources — We request that BLM expand this CMA to describe what measures would be implemented for the Proposed Action to protect soil and water resources. Please see the "Environmental Contaminants" section below for the resource issues that would be addressed to protect soil and surface water resources.

There is no compensation required for the Proposed Action. We understood that the DRECP imposed compensation for any surface disturbance in critical habitat for the tortoise at a 5:1 ratio. Please add this compensation requirement to the Performance Standards or explain in the NEPA document why compensation is not required.

The effectiveness of implementing standard conservation management actions to minimize take for the tortoise is questionable. While these actions may reduce the direct loss or take of tortoise, indirect take occurs at a rate greater than recruitment. Given the ongoing downward trend in the demographic status of the tortoise and declining recruitment of juvenile tortoises (Allison and McLuckie 2018; please see Appendix A – Demographic Status and Trend of the Mojave Desert Tortoise including the Western Mojave Recovery Unit, which is attached) with the three populations in the western Mojave Recovery Unit below the population viability threshold for several years, the Council concludes that the standard conservation management actions implemented by BLM since the tortoise was listed in 1989 have not been effective in reversing this downward population trend. Additional effective conservation management actions are needed with appropriate science-based monitoring and adaptive management to ensure their effectiveness in halting the decline in tortoise numbers and densities

Environmental Impacts

3.1.2.1 Wildlife, Alternative A: Proposed Action, Special Status Wildlife Species, Mojave Desert Tortoise: We were unable to find a description or analysis in the EA of the impacts of metals and other environmental contaminants on the tortoise/tortoise critical habitat. Chaffee and Berry (2006) reported in the Rand and Atolia mining districts, that samples of soils are generally highly enriched with at least six elements/metals (arsenic, chromium, lithium, nickel, antimony, and gold). High concentration levels for arsenic, gold, and antimony were also found in mineralized samples from old mine dumps and tailings piles (Chaffee, M.A., 2006, unpub. data, in Chaffee and Berry 2006). Soil anomalies for arsenic, gold, cadmium, mercury, antimony, and tungsten extend as far as 15 km (9.3 miles) outward from the present area of mining. Soils containing anomalous Hg were found at least 6 km (3.7 miles) away from tailings.

Arsenic is probably the most potentially toxic element to tortoises of all those determined for this study (Chaffee and Verry 2006). High arsenic concentrations were found almost exclusively in plant samples collected in or near areas known to be contaminated by mining of arsenic-rich ores in the Project area. The highest arsenic concentrations were found in 13 different species with five species in the legume family and are favored foods for (Jennings, 1993, 2002). However, the other eight species are also consumed by tortoises.

Chaffe and Berry (2006) attributed the source of these elevated levels of metals to mining activities that produced dust contaminated with these metals. This contaminated dust was/continues to be distributed by wind, vehicles, and rainfall including flash flooding. The highest concentration of arsenic in soils was 510 ppm. The anomalous concentrations of arsenic and mercury may be the source of elevated levels of these elements found in ill tortoises from the region.

An analysis of plants collected in the area that are used a forage by tortoises revealed the plant material was strongly enriched in seven elements - calcium, cadmium, potassium, molybdenum,

strontium, and zinc. In contrast, concentrations of most other elements were significantly lower in plants as compared to soils. They suggested that the distribution and abundance of these metals should be evaluated in tortoise forage plants to determine their role in systemic uptake in plants and consumption by tortoises.

Kim et al. (2012) studied the origins of arsenic in the Project area. Mineral deposits in the western Mojave Desert contain unusually high concentrations of arsenic and is common in veins in the Kelly and Randsburg ore deposits. It is also common in the processed tailings at both of these mines.

Kim et al. (2012) reported that airborne mobilization of mine tailings is diffuse and covers large areas, while fluvial transport is more localized. It is directed down narrow and semi-linear washes, which facilitates the movement of tailings across significant distances and into ephemeral lakes or playas (Kim et al 2012). For fluvial transport at sites in the Randsburg area, arsenic deposition was recorded 1 km (0.6 mile) to >5 km (>3.1 miles) downstream from the mine/tailings in washes, and concentrations were greater than 2,000 mg/kg (or 2,000 ppm) than in the tailings and background samples. Kim at el. (2012) detected pulses of arsenic on the surface. Pulses of arsenic transport nearest the initial tailings source originated through recent storm events that were relatively short in duration, while pulses further downstream represent a much longer timeframe of transport and mine migration. Where the wash is not highly incised into the alluvial fan, transport of tailings occurs as sheet wash on the alluvial fan and in the smaller channels that extend on either side of the main wash. The future variability in such events as a result of climate change may significantly impact the migration of contaminated tailings, particularly if the frequency or severity of storm events increases (Kim et al. 2012). Now that arsenic has been documented as being transported and concentrated through the Project area and beyond via fluvial transport, it is likely that other metals/environmental contaminants are also being transported and concentrated in a similar manner.

In further research, Kim et al. (2014) studied the aeolian transport of arsenic in the Project area. They reported that mine tailings are susceptible to weathering and windborne transport, and this significantly increases the spatial extent of arsenic contamination in topsoils and potential exposure of humans to toxic metal(loid)s.

Aeolian transport is the dominant mechanism of soil contamination by mine tailings in Randsburg Historic Mining District (RHMD). Field studies of surface arsenic concentrations and surface enrichment of arsenic demonstrate the decay with distance is strongly dependent on prevailing wind direction, which in the RHMD is primarily from west to east. Surface contamination based on depth profiling of residential lots in Red Mountain, CA is pervasive and appears to extend to approximately 15 cm depth, providing a baseline for recommended soil removal in order to remediate contaminated Residences (Kim et al. 2014). All samples analyzed from the RHMD have the potential to exceed the de minimis cancer risk threshold for humans based on average PM10 concentrations, with multiples as high as nearly 23 times the threshold value. Materials at the mine sites examined exhibit the potential to exceed minimum risk level for non-cancer-related health risks under chronic exposure conditions. This suggests that long-term residents located closest to/downwind of these mine sites face possible adverse health effects due to the inhalation of fine-grained mine tailings mobilized through aeolian processes. Recreational OHV users, who mobilize

large dust clouds with their vehicles and who drive directly through such clouds regularly, are also at potential risk for acute short-term exposure (Kim et al. 2014).

From these finding, we conclude that impacts to the tortoise from fluvial and aeolian exposure to arsenic and other environmental contaminants may be as great or greater than to humans. Tortoises are outsider within the 15 cm depth of deposition and therefore exposed 24 hours a day. Tortoises also have more exposure pathways for environmental contaminants than humans and would have more opportunities for exposure than humans.

Tortoises intentionally consumes soil (geophagy) and small rocks (lithophagy) (Sokol 1971) to support digestive and nutritional needs. Because tortoises forage in washes and use washes for movement corridors, they are more likely to encounter the dust of metals/environmental contaminants downgradient from locations of mining activities than many other wildlife species. Because of intentional consumption of soil and rocks and foraging/movements in washes, tortoises are likely exposed to a greater level of metals in the project area from ingestion than animals that accidentally consume contaminated soil and rocks or spend little time foraging in washes.

Olfaction is important to the tortoise. When moving about, tortoises touch their nose to the soil and rocks, and actively sniff (Berry 1972). This behavior is repeated as the tortoise walks over the ground. This sniffing behavior means that tortoises are more likely to be exposed to metals/environmental contaminants in the dust deposited on the soil and plants through inhalation than birds or most mammals.

In summary, the physiology and behavior/ecology of the Mojave desert tortoise means there are multiple pathways for tortoises to be exposed to these metals/environmental contaminants in this area of the Fremont-Kramer critical habitat unit and tortoise population. These pathways include:

- Intentional ingestion of soil (geophagy) and small rocks (lithophagy) that may be contaminated with metals
- Ingestion of dust contaminated with metals deposited on plants that tortoises use for forage
- Inhalation of dust contaminated with metals when sniffing the ground
- Inhalation of dust contaminated with metals deposited by wind when in burrows
- Inhalation of dust contaminated with metals when excavating/modifying a burrow
- Dermal/eye contact with dust contaminated with metals when excavating/modifying a burrow.
- Ingestion of plants in down-gradient washes and/or slopes that may be contaminated with metals from uptake through their roots

Heavy metals have been identified as a factor contributing to mycoplasmal disease in tortoises (Jacobsen et al. 1991, Jacobsen et al. 2014). For comparison, the U.S. Environmental Protection Agency (USEPA) established the maximum level of inorganic arsenic in drinking water for humans as 10 ppb. The concentrations reported above are >2,000 ppm for arsenic transported by water. USEPA considers arsenic a hazardous air pollutant, defined as a substance that may cause an increased mortality or serious illness in humans after significant exposure (Centers for Disease Control 2023). Kim et al. (2014) reported windborne exposed mine wastes containing elevated levels of toxic metals and metalloids including arsenic (As), a known carcinogen, in the area of the Proposed Action. While we were unable to find studies on the impacts of these

metals/environmental contaminants on the Mojave desert tortoise, there is literature on their effects to other species. This information should be included in the analysis of impacts from exposure to environmental contaminants/metals and applied to impacts to reproduction, growth, and survival of the tortoise as surface activity in the area results in the spread of and increased exposure to environmental contaminants including arsenic.

We request that the NEPA document describe that past and ongoing mining in the area has resulted in deposition of metals/environmental contaminants on the surface, this deposition results in exposure to tortoises and other wildlife through (1) direct exposure (i.e., exposure to eyes and skin; inhalation – tortoises sniff the ground much like a dog and sniff plants before foraging on them; and direct consumption – tortoises eat small rocks (lithophagy), soil (geophagy) to aid digestion, and plants including dust deposited on them) drinking water from puddles and (2) indirect exposure (consuming plants that have absorbed the heavy metals through their roots. The EA should analyze the impacts of the deposition and exposure pathways for the tortoise and other special status species, and require monitoring of tortoises and tortoise habitats for these environmental contaminants/metals. Laser ablation of tortoise scutes is a method that can be used to measure arsenic concentrations and the relative timing of uptake of arsenic (Seltzer and Berry 2005).

In designating critical habitat for the tortoise, the USFWS (1994) identified the following primary constituent elements/physical and biological features: 1) Sufficient space to support-viable-populations within 'each of the recovery units and provide for movements, dispersal, and gene flow; 2) sufficient quantity and quality of forage species and the proper soil conditions to provide for the growth of such species; 3) suitable substrates for burrowing, nesting, and overwintering; burrows, caliche caves, and other sheltersites; 4) sufficient vegetation for shelter from temperature extremes and predators; and 5) habitat protected from disturbance and human-caused mortality.

Destruction or adverse modification of critical habitat is defined at 50 CFR 402.02 as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. The regulations also clearly state that such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

The Endangered Species Act's definition of critical habitat indicates that the purpose of critical habitat is to contribute to a species' conservation, which by definition equates to recovery. Section 7 prohibitions against the destruction or adverse modification of critical habitat apply to actions that would impair survival and recovery of the listed species, thus providing a regulatory means of ensuring that Federal actions within critical habitat are considered in relation to the goals and recommendations of a recovery plan. As a result of the link between critical habitat and recovery, the prohibition against destruction or adverse modification of the critical habitat should provide for the protection of the critical habitat's ability to contribute fully to a species' recovery. Thus, the adverse modification standard may be reached closer to the recovery end of the survival continuum, whereas the jeopardy standard traditionally has been applied nearer to the extinction end of the continuum.

The presence of dust from metals/environmental contaminants on plants consumed by tortoises and on the soil surface in critical habitat is likely adversely impacting numbers 2 and 5. We request that BLM analyze in the EA how this contaminated dust is affecting the primary constituent element. In addition, we request that BLM reinitiate section 7 consultation with USFWS so the USFWS may analyze the effects of metals/environmental contaminants to tortoise critical habitat in a biological opinion. BLM should assist the USFWS in its evaluation of the Proposed Action by providing detailed information on the habitat conditions of areas/levels and extent of contamination, etc.

Because functioning critical habitat is interwoven with a species recovery, the demographic status of a species and its trend is an indication of whether critical habitat is providing the physical and biological features/primary constituent elements for survival and recovery of the listed species. In reviewing the demographic status of the tortoise (please see "Appendix A: Demographic Status and Trend of the Mojave Desert Tortoise including the Western Mojave Recovery Unit" which is attached) with its ongoing downward trend in four of the five recovery units and densities below the level needed for population viability, we conclude that designated critical habitat for the tortoise is not providing the primary constituent elements/physical and biological features needed by this species to survive and recover. We request that BLM address this conclusion in the EA with the data and analyses.

Cumulative Impacts

We could not find a cumulative effects section in the EA. Please see *Grand Canyon Trust* v. *F.A.A.*, 290 F.3d 339, 345-46 (D.C. Cir. 2002) in which the court ruled that agencies must analyze the cumulative impacts of actions in environmental assessments. We request that BLM revise their NEPA document to include a section that analyzes the cumulative impacts of the Proposed Action.

The EA should include an analysis of all impacts to the tortoise/critical habitat within the region including an up-to-date list of future state, federal, and private actions affecting the tortoise species on state, federal, and private lands.

In the cumulative effects analysis, please ensure that the Council on Environmental Quality's (CEQ) "Considering Cumulative Effects under the National Environmental Policy Act" (1997) is followed. BLM refers to this document in its NEPA Handbook (BLM 2008). BLM"s analysis should include CEQ's the eight principles, when analyzing cumulative effects of the Proposed Action to the tortoise and its critical habitat/habitats. CEQ states, "Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects." The analysis "must describe the response of the resource to this environmental change." Cumulative impact analysis should "address the *sustainability* [emphasis added] of resources, ecosystems, and human communities." For example, the EA should include data on the likelihood that the tortoise population in the Western Mojave Recovery Unit will be sustained into the future given its status and trend.

CEQ's eight principles are listed below:

1. Cumulative effects are caused by the aggregate of past, present, and reasonable future actions.

The effects of a proposed action on a given resource, ecosystem, and human community, include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to the effects (past, present, and future) caused by all other actions that affect the same resource.

2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.

Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effect at one time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.

3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.

Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resources, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.

4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.

For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to the affected parties.

5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.

Resources are typically demarcated according to agency responsibilities, county lines, grazing allotments, or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.

6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.

Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.

7. Cumulative effects may last for many years beyond the life of the action that caused the effects.

Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine damage, radioactive waste contamination, species extinctions). Cumulative effects analysis need to apply the best science and forecasting techniques to assess potential catastrophic consequences in the future.

8. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accommodate additional effects, based on its own time and space parameters.

Analysts tend to think in terms of how the resource, ecosystem, and human community will be modified given the action's development needs. The most effective cumulative effects analysis focuses on what is needed to ensure long-term productivity or sustainability of the resource.

The CEQ recognizes synergistic and interactive effects as a part of cumulative impacts analysis (Principal #6). Also note that CEQ provides a specific example on mining impacts (Principal #7) The Council requests that BLM implement Principal #8 specifically with respect to the Fremont-Kramer tortoise population and the tortoise in the West Mojave Recovery Unit (i.e., the sustainability of the tortoise in these areas), and Principals #6 and #7 for the tortoise when conducting its analysis in the NEPA document of the Proposed Action. This would include the impacts of environmental contaminants/metals from past, current, and future activities on the tortoise and tortoise critical habitat/habitats.

We request that the EA include these eight principles in its analysis of cumulative impacts to the Mojave desert tortoise, and address the sustainability of the tortoise in tortoise conservation areas (TCAs). The EA should include an analysis of all proposed mitigation and how its implementation during all phases of the Proposed Action (including monitoring for effectiveness and adaptive management) would result in "no net loss in quantity and quality of Mojave desert tortoise habitat....and using offsite mitigation (compensation) for unavoidable residual habitat loss."

To help BLM understand the complexity of the cumulative and interactive nature of multiple anthropogenic threats to desert tortoise populations and to help develop BLM's analysis of cumulative impacts in the EA, we have included a map of some of these multiple threats and their relationships to other threats (Tracy et al. 2004) (please see Figure 2).

For BLM to conduct an adequate cumulative impacts analysis, BLM would need to track and map all projects that result in the loss and/or degradation of habitat for the tortoise, especially critical habitat. This would include projects with indirect impacts (e.g., fluvial transports of arsenic and other environmental contaminants, etc.), whether these impacts fragment habitat and populations (e.g., roads and routes of travel, pipelines and other linear features, adjacent projects, etc.), promote the spread and proliferation of invasive plant species (projects that result in surface disturbance), provide food water and nesting subsidies for common ravens, etc. This tracking system should include location data and maps that are updated as each project is entered into the cumulative impact tracking system. Absent this system, BLM is unable to do an adequate job of analyzing cumulative impacts as required under NEPA. We request that BLM implement such a system and use it when analyzing the impacts to the tortoise and tortoise habitat in BLM NEPA documents.

For regional and cumulative impacts, the BLM should require the Proponent to participate in an effort to address regional and cumulative impacts from common raven predation. For example, in California, the Proponent should contribute to the National Fish and Wildlife Foundation's Raven Management Fund to help mitigation for regional and cumulative impacts. Unfortunately, this Fund that was established in 2010 has not revised its per acre payment fees to reflect increased labor and supply costs during the past decade to provide for effective implementation. The National Fish and Wildlife Foundation should revise the per acre fee.

Appendix C: Required Performance Standards

Under "Mining wastes," BLM says, "[a]ll tailings, dumps, deleterious materials or substances, and other waste produced by the operations shall be disposed of so as to prevent unnecessary or undue degradation and in accordance with applicable Federal and state Laws."

We request that "operations" include exploratory drilling. In addition, we request the Proponent test the substances drilled, and placed beside the drill holes, and placed in the drill holes for presence of environmental contaminants/metals that are deleterious to human health and the environment (e.g., arsenic, etc.). The test results should be reported to BLM, USFWS, CDFW, California Department of Toxic Substances Control and California Office of Environmental Health Hazard Assessment.

Under "Reclamation," BLM says, "Reclamation shall include, but shall not be limited to:

- (A) Saving of topsoil for final application after reshaping of disturbed areas have been completed;
- (B) Measures to control erosion, landslides, and water runoff;
- (C) Measures to isolate, remove, or control toxic materials;

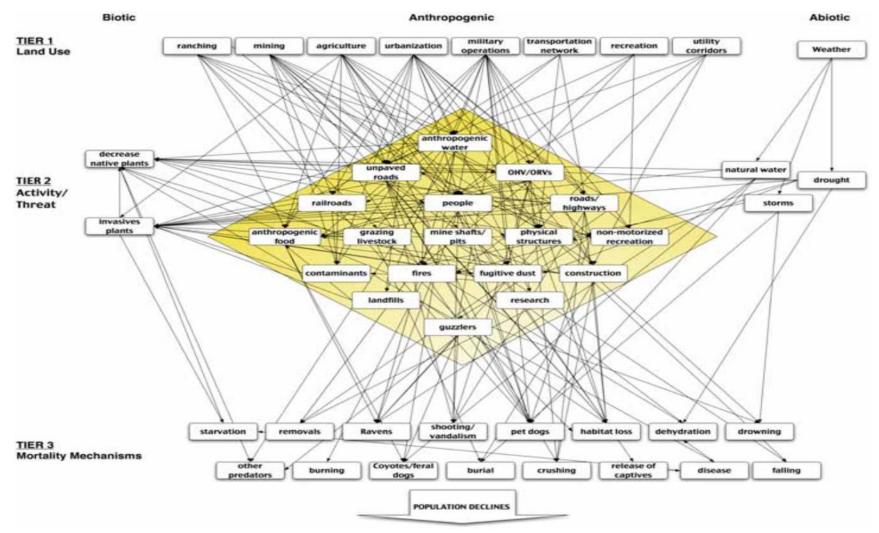


Figure 2. Network of threats demonstrating the interconnectedness between multiple human activities that interact to cause mortality and prevent recovery of tortoise populations. Tier 1 includes the major land use patterns that facilitate various activities (Tier 2) that impact tortoise populations through a suite of mortality factors (Tier 3). Just one land use results in several activities that are threats to the tortoise and cause numerous mortality mechanisms most of which are indirect (from Tracy et al. 2004).

- (D) Reshaping the area disturbed, application of the topsoil, and revegetation of disturbed areas, where reasonably practicable; and
- (E) Rehabilitation of fisheries and wildlife habitat.

We request that BLM specify to the Proponent what the final results are for rehabilitation of wildlife habitat when the BLM approves one of the action alternatives.

We appreciate this opportunity to provide comments on this project and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Desert Tortoise Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the BLM that may affect species of desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that you respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this project.

Respectfully,

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Edward L. LaRue, Jr., M.S.

Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Attachment: Appendix A – Demographic Status and Trend of the Mojave Desert Tortoise including the Western Mojave Recovery Unit

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Appendix A Demographic Status and Trend of the Mojave Desert Tortoise including the Western Mojave Recovery Unit

<u>Status of the Population of the Mojave Desert Tortoise</u>: The Council provides the following information for resource and land management agencies so that these data may be included and analyzed in their project and land management documents and aid them in making management decisions that affect the Mojave desert tortoise (tortoise).

There are 17 populations of Mojave desert tortoise described below that occur in Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs); 14 are on lands managed by the BLM; 8 of these are in the California Desert Conservation Area (CDCA).

As the primary land management entity in the range of the Mojave desert tortoise, the Bureau of Land Management's (BLM's) implementation of a conservation strategy for the Mojave desert tortoise in the CDCA through implementation of its Resource Management Plan and Amendments through 2014 has resulted in the following changes in the status for the tortoise throughout its range and in California from 2004 to 2014 (**Table 1**, **Table 2**; USFWS 2015, Allison and McLuckie 2018). The Council believes these data show that BLM and others have failed to implement an effective conservation strategy for the Mojave desert tortoise as described in the recovery plan (both USFWS 1994a and 2011), and have contributed to tortoise declines in density and abundance between 2004 to 2014 (**Table 1**, **Table 2**; USFWS 2015, Allison and McLuckie 2018) with declines or no improvement in population density from 2015 to 2021 (**Table 3**; USFWS 2016, 2018, 2019, 2020, 2022a, 2022b).

Important points from these tables include the following:

Change in Status for the Mojave Desert Tortoise Range-wide

- Ten of 17 populations of the Mojave desert tortoise declined from 2004 to 2014.
- Eleven of 17 populations of the Mojave desert tortoise are below the population viability threshold. These 11 populations represent 89.7 percent of the range-wide habitat in CHUs/TCAs.

Change is Status for the Western Mojave Recovery Unit – Nevada and California

- This recovery unit had a 51 percent decline in tortoise density from 2004 to 2014.
- Tortoises in this recovery unit have densities that are below viability.

Change in Status for the Superior-Cronese Tortoise Population in the Western Mojave Recovery Unit.

- The population in this recovery unit experienced declines in densities of 61 percent from 2004 to 2014. In addition, there was a 51 percent decline in tortoise abundance.
- This population has densities less than needed for population viability (USFWS 1994a).

Table 1. Summary of 10-year trend data for the 5 Recovery Units and 17 CHUs/TCAs for Mojave desert tortoise. The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and the percent change in population density between 2004 and 2014. Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) or showing a decline from 2004 to 2014 are in red.

Recovery Unit: Designated Critical Habitat Unit ¹ /Tortoise Conservation Area	Surveyed area (km²)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km² (SE)	% 10-year change (2004–2014)	
Western Mojave, CA	6,294	24.51	2.8 (1.0)	-50.7 decline	
Fremont-Kramer	2,347	9.14	2.6 (1.0)	-50.6 decline	
Ord-Rodman	852	3.32	3.6 (1.4)	−56.5 decline	
Superior-Cronese	3,094	12.05	2.4 (0.9)	-61.5 decline	
Colorado Desert, CA	11,663	45.42	4.0 (1.4)	-36.25 decline	
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	-29.77 decline	
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	-37.43 decline	
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	-64.70 decline	
Fenner, CA	1,782	6.94	4.8 (1.9)	−52.86 decline	
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase	
Pinto Mtn, CA	508	1.98	2.4 (1.0)	-60.30 decline	
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase	
Northeastern Mojave	4,160	16.2	4.5 (1.9)	+325.62 increase	
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase	
Coyote Spring, NV	960	3.74	4.0 (1.6)	+ 265.06 increase	
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+ 384.37 increase	
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+ 217.80 increase	
Eastern Mojave, NV & CA	3,446	13.42	1.9 (0.7)	-67.26 decline	
El Dorado Valley, NV	999	3.89	1.5 (0.6)	-61.14 decline	
Ivanpah Valley, CA	2,447	9.53	2.3 (0.9)	-56.05 decline	
Upper Virgin River	115	0.45	15.3 (6.0)	–26.57 decline	
Red Cliffs Desert	115	0.45	15.3 (6.0)	-26.57 decline	
Range-wide Area of CHUs -	25,678	100.00		-32.18 decline	
TCAs/Range-wide Change in					
Population Status					

¹ U.S. Fish and Wildlife Service. 1994b. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. Federal Register 55(26):5820-5866. Washington, D.C.

Table 2. Estimated change in abundance of adult Mojave desert tortoises in each recovery unit between 2004 and 2014 (Allison and McLuckie 2018). Decreases in abundance are in red.

Recovery Unit	Modeled	2004	2014	Change in	Percent Change in
	Habitat (km ²)	Abundance	Abundance	Abundance	Abundance
Western Mojave	23,139	131,540	64,871	-66,668	-51%
Colorado Desert	18,024	103,675	66,097	-37,578	-36%
Northeastern Mojave	10,664	12,610	46,701	34,091	270%
Eastern Mojave	16,061	75,342	24,664	-50,679	-67%
Upper Virgin River	613	13,226	10,010	-3,216	-24%
Total	68,501	336,393	212,343	-124,050	-37%

Table 3. Summary of data for Agassiz's desert tortoise, *Gopherus agassizii* (=Mojave desert tortoise) from 2004 to 2021 for the 5 Recovery Units and 17 Critical Habitat Units (CHUs)/Tortoise Conservation Areas (TCAs). The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and percent change in population density between 2004-2014 (USFWS 2015). Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) (USFWS 1994a, 2015) or showing a decline from 2004 to 2014 are in **red.**

Recovery Unit: Designated CHU/TCA &	% of total habitat area in Recovery Unit & CHU/TCA	2004 density/ km²	2014 density/ km² (SE)	% 10- year change (2004– 2014)	2015 density/ km²	2016 density/ km²	2017 density/ km²	2018 density/ km²	2019 density/ km²	2020 density/ km²	2021 density/ km²
Western Mojave, CA	24.51		2.8 (1.0)	-50.7 decline							
Fremont-Kramer	9.14		2.6 (1.0)	-50.6 decline	4.5	No data	4.1	No data	2.7	1.7	No data
Ord-Rodman	3.32		3.6 (1.4)	-56.5 decline	No data	No data	3.9	2.5/3.4*	2.1/2.5*	No data	1.9/2.5*
Superior-Cronese	12.05		2.4 (0.9)	-61.5 decline	2.6	3.6	1.7	No data	1.9	No data	No data
Colorado Desert, CA	45.42		4.0 (1.4)	-36.25 decline							
Chocolate Mtn AGR, CA	2.78		7.2 (2.8)	−29.77 decline	10.3	8.5	9.4	7.6	7.0	7.1	3.9
Chuckwalla, CA	10.97		3.3 (1.3)	-37.43 decline	No data	No data	4.3	No data	1.8	4.6	2.6
Chemehuevi, CA	14.65		2.8 (1.1)	-64.70 decline	No data	1.7	No data	2.9	No data	4.0	No data
Fenner, CA	6.94		4.8 (1.9)	-52.86 decline	No data	5.5	No data	6.0	2.8	No data	5.3
Joshua Tree, CA	4.49		3.7 (1.5)	+178.62 increase	No data	2.6	3.6	No data	3.1	3.9	No data
Pinto Mtn, CA	1.98		2.4 (1.0)	-60.30 decline	No data	2.1	2.3	No data	1.7	2.9	No data
Piute Valley, NV	3.61		5.3 (2.1)	+162.36 increase	No data	4.0	5.9	No data	No data	No data	3.9

Northeastern Mojave AZ, NV, & UT	16.2		4.5 (1.9)	+325.62 increase							
Beaver Dam Slope, NV, UT, & AZ	2.92		6.2 (2.4)	+370.33 increase	No data	5.6	1.3	5.1	2.0	No data	No data
Coyote Spring, NV	3.74		4.0 (1.6)	+ 265.06 increase	No data	4.2	No data	No data	3.2	No data	No data
Gold Butte, NV & AZ	6.26		2.7 (1.0)	+ 384.37 increase	No data	No data	1.9	2.3	No data	No data	2.4
Mormon Mesa, NV	3.29		6.4 (2.5)	+ 217.80 increase	No data	2.1	No data	3.6	No data	5.2	5.2
Eastern Mojave, NV & CA	13.42		1.9 (0.7)	-67.26 decline							
El Dorado Valley, NV	3.89		1.5 (0.6)	-61.14 decline	No data	2.7	5.6	No data	2.3	No data	No data
Ivanpah Valley, CA	9.53		2.3 (0.9)	−56.05 decline	1.9	No data	No data	3.7	2.6	No data	1.8
Upper Virgin River, UT & AZ	0.45		15.3 (6.0)	-26.57 decline							
Red Cliffs Desert**	0.45	29.1 (21.4- 39.6)**	15.3 (6.0)	-26.57 decline	15.0	No data	19.1	No data	17.2	No data	
Rangewide Area of CHUs - TCAs/Rangewide Change in Population Status	100.00			-32.18 decline							

^{*}This density includes the adult tortoises translocated from the expansion of the MCAGCC, that is resident adult tortoises and translocated adult tortoises.

^{**}Methodology for collecting density data initiated in 1999.

Change in Status for the Mojave Desert Tortoise in California

- Eight of 10 populations of the Mojave desert tortoise in California declined from 29 to 64 percent from 2004 to 2014 with implementation of tortoise conservation measures in the Northern and Eastern Colorado Desert (NECO), Northern and Eastern Mojave Desert (NEMO), and Western Mojave Desert (WEMO) Plans.
- Eight of 10 populations of the Mojave desert tortoise in California are below the population viability threshold. These eight populations represent 87.45 percent of the habitat in California that is in CHU/TCAs.
- The two viable populations of the Mojave desert tortoise in California are declining. If their rates of decline from 2004 to 2014 continue, these two populations will no longer be viable by about 2030.

Change in Status for the Mojave Desert Tortoise on BLM Land in California

- Eight of eight populations of Mojave desert tortoise on lands managed by the BLM in California declined from 2004 to 2014.
- Seven of eight populations of Mojave desert tortoise on lands managed by the BLM in California are no longer viable.

Change in Status for Mojave Desert Tortoise Populations in California that Are Moving toward Meeting Recovery Criteria

• The only population of Mojave desert tortoise in California that is not declining is on land managed by the National Park Service, which has increased 178 percent in 10 years.

Important points to note from the data from 2015 to 2021 in Table 3 are:

Change in Status for the Mojave Desert Tortoise in the Western Mojave Recovery Unit:

- Density of tortoises continues to decline in the Western Mojave Recovery Unit
- Density of tortoises continues to fall below the density needed for population viability from 2015 to 2021

Change in Status for the Mojave Desert Tortoise in the Colorado Desert Recovery Unit:

• The population that had the highest density in this recovery unit had a continuous reduction in density since 2018 and fell substantially to the minimum density needed for population viability in 2021.

Change in Status for the Mojave Desert Tortoise in the Northeastern Mojave Recovery Unit:

- Two of the three population with densities greater than needed for population viability declined to level below the minimum viability threshold.
- The most recent data from three of the four populations in this recovery unit have densities below the minimum density needed for population viability.
- The population that had the highest density in this recovery unit declined since 2014.

Change in Status for the Mojave Desert Tortoise in the Eastern Mojave Recovery Unit:

• Both populations in this recovery unit have densities below the minimum density needed for population viability.

Change in Status for the Mojave Desert Tortoise in the Upper Virgin River Recovery Unit:

• The one population in this recovery unit is small and appears to have stable densities.

The Endangered Mojave Desert Tortoise: The Council believes that the Mojave desert tortoise meets the definition of an endangered species. In the FESA, Congress defined an "endangered species" as "any species which is in danger of extinction throughout all or a significant portion of its range..." In the California Endangered Species Act (CESA), the California legislature defined an "endangered species" as a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant, which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes (California Fish and Game Code § 2062). Because most of the populations of the Mojave desert tortoise were non-viable in 2014, most are declining, and the threats to the Mojave desert tortoise are numerous and have not been substantially reduced throughout the species' range, the Council believes the Mojave desert tortoise should be designated as an endangered species by the USFWS and California Fish and Game Commission. Despite claims by USFWS (Averill-Murray and Field 2023) that a large number of individuals of a listed species and an increasing population trend in part of the range of the species prohibits it from meeting the definitions of endangered, we are reminded that the tenants of conservation biology include numerous factors when determining population viability. The number of individual present is one of a myriad of factors (e.g., species distribution and density, survival strategy, sex ratio, recruitment, genetics, threats including climate change, etc.) used to determine population viability. In addition, a review of all the available data does not show an increasing population trend (please see Tables 1 and 3).

Literature Cited in Appendix on Status and Trend of the Mojave Desert Tortoise

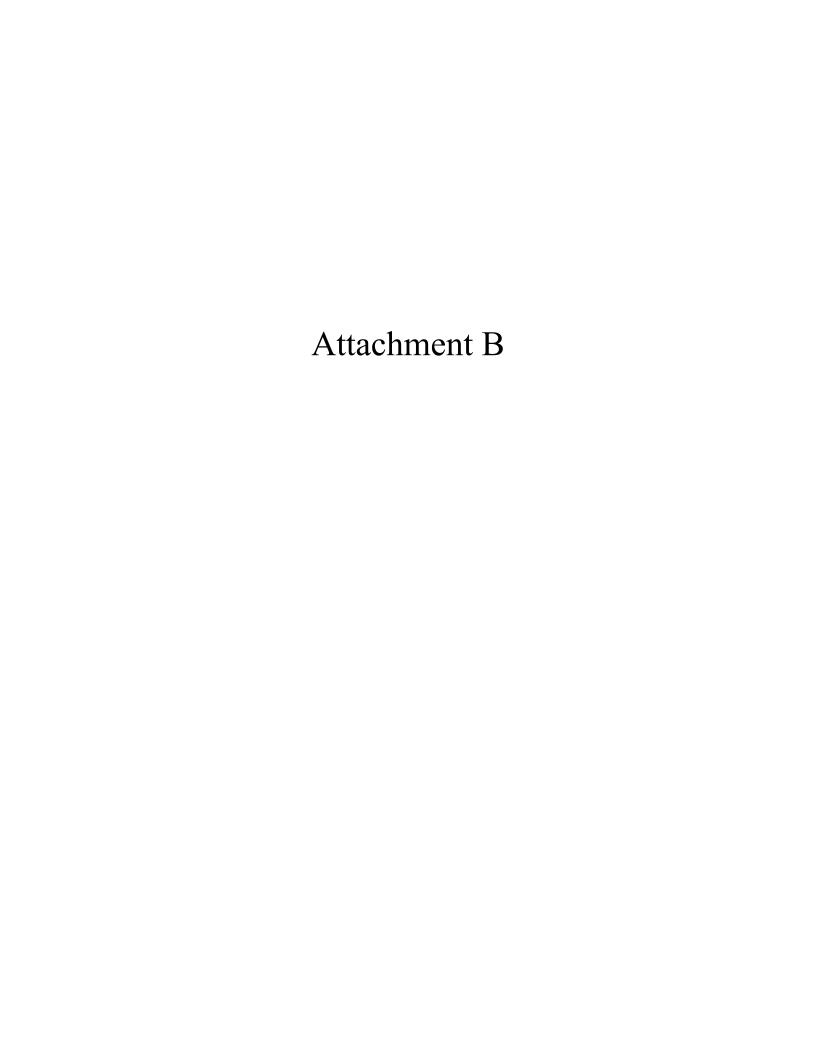
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March 27, 2023

BLM Ridgecrest Attn: Randy Porter 300 S. Richmond Rd. Ridgecrest, CA 93555

Submitted via email to: rporter@blm.gov

Re: California Native Plant Society Comments on Gold Discovery Group (GDG)
Exploratory Drilling near Atolia, CA DOI-BLM-CA-D050-2023-0007-EA

Dear Mr. Porter:

Thank you for the opportunity to comment on the Gold Discovery Group (GDG) Exploratory Drilling near Atolia, CA DOI-BLM-CA-D050-2023-0007-EA. The following comments are submitted on behalf of the California Native Plant Society (CNPS), a non-profit environmental organization with over 12,000 members in 36 Chapters across California and Baja California, Mexico. CNPS's mission is to protect California's native plant heritage and preserve it for future generations through the application of science, research, education, and conservation. We work closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices.

The exploratory drilling in this area of desert habitat should not be approved. Allowing this project to proceed could set the stage for future mining operations which would have much longer lasting impacts to the environment. The EA should have evaluated the potential for Charlotte's phacelia (*Phacelia nashiana*) to occur, specified that the biological monitor be familiar with all special status species that could occur, and offered a more user-friendly map of the project area.

Impacts of Mining Operations

While the impacts of exploratory drilling will likely be limited, allowing this project to proceed would set a pathway for much more destructive and impactful activities. A large-scale mining operation in this area would have much more substantial impacts to this relatively intact desert ecosystem. Future mining operations would not only impact the habitats of special status plant species but would create threats for desert tortoises within critical habitat for this species. Despite mitigation efforts the population of this species continues to decline. Additional threats to individuals of this species within their designated critical habitat should not be allowed.

Botanical Impacts

The impacts to Charlotte's phacelia, and the presence of suitable habitat for this species should have been analyzed in the EA. There are known occurrences of this species east of the project site in the Garlock and Saltdale SE quads. While the mitigation measures for other species would be effective at mitigating the impacts to this species as well, its potential to occur should have been acknowledged in the EA for this project.

Biological Monitor

Although the main role of the biological monitor is to prevent potential impacts to the desert tortoise, this monitor should also be able to identify other special status species that could be impacted by the project activities. Informing the monitor of the special status plant species would allow the monitor to prevent impacts to these species when project activities occur during their active growing season. While unlikely to occur due to lack of suitable habitat, the monitor could insure that no *Cymopterus deserticola* would be impacted during topsoil recovery and drilling activities.

Maps

The overlay of multiple shaded layers in the maps provided make it very difficult to determine the location of the project in the context of the Fremont Kramer ACEC and the critical habitat for the desert tortoise as none of the colors in the key were clearly evident on the map other than small noncontiguous blips. Separate maps for the ACEC and the critical habitat or a key including the combined areas should have been provided to clarify these boundaries. After reviewing separate maps of the ACEC and the critical it is clear what this map is meant to portray, however this should have been made easily distinguishable in the EA.

To avoid future impacts to habitat this project should not be approved. Please include updated maps, additional analysis of botanical resources, and additional requirements for the biological monitor in any upcoming findings.

We would appreciate being informed as to any future developments regarding this project. Thank you for the opportunity to comment on this project and please contact me if you have any questions.

Sincerely,

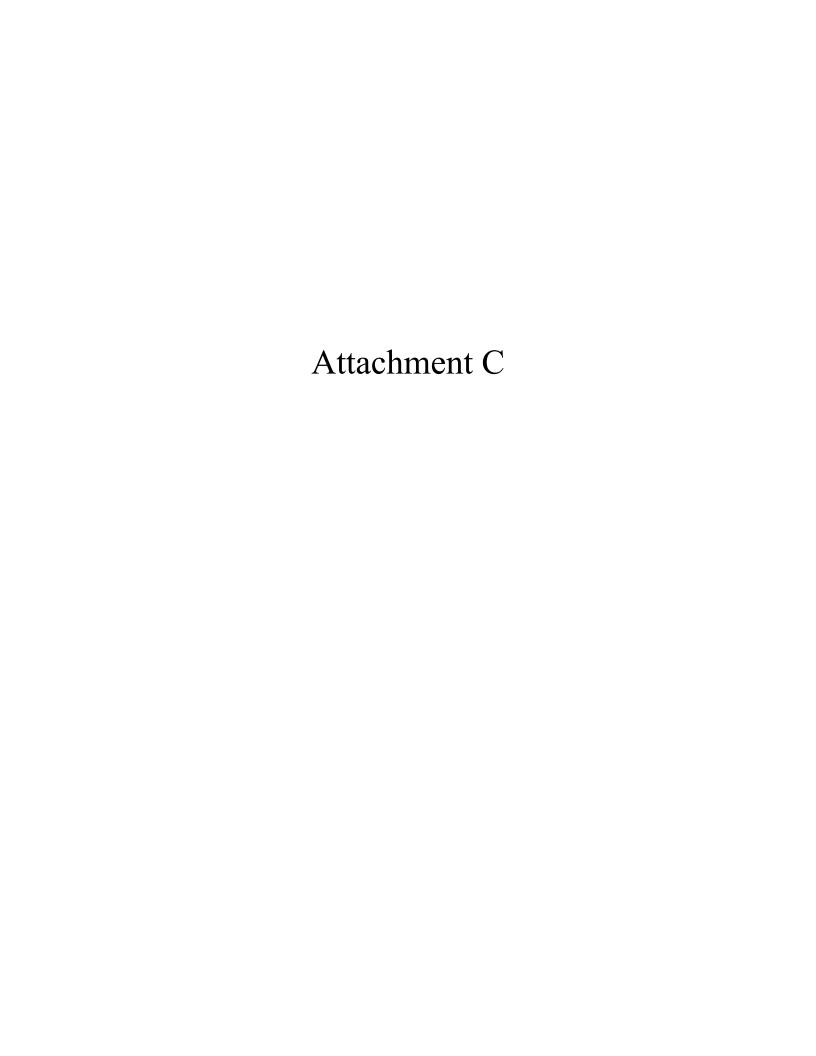
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March 27, 2023

BLM Ridgecrest Field Office Attn: Randall Porter 300 South Richmond Road Ridgecrest, CA 93555 rporter@blm.gov

RE: Comments on Environmental Assessment for Gold Discovery Group (GDG) Exploratory Drilling Near Atolia, CA DOI-BLM-CA-D050-2023-0007-EA

Dear Mr. Porter,

These comments are timely submitted on the BLM's Environmental Assessment (EA) for the Gold Discovery Group (GDG) Exploratory Drilling near Atolia, CA DOI-BLM-CA-D050-2023-0007-EA (Project) from the Center for Biological Diversity (Center). As detailed below, the EA is incomplete and inadequate, and reliance on this EA would violate a number of federal laws, including the Federal Land Policy Management Act (FLPMA), the National Environmental Policy Act (NEPA), and other federal laws and regulations. At a minimum, due to the likely potential for significant impacts, BLM must prepare a full Environmental Impact Statement (EIS) for this Project.

I. The Project and BLM's Review Violates FLPMA

BLM's review and proposed approval of the Project violates the agency's multiple duties to protect public land resources under FLPMA.

A. The Project Must Comply with All Applicable Land Use Plans

FLPMA is the basic "organic act" for management of the BLM public lands. Under FLPMA, BLM must develop land use plans for the public lands under its control, 43 U.S.C. § 1712, and all resource management decisions must be in accordance with those plans. Id. § 1732(a), 43 C.F.R. § 1610.5-3(a). See Norton v. S. Utah Wilderness Alliance, 542 U.S. 55, 69 (2004) (this requirement "prevent[s] BLM from taking actions inconsistent with the provisions of a land use plan"); Ore. Natural Res. Council v. Brong, 492 F.3d 1120, 1128 (9th Cir. 2007) (holding BLM decision is "inconsistent with the [Land Use] Plan and, consequently, violate FLPMA"); W. Watersheds Project v. Salazar, 843 F.Supp.2d 1105, 1114 (D. Id. 2012) (reversing BLM decisions as inconsistent with land use plans); W. Watersheds Project v. Bennett, 392 F.Supp.2d 1217, 1227 (D. Id. 2005) (same).

If a proposed action is not clearly consistent with the land use plan, BLM must either deny the proposed action or amend the plan, complying with NEPA and allowing for public participation. *See* 43 C.F.R. §§ 1610.5-3, 1610.5-5. *See also* National Parks and Conservation Ass'n v. FAA, 998 F.2d 1523, 1526 (10th Cir. 1993) (nonconforming land use required RMP

Arizona California Colorado Florida N. Carolina Nevada New Mexico New York Oregon Washington, D.C. La Paz, Mexico

amendment). The Interior Board of Land Appeals recognizes that this "consistency" requirement reflects the mandatory duty to fully and strictly comply with the governing land management plans. See, e.g. Jenott Mining Corp., 134 IBLA 191, 194 (1995); Uintah Mountain Club, 112 IBLA 287, 291 (1990); Marvin Hutchings v. BLM, 116 IBLA 55, 62 (1990); Southern Utah Wilderness Alliance, 111 IBLA 207, 210-211 (1989). Complying with the RMP is required by both the general land use conformity requirement of FLPMA as well as BLM's duty under FLPMA to "prevent unnecessary or undue degradation" ("UUD") of the public lands. 43 U.S.C. §1732(b). To prevent UUD, BLM must ensure that all environmental protection standards will be met at all times. 43 C.F.R. § 3809.5 (definition of UUD prohibited by FLPMA includes "fail[ure] to comply with one or more of the following: ... Federal and state laws related to environmental protection."). "All future resource management authorizations and actions ... shall conform to the approved plan." 43 C.F.R. §1610.5-3(a). BLM defines "conformity" as requiring that "a resource management action shall be specifically provided for in the plan, or if not specifically mentioned, shall be clearly consistent with the terms, conditions, and decisions of the approved plan or plan amendment." Id. §1601.0-5(b). "Consistent" is defined as requiring that decisions "will adhere to the terms, conditions, and decisions of officially approved and adopted resource related plans." *Id.* §1601.0-5(c).

Mining operations are not exempted from FLPMA's requirement to comply with the RMP. For example, in *Western Exploration v. U.S. Dept. of the Interior*, 250 F. Supp. 3d 718, 747 (D. Nev. 2017), the court held that in the mining context, as well as for other potential uses of public land, RMP standards to protect the Greater Sage Grouse must be met to comply with BLM's duty to "prevent unnecessary or undue degradation" under FLPMA. The court rejected a challenge from the mining industry and others and agreed with the Interior Department that meeting the RMP requirements was part of the UUD mandate:

Defendants [Interior Department et al.] contend that the "unnecessary or undue degradation' standard in the statute does not preclude the agency from establishing a more protective standard that seeks improvements in land conditions that "go beyond the status quo." The FEIS states that "if actions by third parties result in habitat loss and degradation, even after applying avoidance and minimization measures, then compensatory mitigation projects will be used to provide a net conservation gain to the sage-grouse." The Agencies' goals to enhance, conserve, and restore sage-grouse habitat and to increase the abundance and distribution of the species, they argue, is best met by the net conservation gain strategy because it permits disturbances so long as habitat loss is both mitigated and counteracted through restorative projects. If anything, this strategy demonstrates that the Agencies allow some degradation to public land to occur for multiple use purposes, but that degradation caused to sage-grouse habitat on that land be counteracted. The Court fails to see how BLM's decision to implement this standard is arbitrary and capricious. Moreover, the Court cannot find that BLM did not consider all relevant factors in choosing this strategy, as it appears to possess elements proposed in the DEIS.

In sum, Plaintiffs fail to establish that BLM's challenged decisions under FLPMA are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.

Western Exploration, at 747 (internal citations omitted). See also Mineral Policy Center v. Norton, 292 F. Supp. 2d 30, 49 (D.D.C. 2003) ("when BLM receives a proposed plan of operations under the 2001 rules, pursuant to Section 3809.420(a)(3), it assures that the proposed mining use conforms to the terms, conditions, and decisions of the applicable land use plan, in full compliance with FLPMA's land use planning and multiple use policies.").

In addition to FLPMA's general mandate that public lands be managed to prevent unnecessary or undue degradation, FLPMA further requires the Secretary in the context of mining to promulgate regulations to "protect the scenic, scientific, and environmental values of the public lands of the California Desert Conservation Area against undue impairment, and to assure against pollution of the streams and waters within the California Desert Conservation Area." 43 U.S.C. §1781(f). FLPMA therefore requires BLM to apply an even higher standard of protection—the "undue impairment" standard—to mining related proposals on CDCA lands than to public lands generally. FLPMA also requires BLM to manage public lands in the CDCA in particular in a manner that will maintain environmental quality. 43 U.S.C. § 1781(b).

BLM's mitigation policy, as detailed by the Interior Solicitor, acknowledges the need to ensure compliance with an RMP as part of its mitigation duties under the FLPMA UUD standard. In discussing the previous rulemaking (quoted above) with approval, the Solicitor reiterated "the operator's responsibility to comply with applicable land use plans and BLM's responsibility to specify necessary mitigation measures.' Id. at 54,840 (emphasis supplied)." M-37039, The Bureau of Land Management's Authority to Address Impacts of its Land Use Authorizations through Mitigation, 20, n. 115 (Dec. 21, 2016) (Mitigation Opinion). The 2016 Mitigation Opinion was temporarily revoked in 2017 but was recently reinstated by the Solicitor. M-37075, Withdrawal of M-37046 and Reinstatement of M-37039 (April 15, 2022) This new Opinion noted that the 2017 Opinion (M-37046) "expresses no views regarding the merits of the legal analysis or conclusions contained in the [2016 Opinion]." M-37075 at 2. The Solicitor noted that "in the hardrock mining context, the BLM has long recognized that the UUD requirement creates a 'responsibility [for the BLM] to specify necessary mitigation measures' when approving mining plans of operations." M-37039, at 19 (citations omitted). "The BLM regulations addressing surface management of hardrock mining operations on public lands have consistently included mitigation as a requirement for preventing UUD, including as part of the general performance standards in the current regulations." Id.

B. The Project Does Not Comply with the Management Requirements and Prescriptions of the DRECP and Federal Law.

1. Area of Critical Environmental Concern (ACEC)

The Fremont-Kramer ACEC was designated as an ACEC in the West Mojave Plan (WEMO) in

2006 in order to protect the federally designated critical habitat. The ACEC was re-affirmed in the Desert Renewable Energy Conservation Plan (DRECP) Record of Decision signed in September of 2016 with specific Objectives for desired future conditions specified.

The Federal Land Policy Management Act (FLPMA) requires that public lands be managed under multiple use principles "except that where a tract of such public land has been

dedicated to specific uses according to any other provisions of law it shall be managed in accordance with such law" 43 U.S.C. § 1732(a) (emphasis added). Because most of the project is within the Fremont-Kramer Area of Critical Environmental Concern (ACEC) it will significantly impact nationally significant values therein, including cultural, ecological, and scientific resources of this area. These values and the management goals are detailed in the DRECP Appendix L regarding the Fremont-Kramer ACEC. Most importantly, the BLM EA must consider how the goals can be met if the Project is approved. The overarching goal is:

"Tortoise areas are managed for tortoise conservation and recovery until which time the tortoise may be delisted as per criteria given in the Recovery Plan. Manage area in accordance with the Desert Tortoise Recovery Plan. Protect biological values, including habitat quality, populations of sensitive species, and landscape connectivity while providing for compatible public uses. Maintain habitat connectivity for wildlife with movement corridors in all directions and prevent habitat fragmentation."

Appendix L at 1193.

The EA fails to show that BLM fully considered how the Project would affect these overarching management goal or how it meets the objectives identified in the DRECP.

2. The EA Fails to Fully Address ACEC Standards

While the EA recognizes that the proposed project is partially within an Area of Critical Environmental Concern (ACEC) - specifically the Fremont-Kramer ACEC, it fails to acknowledge the objective laid out in the Desert Renewable Energy Conservation Plan (DRECP). Applicable Objectives (from Appendix L of the DRECP) for the Fremont-Kramer ACEC lands (in bold below) need to be analyzed in the EA:

1) "Soils exhibit functional biological and physical characteristics that are appropriate to soil type, climate, and land form.

Allowable Uses: Restrict construction activities when soils are susceptible to heightened risk of erosion."

The EA fails to address or analyze the susceptibility of the soils to heightened risk of erosion during and after the drilling.

2) "Maintain or improve condition of Desert Tortoise habitat.

The EA states:

"Interpretation of the 2020 data resulted in an estimated density of 1.7 adult tortoises/km², lowest out of all six strata surveyed that year (USFWS 2022d). The minimum viable density for this species is estimated to be 3.9/km² (USFWS 2022c)" (at pg. 18)

Because the desert tortoise density is well below the minimum viable density in the project area and DRECP's goal for the area is to maintain or improve Desert Tortoise habitat in

the area, the EA needs to re-evaluate the drill sites where live desert tortoise, scat and tracks were located during project surveys in different drilling areas and reduce drilling in those areas of critical habitat.

- 3) Protect and enhance habitat to maintain stable or increasing population trends of special status species to ensure persistence:
 - Mojave Desert Tortoise (*Gopherus agassizii*), Federally and State threatened
 - Mohave ground squirrel (Xerospermophilus mohavensis) State threatened
 - Townsend's big-eared bat (Corynorhinus townsendii) BLM sensitive
 - Pallid bat (Antrozous pallidus) BLM sensitive
 - American Badger (Taxidea taxus) State Special Animal

Each of these special status species are known to occur in the proposed project area (CNDDB 2023).

The EA recognizes that one live desert tortoise, recent desert tortoise scat and burrows, including one active burrow were detected on the sites. While implementation of mitigation measures laid out in the EA may be effective in protecting those onsite resources, the disturbance of the habitat must still be mitigated. The EA needs to be revised to provide adequate mitigation for impacts to the habitat, which generally are required at a 3:1 ratio.

The EA completely fails to identify that *all of the drill sites* are within the Mohave Ground Squirrel (MGS) Conservation Area which was designated by BLM in 2006 in the West Mojave Plan. Mining is known to be one of the threats to the Mohave ground squirrel and results in the loss of MGS habitat directly through removal of vegetation and removal or erosion of soils used for burrows as well as off-road travel, drilling associated with mining exploration, and access road construction can also result in impacts to habitat (California Department of Fish and Wildlife 2019). Failing to provide an analysis of the impacts to the MGS and its designated Conservation Area requires a revised EA to be produced those analyses and mitigates impacts to the MGS Conservation Area.

As an avoidance measure, the revised EA should include at minimum a requirement for drilling activities if permitted, to only occur between September 1st to February 28th as the DRECP requires for Special Recreation Permits (Ibid), which avoids MGS activity.

The Townsends big-eared bat is a species of special concern and is known from the Rand mining area near the Yellow Aster Mine, where bats were observed exiting from six mines and foraging in the general vicinity of the proposed project (CNDDB 2023). While the EA acknowledges the presence of the Towsend's big-eared bat, it fails to discuss, much less analyze impacts to the bats from the proposed project. Recent modeling of Towsend's big-eared bat in the Mojave Desert from the effects of climate change indicates a reduction in Townsend's habitat between 60-65% (Hamilton et al. 2022), so conserving existing roosting and foraging areas is crucially important. Harris et al. (2019) recommends "Adequate foraging locations must... be available. We recommend allocating resources to implement long-term monitoring of the species, and so that individual owners-managers can be contacted and encouraged to work with agency personnel in protecting the bat resource through cooperative approaches."

The pallid bat is also a species of special concern and is known from the same general area as the Townsend' big-eared bat – Rand Mining District, Yellow Aster Mine. Pallid bats often hunt prey on the ground (Razak 2018) and can roost under rock piles (Hermanson and O'Shea 1983). While the EA acknowledges the presence of the pallid bat, it fails to discuss, much less analyze impacts to the bats from the proposed project. Because they are not cavernicolous and are known to roost in piled up rocks (Ibid) and pursue their prey on the ground (Razak 2018), the revised EA must provide an analysis of potential impacts from the proposed project on the pallid bat.

The badger has special status under State law and is protected as a furbearing mammal under California Code of Regulations Title 14 Section 460. The EA fails to note that the badger has been documented in the general area of the proposed project (CNDDB 2023). Literature on the highly territorial badger indicates that badger home territories range from 340 to 1,230 hectares (Long 1973; Goodrich and Buskirk 1998). Therefore, the proposed project could impact the badger territory. The revised EA must provide an analysis of potential impacts from the proposed project on the badger.

The EA not only fails to analyze impacts to these sensitive wildlife species but fails to require mitigation for impacts.

C. The Project Fails to Prevent Undue Impairment of the Scenic, Scientific and Environmental Values of the CDCA.

BLM must also consider whether the proposed project complies with the FLPMA requirements "to protect the scenic, scientific, and environmental values of the public lands of the California Desert Conservation Area against undue impairment, and to assure against pollution of the streams and waters within the California Desert Conservation Area." 43 U.S.C. § 1781. The undue impairment standard is a more environmentally protective standard than the unnecessary and undue degradation (UUD) standard (discussed in more detail below), which applies on all BLM lands: Under FLPMA section 601(f), BLM can prevent activities that cause undue impairment to the scenic, scientific, and environmental values or cause pollution of streams and waters of the CDCA, separate and apart from BLM's authority to prevent unnecessary or undue degradation. The IBLA has agreed that BLM's obligation to protect the three enumerated CDCA values from "undue impairment" supplements the unnecessary or undue degradation standard for CDCA lands. See Eric L. Price, James C. Thomas, 116 IBLA 210, 218–219 (1990). Thus, BLM decisions with respect to development proposals in the CDCA are governed by both the "undue impairment" standard of subsection 601(f) and the "unnecessary or undue degradation" standard of section 302(b), as implemented by the subpart 3809 regulations. 66 Fed. Reg. 69998, 70018 (Nov. 21, 2000). See also Reeves v. U.S., 54 Fed. Cl. 652, 670-674 (Fed. Cl. 2002) (in the context of the "nonimpairment" standard for Wilderness Study Areas, federal claims court held that mining claimant had no property right under the Mining Law to violate the standard, upholding BLM's denial of the proposed plan of operations). BLM's surface mining regulations, 43 C.F.R. § 3809 et seq., specifically define UUD as occurring when operations "[f]ail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area." 43 C.F.R. §3809.5.

BLM was required to fully consider FLPMA's "undue impairment" standard for the CDCA and require measures "to protect the scenic, scientific, and environmental values of the public lands of the California Desert Conservation Area against undue impairment, and to assure against pollution of the streams and waters within the California Desert Conservation Area." FLPMA Section 601(f), 43 U.S.C. §1781(f). Most of the drill sites of the proposed project are protected as part of the Fremont-Kramer ACEC; therefore, as part of the analysis of the proposed project, BLM must look to the objectives, desired future conditions, allowable uses, and Conservation Management Actions (CMAs) adopted in the DRECP (as detailed above), but the EA fails to show that BLM has done so. Allowing any unmitigated adverse impacts to sensitive and protected wildlife, water resources, cultural resources, scenic, and other environment values would violate FLPMA's standards for these lands, and therefore the Project should not be approved.

D. The Project Fails to Prevent Unnecessary or Undue Degradation of Public Land Resources.

FLPMA requires that the BLM "take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b). This is known as the "prevent UUD" standard. This duty to "prevent undue degradation" is "the heart of FLPMA [that] amends and supersedes the Mining Law." Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 42 (D.D.C. 2003). "FLPMA, by its plain terms, vests the Secretary of the Interior [and the BLM] with the authority – indeed the obligation – to disapprove of an otherwise permissible mining operation because the operation, though necessary for mining, would unduly harm or degrade the public land." *Id*.

The 3809 regulations implement FLPMA's mandate to prevent UUD through two primary provisions: (1) the definition of UUD at 3809.5; and (2) the Performance Standards at 3809.420. As detailed below, BLM must fully consider the UUD mandate and protect public resources. The Performance Standards in Part 3809 mandates that all operations "must take mitigation measures specified by BLM to protect public lands." 43 CFR § 3809.420(a)(4). BLM cannot approve a mining project that would cause UUD. 43 C.F.R. § 3809.411(d)(3)(iii). "FLPMA's requirement that the Secretary prevent UUD supplements requirements imposed by other federal laws and by state law." Center for Biological Diversity v. Dept. of Interior, 623 F.3d 633, 644 (9th Cir. 2010). BLM complies with this mandate "by exercising case-by-case discretion to protect the environment through the process of: (1) approving or rejecting individual mining plans of operation." Id. at 645, quoting Mineral Policy Center, 292 F.Supp.2d at 44:

"Mitigation measures fall squarely within the actions the Secretary can direct to prevent. unnecessary or undue degradation of the public lands. An impact that can be mitigated, but is not, is clearly unnecessary." 65 Fed. Reg. 69998, 70052 (Nov. 21, 2000) (preamble to BLM's 43 C.F.R. Part 3809 mining regulations). Furthermore, if an UUD cannot be prevented through mitigation measures, BLM must reject the plan of operations. Kendall's Concerned Area Residents, 129 IBLA 130, 138 (1994) ("If unnecessary or undue degradation cannot be prevented by mitigation measures, BLM is required to deny approval of the plan.").

In undertaking environmental review of this proposed plan of operations, BLM must consider whether mitigation measures can protect the species, habitats, soils, cultural and water resources affected by the proposed project in order to prevent UUD. That analysis must include detailed identification of direct and indirect impacts as well as cumulative impacts. It must identify specific mitigation measures that address each impact and also include an analysis of the effectiveness of each measure in order to meet BLM's duties under NEPA as well as FLPMA.

As detailed below, the EA fails to adequately address environmental impacts and as a result has also failed to show it has taken steps to prevent UUD.

E. The Project Fails to Meet the FLPMA and Part 3809 Reclamation and Submittal Requirements and the SMARA requirements

Related to, and part of, the failure to prevent undue impairment and UUD under FLPMA, the Project fails to meet all the requirements of the 43 CFR Part 3809.420 Performance Standards and the Plan of Operation (PoO) submittal requirements of 3809.401. Those rules require detailed operational and reclamation requirements for all proposed activities. But the EA falls far short of these mandates and the PoO is not provided.

II. The EA Violates NEPA

NEPA requires federal agencies to take a "hard look" at the environmental consequences of their proposed actions. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976); *Blue Mountain Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1211 (9th Cir. 1998). To take this "hard look," agencies must prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). The standard for when an agency must prepare an EIS is a "low standard." *Klamath Siskiyou Wildlands Ctr. v. Boody*, 468 F.3d 549, 562 (9th Cir. 2006).

The Council on Environmental Quality (CEQ) establishes NEPA regulations, which are binding on every federal agency. 40 C.F.R. § 1500.3(a) (2020). The original regulations implementing NEPA were published by CEQ in 1978. See 40 Fed. Reg. 55,978 (Nov. 29, 1978). In 2020, the Trump administration published new CEQ NEPA regulations. See 85 Fed. Reg. 43,304 (July 16, 2020) (codified at 40 C.F.R. Part 1500). The Biden administration has since revised the regulations and is making further revisions. See 87 Fed. Reg. 23,453 (April 20, 2022). The Secretary of the Interior issued Order #3399, on April 16, 2021, which states that:

"Bureaus/Offices will not apply the 2020 Rule in a manner that would change the application or level of NEPA that would have been applied to a proposed action before the 2020 Rule went into effect on September 14, 2020."

In 2022, additional changes were made to these regulations (87 Fed. Reg. 23453 (April 20, 2022)), which apply here along with the majority of the 1978 NEPA CEQ guidelines.

Under NEPA, if an agency is unsure whether a proposed action may have significant environmental effects, it may prepare a shorter "environmental assessment" to determine whether an EIS is necessary. 40 C.F.R. § 1501.4(c) (1978); 40 C.F.R. § 1501.5 (2020). To avoid

preparing an EIS, the agency's EA and FONSI must provide a "convincing statement of reasons" why a project's impacts are insignificant. 40 C.F.R. §§ 1501.4, 1508.9, 1508.13 (1978).

The scope of NEPA review is broad. BLM must evaluate and disclose the direct, indirect, and cumulative effects of the proposed action and its alternatives on ecological, aesthetic, historic, cultural, economic, social, and health interests. 40 C.F.R. §§ 1508.1(g). That did not happen here. The following sections provide details on the failure for the EA to comply with NEPA.

A. The EA Failed to Fully Analyze Direct, Indirect and Cumulative Impacts.

The EA fails to conduct the required "hard look" at the Project's impacts, including both the drilling areas and the access route(s) and the Project as a whole. Under NEPA, BLM must consider all direct, indirect, and cumulative environmental impacts of the proposed action. 40 CFR §§ 1502.16, 1508.8, 1508.25(c). Direct effects are caused by the action and occur at the same time and place as the proposed project. 40 CFR § 1508.8(a). Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. 40 CFR §1508.8(b). Both types of impacts include "effects on natural resources and on the components, structures, and functioning of affected ecosystems," as well as "aesthetic, historic, cultural, economic, social or health [effects]." Id.

BLM's limited environmental review of the exploratory drilling and access is inadequate under NEPA. At a minimum, as noted above, the EA proposes "The proponent would drill to obtain direct samples at depth from the 32 unpatented placer claims listed in Table 1." EA at 10. But it is actually Table 2.1 on page 11 that identifies the placer claims and their size (17 in Kern County and 15 in San Bernardino County) (EA Table 2.1 at pg. 11) where 337 drill holes (EA at pg. 1) are proposed to be drilled.

We attach the current regulation about the size of the placer claims. 43 C.F.R. section § 3832.22 (Attachment). The EA fails to identify how the project proponent will meet this rule for each 80-acre claim.

BLM must also fully review the impacts from all "past, present, and reasonably foreseeable future actions." These are the "cumulative effect/impacts" under NEPA. Cumulative effects/impacts are defined as:

Cumulative effects, which are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

40 CFR § 1508.1(g)(3).

In a cumulative impact analysis, an agency must take a "hard look" at all actions. An EA's analysis of cumulative impacts must give a sufficiently detailed catalogue of past, present, and future projects, and provide adequate analysis about how these projects, and differences between the projects, are thought to have impacted the environment. ... Without such information, neither the courts nor the public ... can be assured that the [agency]

provided the hard look that it is required to provide. *Te-Moak Tribe of Western Shoshone v. U.S. Dept. of Interior*, 608 F.3d 592, 603 (9th Cir. 2010) (rejecting BLM-issued EA for mineral exploration that had failed to include detailed analysis of impacts from nearby proposed mining operations).

NEPA's mandate to analyze cumulative impacts applies to all "past," "present," and "reasonably foreseeable future actions." 40 C.F.R. §1508.1(g)(3). BLM must include "minespecific or cumulative data." *Great Basin Resource Watch v. BLM*, 844 F.3d 1095, 1105 (9th Cir. 2016), *quoting Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 973 (9th Cir. 2006). It must provide a detailed "quantified" analysis of other projects combined environmental impacts, and "identify and discuss the impacts that will be caused by each successive project. Including how the combination of those various impacts is expected to affect the environment" within the area. *Great Basin Res. Watch*, 844 F.3d at 1105.

The EA does not adequately analyze the cumulative impacts from the other proposed activities within the cumulative effects study area on environmental justice, cultural resources and uses, wildlife, recreation, air quality, and other potentially affected resources. The EA contains little, if any, detailed analysis of these and other past, present, and "Reasonably Foreseeable Future Activities" (RFFAs) within the potentially affected areas that may cumulatively affect these resources. BLM simply lists the acreages of these activities, with no detailed impacts analysis.

The Ninth Circuit has repeatedly rejected similarly cursory analyses contained in BLM EAs and EISs for mineral operations, holding that listing other projects does not satisfy NEPA: [S]imply listing all relevant actions is not sufficient. Rather, "some quantified or detailed. information is required. Without such information, neither the courts nor the public ... can be. assured that the [agency] provided the hard look that it is required to provide." *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1379 (9th Cir. 1998).

Great Basin Res. Watch, 844 F.3d at 1104. The Ninth Circuit in Great Basin Mine Watch v. Hankins specifically rejected BLM's argument that a list of other projects and their acreages satisfied NEPA's cumulative impacts analysis requirements: "A calculation of the total number of acres to be impacted by other projects in the watershed is a necessary component of a cumulative effects analysis, but is not a sufficient description of the actual environmental effects that can be expected." 456 F.3d at 973 (emph. added).

The EA does not include a cumulative impacts section and only mentions cumulative impacts regarding wildlife (at pg. 26) and greenhouse gases (at pg. 7) but does not include other projects in the Ridgecrest Field Office Area or in the CDCA.

B. The EA fails to fully review all baseline conditions.

The establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process whether an EA or EIS is prepared:

"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).

Similarly, the CEQ explained: "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). "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). Baseline information and analysis must be part of the environmental review and be subject to public review and comment under NEPA. Federal courts have repeatedly rejected EAs for mineral exploration project that do not contain detailed analysis of baseline conditions for all potentially affected resources, such as wildlife, surface water, etc. See Gifford Pinchot Task Force v. Perez, 2014 WL 3019165, **27-33 (D. Or. 2014) (BLM EA for mineral exploration failed to analyze baseline ground water conditions); Cascade Forest Conservancy v. Heppler, 2021 WL 641614, *17–20 (D. Oregon 2021); ICL v. U.S. Forest Serv., 2012 WL 3758161, *14–17 (D. Idaho 2012); ICL v. U.S. Forest Serv., 429 F. Supp. 3d 719, 730-32 (D. Idaho 2019).

Here, the EA failed to obtain this baseline information on all potentially affected resources, including native and non-native vegetation and wildlife, surface waters resources and water quality, air quality, recreation, cultural/religious/historical, and soils.

C. The EA failed to include an adequate mitigation plan under NEPA and BLM mining regulations.

As noted herein, the EA fails to have an adequate plan to mitigate the significant impacts to environmental resources, as required by NEPA, FLPMA, and BLM regulations (e.g., Part 3809). As just one example, the EA fails to analyze mitigation of the dozens/scores of potential drill sites (and access routes), as it fails to analyze their impacts at all. There is also no mitigation for the impact to desert tortoise critical habitat or the Mohave ground squirrel conservation area.

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.

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").

The EA proposes to allow the use of "closed routes that have not yet been restored" as mitigation stating, "The use of closed routes limits the amount of overland travel needed to access each site and would mitigate impacts to vegetation, soils, and damage to cryptogamic soils." (At pg.12). Allowing the use of closed routes for this proposal encourages further illegal use of those closed routes (Ouren et al. 2007). The EA mischaracterizes this proposal as mitigation, when in fact it is, at most, minimization of impacts, but still cause impacts by further compacting soils, potentially crushing vegetation and altering hydrology (Ibid).

The EA needs to be revised to provide actual mitigation for impacts to the resources, including continuing impacts to the closed routes being proposed in this EA. The mitigation needs to include revegetating the closed routes because BLM has failed in successfully implementing revegetation of these routes in the past.

D. 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). NEPA requires the

environmental review to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." *League of Wilderness Defs.-Blue Mts. Biodiversity Project v. United States Forest Serv.*, 689 F.3d 1060, 1069 (9th Cir. 2012). Whether an EA or EIS is prepared, BLM must "rigorously explore and objectively evaluate all reasonable alternatives" including alternatives that are "not within the [lead agency's] jurisdiction. 40 C.F.R. § 1502.14(a), (c)." Id. at 1071. "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 EA only considers two alternatives – the proposed project and the no action alternative. It failed to fully consider other reasonable alternatives including: (1) reduction in the amount, scope, and impact of each group of claims; (2) timing restrictions to protect wildlife; (3) preclusion of any impact to cultural/religious/historical resources; (4) reducing the number of drill holes in federally designated critical habitat for desert tortoise; (5) avoiding impacts to existing hydrological processes, (6) no use of overland travel by vehicles; (7) avoidance of rare plants/plant communities and their ecological processes; and (8) reducing the number of drill holes in the Mohave Ground Squirrel Conservation Area.

E. Reclamation Plan Missing

The EA does not provide a Reclamation Plan. It does reference the DRECP's requirements, regulatory requirement and U.S. Fish and Wildlife Endangered Species Act consultation process including:

- LUPA-BIO-10 and per 43 CFR 3809.420(b)3I, USFWS 2023

The EA also makes the scientifically unsubstantiated claim that "these disturbances are anticipated to fade completely from detection within two years following reclamation at the end of the proposed project." (At pg. 23). It is well documented in the scientific literature that "After initial disturbance, the effects of soil compaction can persist for years, even centuries, before natural soil-loosening processes can restore the soil's texture" and "A significant effect of soil compaction is the soil's inability to support vegetation after disturbance, thus increasing its susceptibility to erosion" (Ouren et al. 2007). The EA needs to be revised to analyze and adequately address the impacts from the proposed drilling project.

III. Conclusion

Due to the numerous violations of FLPMA, NEPA, and other laws, BLM cannot approve the Project based on the EA and must revise the EA or prepare an EIS in order to adequately address the deficiencies in the environmental review. We also recommend addressing the important comments submitted by the Desert Tortoise Council regarding this proposal and EA and include them here by reference.

Please keep us informed of all notices associated with this project.

Respectfully,

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Attachment: 43 CFR 3832.22

ec:

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This content is from the eCFR and is authoritative but unofficial.

Title 43 - Public Lands: Interior

Subtitle B - Regulations Relating to Public Lands

Chapter II - Bureau of Land Management, Department of the Interior

Subchapter C - Minerals Management (3000)

Part 3832 - Locating Mining Claims or Sites

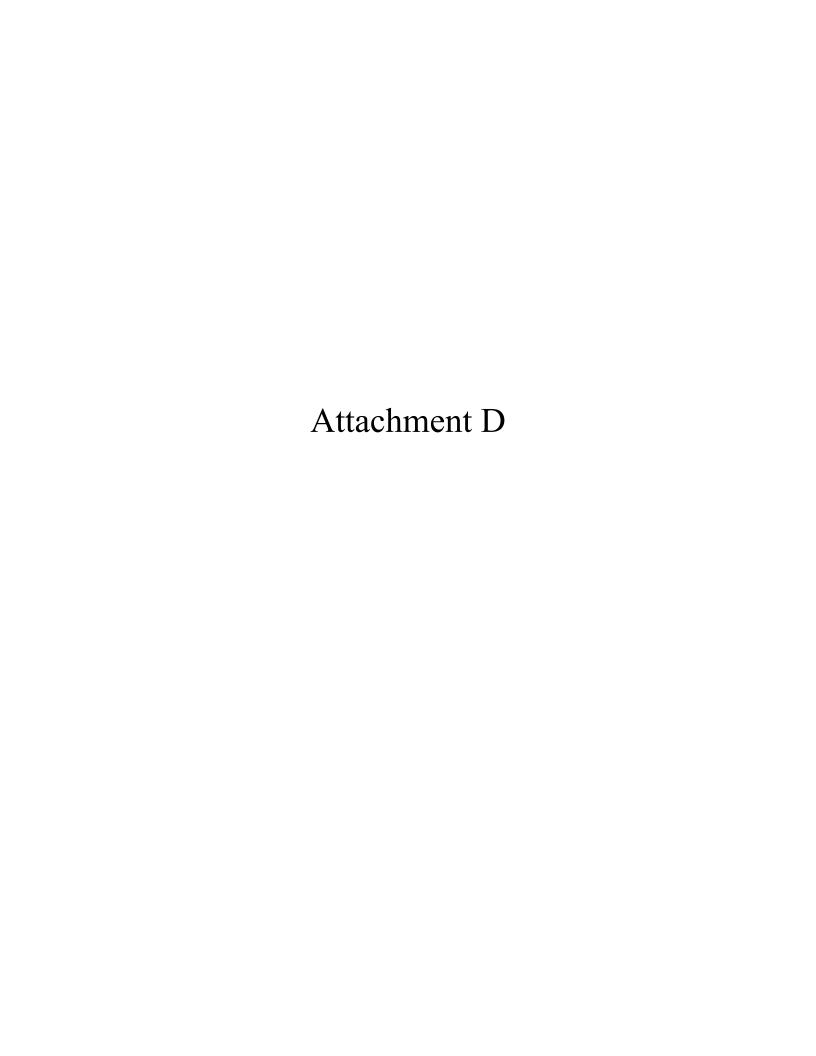
Subpart B - Types of Mining Claims

Authority: 30 U.S.C. 22 et seq.; 43 U.S.C. 2, 1201, 1457, 1740, 1744.

Source: 68 FR 61069, Oct. 24, 2003, unless otherwise noted.

§ 3832.22 How much land may I include in my mining claim?

- (a) Lode claims. Lode claims must not exceed 1,500 by 600 feet. If there is a vein, lode, or ledge, each lode claim is limited to a maximum of 1,500 feet along the course of the vein, lode, or ledge and a maximum of 300 feet in width on each side of the middle of the vein, lode, or ledge.
- (b) Placer claims.
 - (1) An individual placer claim may not exceed 20 acres in size.
 - (2) An association placer claim may not exceed 160 acres. Within the association, each person or business entity may locate up to 20 acres. To obtain the full 160 acres, the association must consist of at least eight co-locators. You may locate smaller association claims. Thus, three co-locators may jointly locate an association placer claim no larger than 60 acres. You may not use the names of other persons as dummy locators (fictitious locators) to locate an association placer claim for your own benefit.





U.S. FISH AND WILDLIFE SERVICE Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, California 92008



BUREAU OF LAND MANAGEMENT Palm Springs - South Coast Field Office 1201 Bird Center Drive Palm Springs, California 92262

ACTIVITY FORM

FOR BIOLOGICAL OPINION 17B0532-17F1029

This consultation consists of the biological opinion for activities in the California Desert Conservation Area, the Bureau of Land Management's (Bureau) request to use the biological opinion for the proposed action with project-specific information (Part A), the Fish and Wildlife Service's (Service) response (Part B), and the Bureau's post-project reporting (Part C). This form will be filled out and sent electronically. If your response to any question does not fit in the fillable box, please add extra pages, and note the additional pages in the appropriate box.

For projects that affect 10 acres of habitat or less or that do not involve ongoing impacts to desert tortoises that are associated with transportation, the Service's Division Supervisor will have 30 days to respond via electronic mail if they have any concerns with use of the biological opinion. The Bureau may assume that the Service has no concerns if it does not respond by the close of the 30-day period; as a courtesy, the Service's Division Supervisor will attempt to notify the Bureau of their decision as soon as possible.

For projects that affect more than 10 acres or that will involve ongoing impacts to desert tortoises that are associated with transportation, the Service's Division Supervisor will respond within 30 days by signing and returning the activity form via electronic mail. The Bureau will not authorize or implement such projects until it receives notification from the Service.

PART A: REOUEST TO IMPLEMENT AN ACTIVITY BY THE BUREAU

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I Jail	OI ICUL	ical itomi	Dui Cau.

Project/activity title:

Point of contact	Phone	E-mail
Bureau biologist:		
Bureau project lead:		
Proponent/applicant company name:		

Summary and Results of Desert Tortoise Survey:

Attach any relevant reports to indicate habitat quality or survey information.

Number of Desert Tortoises	Found during Surveys	Estimated by the Protocol		
<180 mm				
>180 mm				
Totals				

Estimate acres of suitable desert tortoise habitat anticipated to be affected:

Habitat	Permanent Impacts	Temporary Impacts	Totals
Disturbance in critical habitat			
Disturbance in non-critical habitat			
Totals			

Description of Proposed Action:

What is the Federal action (e.g., permit, etc.)?

Attach a map of the project area and/or electronically send GIS project data to the Service if not uploaded into the <u>Information for Planning and Consultation tool</u> (IPaC).

Describe the specific activities for the proposed action.

How will access to work areas be accomplished? List routes of travel.

List proposed Conservation and Management Actions that are desert tortoise specific:
Additional Information:
Bureau Approval:
Signature:

Service File No. for Proposed Activity:
Conclusion:
Is this project appropriate for use under the biological opinion?
Additional protective measures or Conservation and Management Actions agreed to by the Bureau and Service during consultation:
Service Approval:
Signature:
Division Supervisor Palm Springs Fish and Wildlife Office Palm Springs, California

PART B: SERVICE RESPONSE

PART C: POST-PROJECT REPORTING

THIS POST PROJECT REPORTING SHOULD BE SENT TO THE PALM SPRINGS FISH AND WILDLIFE OFFICE AND TO THE BUREAU BIOLOGIST WITHIN 30 DAYS OF PROJECT COMPLETION OR ON JANUARY 31 OF EACH YEAR WITH AN ESTIMATED DATE OF PROJECT COMPLETION.

Number of desert tortoises affected:

Number of desert tortoises affected	Killed	Injured	Moved from harm's way	Translocated
<180 mm				
>180 mm				
Totals				

Actual acres of suitable habitat affected:

Habitat	Permanent Impacts	Temporary Impacts	Totals
Disturbance in critical habitat			
Disturbance in non-critical habitat			
Totals			

Please provide a brief description (1-3 paragraphs) of the disturbance that took place and any restoration of habitat that followed, if applicable.

Other effects not described above:
Recommendations to improve protection of desert tortoises during future activities:

Gold Discovery Group Drilling Exploration Project

The proposed action is authorization of a small prospecting or mining operation under Surface Management regulations 43 CFR 3809. Gold Discovery Group LLC has submitted a Plan of Operation (CACA-59184) to drill 293 holes vertically to gather samples on 32 unpatented placer claims in the vicinity of Randsburg, Johannesburg and Atolia within Kern County and San Bernardino County, California. The approximate location of the center of the project is T29S, R40E and T30S, R41, Mount Diablo Meridian, and can be found on the USGS El Paso Peaks, Johannesburg, and Red Mountain 7.5-minute quads. The area involved is open to mineral entry under the Mining Law of 1872 but is within the Fremont-Kramer Area of Critical Environmental Concern (ACEC) and/or the Fremont-Kramer unit of the Desert Tortoise Critical Habitat.

Project Plan Overview

This project includes drilling 8"- diameter holes through unconsolidated placer material using a hollow stem auger drill, which does not need water or air to operate. No clearing of tracks or pads are needed for the equipment and no sumps are required.

The top 2"- 4" of topsoil will be removed with a spatula and set aside for reclaiming the borehole location immediately after drilling each hole. 1kg-2kg samples will be collected every 5 feet to varying depths (30 feet or when they hit bedrock), but no deeper than 150 feet. The maximum depth of the auger drill is 150 feet. Material from drilling will be stockpiled on the drill rig tire tracks until the bore hole is completed. Once the desired samples are collected, stockpiled material will be shoveled back into the opening, and the topsoil replaced. Each drill hole will be reclaimed, and tracks to the nearest BLM route will be raked before moving on to the next drill location, so only one hole will be drilled at one time. If a hole is required to be left open overnight, the team will place a wooden board over the hole, as well as a weighted-down white 5-gallon bucket, until the next workday when rehabilitation can take place.

Access to the drill locations will be using BLM travel routes to the extent possible, then driving selected trans-linear features cross country to each site. No road construction will occur, and no blading of access routes or drill pads will be required. Disturbance will consist of tire tracks and the drilled 8" diameter holes. Vegetation will be avoided to the extent reasonably practical.

The impacts of this operation will be short term and affect an estimated 15.9 acres (drill holes and tracks), as shown in Table 1. After raking and natural weather events, the evidence of the operation is expected to fade within 2 years.

The project will commence upon BLM approval and authorization to proceed with work. Project duration will be approximately 2 years.

Equipment to be used:

- One hollow-stemmed auger drill rig, 8" hole diameter. The rig is rubber tired, with each tire track approximately 2 feet wide.
- 4X4 pickup or equivalent four-wheel-drive vehicle.

• Rakes, shovels

Table 1. Estimated limited site disturbance due to tracks and drill holes

Number of Holes	337	Count	
Total length of proposed tracks with individual track length >	2,612	Length	
100ft		(ft.)	
Total length of proposed tracks with individual track length <	156,763	Length	
100ft		(ft.)	
Proposed tracks with individual track length > 100ft	48	Count	
Total length of proposed tracks with individual track length <	234	Count	
100ft			
Hole disturbance	337	Square	
		feet	nce
Track disturbance	637,500	Square	Total Disturbance
(assuming 2 tire tracks at 2 feet wide each)		feet	To
Turn around required where track length is greater than 100ft	56,160	Square	Dis
(assuming 60ft to turn around for 2 tires at 2 feet wide each)		feet	
Total Disturbance	693,997	Square	
		feet	
Total Disturbance	15.93	Acres	

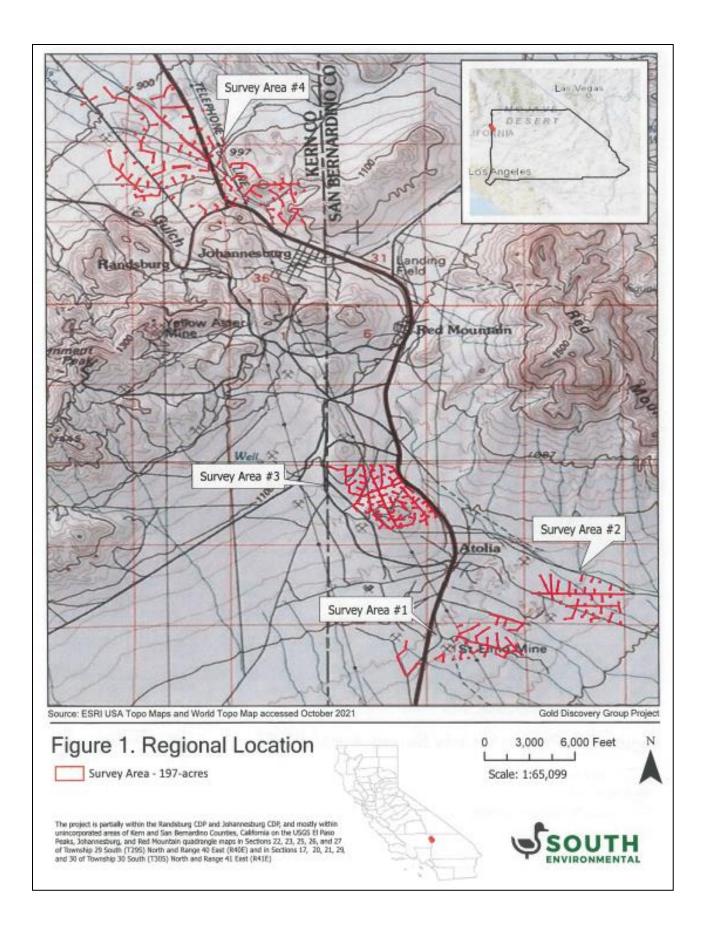
Tortoise Information for the Area

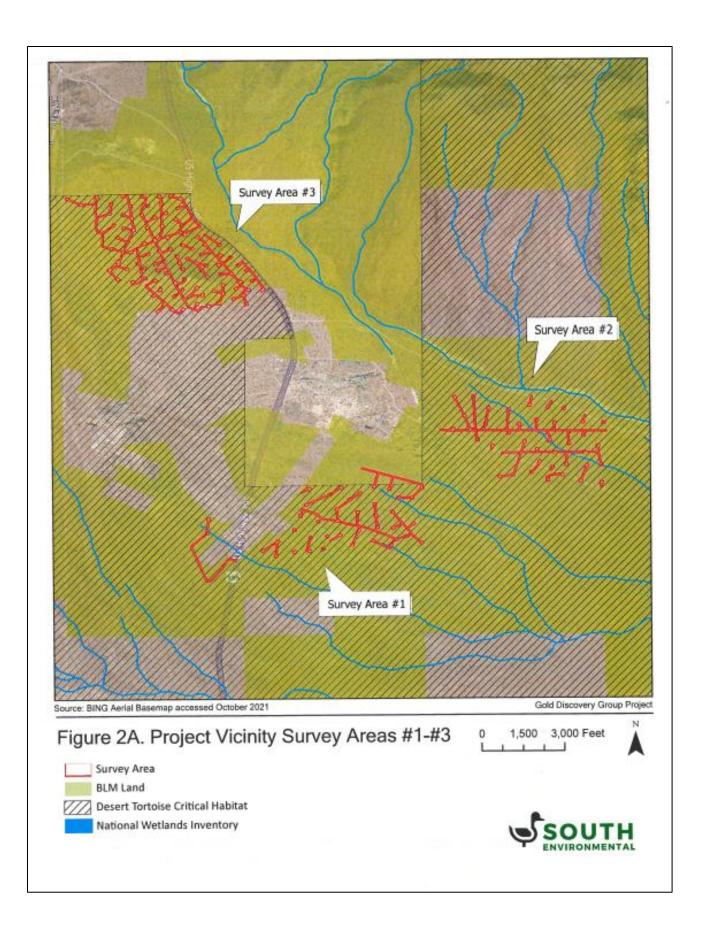
In 2021, South Environmental consultants conducted protocol-level presence/absence desert tortoise surveys for the area according to USFWS 2017 *Preparing for Any Action That May Occur Within the Range of the Mohave Desert Tortoise (Gopherus agassizii)*. The surveys were conducted in early October and included areas where the drill rig will go off existing roads, the drill site locations, and a 25-feet buffer surrounding these areas. Complete coverage surveys were conducted using 10-meter belt transects oriented within the linear survey areas and focused on tortoise and sign, including shells, bones, scutes, limbs, scat, burrows, pallets, tracks, eggshell fragments, etc. The condition of desert tortoise burrows observed were assessed and classified in accordance with class definitions in Section 4.2.2 of the *Desert Tortoise (Mojave Population) Field Manual* (USFWS 2009). Desert tortoise and sign observations are noted below.

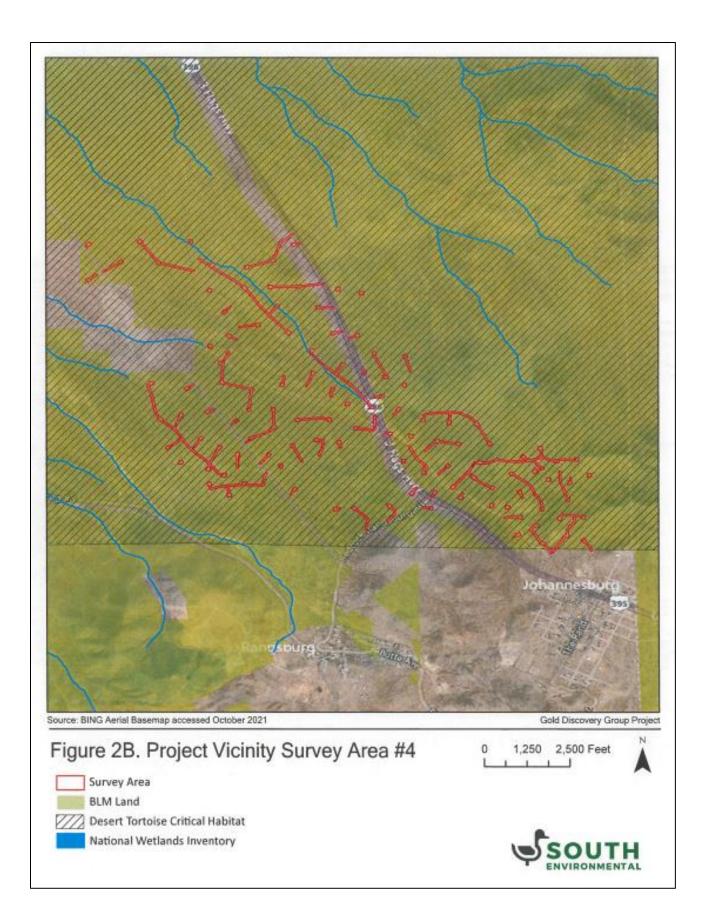
- Survey Area #1: One recently used Class 1 burrow (currently active, with desert tortoise or recent desert tortoise sign) with tracks, one Class 2 burrow (good condition, definitely desert tortoise; no evidence of recent use), and one recent tortoise scat.
- Survey Area #2: No tortoise sign observed.
- Survey Area #3: One recent tortoise scat.
- Survey Area #4: One live female tortoise NOT in burrow, MCL 200 mm., no tag, no evidence of shell disease or URT infection.
- ** Canid burrows were observed in all 4 survey areas.

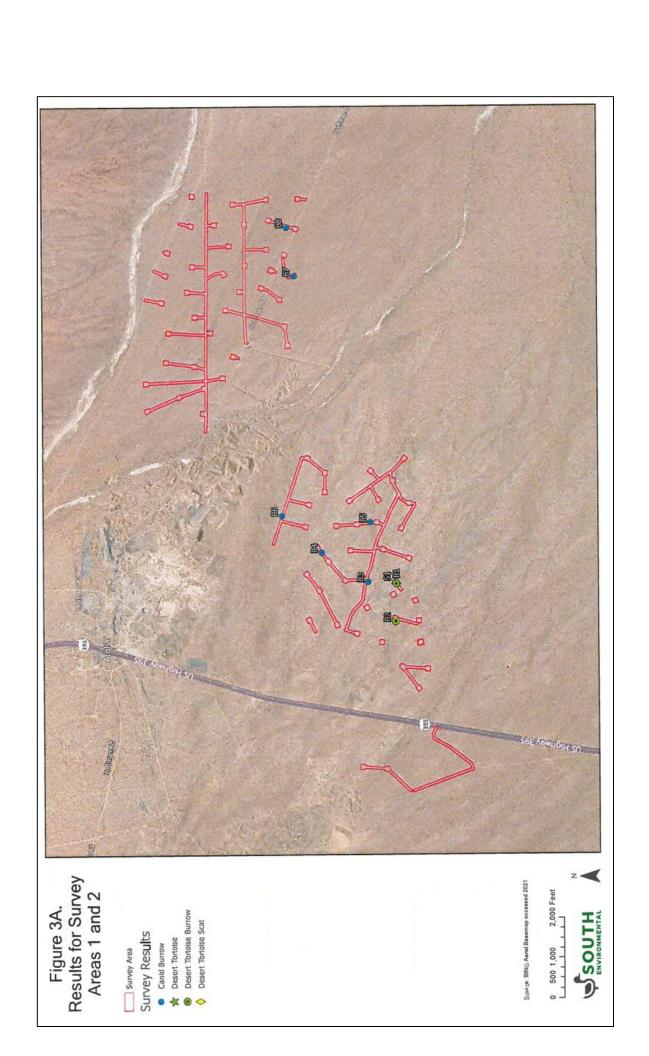
Conservation Management Actions:

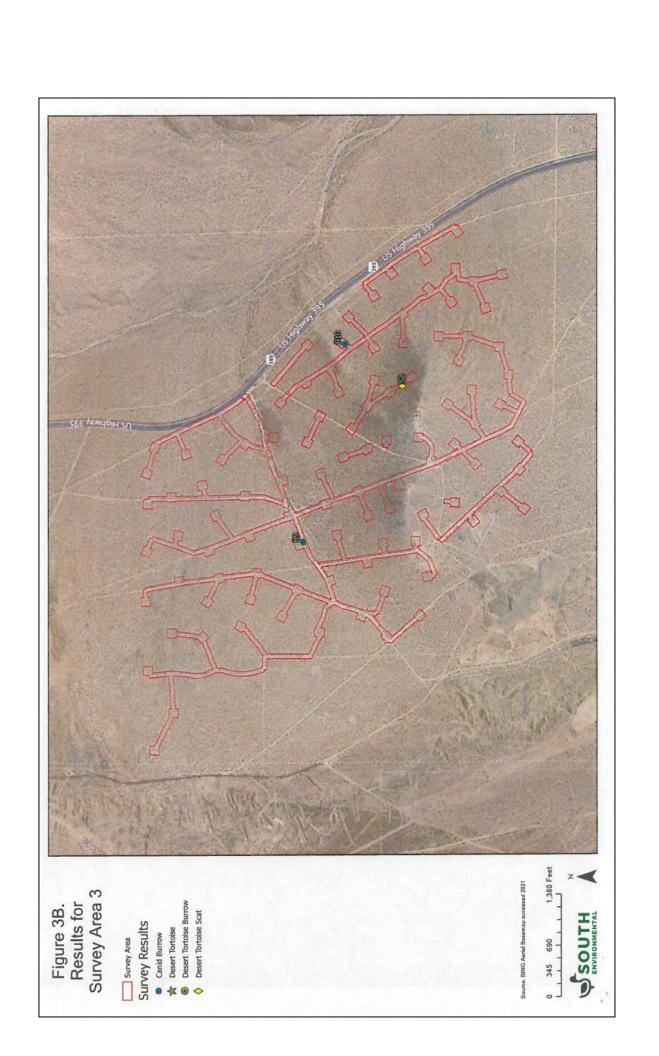
- * All workers engaged in activity will be educated about the desert tortoise, including awareness on its legal status, activity patterns, and avoidance measures.
- <u>LUPA-BIO-2</u>: A designated biologist would be on-site during excavations and equipment movement as needed to ensure avoidance and minimization measures are appropriately implemented. Only an USFWS Authorized biologist can move desert tortoises from harm's way if halting equipment does not fully protect the desert tortoise or results in delays to project activities. The authorized biologist must move the desert tortoise the shortest distance possible into appropriate habitat to provide for its safety.
- <u>LUPA-BIO-6</u>: Subsidized predator standards will be implemented. All trash and food items shall be promptly contained within closed, raven-proof containers or placed out of site in vehicles with closed windows. This also includes "micro-trash", such as screws, washers, small electrical components, etc.
- LUPA-BIO-7: Disturbed areas will be restored to BLM approved standards.
- <u>LUPA-BIO-10</u>: Weed management practices would be implemented as part of the Proposed Action operations including but not limited to vehicle cleaning, use of weed-free materials, and monitoring.
- <u>LUPA-BIO-13</u>: Avoid unnecessary surface disturbance.
- <u>LUPA-BIO-14</u>: Feeding of wildlife, leaving of food or trash as an attractive nuisance to wildlife, collection of native plants, or harassing of wildlife on a site is prohibited. Any wildlife encountered during an activity, including construction, operation, and decommissioning will be allowed to leave the area unharmed. Domestic pets are prohibited on sites. All construction materials will be visually checked for the presence of wildlife prior to their movement or use. Any wildlife encountered during these inspections will be allowed to leave the construction area unharmed. All drill holes used during the project will be covered, except when being actively used, to prevent entrapment of wildlife. Minimize natural vegetation removal through implementation of crush and drive or cut or mow vegetation rather than removing entirely.
- <u>LUPA-BIO-IFS8</u>: Check under vehicles and equipment for tortoises before moving. If a tortoise is found underneath one, operator must wait until it leaves on its own accord.
- <u>LUPA-BIO-IFS9</u>: Vehicular traffic will not exceed 15 miles per hour on BLM access roads and within the project area.

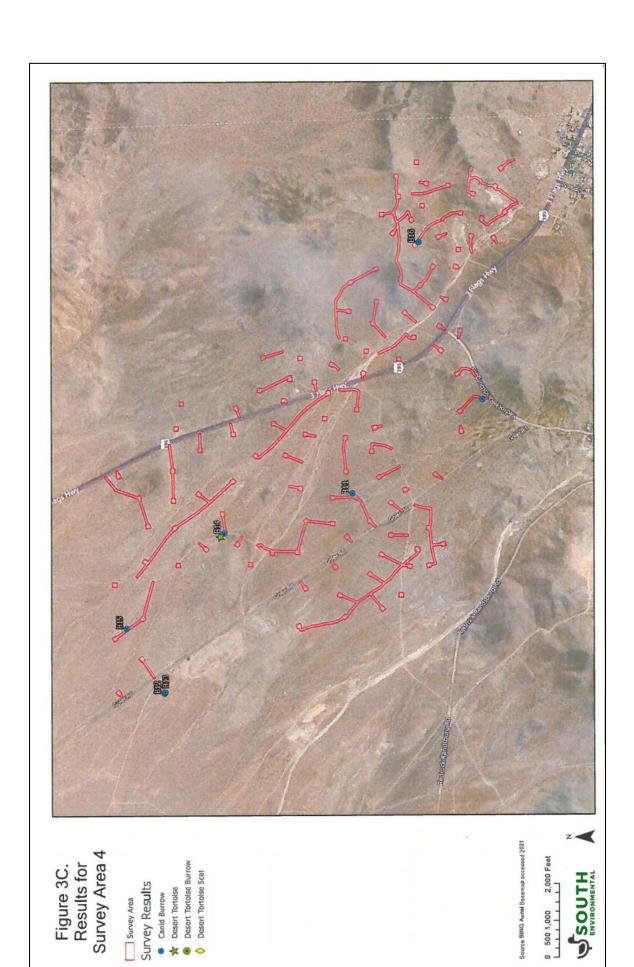


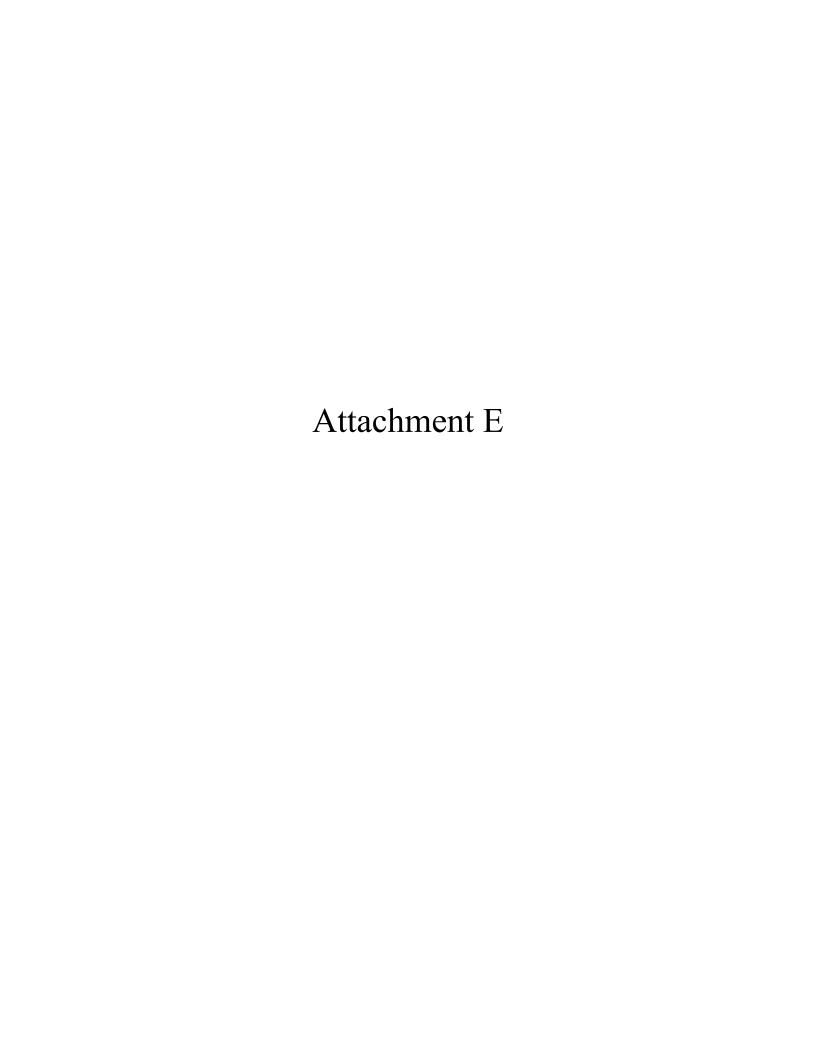












12.13.22 smgb@conservation.ca.gov

Dear Mining Board,

Thank you for this workshop opportunity to discuss the proposed new regulation that would allow the State Mining and Geology Board (Board) to exempt certain surface mining operations from SMARA under Public Resource Code (PRC) section 2714(f). This issue is of keen interest to the conservation communities signed onto this letter that mining operations are carefully reclaimed using the best available practices and technologies. We understand that part of the impetus for the process are restoration projects that include mining and removing material to restore natural areas and ecological function, a laudable goal. However, we are concerned that utilizing the PRC section 2714 (f) exemption for this purpose is not appropriate and would weaken SMARA implementation overall.

Summary

This topic has been raised because the current language in the PRC section 2714 (f) states that the Surface Mining and Reclamation Act does not apply to "Any other surface mining operations that the board determines to be of an infrequent nature and that involve only minor surface disturbances." Both metrics must be met to qualify for an exemption but neither are defined and there is significant variation in how this exemption has been applied since 2008.

The PRC does not define what an infrequent nature is nor does it define what is considered a minor surface disturbance. Leaving these terms to be decided by the board on a per project basis effectively eliminates the effectiveness of SMARA.

The law states that a Surface Mining and Reclamation Permit is needed for any project that disturbed over one acre or 1,000 cubic yards of material. Therefore, by definition of SMARA any project that is greater than one acre cannot be considered a minor surface disturbance. It may be possible, however, that some projects with under 1 acre surface disturbance could be considered to have "minor surface disturbance" even if they involve over 1,000 cubic yards of material. At most, the exemption should be restricted to such projects which are also "of an infrequent nature" but the board also needs to clarify that "infrequent" cannot simply be based on normal seasonal shifts in mining or business cycles, it must be something different about these projects which makes them "of an infrequent nature".

An effective SMARA exemption process would also create consistent requirements for any exempt projects, using monitoring, financial assurances and bonding, and regular inspections. This exemption section of the regulations is not suited to those projects—where mining is being used as a restoration tool. If the board believes some special regulations are needed for those restoration projects, it could consider regulatory changes that specifically address that need. Even where mining is used as part of a restoration project there is a need to identify, describe and require best management practices and best available technologies, and project implementation strategies. Just like other mining projects, restoration projects should include monitoring, financial assurances and bonding, and regular inspections to ensure that reclamation standards are met along with restoration goals.

Answering questions raised in the staff memo:

1. When and how should a project proponent approach the Board for a 2714(f) determination for exemption from SMARA?

Currently any project recovering mined materials for sale that is greater than 1 acre of disturbance, or more than 1,000 cubic yards of disturbance, must get a mining permit under SMARA. Various exemptions already exist for purposes including farming, landscaping, prospecting and other activities. In this case, regulations for an exemption process, if an exemption process is appropriate at all, must address the murky issue of the difference between a "restoration project" with a mining component, or a "mining project" with a significantly enhanced restoration project as part of its reclamation plan.

The proposed language provided by staff does not address these issues. For example, the proposed language requires submission of an approved surface mining plan – but what if the project is deemed "mostly restoration"? It requires environmental documents and permits created for the mining project – but what if the project is deemed a restoration project? What environmental documents would pertain to these projects (a streambed alteration permit, a dredging permit or other permits)?

Recommended Action: The Board should direct development of language that clearly defines the difference between a "restoration project with some mining elements" and a mining project that is doing what all mining projects are required to do – restore the land to a use that benefits the public at the end of the project.

2. Should the regulations define "infrequent nature" and "minor surface disturbance"? If so, what criteria should be included?

The current exemption language in (f) has been used since 2008 to justify a suite of projects many of which do not have a discernable restoration component, nor can they be considered minor surface disturbances because they have included many acres of surface disturbance, with one project at over 150 acres of surface disturbance. In addition, the projects include up to 3.2 million cubic yards of material that was removed and sold as part of a project. The list below summarizes the general scope of the projects and their activity type that have received (and two that have been denied) an exemption from SMARA.

Date	Project Name	General Activity Type	General Scope	General Location	Board Determination
2008	Willets Bypass	Highway Construction	1M yrd of fill, 27 acres	Mendocino County	Granted
2008	Willow Glen Drive	Road Construction, rock fall protect	100k yrds of fill, 3.9 acres	San Diego County	Granted
2009	Natomas Urban	Levee and canal improvements	85k of fill, 20 acres	Sacramento Count	Denied
2010	California Vision	Site characterization for potential r	4.48 acres	Kern County	Conditionally Granted
2010	M&T Ranch	Water intake and fish screen maint	150k tons of gravel	Butte County	Conditionally Granted
2010	Ford Construction	PG&E Easement construction	4,600 yrds of fill	Tehama County	Granted
2010	Black Rock Project	California Energy Commission Facil	300k yrds of fill, 34 acres	Imperial County	Conditionally Granted
2010	Broome Ranch Project	Gravel removal following flood	100k of gravel	Ventura County	Granted
2011	Ojai Oil Company	Agricultural Mining	5,000 tons of boulders, 7 acres	Ventura County	Granted
2011	Regional Beach Sand Project	Beach Improvement	undetermined	City of San Diego	Granted
2012	Spanish Creek, Meadow Valley	River Restoration	8,500 yrds of gravel, 4.4 acres	Plumas County	Conditionally Granted
2012	Sand Creek	Flood Management	30k of fill	Colusa County	Conditionally Granted
2012	East Area Project	Construction Project	340k tons of fill, 150 acres	City of Santa Paula	Conditionally Granted
2013	San Cayatano Orchard	Agricultural Mining	40k yrds, 11 acres	Ventura County	Granted
2013	Mendocino Forest Productions	Highway Construction	800k yrds, 22 acres	Mendocino County	Granted
2014	Barn Project	Highway Construction	902k yrds, 21.8 acres	Mendocino County	Denied
2015	Lower Clear Creek	River Restoration	330k yrds of sand, 43.5 acres	Shasta County	Granted
2016	Sycamore Road	Agricultural Mining	10 acres	Ventura County	Granted
2017	Hallwood Side Channel	Flood Management and River Resto	3.2M yrds of gravel	Yuba County	Conditionally Granted

(Note: Only one of these exemptions have been approved since the new SMARA regulations became law in 2017.)

Unfortunately, the information provided by the board, did not explain the basis for its determinations that these activities were "of an infrequent nature". "Infrequent nature" must mean something specific and cannot simply be the same seasonal and business cycles that all mining projects are subject to.

The language in section (f) has been used to exempt more than restoration projects from SMARA. This begs the question of whether an exemption process is appropriate at all, and if so, by whom and for what purpose.

Recommended Action: The board should not rely on PRC section 2714 (f) to exempt restoration project or other projects that do not meet the "minor surface disturbance" (under one acre) and "of an infrequent nature" (based on more than seasonal or business cycles). The board should consider adopting regulations specific to restoration projects which could require a comprehensive restoration plan to be in place as part of a streamlined SMARA permit for restoration activities.

3. What types of documents should the project proponent provide the Board with to determine if the proposed project is within its jurisdiction?

This question speaks to the problem of working on projects that cross multiple jurisdictions including local, federal, and state agencies – not to mention private versus public land. Who is the lead agency on a project in a county that has lost the right to regulate mining? How about a project that is proposed by a public agency instead of a mining company?

This is particularly important when determining fiscal responsibility and liability. The proponent must be able to demonstrate that they have the funding – in place and ready to go – to pay for reclamation if the project goes "belly up" or if circumstances change dramatically (such as new flooding caused by the project). This was the purpose of a statewide regulations in SMARA to begin with and suggests that an exemption process is not appropriate.

Recommended Action: The Board must adopt regulations that clarify how to manage projects and with multiple potential lead agencies.

4. Should the Board require a reasonable fee to recoup costs associated with an exemption determination? If so, what should be the amount of fee?

Creation and implementation of this new program will certainly cost taxpayer funds. These costs should be recovered through a carefully calibrated fee structure.

Recommended Action: If the exemption program moves forward, the Board should create a fee for this review process that is commensurate with state costs expended in conducting the review. It appears that this exemption calls for inspections of the site by SMGB staff, costs that should be included in the permit process.

(No comment on question 5.)

6. What, if any, conditions or limitations should the Board place on an exemption after a determination has been made?

Recommended Action: This exemption should be narrowly scoped. Any changes to the project design or implementation should be severely limited. Inspections that discover significant changes to the project should be used to inform any sanctions that may be needed to guide corrective action.

7. What economic impacts should the Board consider in drafting these regulations?

If the board considers a regulatory change to support restoration projects, it is appropriate to consider economic benefits and impacts broadly. For example, in making the decision to approve an exemption to the Fish Restoration Projects at Long Bar on the Lower Yuba River, a project upstream of the Hallwood project listed above, the staff report noted that the costs for the project were covered in large part by the taxpayers thereby reducing the cost for project proponents, including the mining company. The project description noted that the "mined products were taken" by the mining company partner—and this was seen as a sort of "donation."

The economic value of creating a healthy, vibrant flood-safe landscape with restored fisheries, clean water and improved recreational opportunities is almost incalculable. However, mining products are valuable – and the mining industry should be contributing their fair share to the costs associated with this extraction. The taxpayers should be partners but it is not appropriate for them to shoulder the entire burden of these costs.

The saleability of these mined products are part of the equation in a restoration project. Note that any new regulations need to clarify whether mined products created as part of a "restoration" project exempt under SMARA are still eligible to be sold under the "AB 3098" regulations. Public agencies – the primary customers for construction materials such as gravel - are required by this law to only purchase SMARA-compliant materials. Does waiving SMARA create a "compliant" mining project?

Recommended Action: The regulations need to clarify whether mined products created as part of a "restoration" project not regulated by SMARA are eligible to be sold under the AB 3098 regulations.

8. Other considerations?

Any proposed policy change would have statewide impact, across a patchwork of resources, and require new training and policies to manage those projects that are impacted by SMARA. Mining activities may provide opportunities to marry large landscape restoration and mine reclamation activities projects in the design and permitting stages. It is unclear whether that goal can be accomplished as part of the new "SMARA exemption" process, instead, it may be better accomplished through new restoration-specific regulations. The SMGB could scope a new regulatory process to create a framework that allows regulators, the mining industry, and other partners to create comprehensive restoration plans that use mining as one important tool – just like CEQA intended planning to be done.

The hundreds of mines that operate throughout the state of California are already required to reclaim their operations to a greater or lesser degree. This can take the form of "restoration" or "habitat improvement." However, many modern mines, like those in the Yuba Goldfields, are located on legacy mines established well before the passage of SMARA. The older the mine is, the less reclamation is, has been, or will be required. These partially or completely unremediated mines need to be considered as part of this policy process.

In summary, the purpose of creating "exemptions" from SMARA should not be to evade CEQA or reduce public participation. Instead, if a regulatory change is needed to support restoration projects it should be crafted to help knit together permitting for the various mining and restoration project elements required by CEQA, SMARA, water boards, county and special districts to create a smooth permitting process that builds upon the information and actions of each agency with permit authority.

We look forward to meeting with the SMGB staff and board members to discuss these questions, ideas and concerns. Thank you again for this opportunity to comment.

Sincerely,

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