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DEVELOPMENT SERVICES AGENCY

Engineering, Surveying and Permit Services  
Planning and Community Development  
Roads

June 12, 2014

File: Gen Corr Map 113

Randall Porter, Project Lead  
Bureau of Land Management  
Ridgecrest Field Office  
300 S. Richmond Road  
Ridgecrest, CA 93555

RE: Environmental Assessment for the Dragonfly Exploratory Drilling Project

Dear Mr. Porter,

This Department is in receipt of your email dated May 20, 2014, inviting public comment on an Environmental Assessment (EA) prepared for the Dragonfly Exploratory Drilling Project by Glacial Minerals, Inc.

As described in the EA, the operator intends to drill 12 subsurface exploration holes to gather evidence of subsurface geology and mineralization for the Dragonfly placer claims. More specifically, each hole will average 165 feet deep and be located exclusively along existing roadways. The disturbance created by the drilling operation is approximately 540 square feet per drill site. The drill site locations, access roads, and staging areas will be located within existing dirt trails and/or off-highway vehicle travel routes. A field crew up to 10 workers will work typically 7:00a.m. to 5:00p.m.

In reviewing the EA, page 4 states the Surface Mining and Reclamation Act (SMARA) of 1975 has a common threshold of approximately 1,000 cubic yards of disturbance in any one acre of land. To be more specific, the County notes that Public Resource Code (PRC) 2714(d) states that SMARA does not apply to: "Prospecting for, or the extraction of, minerals for commercial purposes where the removal of overburden or mineral product total less than 1,000 cubic yards in any one location, and the total surface area disturbed is less than one acre." Consequently, any cumulative disturbance of 1,000 cubic yards or more of material and/or one acre of disturbance or more, is subject to the provisions of SMARA.

The County notes that under certain circumstances, the State Mining and Geology Board (SMGB) has the statutory authority to consider and grant an exemption from SMARA pursuant to PRC Section 2714(f). The SMGB allows for a one-time exemption for certain surface mining operations should their Board determine the operation to be of an infrequent nature and involve only minor surface disturbances.

Based on the information provide in the EA prepared for the Dragonfly Exploratory Drilling Project, the County determined that the total amount of surface disturbance for the drill sites is 6,480 square feet (0.15 acre). However, the County was unable to determine the full extent of ground disturbance for the access roads (existing and proposed) and staging areas, or the total cubic yards of material that will be displaced. Therefore, at this time the County cannot conclude whether the exploratory drilling project is subject to SMARA or could be considered for an exemption.

As you are aware, there are long standing memorandums of understanding (MOU) entered into with the Bureau of Land Management (BLM), State of California, and the County of Kern. Attached for your reference is a copy of the 1994 MOU between the Ridgecrest Field Office and Kern County developed for the purposes of:

- Providing for the consistent application of an adequate and appropriate mining and reclamation policy throughout Kern County;
- Regulating surface mining and reclamation activities related to mining, mineral material sales, mineral leasing under the General Mining Laws of 1872, as amended, Mineral Materials Sales Act of 1947, as

amended, and Mineral Leasing Act of 1920, as amended, which are located on lands and/or mineral estate under BLM jurisdiction within Kern County: in so far as those surface mining and reclamation activities are subject to state and local environmental regulations (ref. California Coastal Comm. v. Granite Rock Co., 480 U.S. 572, 1987); and

- Coordinating and simplifying the administration and processing of applicable NEPA, CEQA, FLPMA, and SMARA documents.

Under the provisions of SMARA, Kern County is the lead agency responsible for the approval of surface mining and reclamation plans in the unincorporated areas of Kern County. The Kern County Board of Supervisors has tasked this Department with the responsibility of administering SMARA on behalf of the County.

Of concern is the manner in which the Ridgecrest Field Office has processed the Dragonfly exploratory drilling project, given the MOUs in place with Kern County and the State of California in addition to the BLM's own 43 Code of Federal Regulation Subpart 3809. Furthermore, this is not the first instance of this happening subsequent to a court decision entailing essentially the same issue that, on numerous occasions, the Ridgecrest Field Office has been informed of.

As a reminder, in 2005, the Ridgecrest Field Office completed an EA for a planned mining operation by Tri-Western on a forty-acre parcel located on federally administered land, without coordinating with the County. The County subsequently prepared a mitigated negative declaration to address the requirements of CEQA in its consideration of the reclamation plan. The reclamation plan was ultimately approved by the Board of Supervisors, after denying an appeal filed by an adjacent property to the approval decision adopted by the Kern County Planning Commission. However, because the time frame for pursuing legal action against the BLM's decision had passed, the concerned party's only remaining option was to sue Kern County.

The County's approval of the reclamation plan and adoption of the environmental document were ultimately overturned by the Fifth District Court of Appeal (Renee D. Nelson et al., v. County of Kern – F059293 – Superior Court No. CV262312- Filed 11/19/2010) on the summarized basis that: (a) while MOUs existed, the County is the lead agency under SMARA and therefore, is wholly responsible for approval of surface mining and reclamation plans (emphasis added) in the unincorporated areas of Kern County, including those on federally administered lands; and (b) the analysis in the environmental document prepared by the County was focused on impacts associated with implementation of the reclamation plan. The Court determined that any CEQA document must address impacts on both the operational and reclamation aspects of the surface mining and reclamation plan.

At this time, this Department requests that the Ridgecrest Field Office:

- Be advised that Kern County will not accept a separate NEPA process, and a subsequent CEQA process will re-evaluate all operational as well as reclamation impacts.
- Coordinate with the County regarding further processing of the Dragonfly exploratory drilling project to ensure the applicable provisions of SMARA and CEQA are in compliance.

Should you have any questions regarding this letter, please contact me at 661-862-8612 or CatesR@co.kern.ca.us

Sincerely,



Randall Cates, Planner 3  
Planning and Community Development Department

Enclosure(s)



# Kerncrest Chapter National Audubon Society

P.O. Box 984  
Ridgecrest, CA 93556

June 13, 2014

Carl B. Symons  
Field Manager  
Bureau of Land Management  
Ridgecrest Field Office  
300 S. Richmond Road  
Ridgecrest, CA 93555

Dear Mr. Symons,

The Kerncrest Audubon Society appreciates the opportunity to comment on the Environmental Assessment (EA) DOI-BLM-CA-DOS0-2014-014-EA, For Exploratory Drilling of the Dragonfly Placer Claims by Glacial Minerals, Inc. Plan of Operations (POO)- CACA-53193. Located within: Sections 10 & 11 of Township 29 South, Range 38 East, Mount Diablo Meridian, Kern County, California.

The Kerncrest Audubon Society has about 200 members many who recreate and enjoy outdoor activities in the El Paso Mountains.

The Kerncrest Audubon Society objects to this proposal on the grounds that the BLM should not be opening the door to potential mining through the approval of speculative exploratory drilling of the placer mining claims in this area. This area is environmentally sensitive due to known threatened and endangered species, and historic and prehistoric cultural resources. The EA does not explain how drilling 12 holes will define gold or copper deposits in the claim area sufficiently to determine the economic feasibility of mining. The EA does not address the potential cumulative impacts to these sensitive resources and to recreation activities from reasonable foreseeable future exploration and/or mining. The EA also does not adequately address the direct and indirect impacts resulting from the use of the designated and undesignated routes for the proposed exploratory drilling. Because the EA inadequately addresses the impacts, the mitigation and monitoring measures are inadequate.

We recommend that the EA be modified to address reasonable foreseeable future exploration and/or mining and the impacts to sensitive resources and recreation activities. The EA should also be modified to evaluate an alternative to use only designated routes and at a minimum the mitigation measures be changed. In addition to the above concerns, the EA does not adequately address certain operational aspects such as appropriate monitoring, rig setup and takedown, open drill holes, and use of sanitary facilities.

To be more specific about our concerns regarding about how the EA fails to adequately address direct, indirect and cumulative impacts from this proposal and future exploratory drilling and/or mining we question the conclusions stated in section 2.3 Alternatives

Eliminated From Analysis (p.IS-16). For example in the affected environment section 3.7 Geological Resources (p.15-26), the EA briefly describes the surficial geology of the exploratory area as consisting of alluvium and gravel overlying hard sedimentary and igneous basement rocks. The EA explains the need for exploring drilling without explaining why surficial hand sampling of the alluvium and gravel deposits and hard rocks for geochemical analyses is not sufficient to obtain direct and quantifiable samples of any mineral deposits. Hand sampling would significantly reduce the environmental impacts and prevent unnecessary or undue degradation of the lands from exploratory drilling.

Furthermore we question the conclusion as to "*Accessing the proposed drill sites by some means other than the proposed routes.*" The use of undesignated routes for access by a drilling rig and support vehicles should be considered the same as travelling cross-country and the impacts should be evaluated in the EA. The EA does not justify based on the geology of the area or explain why it is essential to drill the exploratory holes along the undesignated routes. The EA states that "It would be unreasonable to deny usage of such undesignated routes because BLM would then be impairing the claimant's ability to access and sample these claims..." It is inadequate to simply state this in the EA without more justification and a thorough evaluation of the impacts resulting from the use an undesignated route and the development of reasonable mitigation measures. To address the concerns over the use of undesignated routes of travel, the EA should include an alternative which evaluates the use of only designated routes and not use of the undesignated routes of travel. The use of undesignated routes of travel for drilling only perpetuates the use of these undesignated routes of travel without the requirement to restore and reclaim these routes to improve the habitat and offset continued impacts to the sensitive habitat.

The EA describes the proposed action in section 2.1 Proposed Action. The EA states that "All work will remain within the existing roadways." We question whether this can be accomplished when each drill site will involve a long drill rig, pipe truck, and five or more four wheel drive vehicles. The EA fails to describe the possibility of disturbance outside the existing roadway by drilling equipment setup and takedown, and vehicles going off the disturbed roadway while maneuvering in the drill site area. As a result of this failure to adequately describe the proposed action, the EA fails to describe the potential impacts to soils, plants, wildlife and cultural resources in and around the drill site location. In addition to this failure, the mitigation and reclamation recommendations are inadequate. Because of these shortcomings, the BLM should require Glacial Minerals to designate a field contact representative (FCR) who reports directly to the BLM, who meets Fish and Wildlife qualifications, who will be responsible for overseeing compliance with stipulations and for communicating with the BLM. It is not in BLM's interest that the FCR be a crew chief or field supervisor who reports to Glacial Minerals as stated in the mitigation section for the Desert Tortoise, p.32.

Another operational aspect which we are concerned about is described in the Drilling Plan Details. The EA states "Some of the drill holes may remain open overnight in order to complete drilling and down hole geophysics". In the event that a drill hole must remain

open overnight, the road will be properly barricaded. Because different drill holes are located on different roads, the need for detours/alternate routes will be addressed on an as needed basis." The EA fails to evaluate the potential impacts to wildlife posed by an open drill hole. An open drill can trap wildlife. This potential hazard should be mitigated by ensuring wildlife do not fall into an open drill hole. The EA states that detours/alternate routes may be needed. These should not be undesignated routes. Undesignated routes of travel should be treated as cross-country travel and the impacts appropriately evaluated.

One glaring operational requirement is missing in the EA. The EA should address sanitary facilities for workers. We did not see the use of portable toilets in the EA. This oversight should be addressed or the potential impacts described in the EA.

In conclusion, the Kerncrest Audubon Society does not agree with a decision to allow the exploratory drilling, without an adequate evaluation of the cumulative impacts resulting from reasonable foreseeable future actions. The EA states "Although raised through public comments, this document does not consider the possibility of this exploration leading to further development as reasonably foreseeable." We question this conclusion when Glacial Minerals holds the Dragonfly Placer Mining Claims for the intent and purpose of exploring for gold and future mining. The proposed exploratory drilling may lead to further exploration and/or mining and this is not evaluated under the cumulative impacts sections for any of the resources described under the affected environment section.



Hector Villalobos  
Vice President  
Kerncrest Audubon Society  
13 June 2014





DEPARTMENT OF PARKS AND RECREATION  
Tehachapi District  
15101 Lancaster Road  
Lancaster CA 93536

Major General Anthony L. Jackson, USMC (Ret), *Director*

June 18, 2014

Mr. Randall Porter  
Geologist  
U.S. Department of the Interior  
Bureau of Land Management  
Ridgecrest Field Office  
300 South Richmond Road  
Ridgecrest, CA 93555

RE: Exploratory Drilling of the Dragonfly Placer Claims

Dear Mr. Porter:

The Tehachapi District of the California Department of Parks and Recreation (State Parks) appreciates the opportunity to comment on the Environmental Assessment for DOI-BLM-CA-D050-2014-014-EA for Exploratory Drilling of the Dragonfly Placer Claims by Glacial Minerals, INC. Plan of Operations (POO) -CACA53193.

State Parks is a State Agency as defined by the California Environmental Quality Act (CEQA) § 21082.1, a Trustee Agency as used by CEQA, its Guidelines and as defined by CCR § 15386 for the resources affected by this proposed project. Our mission is to provide for the health, inspiration, and education of the people of California by helping preserve the state's extraordinary biodiversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.

As the governmental entity responsible for the stewardship of Red Rock Canyon State Park (RRCSP), we have a strong interest and concern about contemplated alterations of land use adjacent to the park. The long-term health of RRCSP is dependent on the health of the area ecosystems because the biotic boundaries of the park extend beyond its jurisdictional boundaries and must be managed with an eye toward wildlife corridors and regional concerns.

In general, based on our review of the Environmental Assessment, we have found that the proposed project could result in impact to the resources of RRCSP and the Last Chance Canyon Area of Critical Environmental Concern. These protected public lands represent a tremendous public investment in the protection and preservation of both cultural and natural resources.

We have detailed our concerns and comments below.

## BIOLOGICAL

### *Foraging Habitat- Fragmentation*

The Environmental Assessment state there is the presence of suitable habitat within the drill hole study areas of the Dragonfly Claim Group and that foraging habitat is used by golden eagles, prairie falcons, pallid bats, Townsend's big-eared bats, and spotted bats.

This habitat is extremely important due to its location of being just east of RRCSP. These lands are used for foraging raptors and other wildlife. We are concerned that the proposed project may result in impacts on species within RRCSP that could cause disruption of movement patterns that would alter essential ecosystem functions, such as predator-prey relationships or competitive relationships among species.

In addition, we are concerned that construction and operation impacts as a result of encounters with vehicles and/or heavy equipment could result in the direct mortality, injury, or harassment of these special-status species.

We request that no work occur between February 1 and July 1 to comply with the Federal/State Bird of Prey Closure within RRCSP. Additionally, we respectfully request that the project biologist work with and provided updates to CA State Parks staff to ensure that these none of these special-status species are being impacted by the proposed project.

## LAND USE

We are concerned that proposed project may be incompatible with RRCSP.

Public Resource Code Section 5019.53 states that State Parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological or similar values. The purpose of a State Park is to preserve outstanding natural, scenic, and cultural values and terrestrial fauna and flora.

Each State Park shall be managed as a composite whole in order to restore, and maintain its native environment complexes to the extent compatible with the primary purpose for which the park was established.

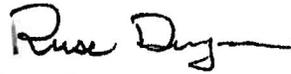
The proposed project will introduced modern equipment to the area, which has the potential to degrade the visual character and quality of views to the area, including RRCSP. These visual impacts will not only affect the park visitors but could affect other visitors that are *using* the primitive route network within the area

Randall Porter  
Page 3  
June 18, 2014

We recommended that the Lead Agency and project proponent work with State Parks to implement an approach that may help reduce these impacts.

Once again, we appreciate the opportunity to comment on the proposed project. As we have outlined in our comments, there are some issues related to Red Rock Canyon State Park. It is important that all land use decisions adjacent to Red Rock Canyon State Park be compatible with the preservation of the tremendous resources found there. For further discussion, please feel free to contact me directly at (661) 724-2380.

Sincerely,

A handwritten signature in black ink that reads "Russ Dingman". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Russ Dingman  
District Service Manager





June 17, 2014

Mr. Randall Porter  
Bureau of Land Management

Dear Mr. Porter:

Red Rock Canyon Interpretive Association is aware that Bureau of Land Management is considering allowing exploratory drills on a parcel of land currently supervised by BLM (Ridgecrest Office) known as the Dragonfly Placer Claims.

RRCIA understands that this land is adjacent to Red Rock Canyon State Park and more specifically one of the most fragile habitats in the state park known as Last Chance Canyon. Red Rock Canyon Interpretive Association is concerned that this project will have a negative impact on the park that will have long lasting consequences.

Some of our concerns involve the possible destruction of valuable resources including wildlife. Red Rock Canyon State Park has taken great care to protect endangered and threatened species including raptors such as the Golden Eagle which is nesting in Red Rock Canyon State Park. Eagles have acute senses and are sensitive to their surroundings. We consider it an honor to have a bird of prey such as the eagle which is symbolic of many of America's greatest points of pride nesting at Red Rock. We are disappointed that BLM is not being responsible by virtue of the fact that they are proposing the exploratory drilling take place so close to this vulnerable species.

Red Rock Canyon State Park is known to have rich and largely unexplored fossil beds that are not always exposed on the surface. The Society of International Vertebrate Paleontologists came to Red Rock on a field trip which illustrates how important the fossils are that are found in our area. The valuable paleontological resources at Red Rock Canyon State Park are not likely to stop at the physical boundaries of the park. We wanted to share the importance of this resource as a point of concern for a public steward such as BLM.

We respectfully ask that you will carefully consider our concerns about the dragonfly mine and surrounding environs.

Sincerely,

Carolyn Neipris-Jones  
President, Red Rock Canyon Interpretive Association  
on behalf of the Board of Red Rock Canyon Interpretive Association



Mark R. Faull  
8260 Charles Place  
California City, California 93505

June 17, 2014

Bureau of Land Management  
Ridgecrest Field Office  
300 South Richmond Road  
Ridgecrest, California 93555

**Comments on Environmental Assessment DOI-BLM-DOS0-2014-014-EA**  
(Exploratory Drilling of the Dragonfly Placer Claim)

Field Manager Carl Symons and Geologist Randall Porter,

Thank you for the opportunity to provide comments on the Environmental Assessment document for the Exploratory Drilling of the Dragonfly Placer Claims. This opportunity is greatly appreciated. Let me apologize at the outset for any typographical errors and/or omissions, which resulted from a limited personal window to respond.

Pursuant to this opportunity, there are three primary categories within which comments will be addressed below: (1) Potential omissions from the Environmental Assessment worthy of consideration, (2) The recognition that this exploratory processes holds a direct and logical nexus to future more impactful actions, and (3) The failure of the Bureau to date to support and recognize the El Paso Mountains as an official National Conversation Lands terrain, for which *it* is more than qualified, which could dramatically shift the parameters of this evaluation.

**Potential Omissions from the Environmental Assessment**

The El Paso Mountains contains numerous examples of locally endemic and regionally species. These species often are not captured by the sensitive species databases. It becomes incumbent for the requisite management agencies to update their files as well as those regional databases to insure that all sensitive species are duly captured. Several important flora and fauna were inadvertently overlooked during this Environmental Assessment. In addition, important components of both the paleontological and the archaeological components of this Assessment should be more greatly acknowledged and/or strengthened.

Two Endemic Snails

Two extremely significant endemic terrestrial snails have been scientifically identified from the El Paso Mountains of Kern County. In 1930 a diminutive terrestrial snail, somewhat compressed in profile, was published as a species nova

from Last Chance Canyon within the El Paso Mountains. Originally published as *Micrarionta (Eremarionta) micrometa/leus* (Berry 1930) this highly specialized and restricted snail, which is endemic to the El Paso Mountains, is now classified as *Sonorelix (Mohavelix) micrometalleus*.

Years later, while searching to discover additional populations of the original endemic snail, a new second locally endemic snail was discovered. Originally thought to be a range extension of the first, due to its extremely similar appearance upon first examination, further research indicated that these specimens represented a distinct new specimen to science- *Helminthoglypta micrometalleoides* (Miller 1970).

Unfortunately, significant population surveys have not occurred for either species. While some habitat requirements may not be present on the target site, the lack of data requires acknowledgement that these extremely limited endemics be considered herein.

#### Red Rock Canyon Monkey Flower (*Erythranthe rhodopetra*)

In recent years Fraga (2012) has published on a new species to science discovered in Red Rock Canyon State Park and termed the Red Rock Canyon Monkey Flower (*Erythranthe rhodopetra*). To date, this species is considered endemic to the El Paso Mountains. Further population studies have been gravely hampered by modern drought. The species is known to exist in Last Chance Canyon and should be considered within the Environmental Assessment for this project.

#### Parched Fringe-toed Scorpion (*Serradigitus torridus*)

In 1986 the Parched Fringe-toed Scorpion, *Serradigitus torridus* (Williams & Berke 1986) was identified from Red Rock Canyon specimens. To date, investigations show that this species is an eastern Kern County desert endemic. No investigations have occurred near the project site to determine proximity. Still, the absence of actual field research should not presume absence of this locally constricted endemic.

#### Martini's Moth (*Plumipalpia martini*)

Yet another local endemic has even less known about its range and habitat. Martini's Moth, *Plumipalpia martini*, was identified from a type collection in Dove Springs Open area near the border with Red Rock Canyon State Park (Munroe 1961). No studies have sought its range extension eastward into the El Paso Mountains and the species is only known from this locally endemic population. Similar to above, the absence of actual field research should not presume absence of this extremely rare locally constricted endemic.

#### Paleontology of Goler Formation

The project proponents self-identify their project site and their targeted recovery as consisting of Goler Formation materials. However, the Environmental Assessment unfortunately overlooks the fact that the Goler Formation is a known paleontological formation of considerable importance in the western United States (McKenna 1960; McKenna et al. 1987; Lofgren et al. 2008; McKenna et al. 2008 and others). In a recent published paper, Lofgren et al. (2008:11) writes, "The Goler Formation provides the only diverse sample of Paleocene continental vertebrates from the west coast of North America." Further, Lofgren et al. (2008:26) mentions "evidence of significant endemism" within the paleofauna and that more recent techniques using screen- washing have provided much larger paleontological recovery rates. In addition, the Goler Formation apparently contains abundant fossil wood within Member 4 (Lofgren et al. 2008:26), which has been inadequately studied and published.

While paleontological recoveries occur more frequently in the finer grained units higher in the stratigraphic section of the Goler Formation, nevertheless, the coarser lower units still hold strong potential for the additional recoveries and expansion of the fossil fauna, especially utilizing the recently developed techniques, which increased successful recovery. In fact, these units could yield older paleontological specimens than most recovered from the Goler to date.

Environmental assessment of the paleontology is definitively warranted.

#### Archaeological Assessment

While the totality of the archeological assessment by the nature of its sensitivity requires less than full public disclosure, nevertheless, a certain thoroughness of evaluation remains a requisite. In this instance, since the proposed action involves the continuation of a historical practice, the context of that practice becomes a pertinent and integral element of this report.

While the archaeological portion of the Assessment summarizes the archaeological reconnaissance and its discoveries, these discoveries are not placed into the context of El Paso Mountain's mining. This context is somewhat informative as to why this site was chosen for drilling, but also as to the known significance of this site within the broader El Paso mining context.

Historically, the mineral potential for the landscape surrounding the Dragonfly claims was actioned by generations of miners, primarily starting in 1892 (Troxel & Morton 1962; numerous other references can be provided upon request), although a relatively brief and less consequential mining period also occurred from 1863 to 1865 in this region (numerous references can be provided upon request). Part of the 1863 mining effort was focused upon the same vicinity as the Dragonfly claims (Holt 1863).

The prolonged, long-term efforts to extract placer gold have left definitive historical remains, some of which are represented by the local historic mining camps at Bickel Camp (Bonanza Gulch), Florence #7 and other historic sites. Some of these mining efforts were of long duration and yet documented output was never overwhelming. In 1962 the State of California estimated the total output for all mineral values, including gold, for the entire El Paso Mountains over a 70 year period of focused interest as "probably exceeds several hundred thousand dollars" (Troxel & Morton 1962:31). No other independent, more definitive evaluation of mineral wealth has been undertaken.

Most of the placer gold recovered from the El Paso Mountains has come from Quaternary gravels (Troxel & Morton 1962:31). This is certainly true from my personal archaeological documentation within Red Rock Canyon State Park (neighboring the project site). In a similar fashion, Diggles, Cox & Tucker (1985:CS) conclude that in the El Paso Mountains, "Modest quantities of placer gold were recovered from Quaternary bench gravels and from modern gravel filling the deeper canyons, particularly Goler Gulch and Bonanza Gulch."

The project proponents indicate that certain Goler Formation strata are herein targeted to analyze for placer gold. Diggles, Cox & Tucker (1985:C8) indicate that the basal conglomerate of the Goler formation is auriferous in Goler Gulch. As indicated, these deposits have proven far more productive when reworked and concentrated by Quaternary erosional processes.

Despite this long public mining history and the relative abundance of mining features one can witness in the El Paso Mountains, the archaeological surveys conducted pursuant to this assessment represent a testament to how little success copious past explorations and even prospects have had within the Dragonfly claims context. No major mining features were reported herein, indicating validation of mineral content could not be accomplished to a degree where even a modest or moderate historic investments of capital or human energy occurred.

#### Highly Sacred Terrain to Local Native Americans

The El Paso Mountains reflect the continued living family and communal cultural practices of the Kawaiisu (Nuwa) and other Native American peoples, which render the surrounding terrain extremely culturally sensitive. This landscape represents sacred geography on file with the Native American Heritage Commission (Garfinkel et al. 2008).

The Bureau of Land Management documented the cultural importance of this terrain pursuant to the development of the Desert Plan. Acknowledgement of this known cultural sensitivity has been overlooked in the current review.

#### Project Site Lies Within Last Chance Canyon Archaeological District

The Assessment recognizes the fact that the Project Site resides within the Last Chance Canyon Archaeological District on the National Register of Historic Places, but provides an inadequate treatment of what protections the National Register brings to such a District. Given that the Project Site also lies within identified Sacred Terrain (even by previous BLM studies) and resides immediately adjacent to an Area of Critical Environmental Concern (ACEC) there is surprisingly no detailed discussion of why the ACEC was established, if some of those values also exist on these adjacent properties and how this terrain represents a Cultural Landscape in addition to its individually known archaeological sites.

### Impacts to Recreation

The El Paso Mountains are widely used by a large cadre of vacationing tourists. These tourists contribute far more economic dollars to the surrounding eastern Kern Communities than any prospective potential mineral operations. In fact, if the proposed actions pursuant to this mineral assessment are successful any proposed economic benefit to local communities would need to subtract the potential lost economic tourism resultant from disrupting a significant tourism trade.

The Plan of Operations for this project claims that all drilling will occur within the confines of existing roads (although the Environmental Assessment plots the several drilling sites are not located upon roadways). Blockage of legal roadways during the drilling operations and the anticipated vehicular responses are not discussed. Blockage of roadways could likely result in off designated route travel by motorists.

In addition, the Assessment states that all recovered materials pursuant to the drilling operation will be hauled off site. Inadequate discussion follows as to how the resultant empty drilling shafts or chambers will be refilled and re-compacted so as not to endanger future recreational riders who not unlikely would encounter sinkholes over time which develop around these chambers in the roadways.

### **Direct Nexus to Likely Future More Impactful Actions**

While the initial scope of this assessment is specifically focused upon the exploratory drilling process and its potential impacts, this exercise becomes futile if the logical extension of Galactic Minerals, Inc. interests in an outcome pursuant to the exploratory drilling process (the recovery of a positive proxy mineral signature) is not immanently obtainable. It is therefore both logical and somewhat ethical to consider upfront the rational true desired outcome from this initial phase or process.

As such, any competent evaluation of this proposed exploratory drilling project must also in tandem evaluate the logical outcome of successful discovery and its logical resultant impacts. It is patently unfair to approve an exploratory project if the resultant discovery is not actionable by the investors. It is also unfair to current

El Paso Mountain stakeholders to limit the evaluation of assessment impacts to the exploratory phase, if success discovery during the exploratory stage predicates a greater follow up impact.

The recovery of potential auriferous deposits would likely involve strip-mining technologies and chemical recovery processes, such as cyanide heap leach. If that is one likely envisioned outgrowth of this Environmental Assessment, it would be prudent to acknowledge that reality in advance.

### **Failure of Bureau to Date to Convey "National Conservation Lands" Status**

Obviously, the Bureau of Land Management must act in accordance with certain mining regulations, laws and obligations, which are Congressionally mandated through past legislation. Equally true, the Bureau of Land Management has also been mandated to review and propose terrains worthy of National Conservation Lands status.

Once such properties have been rightfully evaluated and enacted into the program, such lands contain new management guidelines the agency must observe to perpetuate the values held by such lands. There are few terrains in all of the national holdings of Bureau of Land Management that possess greater values worthy of National Conservation Lands status than those of El Paso Mountains of Kern County, California. It is therefore not only prudent, but essential that the discussion of these values be recognized during the Environmental Assessment proposal for lands that should by all rights and means of this legislation be considered for National Conservation Lands status.

The El Paso Mountains of Kern County, California represent a unique public heritage legacy largely under the jurisdiction of the federal Bureau of Land Management. Few terrains managed by the Bureau of Land Management within the Mojave Desert of California possess a larger suite of significant cultural, biological and scientifically important resources packaged into a single concentrated desert mountain range.

Situated in the northwestern Mojave Desert only a few miles from the southern terminus of the Sierra Nevada, the El Paso Mountains have long been recognized as a significant transition zone bearing noteworthy and at times uniquely important biota and ecosystems. The combination of this regional geomorphology, underpinned by significant tectonic actions along the Sierra Frontal and Garlock Fault zones, has crafted a transition zone that not only benefits from the localized interaction of climate with disparate terrains and topographies, but in addition, benefits from numerous microenvironments imparted by the localized manifestation of the varied El Paso Mountain geology and the physiography of the resultant canyonlands.

Upon this theater our human lifeways over extended time frames sought to utilize, revere and harvest a suite of valuable resources. These varied resources

supplemented peoples' physical and spiritual existence, within multiple cultures. The localized combination of starkly revealed geology and Mojave Desert biota presented various spiritual and highly practical cultural benefits and blessings. These utilized opportunities imprinted the landscape with a heritage of regional significance, worthy of preservation.

The El Paso Mountains of Kern County, California is emblematic of the landscapes Congress sought to recognize and preserve through the passage legislation that created the National Conservation Lands designation. As such, they more than deserve to receive bestowment of such status.

#### Past Recognition of Significant Heritage Values

The El Paso Mountains of Kern County, California for years has contained the large Last Chance Canyon Archaeological District on the National Register of Historic Places, the Last Chance Canyon Area of Critical Environmental Concern and the El Paso Mountains Wilderness all established because of documented, recognized and sometimes sensitive resource values. Over the intervening years the known suite of values have only expanded.

In 1994, Congress passed the California Desert Protection Act, a section of which transferred portions of Last Chance Canyon to Red Rock Canyon State Park in recognition of the scientific and scenic values, which should underpin the management of this landscape. Those values do not end at the somewhat arbitrary boundary chosen to establish ease in management transfer, but obviously extend eastward beyond these terrains (including into the proposed project area).

#### High Quality and Quantity of Heritage Recreation

While the Bureau of Land Management may be slow to recognize and recommend the full inclusion of the El Paso Mountains within a new National Conservation Lands status, the public at large has long recognized such values and has sought to recreate upon the well-established scenic, scientific and cultural values found within this terrain. The wonders of the El Paso Mountains began to be touted strongly once vehicular travel improved during the early 20th Century.

First, for more than half a century the principle use of the El Paso Mountains landscape has been by a wide consortium of recreational users, including motorists, hikers, equestrians, and others in pursuit of heritage tourism. The volume of use and utilization by such activities (and for such societal purposes) has dwarfed all other uses combined. This use supports the needs and desires of families, friends and specialized groups who seek solitude, open space and exploration adventures. These use values are entirely consistent with both the intent and the spirit of National Conservation Lands designation.

As early as the late 1910s nearby Red Rock Canyon, located in the western end of the El Paso Mountains, was declared a scenic wonderland worthy of both visitation and preservation (*Los Angeles Times* 12 October 1919:part VI,p.3). During the 1920s publicity began to extend to the scenic and scientific wonders to the east in neighboring Last Chance Canyon as visitors frequented an increasingly expanding section of El Paso Mountain heritage (examples Archer 192Sa; 192Sb; 1926a; 1926b; 1928a; 1928b; 1929). By the early 1930s intriguing discoveries of Native American heritage further expanded local interest and tourism (Johnston 1931).

This public tourism has never waned and today extends from educational university fieldtrips to individual families and friends. Recreational touring is quite popular and cultural sites such as Bickel's Camp and Burro Schmidt tunnel are common tourist destinations. Citizen groups like the "Friends of Last Chance Canyon" have achieved 501(c)3 non-profit status to further the preservation and sharing of the historic sites and scenery of this unique desert mountain range.

From Native American petroglyphs (and occasional pictographs) found at Sheep Springs and many other locales to the historic mining of mineral resources, people enjoy exploring a wealth of El Paso Mountain treasures. Throughout this long interactive history the **public has already recognized** those attributes that warrant the application of National Conservation Lands status upon this terrain. It only remains for the Bureau to catch up with the popular public vision and sentiment.

Continued public access and benefits should remain an intrinsic component of the proposed National Conservation Lands status, modeled closely upon the modern paradigm, as long as proper multi-generational stewardship can be maintained.

#### Important Regional Biological Connectivity

The local Bureau of Land Management properties in question bear the great benefit of local connectivity with other previously recognized and preserved terrains, given various forms of formal designation or status. As such, the creation of a National Conservation Lands designation, with its improved recognition of scientific values and management, establishes a suite of larger contiguous management units highly beneficial towards long-term sustainability of public heritage and biological diversity. These potentially contiguous units provide both a larger core reserve and important and imperative corridors or linkages for long-term genetic diversity and species sustainability.

To the west and southwest of the herein proposed National Conservation Lands lies Red Rock Canyon State Park, a 25,000 acre parkland dedicated to heritage preservation and public enjoyment. Towards the center-north of the proposed National Conservation Lands unit lies the El Paso Mountains Wilderness. This Wilderness represents only a portion of the much larger Last Chance Canyon Archaeological District, submitted in 1972 by UCLA based archeologist Alex

Apostolides for the National Register of Historic Places consideration. The entirety of this already formally recognized Archaeological District deserves inclusion within the proposed National Conservation Lands designation, providing protection for both the intrinsic cultural and biologic attributes.

Once the National Register District is included, connectivity then exists across State Highway 14 with the northern portion of the long established jawbone-Butterbredt Area of Critical Environmental Concern (ACEC). This northern stretch of ACEC, north of the Dove Springs Open Area can provide further connectivity between the proposed El Paso Mountains National Conservation Lands and lands managed by Sequoia National Forest in the southern terminus of the Sierra Nevada. This connectivity would include the 88,000 acre Kiavah Wilderness jointly managed by the US Forest Service and the Bureau of Land Management.

A few south-southeast of the proposed National Conservation Lands lies the Desert Tortoise Natural Area managed jointly by the Bureau of Land Management and the Desert Tortoise Committee. This 25,000 acre preserve was has also been designated as an Area of Critical Environmental Concern. Over time a the establishment of a conservation corridor or easement linking the Desert Tortoise Natural Area with the proposed National Conservation Lands could provide a valuable undisturbed wildlife corridor or linkage from the Sequoia National Forest in the southern Sierra Nevada all the way to the Desert Tortoise Natural Area, although vital gene flow to maintain a healthy stock of genetic diversity within this greater region.

The establishment of the herein proposed National Conservation Lands becomes the lynch pin within this larger proactive vision or strategy to manage for healthy species diversity as well as several listed (i.e. Desert Tortoise, Mohave Ground Squirrel) to unlisted but locally endemic species found within this region.

#### El Paso Mountains Paleontology

In addition to the national and international importance of the Paleocene Goler Formation's paleontological suite previously mentioned, the El Paso Mountains is also globally recognized for the importance of the extremely complete fossil collections recovered from the Miocene era Dove Spring Formation within the Ricardo Group geologic sequence.

The fossils recovered from the Dove Spring Formation were first published as a significant assemblage in 1919 (Merriam 1919). New modern discoveries are frequently adding to the global significance, necessitating revisions in the current status of the paleontological collections (see Whistler et al. 2009).

Few of the bureau's terrains hold the significance of two such iconic paleontological assemblages.

## Biological Significance. Possible Ice Age Endemism and a Laboratory of Evolution

The significance promise the El Paso Mountains represent to scientific inquiry has long been recognized and was noted beginning very early in the 20th Century. This importance can be gleaned by the sheer number of new species to science the El Paso Mountains have yielded. A separate listing of these species accompanies this transmission. In addition to the over 30 species listed, this author is aware of as many as six new pending species within the paleontological realm alone.

By the very nature of paleontological collections, evolution can be witnessed. In addition to the more common occurrences, the Dove Springs Formation has yielded the oldest known C4 plant fossils in the world (Tidwell & Nambudri 1989). The presence of expanding grasslands provides opportunity to new grazers such as horses to expand and evolve, whilst other browsers diminish and disappear. This important evolutionary theater deserves greater protection on Bureau lands.

In terms of extant species, the El Paso Mountains represent a microcosm of the Mojave Desert flora and fauna at *large*, but in addition harbors extremely significant elements of local to regional endemism. As has already been demonstrated in this transmission, the occurrence of local endemism is striking, with new species to science being added almost every decade.

Part of this endemism may well be the result of the dramatic climatic transition at the end of the Pleistocene, the resultant desertification and the ability of certain species to evolve to fit this new changing paradigm (Faull 2004). Species such as the Red Rock Tarplant (*Deinandra Arida*), the Red Rock Monkey Flower (*Erythranthe rhodopetra*), the Red Rock Poppy (*Eschscholzia minutiflora twisselmanni*), the two endemic snails (discussed hereafter), the endemic scorpion (*Serradigitus torridus*) and more may be such relict and newly adapted species.

### (Snails)

As was noted, two extremely significant endemic terrestrial snails have been scientifically identified from the El Paso Mountains of Kern County. In 1930 a diminutive terrestrial snail, somewhat compressed in profile, was published as a species nova from Last Chance Canyon within the El Paso Mountains. Originally published as *Micrarionta (Eremarionta) micrometal/eus* (Berry 1930) this highly specialized and restricted snail, which is endemic to the El Paso Mountains, is now classified as *Sonorelix (Mohavelix) micrometal/eus*.

Years later, while searching to discover additional populations of the original endemic snail, a new second locally endemic snail was discovered. Originally thought to be a range extension of the first, due to its extremely similar appearance upon first examination, further research indicated that these specimens represented a distinct new specimen to science- *Helminthoglypta micrometalleoides* (Miller 1970). Because of the extremely similar appearance this second snail was originally

considered a close relative of the first. However, subsequent analysis indicated this was not in fact the case and that the observed similarities were manifested by strong adaptive environmental pressures manifesting identical survival strategies. In other words, these locally endemic snail from the El Paso Mountains represent a textbook case of convergent evolution.

While poorly known and published (>>>), limited purportedly *Helminthoglypta micrometal/eoides* specimens *have* been *recovered* from nearby Red Mountain (specimens curated at the Santa Barbara Museum of Natural History). This begs a much larger evolutionary question yet unstudied -how and when did these two endemic snails wind up stranded in the El Paso Mountains to undergo convergent evolution? From what is known of local evolution, the strongest suspicion would indicate these snails were locally relict Pleistocene species able to adapt to the dramatically changed post Ice Age environs at the Holocene transition, which otherwise resulted in a pattern of significant local and regional extinctions. Able to adapt to the "island habitat" of the El Paso Mountains, this raises a second evolutionary question- when and how did the *Helminthoglypta micrometalleoides* colonize the second island habitat on Red Mountain, which isolates genetic exchange, and how much genetic drift has occurred between these distinct isolated populations since their separation? These questions offer a profound opportunity for targeted evolutionary research.

By no means do these snails represent the only model of localized evolutionary investigation.

(The Red Rock Poppy Auto Polyploid Sequence)

Another potential example of localized evolution may be the autopolyploid sequence involving *Eschscholzia minutiflora twisse/manni*, *Eschscholzia minutiflora covillei* and *Eschscholzia minutiflora minutiflora* (Clark and Faull 1991). The El Paso Mountains vicinity represents the only terrain in which all three subspecies coexist and may well prove to have again been an ice age refugia providing an evolutionary platform for species diversification and survival.

More examples of the scientific significance found within the El Paso Mountains can be provided by this author upon request.

The values cited herein and more all demonstrate the appropriate consideration of the El Paso Mountains as a heritage landscape enabling the designated National Conservation Lands status to this intrinsically important terrain.

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# PLANT AND ANIMAL SPECIES FIRST DISCOVERED IN THE EL PASO MOUNTAINS, KERN COUNTY, CALIFORNIA

*(Holotype Specimens & Type Localities for Living Species)*

## Faunal Species

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Current Scientific Name</u>	<u>Location of Discovery</u>
Small Miner Snail	<i>Micrarionta (Eremarionta) micrometalleus</i>	Berry 1930	<i>Sonore/i.y. (Mohave/i.Y.) micrometalleus</i>	Red Rock Canyon SP Last Chance Canyon
Mimic Shoulderband Snail	<i>Helminthoglypta micrometalleoides</i>	Miller 1970	<i>Helminthoglypta micrometalleoides</i>	Iron Canyon! Goler- 5 mile east of state park
Chemsak's Desert Moth	<i>Eremanthe chemsaki</i>	Munroe 1972	(same)	Red Rock Canyon
Martini's Moth	<i>Plumipalpia martini</i>	Munroe 1961	(same)	Dove Spring – ½ mile west of state park
Red Rock Sunbather Moth	cf. <i>Heliothodes (species yet to be named)</i>	T. Sears (in prep)		Red Rock Canyon
Parched Fringe-toed Scorpion	<i>Serradigitus torridus</i>	Williams & Berke 1986	(same)	Red Rock Canyon

## Floral Species

Red Rock Tarplant	<i>Hemizonia arida</i>	Keck 1958	<i>Deinandra arida</i>	Red Rock Canyon
Red Rock Poppy	<i>Eschscholzia minutiflora twisselmannii</i>	Clark & Faull 1991	(same)	Red Rock Canyon
Red Rock Canyon Gilia	<i>Gilia tenuiflora</i> var. <i>speciosa</i>	Jepson 1943	<i>Gilia cana speciosa</i>	Red Rock Canyon

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Current Scientific Name</u>	<u>Location of Discovery</u>
Red Rock Canyon Monkey Flower	<i>Erythranthe rhodopetra</i>	Fraga 2012	(same)	Red Rock Canyon SP Last Chance Canyon

(Paleontological Flora)

### Paleontological Flora

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Location of Discovery</u>
C4 Grass	<i>Tomlinsonia thomassonii</i>	Tidwell & Nambudri 1989	Red Rock Canyon State Park Last Chance Canyon
Pinyon Pine	<i>Pinus kelloggi</i>	Webber 1933	Red Rock Canyon State Park Last Chance Canyon
Live Oak	<i>Quercus ricardensis</i>	Webber 1933	Red Rock Canyon State Park Last Chance Canyon
Locust Tree	<i>Robinia alexanderi</i>	Webber 1933	Red Rock Canyon State Park Last Chance Canyon
Palm Tree	<i>Palmoxydon mohavensis</i>	Webber 1933	Red Rock Canyon State Park Last Chance Canyon

### Paleontological Fauna

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Current Scientific Name</u>	<u>Location of Discovery</u>
Rear-fanged Snake	<i>Protychophis achoris</i>	Whistler & Wright 1989	(same)	Red Rock Canyon
Alligator Lizard	<i>Paragenhodon ricardensis</i>	Estes 1963	(same)	Red Rock Canyon
Goose	<i>Branta howardse</i>	Miller 1930	(same)	Red Rock Canyon

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Current Scientific Name</u>	<u>Location of Discovery</u>
Vulture	<i>Neophrontops ricardoensis</i>	Rich 1980	(same)	Dove Springs ¼ mile west of state park
Shrew	<i>Hesperosorex chasseurae</i>	Tedford 1961	<i>Alluvisorex chasseurae</i>	Red Rock Canyon
Shrew	<i>Mojavesorex macconnelli</i>	Whistler 1969	(not officially published- in prep.)	Dove Springs - ½ mile west of state park
Mole	<i>Scapanus shultzi</i>	Tedford 1961	(same)	Red Rock Canyon
Skunk	<i>Martinogale faulli</i>	Wang et al. 2005	(same)	Dove Springs - ¼ mile west of state park
Weasel	<i>Mustela budwaldi</i>	Merriam 1919	(same)	Red Rock Canyon
Antilocaprid	<i>Paracosoryx furlongi</i>	Frick 1937	(same)	Red Rock Canyon
Horse	<i>Protohippus tantalus</i>	Merriam 1913	<i>Pliohippus tantalus</i>	Red Rock Canyon
Horse	<i>Hipparion mohavense</i>	Merriam 1913	<i>Comwhipparion sp. (mohavense)</i>	Red Rock Canyon
Elephant-like Gomphothere	<i>Serbelodon burnhami</i>	Osborn 1933	<i>Amebelodon burnhami</i>	Red Rock Canyon
Fox	<i>Metalopex macconnelli</i>	Tedford, et al. 2009	(same)	Red Rock Canyon
Dog	<i>Tomarctus robustus</i>	Green 1948	<i>Carpocyon robustus</i>	Red Rock Canyon
Saber-tooth	<i>Ischyrosmilus osborni</i>	Merriam 1919	(same)	Red Rock Canyon
Small Periptychid	<i>Goleroconus alfi</i>	McKenna, et al. 2008	(same)	NNE of Black Mountain
Arctocyonid	<i>Mimotricentes tedfordi</i>	McKenna and Lofgren 2003	(same)	Extreme NE El Paso Mtns

**Paleontological Synonymies** (involving original Red Rock holotype specimens)

<u>Organism</u>	<u>Original Scientific Name</u>	<u>Researcher</u>	<u>Current Synonymized Name</u>	<u>Location of Discovery:</u>
Oreodont	<i>Merycochoerus californicus</i>	Merriam 1919	<i>Merychys major</i>	Red Rock Canyon
Horse	<i>Hipparion mohavense callodonte</i>	Merriam 1915	<i>Cormohipparion sp. (mohavense)</i>	Red Rock Canyon
Horse	<i>Protohippus fairbanksi</i>	Merriam 1915	<i>Pliohippus tantalus</i>	Red Rock Canyon
Dog	<i>Aelurodon aphobus</i>	Merriam 1919	<i>Epicyon haydeni</i>	Red Rock Canyon
Bear-dog	<i>Hadrocyon mohavensis</i>	Stock & Furlong 1926	<i>Ischyrocyon gidleyi</i>	Red Rock Canyon S P Last Chance Canyon

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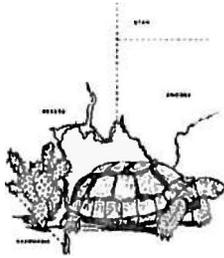
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**DESERT TORTOISE COUNCIL**

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Via email only

16 June 2014

Mr. Randall Porter, Geologist, Project Lead  
Bureau of Land Management  
300 South Richmond Road  
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[rporter@blm.gov](mailto:rporter@blm.gov)

RE: Exploratory Drilling of the Dragonfly Placer Claims by Glacial Minerals, Inc. in El Paso Mountains, Kern County, California

Dear Mr. Porter,

The Desert Tortoise Council (Council) is a private, 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 this species. Established in 1976 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

We are disappointed because, although we have often asked that the Bureau of Land Management (BLM) consider the Council as an affected party for projects potentially affecting the desert tortoise, we were not informed of this proposed project. We received a copy of the Environmental Assessment [DOI-BLM-CA-0050-2014-014-EA for Exploratory Drilling of the Dragonfly Placer Claims by Glacial Minerals, Inc., Plan of Operations (POO)- CACA-53193] from a third party, and are now taking this opportunity to provide feedback before the comment due date of 6/17/2014. Herein, we refer to specific information given in the Environmental Assessment (EA), Biological Assessment (BA), and Plan of Operations (POO) and provide specific recommendations that refer to each point of information. The outline is cross-referenced with that given in the appendix to this letter.

We are impressed with the thorough nature of all three documents and offer our comments as friendly amendments.

## Recommended Amendments to the EA, BA, and/or POO

The following recommendations refer by section to specific information for the EA, BA, and POO that we reviewed, which follows the outline given in the appendix to this letter.

EA-2. BLM has the authority to approve, disapprove, or approve with modification any of the measures given in the EA, BA, or POO. The following measures are presented with the assumption that the BLM will approve exploratory activities and these recommendations are suggested as friendly amendments to the measures proposed by Glacial Minerals LLC and their consultants.

EA-4. The surveys performed in April 2013, finding 4 tortoises in the general area of the project, were sufficient to determine that each of the proposed 12 drill holes is found within occupied desert tortoise habitat. Given their mobility and widespread distribution shown in the BA (Figure 4, page 17), the proponent should assume that tortoises may occur anywhere within the affected area. It is appropriate that there are protective measures including enlisting biological monitors and fencing drill equipment, among others.

EA-5 and EA-6. The Council understands from these measures and others that the larger claim areas comprise approximately 965 acres of suitable if not occupied desert tortoise habitat. This, then, should be considered the "action area," which is defined by regulation as all areas to be affected directly or indirectly and not merely the immediate area involved in the action (50 CFR §402.02). As such, if the project proceeds and a mine is developed, this entire area (and perhaps an even larger area, pending input from the USFWS) must be subject to focused tortoise surveys and NEPA analysis.

EA-7. The Council requests that the FCR's report be made public and available to us for review, particularly if there is intent to proceed with the mine.

BA-2 and BA-3. The surveys revealed that tortoises are found throughout the area and that a 15 mile per hour speed limit will be implemented. Given the mobility of tortoises and the difficulty of seeing juvenile animals, the Council suggests the BLM clarify that: (1) a biological monitor precede all equipment accessing and leaving the site; and (2) all vehicles access and leave the site together, in single-file with the biologist(s) driving the lead vehicle.

BA-4. The area to be fenced around each drill site should be surveyed first to ensure no tortoises or occupied burrows are found within the fence. This will avoid the possibility of a tortoise becoming entrapped within the fence. Also, the proponent should maintain some flexibility, so if a tortoise or burrow is found at the intended location for a drill hole, the proponent would move the location to a new place where no tortoises or burrows occur or take appropriate measures to protect the tortoise until the project is complete.

BA-5. This measure (see same-numbered measure in the appendix) requires that the proponent contact the BLM immediately if an injured or dead tortoise is found, but fails to instruct the proponent to cease all additional activities that may harm tortoises until the BLM responds. The Council recommends that this caveat be added to the reporting requirement.

BA-6. The BA fails to provide meaningful rationale for why the cumulative effects analysis is restricted to mostly rugged, undeveloped portions of El Paso Mountains. Perhaps this is sufficient for the 12 drill holes, but if the larger mine is pursued, the cumulative effects area should be significantly larger. It should include the many renewable energy projects that have recently been proposed in the Cantil, Fremont Valley, and Jawbone Canyon areas, for example.

BA-7. We note in Appendix A of title BA that Mohave fish-hook cactus (*Sclerocactus po vancistrus*) was observed during the surveys but it is not included as a special status species in Appendix B. In fact, Mohave fish-hook cactus is a List 4.2 species according to the California Native Plant Society. All Mohave fish-hook cacti should be mapped during monitoring and future resource inventories. For individual cactus that cannot be avoided, the reclamation plan should specifically identify this species for salvage and transplanting.

POO-1. We assume that any site with an open drill hole is either under the supervision of the biological monitor or that it is fully secured by fencing and road barricade. The BLM should require that all open drill holes be contained within tortoise-proof fences. The fences should not be removed until drill holes have been backfilled and other reclamation activities completed.

The recommendations given above assume that drilling activities have not occurred and the BLM is receptive to friendly amendments that will further ensure that tortoises are not adversely affected by exploratory activities. Should the proponent decide to pursue the mine or additional unidentified exploratory activities, we ask that the Council be considered an affected party. We would like to have the opportunity to provide pre-project scoping comments and to receive all environmental documents associated with additional exploratory or mining activities.

Regards,

Edward L., LaRue, Jr., M.S.  
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

## Appendix: Background Information

The following background information taken from the EA, BA, and POO is reiterated for our membership, who will have an opportunity to read these comments on our website ([www.dcsctortoise.org](http://www.dcsctortoise.org)). Although no date appears on the EA, we see in Appendix 1 that the latest BLM signatory date was 5/15/2014, so we assume that the exploratory activities have not been initiated. The outline below should be cross referenced with the numbers given in the preceding letter.

### Environmental Assessment

EA-1. Glacial Minerals, Inc has submitted to the BLM a plan to explore and conduct drilling operations on unpatented placer claims located within Kern County, California. These claims are the Dragonfly Group, 6 placer claims covering roughly 960 acres of public lands in and adjacent to Last Chance Canyon, within the El Paso Mountains.

EA-2. The BLM will decide whether to approve, approve with modification, or disapprove the drilling plan submitted by Glacial Minerals, Inc.

EA-3. Though not located within an Area of Critical Environmental Concern (ACEC), Desert Wildlife Management Area (DWMA), or Wilderness Area, the proposed drill sites (and therefore, the mine, if it is eventually developed) is very near such designated areas, as depicted in the following map taken from page 6 of the EA:



EA-4. The study area is within the 1984 Desert Tortoise Range of the West Mojave Plan. The Dragonfly Claim Group is not located within USFWS [U.S. Fish and Wildlife Service] Critical Habitat for desert tortoise. A total of four desert tortoises were observed during the general biological survey; however, two individuals were off-site and one individual was observed just outside the 5-acre buffer study area. A fourth individual was found outside the exploratory drilling study areas but within the Dragonfly Claim Group area and approximately 140 feet east of travel route EPI03.

EA-5. The BLM, through informal consultation with the California Office of Historic Preservation, has determined that the Area of Potential Effect for the Proposed Action is the entire 964.66 acres of the claim group.

EA-6. Although raised through public comments, this [EA] document does not consider the possibility of this exploration leading to further development as reasonably foreseeable. This is because the likelihood of future development cannot be assessed until the results of this drilling are complete. Any assumptions about future development would be speculative based on current information. Any future federal authorizations for development in this area would be subject to its own NEPA [National Environmental Policy Act] analysis.

EA-7. Within 90 days of terminating activities, the FCR [Field Contact Representative] shall submit a report documenting the effectiveness of the project protocols and also report any observations of desert tortoises.

### Biological Assessment

The following excerpts are taken from the Biological Assessment (BA), prepared by PCR Services Corporation, and dated May 2013:

BA-1. The Dragonfly Claim Group area consists of primarily undeveloped land, although existing and historic mining operations occur in the area, which is dominated by Mojave creosote bush scrub interlaced with sandy desert washes.

BA-2. As shown on Figure 4, *Locations of Sensitive Species*, a total of four desert tortoise individuals were observed during the general biological survey; however, two individuals were off-site (i.e., outside of the study area near Drilling Locations 2 and 7) and one individual was observed just outside the 5-acre buffer study area (i.e., near Drilling Location 9). A fourth individual was found outside the exploratory drilling study areas but within the Dragonfly Claim Group area and approximately 140 feet east of travel route EP103.

BA-3. When workers are entering each drill hole work site, vehicles will drive no greater than 15 miles per hour (MPH) within travel routes.

BA-4. A temporary tortoise-proof exclusion fence will be erected around each drill hole location, at least 100 feet long (50 feet in each direction of the drilling hole or the extent of the drilling equipment if asymmetric to the drill location) along each side of the road. Once the drilling rigs and trucks are in place, temporary exclusion fencing will be erected at the ends of the work area (i.e., perpendicular to the road) to ensure that no desert tortoise enters the work area while drilling is being conducted. All temporary tortoise-proof exclusion fencing should be secured at the bottom (e.g., partially buried or have straw wattle keyed in along the bottom) to ensure there are no gaps in the fencing and no wildlife can dig or crawl under the exclusion fencing.

BA-5. Upon locating a project-related injured or dead tortoise, or a tortoise that is injured or dead (i.e., of unnatural causes not related to the project) within the vicinity, the FCR will notify the BLM Field Office immediately. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death, if known, and other pertinent information.

BA-6. This cumulative analysis considers those cumulative effects on the biological resources within the Cumulative Effects Study Area (CESA) that could result from the implementation of the Proposed Action and No Action Alternative. The extent of a CESA [sic] will vary

depending on each resource being considered. For purposes of this analysis, the CESA is defined by the boundaries of the Koehn Hydrologic Area watershed to the northwest and the ridgeline of the El Paso Mountains to the southeast, which totals approximately 16,510 acres, as shown in **Figure 6, Cumulative Effects Study Area.**

**BA-7.** We note in Appendix A that Mohave fish-hook cactus (*Sclerocactus po vancistrus*) was observed during the surveys but it is not included as a special status species in Appendix B. In fact, Mohave fish-hook cactus is a List 4.2 species according to the California Native Plant Society.

### **Plan of Operations**

The following excerpts are taken from the October 2013 Revised Plan of Operations (POO), Exploratory Drilling Project Dragonfly Claim Group, El Paso Mountains, Kern County, California, prepared by Meridian Consultants LLC:

**POO-I.** Roads will be closed overnight following drilling and backfilling. Some of the drill holes may remain open overnight in order to complete drilling and down hole geophysics. In the event that a drill hole must remain open overnight, the road will be properly barricaded. Because different drill holes are located on different roads, the need for detours/alternate routes will be addressed on an as needed basis.



CENTER *for* BIOLOGICAL DIVERSITY

*VIA ELECTRONIC MAIL AND U.S. MAIL (with Attachment)*

June 17, 2014

Randall Porter,  
Geologist, Bureau of Land Management  
Ridgecrest Field Office  
300 South Richmond Road  
Ridgecrest, CA 93555  
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Re: Comments on Environmental Assessment, DOI-BLM-CA-DOS0-2014-014-EA  
For Exploratory Drilling of the Dragonfly Placer Claims by Glacial Minerals, Inc.  
Plan of Operations (POO) - CACA-53193

Dear Mr. Porter and the Ridgecrest Field Office:

This letter provides comments on the Environmental Assessment (EA) for the proposed Exploratory Drilling (and related work) of the Dragonfly Placer Claims by Glacial Minerals and the request by Glacial Minerals Inc. for approval of a Plan of Operations ("PoO") for the Project. These comments are submitted on behalf of the Center for Biological Diversity ("Center"), Public Employees for Environmental Responsibility ("PEER"), the California/Nevada Regional Conservation Desert Committee of the Sierra Club, and Desert Survivors.

The Center for Biological Diversity ("Center") is a non-profit public interest organization with offices located across the country including offices in San Francisco and Los Angeles, California, representing more than 775,000 members and online activists nationwide dedicated to the conservation and recovery of species at-risk of extinction and their habitats. The Center has long-standing interest in protecting and preserving the California Desert ecosystem. In response to a recent action alert from the Center to our California based members and supporters, over 6,000 letters were sent to the BLM urging them to deny the proposed exploratory drilling project.<sup>1</sup>

Public Employees for Environmental Responsibility ("PEER") is national alliance of local, state and federal resource professionals working to protect the environment. PEER members include government scientists, land managers, environmental law enforcement agents, field specialists, and other resource professionals committed to responsible management of America's public resources. PEER has a long-standing interest in the western Mojave Desert and the California Desert Conservation area as a whole and in ensuring protection of its natural, cultural and

<sup>1</sup> A copy of those letters is also provided along with these comments as Attachment I.

geologic resources, as well as protecting the health and welfare of BLM and other federal and state employees who work there.

The Sierra Club is a nationwide non-profit conservation organization with more than 150,000 members in California. The Club's purpose are to explore, enjoy, and protect the wild places of the Earth; to practice and promote the responsible use of the Earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to can-y out these objectives. California/Nevada Regional Conservation Desert Committee of the Sierra Club focuses on protecting the fragile ecosystems of the deserts in these two states.

Desert Survivors is an affiliation of desert lovers committed to experiencing, sharing and protecting desett wilderness and the rare and fragile biological resources in the California deserts. Desert Survivors recognizes the places we love to explore will not remain wild unless we give others the opportunity to experience them as we do and unless we remain vigilant and active in our efforts to monitor and preserve them.

As shown in more detail below, the EA and proposed decision to approve the PoO does not comply with the National Environmental Policy Act (NEPA), the Federal Land Policy and Management Act (FLPMA), the National Historic Preservation Act (NHPA), the implementing regulations and policies of these laws, and other legal requirements. As such, and at a minimum, the BLM must revise the environmental review and re-circulate it for public review and comment before any decision can be made.

#### I. THE PROPOSED MINING PROPOSAL VIOLATES THE APPLICABLE LAND MANAGEMENT PLANS.

The proposed project is inconsistent with the land management plans and would require a plan amendment to go forward. The EA fails to address whether the proposed project is consistent with the California Desert Conservation Area ("COCA") Plan as amended. This area has a Multiple Use Classification-Limited (MUC-L). EA at 3; WEMO Plan Amendment to COCA Plan.. Pursuant to the CDCA Plan, Limited "protects sensitive, natural, scenic, ecological, and cultural resource values. MUC-L areas "will be managed to provide for the protection and enhancement of surface and groundwater resources" and "will be managed to protect air quality and visibility." These management requirements preclude the use of this area for large-scale gold or copper mining because such mining practices have a long record of polluting both ground and surface waters and of causing significant impairment to air quality.

In addition, the proposed project as described in the EA would allow the use of closed routes for access by heavy equipment and drill rigs in violation of the West Mojave Plan, although the EA acknowledges that the Land Management Plan(s) would be violated by the Project's access roads and related operations. Therefore, the proposed project cannot go forward without plan amendments which has not been proposed or properly analyzed in the EA

In rejecting an alternative that would limit these roads/routes in order to comply with the Management Plans, the EA erroneously states that BLM cannot deny the use of these roads/routes due to the fact that this is a mineral operation.

*Denying usage of routes undesignated or closed under the Western Mojave Management Plan.* Some of the routes described by Figure 3 are labeled Unknown (UNK) and are not designated open routes under the Western Mojave land use plan (2006). It would be unreasonable to deny usage of such undesignated routes because BLM would then be impairing the claimant's ability to access and sample these claims in contravention of the Purpose and Need for this assessment.

EA at 16.<sup>2</sup> "Some of the vehicle routes within the Project Study Areas are not BLM Designated routes." EA at 20. At minimum, the use of these closed routes would require a plan amendment for new route designations to allow access to the site.

Under the West Mojave Plan motorized use is only permitted on routes designated as "open".<sup>3</sup> Moreover, the regulations are clear that routes which are not inventoried and designated "open" or "closed" are illegal. 43 C.F.R. § 8341.1(a) & (c) (Only allowing the operation of ORVs on routes designated as opened); § 8342.1. As stated in the 2006 Record of Decision for the West Mojave Plan: "Any new authorization or use of public land within the West Mojave Desert area must be in conformance with the West Mojave Plan." March, 2006 ROD at 10.

<sup>2</sup> This position is based on the extremely skewed "Purpose and Need" for the Project, which BLM states requires it to approve the PoO due to the fact that Glacial has filed mining claims. EA at 2. Such a Purpose and Need violates NEPA.

An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality.... "[T]he agency should take into account the needs and goals of the parties involved in the application." Requiring agencies to consider private objectives, however, is a far cry from mandating that those private interests define the scope of the proposed project.

National Parks Conservation Assoc. v. Bureau of Land Management, 606 F. 3d 1058, 1070 (9<sup>th</sup> Cir. 2010)(emphasis added), *quoting* Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C.Cir.1991). "Obviously, an applicant cannot define a project in order to preclude the existence of any alternative sites and, thus make what is practicable appear impracticable." Sylvester v. U.S. Army Corps of Engineers, 882 F.2d 407, 409 (9<sup>th</sup> Cir.1989). "No decision is more important than that delimiting what these 'reasonable alternatives' are ... One obvious way for an agency to slip past the structures of NEPA is to contrive a purpose so slender as to define competing 'reasonable alternatives' out of consideration (and even out of existence) ... **If** the agency constricts the definition of the project's purpose and thereby excludes what truly are reasonable alternatives, the EIS cannot fulfill its role." Simmons v. U.S. Army Corps of Engineers, 120 F.3d 664, 660 (7<sup>th</sup> Cir. 1997).

<sup>3</sup> As the BLM's website explains, "Motorized use is permitted only on routes signed 'Open.' Any route that does not have an 'Open' sign is not legal for motorized use." [http://www.blm.gov/ca/st/en/fo/cdd/west\\_mojave\\_wemo/wemo\\_maps.html](http://www.blm.gov/ca/st/en/fo/cdd/west_mojave_wemo/wemo_maps.html) (viewed May 28, 2014).

As BLM knows, the 2006 ROD and EIS were successfully challenged by the Center, Sierra Club, PEER, Desert Survivors, and others in federal court. All documents in the agency records for the West Mojave Plan amendment and the COCA Plan, including all documents associated with the court case, are hereby incorporated into the record for these comments and BLM's review of this Project.

BLM is under the mistaken view that, regardless of the fact that use of Unknown/Undesignated routes is not allowed by the West Mojave Plan, the COCA Plan, or the regulations, the BLM must nonetheless authorize such use/access under FLPMA, the 36 CFR Part 3809 mining regulations, and the 1872 Mining Law. That is wrong. As even the EA admits, all uses, including mining and exploration, must comply with all provisions of the applicable Plans. **"Operations must be conducted in compliance with BLM land-use plans,** and comply with mitigation measures specified by BLM to protect public lands (43 CFR 3809.420(l)[sic][a](3) and 3809.420(a)(4)." EA at 4 (emphasis added). This is required under the general land use conformity requirement of FLPMA, as well as BLM's duty to "prevent unnecessary or undue degradation" of the public lands. 43 U.S.C. 1732(b).

FLPMA requires that all resource management decisions "shall conform to the approved [land use] plan." 43 C.F.R. § 1610.5-3(a). *See Ore. Natural Res. Council Fund v. Brong*, 492 F.3d 1120, 1128 (9<sup>th</sup> Cir. 2007) (holding that BLM project components "are inconsistent with the Plan and, consequently, violate FLPMA."). BLM "shall take appropriate measures . . . to make operations and activities under existing permits, contracts, cooperative agreements or other instruments for occupancy and use, conform to the approved [land use] plan . . ." *See* 43 C.F.R. § 1610.5-3(b). If a proposed action is not clearly consistent with the land use plan, BLM must either rescind 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 152, 1526 (10<sup>th</sup> Cir. 1993) (nonconforming land use required RMP amendment). The IBLA 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).

BLM is legally wrong to base its decision on its position that "it would be unreasonable to deny usage of such undesignated routes" because that "would then be impairing the claimant's ability to access and sample these claims." EA at 16. To the contrary, denying such access and use is required by the West Mojave and CDCA Plan.

The fact that the area is classified as "Limited Use" in the COCA Plan, which allows mineral exploration in certain situations, does not mean that exploration is allowed everywhere in the L Area- especially when the use/access is not authorized under the Plans. There is no exception to the Plan requirements for mineral operations. As the leading federal court decision interpreting FLPMA and the Part 3809 regulations noted, BLM specifically requires compliance with all Plan provisions.

Interior argues that the 2001 Regulations satisfy FLPMA's multiple use policies by expressly including a performance standard that all operations under § 3809 be managed in accordance with the applicable land use plans. Interior directs the court to § 3809.420(a)(3), which provides as follows:

Land use plans. Consistent with the mining laws, your operations and post-mining land use must comply with the applicable BLM land-use plans and activity plans, and with coastal management plans under 16 U.S.C. § 1451, as appropriate.

43 C.F.R. § 3809.420(a)(3). Relying on § 3809.420(a)(3), as well as the provisions set forth in BLM's Land Use Planning Handbook, Interior maintains that "when BLM receives a proposed plan of operations under the 2001 rules, pursuant to Section 3809.420(a)(3), it assures [sic] 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."

Mineral Policy Center v. Norton, 292 F.Supp.2d 30, 49 (D.D.C. 2003).

The fact that BLM has relied upon the West Mojave Plan as part of its duties to comply with the Endangered Species Act (ESA) only adds to the requirement that all aspects of the Plan be met. Indeed, the Fish and Wildlife Service (FWS) relied upon the Plan to issue its Biological Opinion.<sup>4</sup>

It should also be noted that access to mining claims or mineral deposits are not free from agency regulation or indeed prohibition. "[T]he Secretary of Agriculture has long had the authority to restrict motorized access to specified areas of national forests, including to mining claims. See Clouser [v. Espy], 42 F.3d 1522, 1530 (9<sup>th</sup> Cir. 1994)." Public Lands for the People v. U.S. Dept. of Agriculture, 697, F.3d 1192, 1198 (9<sup>th</sup> Cir. 2012)(emphasis added)(upholding denial of access routes to mining claims in travel management plan). Although that case upheld the Forest Service's denial of access routes to mining claims (i.e., not BLM's), the Ninth Circuit's recognition that the government retains broad authority over access applies to the BLM as well.

Thus, at a minimum, BLM cannot approve the use of any route that is not officially designated as Open under the West Mojave Plan and the proposal would require a plan amendment as well.

## II. THE EA FAILS TO COMPLY WITH NEPA

### A. The EA Fails to Disclose Baseline Conditions As Required by NEPA

The PoO submitted by Glacial seeks approval of a series of wells, pits, drilling and other activities that will admittedly adversely affect important public resources. Despite these impacts, the EA contains little, if any, of the baseline analysis required by NEPA. The BLM is required to "describe the environment of the areas to be affected or created by the alternatives under

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<sup>4</sup> Copy of BiOp is available on BLM webpage for the West Mojave Plan at [http://www.blm.gov/ca/st/en/fo/cdd/west\\_mojave\\_wemo.html](http://www.blm.gov/ca/st/en/fo/cdd/west_mojave_wemo.html) and is incorporated herein by reference.

consideration." 40 C.F.R. § 1502.15. The establishment of the baseline conditions of the affected environment is a fundamental requirement of the NEPA process:

"NEPA clearly requires that consideration of environmental impacts of proposed projects take place before (a final decision) is made." LaFlamme v. FERC, 842 F.2d 1063, 1071 (9th Cir.1988) (emphasis in original). Once a project begins, the "pre-project environment" becomes a thing of the past, thereby making evaluation of the project's effect on pre-project resources impossible. Id. Without establishing the baseline conditions which exist in the vicinity ... before [the project] begins, there is 'simply no way to determine what effect the proposed [project] will have 'on the environment and, consequently, no way to comply with NEPA.

Half Moon Bay Fisherman's Mark't Ass'n v. Carlucci, 857 F.2d 505, 510 (9<sup>th</sup> Cir. 1988). "In analyzing the affected environment, NEPA requires the agency to set forth the baseline conditions." Western Watersheds Project v. BLM, 552 F.Supp.2d 1113, 1126 (D. Nev. 2008). "The concept of a baseline against which to compare predictions of the effects of the proposed action and reasonable alternatives is critical to the NEPA process." Council of Environmental Quality, Considering Cumulative Effects under the National Environmental Policy Act (May 11, 1999).

Such baseline information and analysis must be part of the EA and be subject to public review and comment under NEPA. The lack of an adequate baseline analysis fatally flaws an EA. "[O]nce a project begins, the pre-project environment becomes a thing of the past and evaluation of the project's effect becomes simply impossible." Northern Plains v. Surf. Transp. Brd., 668 F.3d 1067, 1083 (9th Cir. 2011). "[W]ithout [baseline] data, an agency cannot carefully consider information about significant environmental impacts. Thus, the agency fail[s] to consider an important aspect of the problem, resulting in an arbitrary and capricious decision." Id. at 1085.

In Idaho Conservation League v. U.S. Forest Service, 2012 WL 3758161 (D. Idaho 2012), the Idaho federal court concluded that the forest Service acted arbitrarily and capriciously by authorizing exploratory hardrock mineral drilling without fully analyzing the baseline groundwater and hydrology. Id. at \*17. Such analysis must include "a baseline hydrogeologic study to examine the existing density and extent of bedrock fractures, the hydraulic conductivity of the local geologic formations, and [measures of] the local groundwater levels to estimate groundwater flow directions." Idaho Conservation League, 2012 WL 3758161, at \*16. *See also* Shoshone-Bannock Tribes of Fort Hall Reservation v. U.S. Dept. of Interior, 2011 WL 1743656, at \*10 (D. Idaho 2011).

Here, at a minimum, prior to considering or approving any exploration, BLM must first obtain this required information and subject the information and analysis to public review and comment in a revised environmental review. This is especially critical for groundwater and surface water resources, as the EA acknowledges that drilling will likely encounter and affect groundwater – making the gathering of pre-Project baseline information critical.

The proposed action has the potential to negatively affect both surface and groundwater resources in the adjacent area. Runoff from the drill site may carry contaminants down into Last Chance Canyon. Additionally, if the drill rig does encounter groundwater before reaching the desired hole depth, drilling materials may mix with the local groundwater. Impacts from mixing are expected to be minimal, however proper mitigation measures must be taken.

There is however a potential to impact local surface and native groundwater resources in the project vicinity. The act of drilling may temporarily create a connection between surface and subsurface waters.

EA at 29-30. "The El Paso Mountains contain high-quality groundwater resources, and the local water table is known to be very close to surface elevation (<50ft) in locations nearby the project site." EA at 19. In addition, some or all of the drilling areas drain generally towards the important Last Chance Canyon ACEC and related public values. *See* EA Figures 1, 2, 3. "Surface water runoff from the surrounding hillsides is concentrated into Last Chance Canyon. Runoff from the project site would also be expected to collect and drain down into the canyon." EA at 19. Without an understanding of the groundwater resources (flow, depth, hydrology, quality, quantity, etc.) and surface water systems, it is impossible to know the extent of the Project's impacts, nor the condition of the "affected environment."

Because these resources will likely be affected, the current, pre-Project environmental conditions must be known. "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, 668 F.3d at 108(internal citations omitted) (concluding that an agency's "plans to conduct surveys and studies as part of its post-approval mitigation measures," in the absence of baseline data, indicate failure to take the requisite "hard look" at environmental impacts). This requirement applies not only to ground and surface waters, but any potentially affected resource such as air quality, recreation, soils, or wildlife.

As held by the court in Idaho Conservation League, the potential existence of future mitigation measures does not remove the duty to gather baseline information on the site-specific aspects of groundwater flow, quality and quantity, etc. (as an example of one resource).

Arguably the Project's use of a closed system drilling method, stability and sealing of the drill holes, the use of non-toxic drilling fluids, and employment of BMPS are all appropriate precautions to groundwater contamination issues. **However, there still does not appear to be any monitoring anticipated nor any baseline established upon which to conduct any monitoring of the groundwater.**

ICL, at \*16 n. 10 (emphasis added). Thus, the BLM cannot approve the PoO, or satisfy NEPA, without this required information.

## B. An EIS is needed for the Project as a Whole.

BLM cannot segment the NEPA analysis; it must look at the project as a whole. The proposed project reviewed in the EA includes only access for exploratory drilling and the 12 proposed drill holes. The EA completely fails to identify or analyze the likely affects of a large scale mining that is contemplated for this site on 6 placer claims covering "roughly" 960 acres of public lands.

BLM cannot close its eyes to the true purpose of the exploratory drilling. It is clear that the so-called exploratory drilling is intended as the first step towards mining potential gold and/or copper claims that encompass over 900 acres of public land. The Glacial Minerals' own documents state that the purpose is to develop a mine. "Glacial Minerals, Inc., holder of placer claims for the Dragonfly Claim Group, is proposing to develop a new surface mine in the El Paso Mountains area in northeastern Kern County, California on land controlled by the U.S. Bureau of Land Management (BLM)."<sup>5</sup> The company intends to move forward with a mine, this "exploratory" drilling is to evaluate the value of precious metal (gold and copper) deposits.<sup>6</sup>

The impacts such a project will have to the environmental resources of this area should be examined now in a detailed Environmental Impact Statement (EIS), before exploratory drilling is allowed. BLM should not allow the project proponent to take another step along the path to developing an environmentally destructive mine on this site before evaluating the likely impacts of that mine.

Our experience with other mines shows that mining of many different types of ore can destroy all other resources of the public lands; leaving only mine tailings and polluted water even after so-called reclamation. The small quantities of mineral likely to be found per ton of rock, indicate that full scale mining may require open-pit cyanide heap leach mining or other similarly damaging mining techniques, using bulldozers to tear up whole mountains of rock ore which are then crushed and processed using vast amounts of water and toxic chemicals to extract very small amounts of gold. This process results in devastation that can never be truly mitigated. And that is just the geologic impacts - the biological, visual, cultural, air quality and other impacts this ill-considered project will cause are equally as devastating. The area of devastation would impact scarce water resources, increase dust and air pollution in an already polluted air basis and destroyed intact soils and habitats for rare species.

As detailed further below, BLM must evaluate the likely impacts of such activities on all resources in an EJS before making a determination on the proposal.

## C. The EA Fails 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. Moreover, the EA is inadequate even for the exploratory drilling and road access alone.

<sup>5</sup> [www.meridianconsultantsllc.com/uploads/Dragonfly\\_Project\\_011113.pdf](http://www.meridianconsultantsllc.com/uploads/Dragonfly_Project_011113.pdf)

<sup>6</sup> *Id.*

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.

The EA fails to address whether this area is even appropriate for the kind of mine that is anticipated by the project proponent. The project site is located at the crossroads between five conservation areas: to the west, the Jawbone-Butterbrecht ACEC; to the north, the Last Chance Canyon ACEC, which is preserved for Native American cultural sites, and the El Paso Mountains Wilderness area; to the southwest, Red Rock Canyon State Park which encompasses unique geological features; and to the southeast, the Fremont Valley portion of the Desert Wildlife Management Area ("DWMA"), which was established to preserve, protect and recover the threatened desert tortoise. As noted above, this area has a Multiple Use Classification-Limited and Limited areas "will be managed to provide for the protection and enhancement of surface and groundwater resources" and "will be managed to protect air quality and visibility." The likely impacts from the re-designation of routes (which would be required for the use of now-closed routes in order to approve the proposed project) and then open to additional use are completely ignored as well.

Even if the BLM's limited environmental review of the exploratory drilling and road access alone were proper, which it is not, the EA is inadequate for even that narrower project. For example, the impacts of drilling on water resources and air quality are not adequately addressed in the EA even solely for the exploratory drilling because such mining practices have a long record of polluting both ground and surface waters and of causing significant impairment to air quality, more must be done to analyze these impacts.

The likely impacts of use of these public lands by heavy equipment and exploratory drilling that are not adequately disclosed or addressed include, but are not limited to:

- Impacts to wildlife;
- Impacts to native plants;
- Impacts to soils;
- Impacts to surface and groundwater resources
- Impacts to air quality;
- Impacts to nearby wilderness area ACEC, DWMA, and Red Rock State Park;
- Impacts to cultural resources;
- Impacts to both surface and ground water resources and water quality;
- Greenhouse gas emissions and impacts on global warming; and
- Consistency with Resource Management Plans.

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:

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

40 CFR § 1508.7. 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).

A cumulative impact analysis must provide a "useful analysis" that includes a detailed and quantified evaluation of cumulative impacts to allow for informed decision-making and public disclosure. Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1066 (9th Cir. 2002); Ocean Advocates v. U.S. Army Corps of Engineers, 361 F.3d 1108 1118 (9th Cir. 2004). The NEPA requirement to analyze cumulative impacts prevents agencies from undertaking a piecemeal review of environmental impacts. Earth Island Institute v. U.S. Forest Service, 351 F.3d 1291, 1306-07 (9th Cir. 2003).

The NEPA obligation to consider cumulative impacts extends to all "past," "present," and "reasonably foreseeable" future projects. Blue Mountains, 161 F.3d at 1214-15; Kern, 284 F.3d at 1076; Hall v. Norton, 266 F.3d 969, 978 (9th Cir. 2001) (finding cumulative analysis on land exchange for one development failed to consider impacts from other developments potentially subject to land exchanges); Great Basin Mine Watch v. Hankins, 456 F.3d 955, 971-974 (9th Cir. 2006)(requiring "mine-specific cumulative data" a "quantified assessment of their [other projects] combined environmental impacts," and "objective quantification of the impacts" from other existing and proposed mining operations in the region).

As the Ninth Circuit has further held:

Our cases firmly establish that a cumulative effects analysis "must be more than perfunctory; it must provide a useful analysis of the cumulative impacts of past, present, and future projects." Klamath-Siskiyou, 387 F.3d at 994 (emphasis added) (quoting Ocean Advocates v. U.S. Army Corps of Eng'rs, 361 F.3d 1108, 1128 (9th Cir.2004)). To this end, we have recently noted two critical features of a cumulative effects analysis. First, it must not only describe related projects but

also enumerate the environmental effects of those projects. See Lands Council v. Powell, 395 F.3d 1019, 1028 (9th Cir.2005) (holding a cumulative effects analysis violated NEPA because it failed to provide "adequate data of the time, place, and scale" and did not explain in detail "how different project plans and harvest methods affected the environment"). Second, it must consider the interaction of multiple activities and cannot focus exclusively on the environmental impacts of an individual project. See Klamath-Siskiyou, 387 F.3d at 996 (finding a cumulative effects analysis inadequate when "it only considers the effects of the very project at issue" and does not "take into account the combined effects that can be expected as a result of undertaking" multiple projects).

Oregon Natural Resources Council Fund v. Brong, 492 F.3d 1120, 1133 (9<sup>th</sup> Cir. 2007).

None of the "cumulative effects/impacts" discussions in the EA for the various resources and impacts contain this required quantification and other detailed reviews required by NEPA. Note that the requirement for a full cumulative impacts analysis is required in an EA, as well as in an EIS. See Te-Moak Tribe of Western Shoshone, 608 F.3d 592, 603 (9th Cir. 2010) (rejecting EA for mineral exploration that had failed to include detailed analysis of impacts from nearby proposed mining operations).

NEPA regulations also require that the agency obtain the missing "quantitative assessment" information:

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

(a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to reasoned choice among alternatives and the overall costs of obtaining it, are not exorbitant, the agency shall include the information in the environmental impact statement.

(b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:

(1) A statement that such information is incomplete or unavailable; (2) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (3) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment, and (4) the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by

credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.

40 CFR § 1502.22. "If there is 'essential' information at the plan- or site-specific development and production stage, [the agency] will be required to perform the analysis under § 1502.22(b)." Native Village of Point Hope v. Jewell, --- F.3d ----, 2014 WL 223716, \*7 (9<sup>th</sup> Cir. 2014). Here, the adverse impacts from the Project when added to other past, present or reasonably foreseeable future actions is clearly essential to the BLM's determination (and duty to ensure) that the Project complies with all legal requirements and minimizes all adverse environmental impacts.

"[W]hen the nature of the effect is reasonably foreseeable but its extent is not, we think that the agency may not simply ignore the effect. The CEQ has devised a specific procedure for 'evaluating reasonably foreseeable significant adverse effects on the human environment' when 'there is incomplete or unavailable information.' 40 C.F.R. § 1502.22." Mid States Coalition for Progress v. Surface Transportation Board, 345 F.3d 520, 549-550 (8th Cir. 2003) (emphasis in original). The BLM's failure to obtain this information, or make the necessary showings under § 1502.22, for all direct, indirect and cumulative impacts violates NEPA.

Thus, in this case, BLM must fully consider the cumulative impacts from all past, present, and reasonably foreseeable future projects in the region on, at a minimum, water and air quality including ground and surface water quantity and quality, recreation, cultural/religious, wildlife, transportation/traffic, scenic and visual resources, etc. At a minimum, this requires the agency to fully review, and subject such review to public comment in a draft EA, the cumulative impacts from all other mining, grazing, recreation, energy development, traffic, roads, ORV use, etc., in the region. The EA's failure to include these reviews violates NEPA.

#### **D. The EA fails to adequately assess impacts to native wildlife and plants**

The CDCA Plan requires that BLM consider the impacts on the habitats of sensitive species "so that impacts are avoided, mitigated, or compensated." The EA does not provide sufficient information to show that such consideration has been made. As noted above, BLM's decision to limit its review to just those resources/lands around the drilling sites violates NEPA's mandate that the impacts from the entire Project be fully analyzed.

The EA's inadequacies regarding wildlife conditions and impacts are especially problematic, as the agency conducted only one wildlife survey during one week of the year. "A biological survey to document existing conditions, map natural communities, and identify potential presence of sensitive species was conducted within the each of the drill hole areas on April 2 through April 4, 2013." EA at 20. For example, what are the wildlife conditions during other seasons of the year? Simply reviewing unspecified "databases" for additional wildlife analysis is certainly not the required "hard look" required by NEPA. Although the EA mentions that the limited wildlife survey covered a "50-foot buffer" along the access roads/routes, even if adequate (which such a limited distance is not), it apparently did not cover the ACEC portion of the Project, as discussed further below.

The proposed project site is completely within the Mojave ground squirrel ("MGS") conservation area and yet it appears that BLM did not undertake any MGS specific surveys (trapping or camera traps). EA at 21-22. The EA proposes the use of small-mesh desert tortoise fencing in order to keep MGS out of the active drilling sites as a mitigation measure without any citation to literature or expert analysis. EA at 33. This is misguided, in fact, if MGS are present the small mesh will not deter MGS from climbing over and onto the active drill sites.

The EA admits that the proposed project is within modeled habitat for the threatened desert tortoise and that four live animals were observed during the one day survey of an extremely small survey area-"5-acre buffer study area" around each of the proposed well sites in the project vicinity. EA at 21. The EA then dismisses impacts to the desert tortoise on the basis that the observed tortoise were at that time outside of the extremely truncated survey footprint. *Id.* It is unclear from the EA if protocol level surveys were done for desert tortoise even within that truncated area, and clearly protocol level surveys were *not* conducted for the project area as a whole which should include the entire claim area and adjacent lands. The presence of the threatened desert tortoise within the Project area cannot be dismissed on such a limited survey and lack of analysis. Given the average home-range of tortoise, each of the observed individuals (and others) home range could be within the arbitrary "5-acre buffer study area" around the proposed exploratory wells (even if that were an acceptable standard to use for determining likely impacts to the species, which it is not.) Further, the EA provides inadequate safeguards for tortoises (EA at 32-33), and the BLM will need to undertake site specific consultation with the US FWS before any drilling or other activities can occur because the project may affect this species and its habitat.

For burrowing owl ("BUOW") the EA states that no live animals were observed during the extremely limited biological surveys but a burrow with whitewash was documented within the "study area" for one exploratory well. EA at 22. No analysis is provided of potential impacts to this species, only a conclusory statement that "no direct impacts will occur." EA at 33. Again, it is unclear from the EA if protocol level surveys were performed but it does not appear that they were. The measures suggested to protect the burrowing owl were taken from the April 1993 guidelines<sup>7</sup> but BLM does not appear to have utilized the survey protocol and, again, has not taken into account the likely impacts from the project as a whole. The EA also fails to reference the most recent guidance for burrowing owl mitigation<sup>8</sup>.

In addition, the EA also fails to adequately identify or analyze impacts to rare plants including several California I.B plants that are also protected under California law --Red Rock Poppy, Clokey's cryptantha, creamy blazing star, Charlotte's phacelia and Red Rock Tarplant (this last is not even mentioned in the EA). Each of these are annual plants of which only one, a potential Red Rock poppy, was observed during the two day survey in April 2-4, 2013 (which was a drought year). The other rare plants that were not observed in the truncated survey area during the very short survey window may be on the site as seed and may still be affected by the proposed exploratory drilling a well as by the project as a whole. Impacts to all of these species should have been more fully identified and analyzed in the EA.

<sup>7</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83842>

<sup>8</sup> <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>

The proposed drill sites are within a BLM designated Red Mtn/EI Paso Mountains Raptor Breeding Area (W-20, COCA plan at pg. 32) which has a Special Area designation. It is identified as an area to "Control Vehicle Access", "Restrict Camping and/or Parking" and has the long term goal to "Protect, Stabilize and Enhance Values". The proposed action failed to adequately identify potential impacts to the raptor breeding area special area designation and, again, relied on minimal surveys to determine presence of raptors such as golden eagle and prairie falcon. The EA provides virtually no analysis of potential impacts to raptors and relies on a conclusory statement that "if drilling is conducted during nesting season, indirect impacts to nearby nesting birds may occur from human presence, noise, and vibrations." EA at 31. The EA also failed to require seasonal limits to activities associated with exploratory drilling and access to protect the important breeding habitat and behaviors. Rather the EA states only that "if possible" work will be conducted outside the nesting season and again relies on the very truncated action area for any mitigation measures. Clearly, the mining proposal is also at odds with the goals for this Special Area and these factors should have been considered but were not.

E. The EA fails to adequately assess impacts to both surface and ground water resources and water quality.

The EA fails to adequately assess impacts to both surface and ground water resources and water quality. The impacts to precious groundwater in the arid western Mojave Desert are inadequately evaluated in the EA, even looking only at the exploratory drilling, because data on the baseline conditions are not provided regarding the groundwater. The EA admits that this area contains high quality ground water resources and that the water table is known to be close to the surface. EA at 19. The EA admits that the project may negatively affect both surface and ground water but provides no analysis of those likely impacts. *See* EA at 29. The EA admits that if a drill rig encounters ground water it could mix drilling materials (of undisclosed type) with ground water but simply concludes such impacts would be "minimal." EA at 29. The proffered "mitigation measures" water quality are extremely vague and general, rendering them seriously deficient to protect the resources of these public lands. EA at 30. Moreover, the proposed mining, and even the exploratory drilling alone, may have significant impacts on surface water resources and water quality by increasing dust and silt that will be carried down-grade during rainfall events and impacts to soils may also increase the runoff in this area. These potential impacts are dismissed without the needed analysis. Because the EA failed to properly identify or analyze these issues it is inadequate.

F. The EA fails to adequately assess impacts to Soils and Air Quality

The EA's perfunctory treatment of air quality and dust does not even mention the impacts that mining this site will have on soils and air quality particularly from the project as a whole which could include strip mining common to heap leach gold mines is inadequate. Moreover, the EA admits soils could be affected far off the site, and that even the exploratory drilling alone will likely adversely affect the adjacent ACEC and the Canyon. "Surface water runoff from the surrounding hillsides is concentrated into Last Chance Canyon. Runoff from the project site would also be expected to collect and drain down into the canyon." EA at 19. But without meaningful analysis, the EA nonetheless concludes that all negative effects to soils will be prevented. EA at 30.

Just the exploratory drilling alone will bring heavy equipment into the site and other vehicle traffic that will stir dust and impair air quality-the EA's conclusion that the impacts to air quality will be "minimal" (EA at 29) is unsupported. Moreover, the EA completely fails to address likely impacts to air quality from the project as a whole which could destroy surface soil stability over a large area and significantly contribute to local air quality impairment. Similarly the EA's conclusion that the project use of vehicles and other equipment would not significantly contribute to GHGs is unsupported and wholly ignores GHG contributions from operation of a mine and processing of ores.

G. The EA fails to adequately assess impacts to cultural resources and the Last Chance ACEC.

The EA admits that BLM did not review any of the impacts to, and thus failed to protect or mitigate against the impacts from, the Project and related operations on the Last Chance Canyon Area of Critical Environmental Concern (ACEC). EA at 17 (stating that the "reason [the ACEC was] not carried forward for analysis" was because: "The proposed action is outside the boundaries of any ACEC."). *See also* EA Figure 1: "Generalized location of the Dragonfly exploration drilling project. The area is near, but outside the Last Chance Canyon Area of Critical Environmental Concern."

Thus, the EA is based on BLM's view that only the direct activities occurring on the Dragonfly claims need be analyzed in the EA, or protected under FLPMA. Such a truncated view of its duties under NEPA and FLPMA is legally and factually wrong. Under BLM mining regulations, all aspects of the reviewed and approved Project are considered "operations" that must be covered by the PoO and reviewed under NEPA.

*Operations* means **all functions, work, facilities, and activities on public lands in connection with prospecting, exploration,** discovery and assessment work, development, extraction, and processing of mineral deposits locatable under the mining laws; reclamation of disturbed areas; and all other reasonably incident uses, **whether on a mining claim or not, including** the construction of roads, transmission lines, pipelines, and other **means of access across public lands** for support facilities.

43 CFR § 3809.5 (emphasis added).

Here, the northwest access route (labeled P-15 in the EA), will either cross through or be adjacent to, the ACEC. *See* EA Figures 1, 2, 3. *See also* attached Travel Management maps. The BLM cannot simply ignore its duties because the drilling itself will not occur in or adjacent to the ACEC. In addition, the drilling itself will likely adversely affect the ACEC and Canyon. "Surface water runoff from the surrounding hillsides is concentrated into Last Chance Canyon. Runoff from the project site would also be expected to collect and drain down into the canyon." EA at 19.

At a minimum, under FLPMA, BLM must meet all prescriptive mitigation and protection requirements regarding ACECs. This includes considering locating the access route away from the ACEC (also a reasonable alternative that should have been fully reviewed under NEPA), as well as the imposition of mitigation measures.

Under NEPA, the agency is required to fully review all potential impacts to this important, and formally designated, public resource. Even if the access route did not cross the ACEC (which does not appear to be the case), impacts to visual, noise, wildlife, scenery, etc., would occur by the traffic and related activities on the access route adjacent to the ACEC. As detailed below, such direct, indirect, and cumulative impacts to these resources must be fully reviewed under NEPA.

As the Interior Department acknowledged when it promulgated the Part 3809 regulations, mining impacts occur outside the immediately used lands and thus must be fully considered:

BLM's authority is to take any action necessary to prevent unnecessary or undue degradation to public lands. **This includes lands within and outside of the project area. However, it should be noted that impacts from mining operations and many other activities on public lands cannot be confined exclusively to the area of direct surface disturbance. Impacts to many resources transcend the direct disturbance boundary due to the nature of the effect.** Visual impacts can often be seen for miles. Noise from operations can be heard a good distance from the project area. Wildlife may be displaced. Impacts to such resources as water and air will extend beyond the immediate disturbance due to the establishment of compliance points and mixing zones by other regulatory agencies. Due to the nature of mining, these situations will occur even with model operations that are in compliance with all applicable laws and regulations.

65 Fed. Reg. 69998, 70045 (Nov. 21, 2000) (emphasis added). Thus, the revised environmental review must fully consider the impacts to the ACEC from the truck traffic and other Project operations, and protect all ACEC resources from those impacts.

#### **H. The EA fails to adequately address impacts to the adjacent DWMA, State Park, and Wilderness or to Visual Resources**

The proposed mine would be sited on public lands located at the crossroads between five conservation areas: to the west, the Jawbone-Butterbrecht ACEC; to the north, the Last Chance Canyon ACEC, which is preserved for Native American cultural sites, and the El Paso Mountains Wilderness area; to the southwest, Red Rock Canyon State Park which encompasses unique geological features; and to the southeast, the Fremont Valley portion of the Desert Wildlife Management Area ("DWMA"), which was established to preserve, protect and recover the threatened desert tortoise. The EA does not address the impacts of the proposed project on these areas and the resources they protect. The EA does not even accurately assess the impacts of the re-opened roads or exploratory drilling alone on the conservation and wilderness values of

these adjacent areas, and completely ignores the impacts of the project as a whole on those values as well as habitat connectivity and landscape intactness.

In addition, the mine site is adjacent to the border of Red Rock Canyon State Park and would be visible from the park, access roads, and nearby wilderness areas. The project is likely to impair the visual resources of the State Park and wilderness area.

### **III. THE EA FAILS TO INCLUDE AN ADEQUATE MITIGATION PLAN AS REQUIRED BY NEPA**

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(t); and (2) "include discussions of: . . . Means to mitigate adverse environmental impacts (if not already covered under 1502.14(t))." 40 CFR § 1502.16(h). 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. §§1508.20(a)-(e). "(O)mission of a reasonably complete discussion of possible mitigation measures would undermine the 'action-forcing' function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the adverse effects." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 353 (1989).

NEPA requires that the agency discuss mitigation measures, with "sufficient detail to ensure that environmental consequences have been fairly evaluated." Methow Valley, 490 U.S. at 352, 109 S.Ct. 1835.

An essential component of a reasonably complete mitigation discussion is an assessment of whether the proposed mitigation measures can be effective. Compare Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372, 1381 (9th Cir.1998) (disproving 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, 109 S.Ct. 1835(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)(emphasis added)(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").

Here, the EA either fails to adequately discuss mitigation at all, or if it does, fails to analyze the effectiveness of each mitigation measure. Simply listing, or briefly mentioning, mitigation measures violates NEPA. Because the EA fails to discuss how likely proposed or required mitigation measures are to reduce impacts as well as any environmental impacts from any mitigation measure, it violates NEPA. The environmental review must correct these errors.

#### IV. THE EA FAILS TO 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 § 1508.9(b). 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 (9<sup>th</sup> Cir. 1990). The alternatives analysis - is considered the heart of a NEPA analysis. 40 C.F.R. § 1502.14. The alternatives analysis should present the environmental impacts in comparative form, thus sharply defining important issues and providing the public and the decisionmaker with a clear basis for choice. *Id.* The lead agency must "rigorously explore and objectively evaluate all reasonable alternatives" including alternatives that are "not within the [lead agency's] jurisdiction." *Id.*

Even if an EA leads to a FONSI, it is essential for the agency to consider all reasonable alternatives to the proposed action. One of the Ninth Circuit's leading EA/alternatives decisions states:

NEPA requires that federal agencies consider alternatives to recommended actions whenever those actions "involve( ) unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(2)(E) (1982). The goal of the statute is to ensure "that federal agencies infuse in project planning a thorough consideration of environmental values." The consideration of alternatives requirement furthers that goal by guaranteeing that agency decisionmakers "[have] before [them] and take [ ] into proper account all possible approaches to a particular, project (including total abandonment of the project ) which would alter the environmental impact and the cost-benefit balance." NEPA's requirement that alternatives be studied, developed, and described both guides the substance of environmental decisionmaking and provides evidence that the mandated decisionmaking process has actually taken place. Informed and meaningful consideration of alternatives--including the no action alternative-- is thus an integral part of the statutory scheme.

Moreover, consideration of alternatives is critical to the goals of NEPA even where a proposed action does not trigger the EIS process. This is reflected in the structure of the statute: while an EIS must also include alternatives to the proposed action, 42 U.S.C. § 4332(2)(C)(iii) (1982), the consideration of alternatives requirement is contained in a separate subsection of the statute and therefore constitutes an independent requirement. See *id.* § 4332(2)(E). The language and effect of the two subsections also indicate that the consideration of alternatives requirement is of wider scope than the EIS requirement. The former

applies whenever an action involves conflicts, while the latter does not come into play unless the action will have significant environmental effects. An EIS is required where there has been an irretrievable commitment of resources; but unresolved conflicts as to the proper use of available resources may exist well before that point. Thus the consideration of alternatives requirement is both independent of, and broader than, the EIS requirement.

Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1228-1229 (9th Cir. 1988) (citations omitted, emphasis in original). "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 revised environmental review must consider, at a minimum, the following reasonable alternatives: (1) approval of only the baseline-gathering activities; (2) access to each drill location on only Open routes designated in the West Mojave Plan and COCA Plan (as amended); (3) use of helicopter access for drilling operations (i.e., no roads/land routes); (4) avoidance of the access route through or near the ACEC and/or Wilderness Area; and (5) limitations on Project operations to protect wildlife, cultural/historic resources, and ground/surface waters as noted herein.

#### V. THE BLM FAILED TO PREVENT UNNECESSARY OR UNDUE DEGRADATION TO 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 supercedes the Mining Law." Mineral Policy Center, 292 F.Supp.2d at 42. "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.* 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: (I) approving or rejecting individual mining plans of operation." *Id.* at 645, quoting Mineral Policy Center, 292 F.Supp.2d at 44. See also 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."). One of the required 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).

According to the national policy of the Interior Department/BLM, failure to require mitigation that would reduce adverse Project Impacts constitutes UUD. "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) (emphasis added).

Here, the EA does not impose mitigation measures that will eliminate or substantially reduce all of the potential impacts from the Project. As one example, as noted above, the EA imposes no mitigation at all for the impacts to the ACEC (or Wilderness Area). Further, as noted above, the failure to obtain any baseline data for critical resources such as groundwater that will be impacted renders any finding that these resources will not be adversely affected unsupportable.

For wildlife, the EA admits the presence of threatened and sensitive species, yet little if any mitigation to prevent impacts is required. For example, for the designated Sensitive Species of Burrowing Owl, "an empty burrowing owl burrow, which showed sign of presence with evidence of white wash (i.e., scat) and owl pellets, was observed within the Drilling Location 9 study area." EA at 22. In order to protect this species and meet its FLPMA requirements, the BLM should have precluded any activity at (and access to) Drilling Location 9.

The EA acknowledges the likelihood of additional Sensitive Species and habitat in the area:

Other sensitive wildlife species with potential to occur within the Dragonfly Claim Group include: golden eagle (*Aquila chrysaetos*), prairie falcon (*Falco mexicanus*), loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), and American badger (*Taxidea taxus*). Foraging habitat for the golden eagle, prairie falcon, pallid bat, Townsend's big-eared bat, and spotted bat occurs on-site; however, no nesting or roosting habitat for these species was identified within the Dragonfly Claim Group. None of these sensitive species were observed during the biological survey. However, due to the presence of suitable habitat within the Dragonfly Claim Group, these species potentially occur within the drill hole study areas.

EA at 22. Despite this, no additional surveys were conducted, nor any mitigation measures imposed to protect the habitat of these Species. In addition, the EA's continual and limited focus of analysis on only "within the Dragonfly Claim Group" improperly truncates its NEPA review duties, as noted herein.

As part of its duties to prevent UUD and irreparable harm to public land resources under FLPMA, BLM has established a national policy to protect designated Sensitive Species.

The objectives of the BLM special status species policy are:

A. To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species.

B. To initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA.

U.S. Dep't of the Interior BLM. Special Status Species Mgmt. Manual 6840 at 3 (2008) ("Special Status Species Manual"). BLM has specifically acknowledged its duty to safeguard the public's interest in protecting Sensitive Species:

It is in the interest of the BLM to undertake conservation actions for such species before listing is warranted. It is also in the interest of the public for the BLM to undertake conservation actions to improve status of Sensitive Species so sensitive recognition is no longer warranted. By doing so, BLM will have greater flexibility in managing public lands to accomplish native species conservation objectives and other legal mandates.

In compliance with existing laws, including the BLM multiple use mission as specified in the FLPMA, the BLM shall designate Bureau sensitive species and implement measures to conserve these species and their habitats, including ESA proposed critical habitat, to promote their conservation and reduce the likelihood and need for such species to be listed pursuant to the ESA.

Special Status Species Manual at 36. In approving the Project, BLM failed to meet these requirements and as such, failed to meet the protective requirements of FLPMA.

In addition, as held by the IBLA, failure to conduct a proper NEPA analysis, including reviewing off-site impacts and impacts to the ACEC, violates not only NEPA, but the UUD standard:

**Like NEPA, the [UUDJ definition requires BLM to consider the nature and extent of surface disturbances resulting from a proposed operation and environmental impacts on resources and lands outside the area of operations. Kendall's Concerned Area Residents, 129 IBLA 130, 140-41 (1994); Nez Perce Tribal Executive Committee, 120 IBLA 34, 36 (1991); see Sierra Club v. Hodel, 848 F.2d 1068, 1078, 1091 CIOth Cir.1988) (nondegradation duty is mandatory). ... [M]ost disturbed land at the mine sites is public land and other public land is adjacent to them. **To the extent BLM failed to meet its obligations under NEPA, it also failed to protect public lands from unnecessary or undue degradation.****

Island Mountain Protectors, 144 IBLA 168, 202, 1998 WL 344223, \* 28 (I.B.L.A.)(internal citations omitted, emphasis added).

## VI. FAILURE TO COMPLY WITH THE NATIONAL HISTORIC PRESERVATION ACT(NHPA)

The EA admits that portions of the Project area are listed, or eligible to be listed, on the National Register of Historic Sites under the NHPA.

The Dragonfly Claim Group is situated within the boundaries of the Last Chance Canyon Archaeological District (LCCAD). This resource, P-15-008676, has an NRHP status code of IS, indicating this resource is listed on the National Register

by the Keeper. It is also listed on the California Register of Historical Resources (CRHR). The NRHP Nomination Form dated 1971 indicates that the LCCAD is significant for its prehistoric and historic aboriginal occupation, extending from the Pleistocene to the 1870s (Apostolides 1971).

EA at 22. Despite this, little mitigation or protection requirements are included or reviewed.

Regarding the adverse impact to Native American religious and cultural concerns, the EA admits that:

Responses received from consulted Tribal government representatives and members to date indicate that all of the sites within the project area are considered sacred and should be treated as such; that resources should be avoided regardless of NRHP eligibility; that burials should be avoided; and that the BLM should endeavor to protection and preservation of resources for generations to come.

EA at 25. Despite this, the EA admits that consultation with Tribes under the NHPA has not yet been completed. "Consultation will be on-going for this project." EA at 25. It is a violation of the NHPA and NEPA to complete the EA before consultation and a complete review of cultural/historical resources has been completed.

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

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

Under the NHPA, a federal agency must make a reasonable and good faith effort to identify historic properties, 36 C.F.R. § 800.4(b); determine whether identified properties are eligible for listing on the National Register based on criteria in 36 C.F.R. § 60.4; assess the effects of the undertaking on any eligible historic properties found, 36 C.F.R. §§ 800.4(c), 800.5, 800.9(a); determine whether the effect will be adverse, 36 C.F.R. §§ 800.5(c), 800.9(b); and avoid or mitigate any adverse effects, 36 C.F.R. §§ 800.8[c], 800.9(c). The [federal agency] must confer with the State Historic Preservation Officer ("SHPO") and seek the approval of the Advisory Council on Historic Preservation ("Council").

Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800, 805 (9th Cir. 1999). *See also* 36 CFR § 800.8(c)(1)(v)(agency must "[d]evelop in consultation with identified consulting parties alternatives and proposed measures that might avoid, minimize or mitigate any adverse effects of the undertaking on historic properties and describe them in the EA.")

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

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

If an undertaking is the type that "may affect" an eligible site, the agency must make a reasonable and good faith effort to seek information from consulting parties, other members of the public, and Native American tribes to identify historic properties in the area of potential effect. *See* 36 CFR § 800.4(d)(2). *See also Pueblo of Sandia*, 50 F.3d at 859-863 (agency failed to make reasonable and good faith effort to identify historic properties). Consultation "must be initiated early in the undertaking's planning, so that a broad range of alternatives may be considered during the planning process for the undertaking." *Pit River Tribe v. U.S. Forest Service*, 469 F.3d 768, 787 (9th Cir. 2006).

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

The NHPA requires that consultation with Indian tribes "recognize the government-to-government relationship between the Federal Government and Indian tribes." 36 CFR § 800.2(c)(2)(ii)(C). *See also* Presidential Executive Memorandum entitled "Government-to-Government Relations with Native American Tribal Governments" (April 29, 1994), 59 Fed.

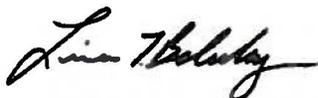
Reg. 22951, and Presidential Executive Order 13007, "Indian Sacred Sites" (May 24, 1996), 61 Fed. Reg. 26771.

Here, the agency's failure to complete consultation prior to completing the NEPA process violates both NEPA and the NHPA and these other requirements. In addition, due to the likely destruction of archeological and grave resources, the failure to protect the Sacred Site and Native American religious and cultural uses at the Site also violates: (1) the American Indian Religious Freedom Act (AIFRA), 42 U.S.C. 1996 et seq.; (2) the Archaeological Resources Protection Act (ARPA), 16 U.S.C. 470aa-mm; and (3) the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001 et seq.

## VII. CONCLUSION

We appreciate the opportunity to comment on this Draft EA for the proposed Project. As discussed above, we believe the environmental review must be significantly improved in order to comply with governing law and should be re-issued for additional public comment before the Project proceeds or any final decision is reached. Rather than prepare a revised EA, the agency should proceed to prepare the needed Draft EIS under NEPA. Please continue to include the commenting groups as interested parties and provide all future public notices and documents to me at the address below.

Sincerely,



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Dave Singleton, Native American Heritage Commission, [nahc@nahc.ca.gov](mailto:nahc@nahc.ca.gov)

Attachment 1: Comments to BLM re; Dragonfly Mine Proposal, 6,039 (on CO-Rom disc via U.S. Mail)





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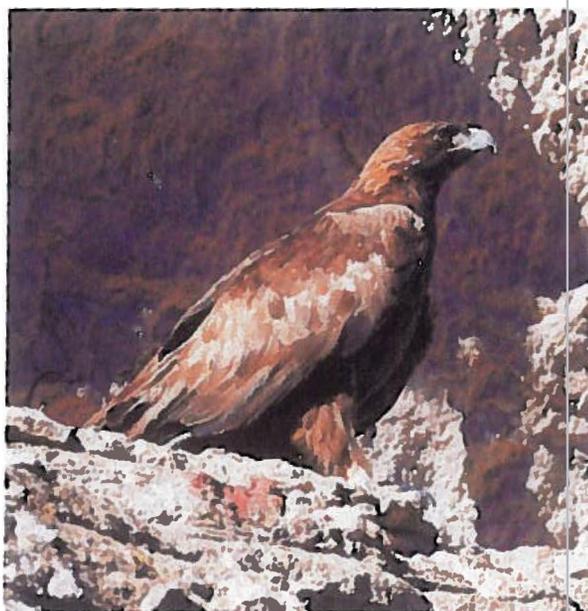
Dear

Exploratory mining near the Mojave Desert's Last Chance Canyon could soon hurt vulnerable wildlife, vanishing plants and precious habitat.

A proposed gold mine on public land may soon be approved by the Bureau of Land Management, and we need your help to stop it.

Unfortunately the BLM hasn't adequately addressed the ways this mine will affect imperiled and endangered species. The area is home to threatened desert tortoises, three species of rare bats and a number of sensitive birds; it's a breeding ground for burrowing owls, golden eagles and prairie falcons. And four wildflowers that are only found in the western Mojave Desert grow in the proposed mine site.

Please act now to urge the agency to reject the mine and protect the Mojave Desert's rare and beautiful creatures.



[Click here to take action and get more information.](#)

If you can't open the link, go to [http://action.biologicaldiversity.org/oldia/action3/commentout/7/action\\_KEY=15782](http://action.biologicaldiversity.org/oldia/action3/commentout/7/action_KEY=15782)

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Photo of golden eagle (c) Robin Silver.

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1-866-357-3349



Porter, Randall <rporter@blm.gov>

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## Reject Exploratory Drilling on the Dragonfly Placer Claims

1 message

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Elena S\_\_\_\_leva <xxxxxxxxxxxx@yandex.ru>  
Reply-To: xxxxxxxxxxxx@yandex.ru  
To: rporter@blm.gov

Thu, Jun 12, 2014 at 11:18 PM

Dear Mr. Randall Porter,

The Dragonfly Placer Claims are located in a special area of the El Paso Mountains of the western Mojave Desert that is inappropriate for mining exploration. Located wholly inside the Mohave ground squirrel conservation area, and adjacent to the Last Chance and Jawbone-Butterbred areas of critical environmental concern and the Fremont Valley portion of the Desert Wildlife Management Area, as well as the El Paso Mountains wilderness and Red Rock Canyon State Park, this area should be left alone to conserve the irreplaceable natural and cultural resources the BLM has previously designated for protection.

This area is also home to threatened desert tortoises and Mohave ground squirrels, golden eagles, and a variety of other rare animals and plants. The Bureau should not allow exploratory drilling to threaten the area's valuable habitat for these rare plants and animals. The environmental assessment fails to adequately evaluate impacts of the proposal -- including inconsistency with current planning, harms to wildlife, or the threat to groundwater (a critical resource in the Mojave).

Therefore I urge the BLM to prepare a full environmental impact statement for this proposal and to disapprove the plan for exploratory drilling on the Dragonfly Claims as proposed in the environmental assessment (DOI-BLM-CA-DOS0-2014-014-EA).

Elena S\_\_\_\_leva  
Socialist  
Yekaterinburg, ot 62008  
RU