



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, California 93555
(760) 384-5400

FINDING OF NO SIGNIFICANT IMPACT ENVIRONMENTAL ASSESSMENT DOI-BLM-CA-D050-2014-014-EA

For the
Exploratory Drilling of the Dragonfly Placer Claims

Introduction:

The Bureau of Land Management has conducted an environmental assessment (DOI-BLM-CA-D050-2014-014-EA) to analyze the potential effect(s) of authorizing Glacial Minerals Inc. to drill and sample unpatented placer claims on public lands classified for Limited Use in the El Paso Mountains, Kern County, California. The proposed action includes authorizing a truck-mounted drilling rig to access twelve sites by routes designated “open” and “unknown” on BLM’s travel management area maps.

Plan Conformance and Consistency:

The proposed action, including usage of routes designated “unknown” by the current travel management system, is consistent with the California Desert Conservation Area Management of 1980 and the Western Mojave Management Plan (Record of Decision March 2006) because:

- BLM management plans provide that limited use lands are open to mineral exploration subject to compliance with and authorization under Surface Management regulations 43 CFR 3809 (Table 1 of CDCA Management Plan).
- The Western Mojave Plan ([WEMO](#)) contains a treatment of BLM’s motorized vehicle access network in the California Desert and BLM’s need to conform with Federal Regulation 43 CFR 8342.1 (governing off-road vehicles). Federal regulations define an *Off Road Vehicle* as any motorized vehicle capable of travel on or over land, excluding any vehicle whose use is expressly authorized by the BLM authorized officer ([43 CFR 8340.0-7\(a\)\(3\)](#)). The proposed action is not subject to the regulations governing off-road vehicles.
- While the proposed action includes routes designated “unknown” on BLM travel management area maps, none are designated “closed” (reference the Dove Springs and Garlock maps at http://www.blm.gov/ca/st/en/fo/cdd/west_mojave_wemo/WEMO_TMA_Maps.html).

I determine the proposed action is, therefore, subject to 43 CFR 3809 and excluded from the land-use requirements governing off-road vehicles on public land routes (43 CFR 8340).

Finding of No Significant Impact:

Based on a review of the Environmental Assessment and supporting referenced documents, I have determined the project is not a major federal action and will not have a significant effect on the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27 and none exceed those effects as described in the California Desert Conservation Area Management Plan of 1980, or the Western Mojave Management Plan, Record of Decision March 2006. An environmental impact statement is not required and will not be prepared. This finding is based on the context and intensity of the project as described below.

Context:

This project is localized with implications only for the immediate area. The impacts associated with this project are short-term and local, and are not likely in and of itself to have international, national, regional or state-wide impacts. Glacial Minerals, Inc. requests BLM's authorization to drill twelve locations on public lands within the El Paso Mountains of eastern Kern County, California. The drilling locations are on the Dragonfly 1-4, and the Solder Top unpatented placer claims. These claims are outside, but within a mile of the Last Chance Canyon Area of Critical Environmental Concern and outside, but within two miles of Red Rock Canyon State Park. This authorization allows Glacial Minerals, Inc. to drill, gather subsurface data and samples, then plug and reclaim the affected sites.

Intensity:**1. Impacts may be both beneficial and adverse.**

- The proposed action may have temporary or minor effect to resources as described in the Environmental Assessment. The proponent has incorporated measures to reduce or mitigate impacts into the proposed action, with further stipulations recommended by BLM in Chapter 4 (Affected Environment Analysis).
- Drilling is the best method to obtain direct, observable baseline samples for subsurface mineral resources, groundwater resources, materials and geology.
- The environmental assessment states how each site will have a maximum drilling depth of 165 feet, portrays the approximate baseline elevations of drilling locations, and shows the relative elevation(s) for the floor of Last Chance Canyon (elevations disclosed in Figure 2 of the EA). These show that many of the holes will terminate before drilling reaches the elevation for the floor of Last Chance Canyon or water beneath. As the disclosed 'Trusonic' drilling system does not primarily rely on mud, the risk of introducing toxic drilling muds into groundwater is not deemed significant.
- The project is disclosed to involve placer, rather than lode claims (Lodes are mineral deposits contained between distinct layers of rock in place. Placers include all other deposits, but especially deposits concentrated by sedimentary processes). The present mineral rights thus extend no deeper than the thickness of placer deposits. Drilling is expected to cease upon confirming the total depth of placer materials, even if less than 165 feet. No injection or production of water is proposed. The proposed action provides that if any water is encountered, bentonite chips (a commonly accepted sealant) will be placed from the bottom of hole to a point above water level. For all these reasons, the likelihood of water intermingling between bedrock and alluvium is considered less than significant.

2. The degree to which the selected alternative will affect public health or safety.

- Recreational access to some designated open routes may be temporarily affected, but the area involved also contains alternate open routes. As recreational motor vehicle use is barred on unknown/undesigned routes, the operator's occupancy of such routes will have no impact on recreational vehicle use.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farm lands, wetlands, wilderness, wild and scenic rivers, or ecologically critical areas.

- The action has no effect to any prime farm land, wetland, wilderness, lands having wilderness characteristics, wild/scenic rivers, or designated critical habitat for any species listed as endangered or threatened under the Federal Endangered Species Act.
- The action is within the Last Chance Canyon Archaeological District. The area of potential effect has been surveyed and assessed in keeping with the [Statewide Heritage Protocol Agreement](http://www.blm.gov/ca/st/en/prog/archcult.html) of February 2014 (available at <http://www.blm.gov/ca/st/en/prog/archcult.html>). No adverse effect is expected from this action, and all necessary steps have been taken to identify, record and determine effects on cultural resources with the area of potential effect. BLM is in compliance with Section 106 of the National Historic Preservation Act.
- BLM Open Route EP-15 provides general public access between State Highway 14 and the Dragonfly drilling area, passing through the Last Chance Canyon Area of Critical Environmental Concern (ACEC) and the northeast portion of Red Rock Canyon State Park. No impacts to either are expected from usage of EP-15 above those described in the WEMO Environmental Impact Statement.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

- BLM received several expressions of opposition to the project, including approximately 4400 substantially identical emails stating the area should be left alone. "Highly controversial" in the context of 40 CFR 1508.27(b) (4) refers to substantial disagreement within the scientific community about the environmental effects of the proposed action. It does not refer to expressions of opposition, or support, or to differences of opinion concerning how public lands should be managed.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

- The proposed drilling program is not unique or unusual. The effects to the human environment are fully analyzed and disclosed in this environmental assessment. No unique or unknown risks are identified by this assessment.

- The likely effects of the proposed action to air quality, greenhouse gas emissions, soil, water, wildlife (including raptors), heritage resources, Native American values, recreation, visual resources, and range are adequately disclosed in the Environmental Analysis chapter of this EA. No unique, unusual or unknown risks to these resources are identified by this assessment.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

- Drilling will provide further useful baseline data on subsurface resources. Such data might prove useful for future development of water resources, or determining whether large-scale mineral development is, or is not, a reasonable foreseeable development.
- NEPA limits consideration to future actions that are reasonably foreseeable, not merely possible. Reasonably foreseeable actions are those for which there are existing decisions, funding, formal proposals, or which are highly probable based on known opportunities or trends, but not simple speculation. The approval of this exploration project involves no precedent or decision in principle regarding the value, validity or likelihood of development for these placer claims.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.

- A number of unpatented mining claims are located in nearby portions of the El Paso Mountains, including BLM parcels in eastern portions of Red Rock Canyon State Park. Roughly 35 claims unrelated to the Dragonfly operation lie within one mile of the proposed drilling project, and roughly 68 claims unrelated to the Dragonfly operation within two miles of this drilling project. Some of these claims are affiliated with authorized plans of operation, or are pending approval.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

- The action is within the Last Chance Canyon Archaeological District. The area of potential effect has been surveyed and assessed in keeping with the [Statewide Heritage Protocol Agreement](#) of February 2014. No adverse effect is expected from this action, and all necessary steps have been taken to identify, record and determine effects on cultural resources with the area of potential effect. BLM is in compliance with Section 106 of the National Historic Preservation Act.
- Geologic maps (referenced in Section 3.7 of the EA) show the area of potential effect is composed largely of Quaternary Alluvium and, in some areas, exposures of the lower part of the Goler Formation. Small amounts of vertebrate fossils have been found and collected in the upper member(s) of the Goler Formation exposed elsewhere in the El Paso Mountains. BLM is not aware of any significant fossils having been collected in the lower portion of the Goler Formation exposed in this area.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, or the degree to which the action may adversely affect: 1) a proposed to be listed endangered or threatened species or its habitat, or; 2) a species on BLM's sensitive species list.

- The area is not within designated critical habitat for any species listed as threatened or endangered under the Endangered Species Act. The placer claims lie within desert tortoise habitat, but the proposed action includes field protocols for a biological monitor, tortoise exclusion fences, and other means to mitigate or minimize any risk to these reptiles. Drilling is on previously disturbed dirt roads and thus has no measurable impact to habitat for any threatened or special status species. Human presence and noise may temporarily disturb members of some species on BLM's sensitive species list while the operation is in progress. The noise of drilling will cease when the operation ends. The human presence is deemed less than significant in comparison with BLM's estimate of 58,000 recreational use visits to the El Paso management area during fiscal year 2013.

10. Whether the action threatens violation of a federal, state, local, or tribal law, regulation or policy imposed for the protection of the environment, where non-federal requirements are consistent with federal requirements.

- All operations authorized by Surface Management regulations, including this proposed action, are required to be conducted in a manner that complies with all pertinent Federal and state laws (43 CFR 3809.420(a)(6)). BLM has not been informed this action threatens violation of any tribal law.

/s/ Carl B. Symons

11/26/2014

Carl Symons
Ridgecrest Field Manager

Date