

**United States Department of the Interior  
Bureau of Land Management**

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**Finding of No Significant Impact  
Environmental Assessment  
DOI-BLM-UT-W020-2011-015-EA**

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**AUGUST 2011**

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**Sevier Dry Lake Exploratory Testing**

***Location:* Millard County, Utah**

***Applicant/Address:* Bureau of Land Management, Utah State Office**

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**FINDING OF NO SIGNIFICANT IMPACT**  
**Environmental Assessment**  
**DOI-BLM-UT-W020-2011-015-EA**  
**Sevier Dry Lake Exploratory Testing**

**INTRODUCTION:**

The Bureau of Land Management (BLM) has conducted an environmental analysis (DOI-BLM-UT-W020-2011-015-EA) for a proposed action to allow exploratory testing on Sevier Dry Lake in Millard County, Utah. The proposed action is based on the Sevier Dry Lake Exploratory Testing Plan which was submitted to the BLM on June 6, 2011. In February 2011, the BLM published an EA (DOI-BLM-UT-W020-2010-014-EA; Leasing EA) disclosing and analyzing the environmental consequences of its Sevier Lake Competitive Potash Leasing Proposal. A portion of the lease sale was awarded to Peak Minerals, Inc. (Peak Minerals) on June 2, 2011.

The Sevier Lake project area is a large “Dry” lake bed, and has been shown to contain potassium-bearing saline brines. The brine resource, along with the meteorological and topographic conditions found at Sevier Dry Lake, make the site a viable location from which to produce potassium and associated minerals (BLM 1987). Potash is the name for a variety of mined and manufactured salts – all containing the element potassium in water-soluble form (USGS 2010).

Peak Minerals has submitted the Sevier Dry Lake Exploratory Testing Plan which proposes three activities as part of the exploratory phase of development: Confirmation of Brine Resource, Hydrology Analysis, and a Screening-Level Geotechnical Study. First, Peak Minerals would conduct proposed brine resource confirmation sampling to develop a better understanding of the distribution of dissolved salts in groundwater occurring within the Sevier Lake potassium lease. Second, Peak Minerals would collect baseline hydrologic data for future use in evaluating potential hydrologic impacts that could result from brine removal and freshwater extraction for potential future project operations. Third, Peak Minerals would conduct a screening-level geotechnical study to assess the conceptual design and feasibility of structures that would be built to support the operation of a potash facility.

EA# DOI-BLM-UT-W020-2011-015-EA is attached and is incorporated by reference for this Finding of No Significant Impact (FONSI). A no action alternative and the Proposed Action (also referred to as selected alternative) were analyzed in the EA.

**FINDING OF NO SIGNIFICANT IMPACT:**

Based upon a review of the EA and the supporting documents, I have determined that the Proposed Action is not a major federal action and would not significantly affect 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 do not exceed those effects described in the Warm Springs RMP/FEIS. Therefore, an environmental impact statement is not needed.

This finding is based on the context and intensity of the project as described:

**Context:** The Sevier Dry Lake Exploratory project is a site-specific action. The majority of the exploration work (Confirmation of Brine Resources and Screening-Level Geotechnical Study) would be confined to the leased parcels which directly involves approximately 95,172 acres of BLM administered land that by itself does not have international, national, regional, or state-wide importance. The remaining exploration activities (Hydrology Analysis) would be located partially within lease and include additional sites outside of the leased parcels which would directly involve less than approximately 5 acres of BLM administered land that by itself does not have international, national, regional, or state-wide importance.

The Sevier Dry Lake is a large “Dry” lake bed, where waters entering the basin from surrounding groundwater aquifers and on rare occasions from the Sevier River evaporate into the atmosphere or infiltrate into the playa. The Sevier Dry Lake is within the Basin and Range Physiographic Province, which is noted for numerous north-south oriented mountain ranges separated by broad, flat valley floors. Cultural Resources, Water Resources, and Wildlife were identified for analysis of cumulative impacts in the EA. The potential impacts were determined to be negligible or not significantly different than those currently occurring.

**Intensity:** The following discussion is organized around the Ten Significance Criteria described in 40 CFR 1508.27 and incorporated into resources and issues considered (includes supplemental authorities Appendix 1 H-1790-1) and supplemental Instruction Memorandum, Acts, regulations and Executive Orders.

The following have been considered in evaluating intensity for this proposal:

- 1. Impacts may be both beneficial and adverse.** The proposed action could have potential impact to resources as described in the EA. Mitigating measures or Environmental Protection Measures to reduce impacts to Wildlife, Fire/Fuels, Cultural Resources, Air Quality, Water Quality, Public Safety, and Grazing were incorporated in the design of the Proposed Action. None of the environmental effects discussed in detail in the EA and associated appendices are considered significant, nor do the effects exceed those described in the Warm Springs FEIS.
- 2. The degree to which the selected alternative will affect public health or safety.** The proposed action is to allow brine resource confirmation, hydrology testing, and screening-level geotechnical testing in and around Sevier Dry Lake. This action would not have any short or long term effects on public health or safety.
- 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.** Impacts to cultural resources would be kept to less than significant by a combination of Class II and Class III surveys, with avoidance of register-eligible sites. The following components of the Human Environment and Resource Issues are not affected because they are not present in the project area: Areas of Critical Environmental Concern, Environmental Justice, Fish Habitat, Fuels/Fire Management, Paleontology, Wilderness, Wild Horses and Burros, Areas with Wilderness Characteristics. In addition, the following components of the Human Environment and Resource Issues, although present, would not be affected by this proposed action for the reasons listed in Appendix A of the EA: Floodplains, Greenhouse Gas Emissions, Farmland (Prime or Unique), Geology/Mineral Resources/Energy Production, Invasive

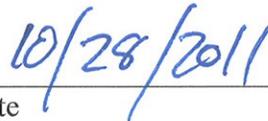
Species/Noxious Weeds, Lands/Access, Native American Religious Concerns, Rangeland Health Standards, Recreation, Socioeconomics, Soils, Threatened, Endangered, Candidate or Special Status Plant Species, Wastes (hazardous or solid), Woodland/Forestry, Vegetation, and Visual Resources. Eight components of the Human Environment and Resource Issues were analyzed in detail in Chapter 4. None of these would be significantly impacted because additional residual impacts may be identified under a specific development plan; however, adaptive management strategies would be used to minimize residual resource impacts.

4. **The degree to which the effects on the quality of the human environment are likely to be highly controversial.** There is no scientific controversy over the nature of the impacts.
5. **The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The project is not unique or unusual. The BLM has experience implementing similar actions in similar areas. For example, the Leasing EA (under which the Exploration Project is authorized) describes a similar operation located near the Bonneville Salt Flats in Western Utah. There also is an operation on lands under the jurisdiction of the State of Utah on the Great Salt Lake in Northern Utah which the BLM is aware of. The BLM has reviewed the effects on the environment at Sevier Lake for similar studies at least two previous times. The environmental effects to the human environment are fully analyzed in the EA. There are no predicted effects on the human environment that are considered to be highly uncertain or involve unique or unknown risks.
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.** The actions considered in the selected alternative were considered by the interdisciplinary team within the context of past, present, and reasonably foreseeable future actions. Significant cumulative effects are not predicted. A complete analysis of the direct, indirect, and cumulative effects of the selected alternative and all other alternatives is described in Chapter 4 of the EA.
7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts – which include connected actions regardless of land ownership.** The interdisciplinary team evaluated the possible actions in context of past, present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the effects of the project is contained in Chapter 4 of the EA.
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 project would not adversely affect districts, sites, highways, structures, or other objects listed in or eligible for listing in the National Register of Historic Places, nor would it cause loss or destruction of significant scientific, cultural, or historical resources. Impacts to cultural resources would be kept to less than significant by a combination of Class II and Class III surveys, with avoidance of register-eligible sites.

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.** There are no listed species which occupy habitat within the project boundary, so it has been determined that they would not be affected. Furthermore, after review of the home ranges of these species, it was determined that there are no species whose home ranges occur within or reasonably close to the analysis area. No other threatened or endangered plants or animals are known to occur in the area. It was concluded that there was "no effect" on threatened, and endangered species.
10. **Whether the action threatens a 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.** The project does not violate any known federal, state, local or tribal law or requirement imposed for the protection of the environment. State, local, and tribal interests were given the opportunity to participate in the environmental analysis process. While analyzing the Leasing EA, letters were sent to five Native American tribes concerning consulting party status, and there was no response from any of the tribes. Follow up phone calls were initiated with the tribes, and it was concluded and documented that there was no interest in this project by those tribes. In addition, the project is consistent with applicable land management plans, policies, and programs.



Authorized Officer



Date