



**US Department of the Interior  
Bureau of Land Management  
Black Rock Field Office  
Winnemucca District, Nevada**

Gerlach Geothermal Exploration Project

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**PUBLIC SCOPING REPORT**

**MARCH 2022**



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The Bureau of Land Management's mission is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

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## APPENDIX

A Substantive Public Scoping Comments
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## **ACRONYMS AND ABBREVIATIONS**

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Full Phrase

BLM	Bureau of Land Management
EA	environmental assessment
EIS	environmental impact statement
NCA	national conservation area
NEPA	National Environmental Policy Act
Ormat	Ormat Nevada Inc.
project	Gerlach Geothermal Exploration Project

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# Chapter I

## Introduction

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# Chapter I.

## Introduction

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This report documents the results of a public scoping process for a proposed geothermal exploration project proposed by ORNI 26 LLC, a subsidiary of Ormat Nevada Inc. (hereinafter collectively referred to as Ormat). Ormat is proposing to construct, operate, and maintain the Gerlach Geothermal Exploration Project (project) on lands administered by the US Department of the Interior, Bureau of Land Management (BLM), Winnemucca District Office. The project is located north and west of Gerlach, in central Washoe County, Nevada.

Public involvement is a vital part of the National Environmental Policy Act (NEPA) process. The BLM conducted scoping to identify issues to be addressed and to help determine the appropriate scope of the forthcoming NEPA analysis.

### **I.1 DESCRIPTION OF THE PUBLIC INVOLVEMENT PROCESS**

In accordance with 40 Code of Federal Regulations 1501.9, the BLM must document public involvement and determine the scope of issues to be addressed. Public involvement helps identify significant issues related to a proposed action. The BLM solicits comments from relevant agencies and the public; then it organizes and analyzes all comments received. The BLM evaluates the substance of each comment and extracts the overarching issues that will be addressed during the NEPA process. These issues help define the scope of the NEPA analysis and are used to develop the project alternatives.

On December 10, 2021, the BLM issued a press release initiating the 30-day public scoping period that ended on January 10, 2022. The BLM recognizes that commenters invested considerable time and effort to submit comments during the scoping period; as such, it developed a comment analysis method to ensure all comments were considered, as directed by NEPA regulations.

## I.2 NATURE OF COMMENTS RECEIVED AND THE COMMENT ANALYSIS PROCESS

The BLM received a total of 70 comment submissions during the scoping period. Comments were submitted by Basin and Range Watch, the Blue Ribbon Coalition, the Burning Man Project, the Environmental Protection Agency Region 9, Friends of Black Rock High Rock, Friends of Nevada Wilderness, the Nevada Department of Wildlife, Nevada State Clearinghouse, Trails West, and private citizens.

Comment analysis is a process used to compile and combine similar public comments into a format that decision-makers can use to develop alternatives to be analyzed in a NEPA document. The comment analysis assists the decision-makers in organizing, clarifying, and addressing technical information, in accordance with NEPA regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the NEPA process. The process includes five main components, as follows:

- Developing a comment coding structure
- Using a comment database to manage comments
- Reading and coding public comments
- Interpreting and analyzing the comments to identify issues and themes
- Preparing issue statements

The BLM developed a comment coding structure to help sort comments into logical groups by topics and issues. The coding structure was designed to capture all comment content rather than to restrict or exclude any ideas.

The BLM used the Comment Analysis and Response Application database to manage all public scoping comments. The database stores the full text of all comment submissions and allows each comment to be coded by topic and issue. Some outputs from the database include tallies of the total number of submissions and comments received, sorting and reporting of comments by a topic or issue, and demographic information regarding the sources of the comments.

## I.3 METHODOLOGY

From the 70 comment letters received, the BLM identified a total of 283 substantive comments (see **Appendix A**). Each comment was given a code to identify its general content and to group similar comments.

The BLM considered all comments and will use them to help create potential alternatives and issues to be analyzed in the NEPA document; however, only those comments determined to be substantive were analyzed, as described below. Substantive comments received during public scoping do one or more of the following:



- Raise issues the BLM has not considered, or reinforce issues the BLM has already identified
- Present information that can be used when the BLM considers the impacts of alternatives
- Raise concerns, with reasoning, regarding public land resources in the project area
- Recommend specific changes to the proposed action or alternatives
- Question, with a reasonable basis, the accuracy of information in an existing report

While reviewing comment submissions, the BLM grouped all substantive comments by similar issue topics; those groups were summarized with issue statements (see **Section 2.1**).

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# Chapter 2

## Public Comment Summary

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## Chapter 2.

# Public Comment Summary

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The BLM received most comment submissions via the project website in ePlanning at <https://eplanning.blm.gov/eplanning-ui/project/2016744/510>. The BLM also received comment submissions via US mail, through the project email, or emailed directly to the BLM project manager during the public scoping period. **Table 2-1** summarizes the distribution of comments by issue category. These issues are outlined further in **Section 2.1**, which identifies issue statements based on the substantive comments included in **Appendix A**.

**Table 2-1**  
**Comments by Issue Category**

<b>Issue Category</b>	<b>Number of Individual Comments</b>	<b>Percentage of Total*</b>
<b>NEPA</b>	<b>—</b>	<b>—</b>
NEPA – general	1	<1
Public outreach	7	2.5
Purpose and need	3	1.1
Range of alternatives	6	2.1
Direct and indirect impacts	19	6.7
Cumulative impacts	2	<1
Level of NEPA analysis	14	4.9
<b>Resources</b>	<b>—</b>	<b>—</b>
Resources – general	11	3.9
Air quality	2	<1
Climate change	1	<1
Geothermal resources	5	1.8
Recreation	13	4.6
Visual resources, including night skies	25	8.8
Groundwater resources	25	8.8
Surface water resources and water rights	22	7.8
Wildlife	12	4.2

<b>Issue Category</b>	<b>Number of Individual Comments</b>	<b>Percentage of Total*</b>
Threatened and endangered species	4	1.4
Cultural resources	14	4.9
Environmental justice	4	1.4
Socioeconomics	32	11.3
Noise	11	3.9
Public health and safety	6	2.1
Special designations	5	1.8
Native American religious concerns	2	<1
<b>Resource Uses</b>	<b>—</b>	<b>—</b>
Solid and hazardous waste	4	1.4
Minerals and mineral rights	2	<1
Lands and realty/infrastructure	10	3.5
Transportation	6	2.1
Public access	9	3.2
Livestock grazing	1	<1
<b>Other</b>	<b>—</b>	<b>—</b>
Requests for documents or other information	5	1.8
<b>Total</b>	<b>283</b>	<b>100</b>

\*All percentages are rounded to the nearest 0.1 percent.

< = less than

## 2.1 ISSUE STATEMENTS

Identifying resource categories and capturing issues are two of the primary benefits of scoping. Defining issues early in the scoping process allows for more effective communication between the public and the decision-makers.

An issue is a concern, disagreement, debate, or dispute over potential project impacts on the environment. Such issues tend to be associated with areas near a project location, although impact areas may vary, depending on the specific resource and nature of the project. The purpose of the issue statements is to highlight comment themes identified through the scoping period. The BLM will use the issue statements to help formulate a reasonable range of alternatives to be analyzed during the NEPA process. Issue statements developed under each issue category are summarized below.

### 2.1.1 NEPA

#### **NEPA – general**

- As part of the NEPA analysis, could the BLM conduct a net energy analysis to compare the energy inputs with the energy outputs?

#### **Public outreach**

- A 30-day public comment period is too short, and this one fell over the holidays when many people were unavailable and offices were

closed. Could the BLM extend the comment period to account for these factors?

***Purpose and need***

- Is there a local need for electricity, or would the energy produced be transmitted elsewhere?
- How does the project contribute to renewable energy portfolio standards and goals in Nevada? Could the draft environmental assessment (EA) include a discussion of the energy market that this project would contribute to?
- What customers would the future power plant serve?

***Range of alternatives***

- Would the draft EA include a reasonable range of alternatives that would meet the stated purpose of and need for the project, including options for avoiding environmental impacts?
- Would the alternatives analysis identify environmentally sensitive areas and the process used to designate them, in terms of sensitivity?
- Would the BLM consider moving the project to the east of Gerlach?
- Would directional drilling be allowed near residential areas? When the study is complete, would the drilling platforms be removed? If so, how would they be removed?
- What timing restrictions would be in place for drilling?
- Could the BLM provide more details for the geothermal plant's location and size?
- What mitigation requirements would be incorporated to reduce surface disturbance impacts from drilling pads and roads?

***Direct and indirect impacts***

- The project area is located at the base of the steep mountainside that is subject to landslides and flash floods. How would this be mitigated so that facilities would not be destroyed or cause harm to life and property during one of these events?
- What are the adverse effects of construction noise, activity, and pollution?
- What mitigation strategies would be in place for the Black Rock Desert and surrounding hillsides?
- Locals own and operate a falconry business near the proposed project area. What are the potential project's impacts on water, noise, lighting, and construction that could harm the falcons?

- To preserve the environment and reduce the need for large transmission lines, could the geothermal plant be built in areas that have already been disturbed or closer to population centers?
- What would be the impacts on springs, well sites, and access roads that are located on private properties near the proposed project location?
- What would be the direct and indirect impacts on the land?

**Cumulative impacts**

- Because of the potential renewable energy contribution that Nevada could make, could a Department of Energy national lab complete a detailed evaluation of the long-term build-out of generation plants and transmission lines to support the plants?
- Could an evaluation take place for the geothermal plant's contribution to the NV Energy Integrated Resource Plan of Record?

**Level of NEPA analysis**

- The proposed project has the potential to impact natural features, groundwater, and well water. It also has the potential to create light, air, and noise pollution. All these factors warrant a more detailed analysis of this project. Should the BLM use a full environmental impact statement (EIS) to ensure that concerns are addressed and that less damaging alternatives are considered?

**2.1.2 Resources**

**Resources – general**

- What steps are being taken to ensure the protection of natural, cultural, and personal resources?
- What are the environmental impacts of condensing the secondary working fluid back to liquid?
- Geothermal leasing on public lands is part of the solution to climate change, but how can the BLM ensure renewable energy projects are sited in locations that do not disrupt water, wildlife, and local economies?
- What environmental impacts would the project have with the use of a secondary working fluid in the plant?
- The interconnecting piping would require grading, leveling, and road improvements. What impact would these activities have on the local area?
- How would geothermal exploration and facility development impact the visual and recreational integrity of this area?



- What impacts would this project have on the environment, the quality of life in the community, and the surrounding wilderness and national conservation area (NCA)?
- What potential damages and impacts would this operation have on plants, noise, light, wildlife, the viewshed, traffic, and the demand for housing?

***Air quality***

- Would the draft EA include an air quality analysis that lists emissions sources, quantifies emissions, and analyzes the direct, indirect, and cumulative impacts of these emissions?
- Would the draft EA list mitigation measures to reduce greenhouse gases, fugitive dust, and other emissions produced by the project?
- Would the draft EA provide a discussion of ambient air conditions, National Ambient Air Quality Standards, and criteria pollutant nonattainment areas? This would be helpful in demonstrating compliance with state and federal air quality regulations.

***Climate change***

- What are the cumulative impacts from the proposed activities on climate change, in addition to potential groundwater hydrology impacts?

***Geothermal resources***

- How would the proposed drilling affect existing owners of geothermal resources?
- What are the potential geologic hazards that are related to geothermal development, such as induced seismicity and subsidence?
- Would the BLM complete a study on the connections among hot springs in the area to determine the impacts and set mitigation measures?
- Would Ormat and the BLM complete studies regarding the possible subsidence of earth beneath the roads and buildings in Gerlach during the extraction of geothermal water, before replacement through injection wells?

***Recreation***

- How would the proposed activities avoid impacting Guru Road, an intentional art and community space, tourist attraction, and recreation resource?
- How would the proposed activities affect the Granite Mountain Special Recreation Management Area?

- How would the proposed activities avoid impacting the road behind the Gerlach transfer station, which is a place used by locals to walk dogs, hike, camp, and target shoot?

**Visual resources, including night skies**

- Would lights only be used when workers are present and would the lights have down-facing shields?
- To try to retain the existing characteristics of the natural landscape, could the BLM review this project for Visual Resources Management Class II impacts?
- How would new structures impact the visual quality and experiences on the Nobles Emigrant and Applegate-Lassen trails?
- Are there any visual quality objectives or mitigation strategies for the project's visual impacts?
- Would the BLM conduct a detailed study of the light pollution produced by the project and how the light pollution would impact the dark sky brightness?
- Would the BLM make the Visual Resources Key Observation Points study, which was completed in March 2021, available to the public?

**Groundwater resources**

- The current operations plan includes a spill or discharge contingency plan that only addresses spills to the surface of the ground. Could this plan be updated to include the processes that would occur if there is a spill or discharge to the groundwater?
- Can Ormat provide a short- or long-term operating procedure for monitoring and remediation of impacts on springs, spring habitat, or private wells?
- Water is a local economic and recreation resource that locals rely on. What would be the long-term impacts on this resource?
- Have the effects on groundwater quality and supply been studied, and what information is available on this?
- Would the BLM provide an estimate of the quantity of water used? Also, if groundwater is used, would the BLM identify which groundwater basin would be used and whether there is any potential for subsidence?
- Would this permit include a monitoring system for ground level subsidence?
- What remedies would Ormat take if the proposed project disrupts the local water table and impacts the foundation of locals' homes?

- What drought impacts could this project enhance and contribute to? Could this project deplete already low water resources?
- What are the potential water contamination impacts?
- How would groundwater be affected in the local aquifers?
- Would the BLM consult a third-party engineering firm to study the water supply and ensure that local aquifers would be safe from depletion, alteration, or contamination?
- Would the reserve pits contain the brine, and are any hazardous materials expected to contaminate those pits? Would gas, air, or chemical fracking be used to lift fluids? Would antifreeze be used as a heat-carrier fluid, and is there a risk of groundwater contamination?
- What are the short- and long-term consequences of water extraction at this level?
- Would Ormat and the BLM comply with and be in accordance with Nevada Revised Statutes Chapter 534 (Underground Water and Wells) and Nevada Administrative Code Chapter 534 (Underground Water and Wells)?

***Surface water resources and water rights***

- What mitigation strategies would be put in place for this project's potential impacts on the nearby springs and groundwater that local community members and businesses rely on?
- How would this project affect natural springs, including their water quantity, quality, and temperature?
- How would this project comply with Nevada water law?
- Would the draft EA identify the presence of surface waterbodies, including springs and wetlands?
- Springs, wetlands, and well sites contain heavy metals that can become mobilized with drilling and contaminate other water sources. How would the BLM consider this? Would there be buffers or setbacks around these areas?
- What actions would be taken to monitor flow rates, flow paths, the water level, geochemical alterations, and other alterations being made to springs, wetlands, and wells surrounding the exploration sites?
- How would the well pads and access roads impact wetland areas?
- What would the impact be on surface springs located on private property near the project area?

- What impacts would the project have on precipitation patterns, and what are the mitigation strategies? Please also discuss the anticipated extent and depth of overland flows given a 500-year flood event.
- How would the BLM protect wetland vegetation if there are any well pads located nearby?
- Would the draft EA document stormwater permit requirements and mitigation measures necessary in reducing impacts on water quality and aquatic resources?
- Would Ormat and the BLM confirm with the US Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit for discharge of dredged or fill materials into waters?
- Would the water used for this project be provided by an established utility or under a permit, temporary change application, or waiver issued by the State Engineer's Office?
- How would wetland habitats in the project footprint be protected from potential changes in the flow or water level, or both, from geothermal activities?

### **Wildlife**

- How would the proposed activities affect wildlife?
- How would the project affect domestic sheep trailing and the subsequent risk of contact between domestic and wild sheep?
- How would sage-grouse management plans apply to this project?
- Under the Nevada Habitat Conservation Framework, would the BLM coordinate with the Nevada Departments of Wildlife, Transportation, and Natural Resources to avoid impacts on sensitive species, critical habitat, and migration corridors?
- How would the BLM implement monitoring, reporting, and adaptive management to protect wildlife and habitat?
- How would the proposed activities affect dark kangaroo mice? Would there be a baseline study or design features, or both, to avoid or mitigate impacts?
- How would increased lighting at night impact local wildlife, including nesting eagles, bats, bighorn sheep, pronghorns, migratory birds, and insects?
- How would the project's impact on springs affect bats, migratory birds, bighorn sheep, and pronghorns?

***Threatened and endangered species***

- What species—and what critical habitat for threatened and endangered species—exist in the proposed project area? What steps would be taken for the protection and recovery of these species?
- Would the BLM work with the US Fish and Wildlife Service to determine whether consultation under Section 7 of the Endangered Species Act is required?
- Would the BLM work with the US Fish and Wildlife Service to ensure all mitigation efforts are taken, and consistent surveying, monitoring, and reporting protocols are followed for species protection?

***Cultural resources***

- How would the proposed action or alternatives affect cultural resources in the project area?
- How would the BLM avoid or minimize adverse impacts on the physical integrity, accessibility, or use of cultural resources or archaeological sites, including traditional cultural properties, in the project area?
- Has the BLM considered the likely presence of Paleo-Indian artifacts and archaeological sites? Research on the Late Pleistocene and Early Holocene has shown that the Great Basin Paleo-Indians occupied the lake basins of ancient Lake Lahontan and left a considerable amount of carbon-dated artifacts; some of these may be in the proposed project area.
- The historic Nobles Trail and the exploration route of John C. Fremont are adjacent to the proposed project area. What would be the potential impacts on the settings of these historic, undeveloped sites and the historic trail corridor?
- Would the proposed activities impact or limit public access to existing archaeological interpretive signs, including the many historical markers commemorating historic emigrant trails near the proposed project area? Two of these markers (Granite Springs [Marker N6] and Great Boiling Springs [Marker N7]) are within or near the proposed project area.
- What impacts would the proposed project have on areas that may be culturally significant for Native communities?
- What impacts would the power line connecting this plant to the NV Energy substations have on archaeological tribal resources?

***Environmental justice***

- Would minority populations and low-income populations be disproportionately impacted?
- How would public participation be facilitated so that minority and low-income populations can participate?

***Socioeconomics***

- How would proposed activities affect the development of the Washoe County ArTrail?
- Some residents depend on the illite clay from geothermal features on their property for their pottery businesses. How would the BLM ensure that proposed activities would not eliminate, contaminate, or substantially change the water and surface conditions on local residents' properties?
- Gerlach's local economy depends on tourism and eco-tourism generated by visitors who come to the region to recreate on public land. How would proposed activities impact Gerlach's vibrant tourism industry?
- Would Ormat provide any direct benefits to Gerlach?
- If proposed activities move forward, would Ormat request access to private property, including the Burning Man Project's 360 acres, for any pipeline alignments or associated project infrastructure?
- What mitigation measures would be implemented to compensate for potential damages to life and property from proposed activities?
- Where would workers stay? If they live on-site or if they stay in the only motel in town, this may displace many recreationists and visitors to Gerlach.
- How would the BLM ensure that proposed activities would not impact local businesses, including Black Rock Mud Company, which relies on Great Boiling Springs for an array of beauty products?
- Would the proposed activities impact the functioning hot springs on the Burning Man Project's property? This would thwart the commercial investment to develop the property as a commercial enterprise that supports outdoor recreation and tourism in the region.
- Would the proposed activities only take place during daylight hours and on weekdays to avoid disturbing local businesses?
- How would the increased noise and lights from drilling rigs and increased traffic impact residents and visitors to the region?

- What remedies would be available to property owners near the proposed project area, if the project were to negatively impact their properties?
- Has the BLM considered potential impacts on local residents, many of whom depend on the vast recreational resource of the Black Rock Desert and playa for their income?
- How would the proposed activities impact the character, culture, community, and health of the small, remote town of Gerlach?
- Would Gerlach benefit from, and have access to, the proposed production of geothermal energy adjacent to the town?
- Would Ormat's employees need to commute to the proposed project area, or would new housing need to be installed in Gerlach? How would the town be impacted under both scenarios?
- The community of Gerlach relies on tourism to support its economy. Creating a geothermal facility would increase construction, alter the natural landscape, and increase lighting that would impact the dark night skies of the Black Rock NCA and Massacre Rim Wilderness Study Area. How would these visual impacts affect the tourists and local economy?
- What are the impacts on tourism if Guru Road is destroyed?

**Noise**

- How would the proposed activities avoid creating excess sound pollution, noise, and vibrations?
- Would the BLM conduct a detailed study of the proposed activities' noise impacts on local residents, tourists, and wildlife?
- Would noises in Gerlach be amplified as they bounce off Granite Mountain? What would be the noise impacts on recreational activities on Granite Mountain?
- Would there be noise impacts on Guru Road, and what would the BLM do to avoid excessive noise at Guru Road?

**Public health and safety**

- Has the BLM considered that if this facility has at least 25 employees on-site for more than 6 months, it would be required to be permitted by the Bureau of Safe Drinking Water as a non-transient, noncommunity public water system?
- Has the BLM analyzed the real health risks of a diversion pond, including the potential exposure to atmospheric concentrations of hydrogen sulfide, benzene, radon, arsenic, and mercury, all of which pose hazards to public and occupational health?

- Could ground disturbance associated with proposed activities disperse *Coccidioides immitis*, a fungus that causes Valley fever in humans? Would measures be developed to reduce the risk of exposure to workers and residents?
- Would there be odors from the proposed activities? How would those odors be mitigated, so they do not disturb local residents, visitors, and wildlife?
- Would proposed activities, including well drilling and testing, release naturally occurring radioactive material, and how would it be managed for this project?

**Special designations**

- How would the proposed activities affect the multiple uses laid out by the Black Rock Desert-High Rock Canyon Emigrant Trails NCA Act, considering the proximity of the NCA to the proposed project?
- What are the potential visual resource impacts on the Black Rock Desert-High Rock Canyon Emigrant Trails NCA from proposed activities?
- The Black Rock Desert-High Rock Canyon Emigrant Trails NCA Act was designated in part to preserve and protect historic trails. How would proposed activities avoid impacting the Nobles Trail and the Trails West markers?
- What would be this project's impacts on wilderness values, recreation and tourism values, and wildlife habitat values of the Black Rock Desert NCA and the lower eastern slopes of the proposed Granite Banjo Wilderness?
- What impacts and conflicts would this project have on the eastern portion of the wilderness character unit?
- How would this project impact the formal wilderness proposal that has been submitted to the Nevada delegation?

**Native American religious concerns**

- Would tribal governments be invited to consult on a government-to-government basis, and would the draft EA include documentation of these consultations?
- How would the proposed project consider tribal concerns and avoid disturbance of tribal artifacts?



### 2.1.3 Resource Uses

#### ***Solid and hazardous waste***

- Blowout prevention techniques may involve barium sulfate and hazardous mud additives. How would material be stored, and how would the area be cleaned up in the event of a blowout?
- How many dumpsters would be required for proposed activities, and how would waste be removed from each site?
- Would the draft EA address the potential direct, indirect, and cumulative impacts of waste generation, including hazardous waste from geothermal project development?
- Does Ormat have a mitigation plan if water is contaminated by hazardous chemicals used in its drilling mud? Would Ormat be financially liable for mitigation required to return groundwater to its pre-drilling state?
- Would the EA describe expected methods for proposed activities, including the use of reserve pits; expected methods for the disposal of geothermal fluids, produced waters, and drill cuttings; consistency of drilling mud; the prevention of leaching; and the potential impacts on ground and surface water?

#### ***Minerals and mineral rights***

- How many yards of gravel or aggregate would this project need?
- How would this project comply with the Nevada Division of Minerals' policies and regulations?

#### ***Lands and realty/infrastructure***

- Would the BLM analyze an alternative that incorporates "acre for acre public/private land swaps" to avoid BLM parcels being isolated within private tracts?
- Would interconnected piping between wells and the plant require more grading, leveling, road improvements, et cetera? Why was this not addressed in the proposal?
- How can the BLM ensure the proposed project would not damage, disrupt, or otherwise cause problems for Gerlach's water and sanitary sewer systems? What are the risks?
- What would be the potential impacts on Gerlach's drinking water supply?

#### ***Transportation***

- How would the proposed activities impact State Route 447 in terms of damage to the road and the presence of increased traffic?

- Would Ormat be required to assist in maintenance of roadways impacted by the deterioration from heavy equipment caused by proposed activities?
- Would Washoe County Roads Department be consulted to determine whether roadway ratings and maintenance schedules are adequate for the proposed activities' specific transportation needs?

**Public access**

- Would access be maintained to and on all motorized routes in areas affected by proposed activities?
- Would public access be maintained to Guru Road, which is a recreation destination?
- This area has a high recreation value for locals in the surrounding community. How would the proposed activities be conducted in a way that does not restrict access to users?
- Would proposed activities affect any organized events or possible future permits? Specifically, would proposed activities impact the Blue Ribbon Coalition's organized events in the area?

**Livestock grazing**

- How would the proposed activities affect livestock, such as cattle and sheep, that graze in the area?

**2.1.4 Other**

**Requests for documents or other information**

- What customers would be served by this future power plant? How large is the planned plant and where would it be located?
- Would Ormat be held to the same cleanup standards as the Burning Man Project's annual event, and where would any gravel pits be located in the project area?
- Would the draft Night Sky Baseline Report currently being reviewed by the BLM be made available to the public?
- Would Ormat and the BLM provide a plan for dark sky-compliant lighting?
- Would Ormat and the BLM provide adequate pre-drilling water and heat flow, water level, geochemistry, and other baseline condition data for springs, springs habitat, wetlands, and wells on public lands and adjacent private property?
- Would Ormat and the BLM provide a detailed plan for maintaining and preserving public access to historic markers and cultural sites within and around the project area?

- Would Ormat and the BLM provide a detailed study of the project's noise pollution and mitigation strategies?
- Would Ormat and the BLM provide a thorough archaeological survey of resources?
- Would Ormat and the BLM provide a report on the economic impacts on the town of Gerlach and include concerns regarding housing, jobs, and impacts on tourism and recreation?
- Would Ormat and the BLM provide a detailed plan for mitigating the impacts on important wildlife habitat and the effects on migratory and resident birds?
- Would Ormat and the BLM provide a mitigation plan for groundwater contamination?
- Would Ormat and the BLM prepare a net energy analysis comparing the energy input with energy outputs to determine the project's viability?
- Would Ormat and the BLM provide a transportation analysis to assess the potential impacts on local roads from increased use and heavy equipment? Ormat should provide data and consult with Washoe County Roads Department.

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# Appendix A

## Substantive Public Scoping Comments

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## Appendix A. Substantive Public Scoping Comments

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	NEPA - general	As part of the NEPA analysis, the BLM should conduct a Net Energy Analysis comparing the energy input with energy outputs for the Project.
Not Provided	Not Provided	—	Public Outreach	A 30 day public comment period seems too short to have the public that normally visit this area informed and able to comment; I request that it be extended to 90 days so that more parties that this directly affects may be involved in public comment.
Whipple	Will	—	Public Outreach	A 30 day public comment period seems too short to have the public that normally visit this area informed and able to comment; I request that it be extended to 90 days so that more parties that this directly affects may be involved in public comment.
Cooper	Dave	—	Public Outreach	It is very disappointing that a short comment period for this proposed project that runs through the holidays was chosen when many people are not available to review the information and comment in a timely manner. The comment period should be at least 60 days to allow everyone that will be affected a chance to review the information and comment.
Wittek	Stacey	Friends of Black Rock High Rock	Public Outreach	On behalf of Friends of Black Rock-High Rock I am requesting an extension on the public comment period on the Gerlach Geothermal Exploration Project proposed by Ormat Technologies Inc. The period for public comment, December 10 to January 10, over a holiday period when many offices are closed and constituents are on holiday vacation, is poor timed and far too short for public input. Friends of Black Rock-High Rock supports the development of renewable energy in Nevada and recognizes the role of renewable energy in offsetting the impacts of climate change. However, the significant impacts on the community of Gerlach, the Black Rock Desert High Rock Canyon Emigrant Trails National Conservation Area and visitors must be considered and the public and stakeholders need more time to review the issues. Please extend the comment period set to end on January 10 by 30 days (February 10, 2022).

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Benson	Marnee	Burning Man Project	Public Outreach	The public comment period for this project as you know falls over the holidays. A project of this nature and its potential impacts on the community of Gerlach deserves a full and robust opportunity for public engagement. The timing of the public comment period does not adequately allow for such. Please consider this as Burning Man Project's request for a thirty day extension of the public comment period. Thank you.
Tanner	Carolyn "Lina"	Burning Man Project	Public Outreach	The public comment period for this project as you know falls over the holidays. A project of this nature and its potential impacts on the community of Gerlach deserves a full and robust opportunity for public engagement. The timing of the public comment period does not adequately allow for such. Please consider this as Burning Man Project's request for a thirty day extension of the public comment period. Thank you.
Netherton	Shaaron	Friends of Nevada Wilderness	Public Outreach	We are asking for a 30-day extension for comments. This proposal impacts proposed Wilderness and the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area, threatens dark sky tourism in the NCA and surrounding area including Gerlach. Having a comment period over the Christmas holidays where there is so much at stake is unnecessary. Please extend the comment period until February 10th.
McPherson	Ann	US EPA Region 9	Purpose and Need	The draft EA should clearly identify the underlying purpose and need for the proposed project. When formulating the need, identify and describe the underlying problem, deficiency, or opportunity that the action is meant to address. The draft EA should discuss the proposed project in the context of the larger energy market that this project would serve and discuss how the project will assist Nevada in meeting renewable energy portfolio standards and goals.
Rankine	Dave	—	Purpose and Need	There is no local need for electricity in that area. What is generated will be transmitted elsewhere.
Not Provided	Not Provided	—	Purpose and Need	What customers would be served by this future powerplant? How large is the planned plant and where is it to be located? Will there be light and noise pollution from the planned wells and plant? Will there be odors from the planned plant? How would those odors be mitigated to not disturb local residents, visitors, and wildlife? It seems that just the exploration phase of this project will severely disturb and alter an otherwise beautiful and peaceful area immediately adjacent to the Black Rock Desert Conservation Area. The interconnecting piping that would be required for the plant and wells would require far more grading, leveling, road improvements, etc that would affect the area and this is simply not addressed in this proposal.
McPherson	Ann	US EPA Region 9	Range of Alternatives	The draft EA should include a reasonable range of alternatives that meet the stated purpose and need for the project and that are responsive to the issues identified during the scoping process. A reasonable range of alternatives will include options for avoiding environmental impacts. The alternatives analysis should describe the approach used to identify environmentally sensitive areas and the process used to designate them in terms of sensitivity.



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Not Provided	Not Provided	—	Range of Alternatives	The proposed project Area of Interest includes significant private parcels that are not participating. Those parcels include warm and hot springs of local cultural and biological significance. The proposed operation plan includes well sites placed on public land as close as possible to the private springs. It also includes access roads through private, non-participating parcels. The Exploration Operations plan includes no restrictions on time of drilling either during the day or during the year. It does not appear the current proposed Exploration Operations Plan gives adequate deference to private, non-participating use and resources.
Scott	Matthew	—	Range of Alternatives	The drilling pads necessary for this project are not attractive and will be a visual blight on the area. To mitigate the effects of these pads: •Any pad not actively used for 14 months must be reclaimed before 18 months of last use. •Reclamation must include the pad area to within a 5-foot radius of the well head, not just the shoulder area of the pad. • Reclamation must also include any access road sections not actively needed to reach another site. •Replacement and regrading of removed topsoil must match the topography of the drill pad as closely as possible.
Dougherty	James	Tripoli Central California (Prefecture # 52)	Range of Alternatives	How will the drilling platforms be removed when the study is done? Why should we the people have a bunch of concrete drilling rigs littering our beautiful countryside - never to be cleaned up, and posing not only a hazard off of the 447, but an eyesore for anyone who passed by the site(s)?
Lyon	Sarah	—	Range of Alternatives	Finally, because Gerlach is about 2 hours from Reno and has a small amount of properties available for rent or purchase, should a Ormat facility be built, it would require commute and/or installation of housing, which would have impacts on the landscape and town as well and need to be addressed.
Sady	Scott	—	Range of Alternatives	If this project moves forward, which I strongly hope it does not, it should be kept to areas east of the town of Gerlach.
Wilson	Alex	—	Direct/indirect impacts	I have been around many different fracking-type operations. They are unsightly, loud, produce light pollution, ruin the view, disrupt animal populations. They cause an increase in heavy truck traffic and they have a history of leaving a mess behind when they shut down for a variety of reasons. This is not a good use of public lands. BLM is charged with protecting public lands. Allowing this operation would not protect anything - it would bring potential damages that might not be able to be restored.
Walters	Jason	—	Direct/indirect impacts	The proposed project presents unknown risks to our water supply, view, quiet (this is one of the quietest places on Earth for much of the year), darkness (it's one of the darkest places in the lower 48 states at night), and property values, all without in the long run providing significant new employment, tax revenue, or housing creation for the community. (We are chronically short on decent housing.) And we won't see any of the benefits of taxes paid to Washoe County. Those will go to help Reno and Sparks - just like the millions the BLM pays to Washoe County each year for our region get spent primarily on the needs of Reno and Sparks.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
McPherson	Ann	US EPA Region 9	Direct/indirect impacts	The EPA recommends that the BLM identify in the draft EA the mitigation measures (including control measures and design features) it would apply if potential adverse impacts on resources on affected lands are predicted. These measures could include equipment type or design requirements, emission standards or limitations, best management practices (BMPs), add-on control technologies, setback distances from aquatic and biological resources and limitations on the density and/or pace of development.
Sabistina	Jan	—	Direct/indirect impacts	Any human activity that destroys or in any way harms the integrity of the fragile desert environment should immediately be shelved. Please do not let one company profit at the expense of all now and in future generations who live this place and it's unique beauty.
Egbert	Cory	—	Direct/indirect impacts	I am concerned about the adverse effects of construction noise, activity, and pollution on or near my property.
Jamieson	David	—	Direct/indirect impacts	I am concerned about the adverse effects of construction noise, activity, and pollution on or near my property.
Hickey	Chuck	—	Direct/indirect impacts	I am very opposed to this construction - as I have seen no plans for mitigating the impacts on both the Black Rock Desert or the surrounding hill sides. I would also question the size of the footprint for this operation. It seems like a giant overkill.
Egbert	Cory	—	Direct/indirect impacts	I originally purchased the Great Boiling Spring and adjacent property for my falconry business, which has been my lifelong career. The hot springs at Gerlach, with their related ponds, are where I have trained my falcons for years. I train falcons to hunt ducks off the ponds, and use the site to "hack" or train my birds for being free in the wild. I am concerned about any activity by an outside party that may impact the water on my property, or noise/lighting/construction activity that could harm my falcons, since they are my livelihood.
Jamieson	David	—	Direct/indirect impacts	I originally purchased the Great Boiling Spring and adjacent property for my falconry business, which has been my lifelong career. The hot springs at Gerlach, with their related ponds, are where I have trained my falcons for years. I train falcons to hunt ducks off the ponds, and use the site to "hack" or train my birds for being free in the wild. I am concerned about any activity by an outside party that may impact the water on my property, or noise/lighting/construction activity that could harm my falcons, since they are my livelihood.
Not Provided	Lucas	—	Direct/indirect impacts	Please do not disturb this land and the delicate balance there. There are so few places left that are unmarked by man, and the precariousness of life in the high desert will surely be felt by a project of this scale.
Not Provided	Not Provided	—	Direct/indirect impacts	The Black Rock Desert environment is unique and must be protected including the dark sky. If possible, geothermal plants should be built in areas that are already disturbed or closer to population centers. This method would preserve many unique environments and reduce the need for large transmission lines.
Angell	JL	—	Direct/indirect impacts	The black rock desert is a unique habitat, recreation area, and national treasure. Any human activity that destroys or in any way harms the integrity of the fragile desert environment should immediately be shelved. Please do not let one company profit at the expense of all now and in future generations who live this place and it's unique beauty.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Sabistina	Jan	—	Direct/indirect impacts	The black rock desert is a unique habitat, recreation area, and national treasure. Any human activity that destroys or in any way harms the integrity of the fragile desert environment should immediately be shelved. Please do not let one company profit at the expense of all now and in future generations who live this place and it's unique beauty.
Benson	Marnee	Burning Man Project	Direct/indirect impacts	The Ormat Gerlach Exploration Project DOI-BLM-NV-W030-2022-0001-EA is of great concern to Burning Man Project for numerous reasons, not the least of which is that the operations plan proposes multiple well sites contiguous to Burning Man's property.
Tanner	Carolyn "Lina"	Burning Man Project	Direct/indirect impacts	The Ormat Gerlach Exploration Project DOI-BLM-NV-W030-2022-0001-EA is of great concern to Burning Man Project for numerous reasons, not the least of which is that the operations plan proposes multiple well sites contiguous to Burning Man's property.
Alderson	George	—	Direct/indirect impacts	The project involves direct impacts on 163 acres and indirect impacts on thousands of acres on all sides of the fixed installations. It involves up to two energy generation facilities, geothermal fluid production and injection wells and well pads, access roads, aggregate pits, geothermal fluid pipelines, an electrical transmission line and ancillary support facilities.
Cooper	Dave	—	Direct/indirect impacts	The proposed development area at the base of the steep mountainside is subject to violent landslides and flash floods resulting in moving large boulders and rocks and soil down the steep mountainsides. Highway 34 and 447 have been closed by these flash floods on many occasions. Stripping the land of vegetation for may add to the instability especially near steep slopes. How will this be mitigated so that facilities will not be destroyed or cause harm to life and property during one of these events?
Not Provided	Not Provided	—	Direct/indirect impacts	This project has potential to cause significant pollution and damage to the plant and animal ecology of this protected desert.
Burls	Kevin	—	Direct/indirect impacts	This project would be a visual and environmental blight on one of the most popular national recreation areas of the west. Impacted features include open skyline and natural features, dark sky benefits, hot spring levels and well water levels.
Wilcox	Rob	—	Cumulative impacts	Nevada, and BLM land nationally, have important potential renewable energy contributions. Before approving every private generation development based on their quarterly P/L interests, you should have a detailed evaluation by a DOE National Lab, like NREL of the long term buildout of generation plants and transmission to support it. Your office could be a leader requesting that. Staff involved can lead the way for the country.
Wilcox	Rob	—	Cumulative impacts	This is a very small plant in proposed MW capacity. It should be evaluated in its contribution to the NV Energy Integrated Resource Plan of record.
Cooper	Dave	—	Level of NEPA analysis (EA vs. EIS)	An EA is not the appropriate vehicle to assess these potential impacts on surface and groundwater, and damage to both public and private land that could occur. While Ormat has reduced the scope of the project from the full development of the resource as previously proposed, there is still potential for controversial and significant long term adverse impacts on this small community and an EIS is warranted with an alternative to move the development away from the population of this community.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Alderson	George	—	Level of NEPA analysis (EA vs. EIS)	An environmental impact statement should be required for a project of this scale.
Not Provided	Not Provided	—	Level of NEPA analysis (EA vs. EIS)	I am appalled that this project has gone this far into planning without an Environmental Impact Survey. This project will permanently alter the area immediately surrounding (and entering into) conservation lands and likely change those lands and water in them.
Wittek	Stacey	Friends of Black Rock High Rock	Level of NEPA analysis (EA vs. EIS)	We adamantly believe this project is not in the right place and that the Ormat project rises to the level of a major impact that not only affects the environment but is also significantly controversial. We know that an Environmental Impact Statement is far more time consuming than an Environmental Assessment, but the data generated would ensure that concerns were addressed and less damaging alternatives are considered. We also understand that a programmatic EIS from 2008 exists but that document is outdated and does not sufficiently address the concerns detailed here and from other stakeholders. We ask that an EIS that sufficiently addresses the concerns presented here and by other stakeholders presented in 2022 be conducted.
sady	m	—	Level of NEPA analysis (EA vs. EIS)	We adamantly believe this project is not in the right place and that the Ormat project rises to the level of a major impact that not only affects the environment but is also significantly controversial. We know that an Environmental Impact Statement is far more time consuming than an Environmental Assessment, but the data generated would ensure that concerns were addressed and less damaging alternatives are considered. We also understand that a programmatic EIS from 2008 exists but that document is outdated and does not sufficiently address the concerns detailed here and from other stakeholders. We ask that an EIS that sufficiently addresses the concerns presented here and by other stakeholders presented in 2022 be conducted.
Whipple	Will	—	Level of NEPA analysis (EA vs. EIS)	An Environmental Impact Survey is absolutely necessary for this potential project before it considered seriously.
Not Provided	Not Provided	—	Level of NEPA analysis (EA vs. EIS)	An Environmental Impact Survey is absolutely necessary for this potential project before it considered seriously.
Tanner	Carolyn "Lina"	Burning Man Project	Level of NEPA analysis (EA vs. EIS)	Because of the possibility of significant and controversial impacts, we believe a full environmental impact statement ("EIS") should be prepared now to determine whether the Gerlach region is the appropriate location to construct the generating facility that Ormat will likely seek in a subsequent phase. While we understand that a programmatic EIS from 2008 exists, this document is outdated and not sufficiently detailed to address the concerns of stakeholders. Further, BLM intends to reference special studies performed through the Burning Man Project's 2019 Special Recreation Permit Renewal. While we appreciate the cost savings afforded to Ormat by BLM's use of special studies required of Burning Man Project during our EIS process, we are unaware of any regulation that would allow a project otherwise suitable for an EIS to then avoid the process. An EIS is certainly warranted here.
Morgan	Troy	—	Level of NEPA analysis (EA vs. EIS)	I firmly believe that an EIS (Environmental Impact Study) is required for permanent installations such as is proposed for the Ormat Geothermal plan.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Wilson	Alex	—	Level of NEPA analysis (EA vs. EIS)	I will keep this simple - a few years ago BLM forced Burning Man to go through a lengthy and expensive environmental impact study in order to get their permits. They are a non-profit and run one of the biggest Leave no Trace events in the world. The playa and surrounding area is cleaned up after every event. Ormat needs to show what impacts they could cause to the area. These are all well documented... things like contaminated ground and well water, light pollution, air pollution, increased truck traffic, increase in unnatural noises, disruption to area wildlife. These things occur year round with an operation like Ormat proposes. Burning Man is a few weeks each year and they always clean up behind themselves (they have a solid history of clean up)
Downey	William	—	Level of NEPA analysis (EA vs. EIS)	In regards to the Gerlach Geothermal Exploration Project, having a background in resource management makes me gravely concerned that the feasibility of this project is being undertaken with only an EA, not an EIS. Significant impact to natural features, cultural features, viewshed and light impacts near a Dark Sky Reserve, and the impacts on the local community all warrant a more detailed review and analysis before any approval process. Proceeding with this project would have a negative impact on a fragile desert environment in close proximity to several wilderness areas as well as the local community of Gerlach.
Downey	William	—	Level of NEPA analysis (EA vs. EIS)	In regards to the Gerlach Geothermal Exploration Project, having a background in resource management makes me gravely concerned that the feasibility of this project is being undertaken with only an EA, not an EIS. Significant impact to natural features, cultural features, viewshed and light impacts near a Dark Sky Reserve, and the impacts on the local community all warrant a more detailed review and analysis before any approval process.
Wilcox	Rob	—	Level of NEPA analysis (EA vs. EIS)	This proposal includes all the drilling for the full scale plant. It is not "exploratory." Therefore it should require a full EIS.
Not Provided	Not Provided	—	Level of NEPA analysis (EA vs. EIS)	This should be a full Environmental Impact Statement, given the potential significant impacts that will last a lifetime.
Netherton	Shaaron	Friends of Nevada Wilderness	Resources - general	We believe that the Ormat project will have a major impact on the environment and quality of life in the community and surrounding Wilderness and National Conservation Area.
Emmerich	Kevin	Basin and Range Watch	Resources - general	The exploration project would be located next to the Black Rock Desert-High Rock Canyon NCA hosts a multitude of recreational opportunities within its 800,000 acres. It encompasses nearly 120 miles of emigrant trails, the Black Rock Desert, and High Rock Canyon. The most popular attractions are the Black Rock Desert playa, the narrow gorge of High Rock Canyon, the natural hot springs, and historic wagon trails. Both geothermal exploration and facility development would impact the visual and recreational integrity of this area. A geothermal plant is noisy and illuminated all night. Clearing of land will create fugitive dust. The appearance of the plant would be inconsistent with historic trails and large vistas. The noise will take away the historic character of the area.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Lyon	Sarah	—	Resources - general	I am concerned with the proposed development of the Ormat Gerlach Exploration Operations Plan because of noise and light pollution, impact on scenic views for the area, increased road traffic from commuting, and increased demands for housing in the area without any plans to develop new housing options.
Barry	Daniel	—	Resources - general	I would like the BLM to hold Ormat to the highest possible standards for minimizing light and sound produced by their operations. Ormat should be required to use the best available methods to mitigate light and sound and should not be allowed to choose less effective methods to cut costs.
Not Provided	Jim	—	Resources - general	I'm worried about how that will effect the surroundings, concerning their value as a place that's pristine in a world that too often, is without. Bringing infrastructure of such sort into the flats would impact them irreparably as a natural scene. I hope it is reconsidered.
Downey	William	—	Resources - general	Proceeding with this project would have a negative impact on a frafile desert environment in close proximity to several wilderness areas as well as the local community of Gerlach.
Egbert	Cory	—	Resources - general	What steps will be taken to ensure the protection of natural, cultural and personal resources?
Jamieson	David	—	Resources - general	What steps will be taken to ensure the protection of natural, cultural and personal resources?
sady	m	—	Resources - general	As a renewable resource that is abundant in Nevada (currently there are 272 active leases managed by BLM) it is encouraging to see an increase in renewable energy as an alternative to coal, oil and gas extraction that has contributed to air pollution and greenhouse gas emissions. Public lands are a part of the solution to climate change. But renewable energy projects can disrupt water, wildlife and local economies if not built in the right place. The best way to get the clean energy we need and protect the communities and places we love is to site projects in the right place.
Wilcox	Rob	—	Resources - general	The full plant development will use a secondary loop working fluid with significant environmental impact requiring evaluation of the secondary fluid now in a full EIS.
Wilcox	Rob	—	Resources - general	Condensing the secondary working fluid back to liquid has environmental impacts. Condensing may require scarce local water resources. Any leakage of the primary water for reinjection is an environmental impact. All are required to be evaluated in a full EIS.
McPherson	Ann	US EPA Region 9	Air Quality	Emissions of all air pollutants, including greenhouse gases, should be estimated for construction and operations. Given the potential air quality impacts from construction and drilling activities, the analysis should include direct, indirect, and cumulative effects, especially during construction and installation of the wells. As an example, use of diesel engines powering the drilling rigs and air compressors/mud pumps could potentially generate significant levels of emissions. The draft EA should specify emission sources and quantify these emissions. The draft EA should analyze reasonable and practicable mitigation measures to reduce project-related greenhouse gas, fugitive dust, and other emissions. Typical mitigation measures include design changes to reduce construction and operations emissions, fugitive dust control measures, mobile and stationary source controls, and administrative controls.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
McPherson	Ann	US EPA Region 9	Air Quality	The draft EA should provide a detailed discussion of ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards, criteria pollutant nonattainment areas, and potential air quality impacts of the project, including cumulative and indirect impacts. Such an evaluation is helpful in demonstrating compliance with state and federal air quality regulations and disclosing the potential impacts from temporary or cumulative degradation of air quality.
McPherson	Ann	US EPA Region 9	Climate Change	Consider in the draft EA how climate change could potentially influence the project area, including anticipated changes to the watershed in terms of quantity and timing of runoff and precipitation and how these changes may impact surface water and groundwater hydrology in the project area.
Evans	Kristy	—	Geothermal resources	There should be studies regarding the possible subsidence of earth beneath the roads and buildings in Gerlach during the extraction of geothermal water before replacement through injection wells.
McPherson	Ann	US EPA Region 9	Geothermal resources	Induced seismicity and/or subsidence can occur as a result of geothermal fluid injection and production. In the case of geothermal induced seismicity, withdrawal of fluids, as well as injection of fluids, can cause seismicity. In most regions where there are economically viable geothermal resources, there is usually tectonic activity, such as in the western United States. These areas are more prone to induced seismicity than in more stable areas of the United States. Potential geological hazards, such as induced seismicity and subsidence, that could be related to geothermal development should be discussed in the draft EA.
Otto	Ed	Trails West, Inc.	Geothermal resources	It seems as if BLM already said no on the first proposal and now Ormat just wants to do exploratory work. We're sure that will prove successful based on all the hot springs in the area, and then the next step will be for them to again request more development and it will be harder to deny as it would be a proven viable operation based on this exploratory event. We see this as Ormat getting a "foot in the door" and it will be harder to say no to further development.
Wilcox	Rob	—	Geothermal resources	The proposed drilling impacts existing owners of geothermal resources.
Cooper	Dave	—	Geothermal resources	There are numerous important hot springs resources in the area mostly on private property. Geothermal development frequently causes substantial changes in the flow rates and flow paths in hydro geothermal systems which could alter existing surface flows at springs in the area. If the project moves into production, BLM will need to do a detailed study of the connections among hot springs in this area and determine the impacts, and set mitigation measures as appropriate. BLM should analyze the impact of development of geothermal resources on springs discharging from shallow groundwater systems. Impacts could occur if development changes the vertical gradient and causes water to flow downward from shallow groundwater significantly faster than currently occurs or occurs naturally.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Recreation	Guru Road is a unique one of a kind cultural art work of great importance to Gerlach and must be off limits to disturbance or development. This mile long art feature is an important and treasured piece of Gerlach history and is under a Right of Way issued by BLM. It must be protected from adverse impacts. Guru Road is a tourist destination and visited year round. The proposed well field immediately adjacent to this unique feature will diminish the relatively undisturbed environmental and recreation setting and will erode the visitor experience to this iconic cultural phenomena. The proposed Gerlach Community Trail from Gerlach to Guru Road is being planned to help enhance and further develop the tourism economy of Gerlach as well as enhance the recreation opportunities and experiences for visitors and the community. This trail will be adversely impacted by well field development by changing the very character of the environmental setting of this most important resource. More Guru Road information can be found at: <a href="https://travelnevada.com/weird-nevada/guru-road/">https://travelnevada.com/weird-nevada/guru-road/</a>
Netherton	Shaaron	Friends of Nevada Wilderness	Recreation	Guru Road/Dooby Lane, an intentional art and community site. From 1970 to the time of his death in 1995 DeWayne Williams built over 450 rock engravings and monuments on a long stretch of road just one mile from Gerlach and parallel to State Route 34. Nicknamed Dooby Lane it is a loving and humorous testament to the community of Gerlach. Thousands of visitors to the BRNCA have walked the road as a significant cultural site. Guru Road is in the Ormat project plan boundary and the southern end of Guru Road is less than 700 feet from a proposed well pad. Though Ormat is required to honor the right of way of Guru rd. on public lands it is impossible to believe that the beauty and integrity of the site will remain. Or that it will be accessible to the public.
Brooks	Christopher	—	Recreation	I was greatly concerned when the October 2020 map showed well pads overlapping with Dooby Lane. I'm gratified to see that the Proposed Gerlach Geothermal Exploration Project map at <a href="https://www.blm.gov/sites/blm.gov/files/docs/2021-12/Gerlach%20Geothermal%20Exploration%20Map%20508%200.pdf">https://www.blm.gov/sites/blm.gov/files/docs/2021-12/Gerlach Geothermal%20Exploration Map 508 0.pdf</a> dated 11/3/2021 now has the four northernmost well pads located on east of Highway 34, across from Dooby Lane (see attached map). However, the proposed project will have an impact on the stark loneliness of the site of Dooby Lane. My hope is that the view and quietness Dooby Lane could be preserved as much as possible by placing pump equipment behind berms or at least fences.
Brooks	Christopher	—	Recreation	My primary concern is how the location of this project will impact the Dooby Lane art installation located at T.32 N., R.23 E., sec. 3.



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Recreation	The proposed geothermal exploration project overlaps a portion of the Granite Mountain Special Recreation Management Area. Easy access to a favorite local recreation area encompassing the west end of the Granite mountain foothills will be eliminated and the environmental setting as well as recreation setting and resulting experiences will be permanently changed by altering the landscape, development of facilities or infrastructure. Visitors to the area also utilize this area for camping, hiking, and for the grand vistas from these higher elevations. What mitigation measures will be implemented to retain and/or restore recreation opportunities in this area with the relatively undeveloped settings? What are the resulting impacts on recreation opportunities and experiences with development of well fields where recreation takes place? Once again, the only way to mitigate the significant adverse impacts on the character of the community, the sense of place to Gerlach and adjacent private properties is to move all of the geothermal development away from the community and private properties so it is out of sight and sound.
Evans	Kristy	—	Recreation	The proposed project overlaps a portion of the Granite Mountain Special Recreation Management Area. What mitigation measures will be implemented to ensure access to recreation opportunities in this area?
Reynolds	Margie	—	Recreation	The road up behind the Gerlach transfer station has, for generations, been a place for locals to walk their dogs, go shooting, hiking. It also serves as a wonderful spot to camp, offering panoramic views of the iconic Black Rock Desert. It's my understanding that this recreation lifeline will be impacted.
Reynolds	Margie	—	Recreation	This iconic folk-art installation is unique to Nevada. It is promoted by the Nevada state travel industry. This installation must be protected and preserved, not mowed over for progress. Stay off Guru Road! Retain access to culture and recreation.
Shepard	Darcy	—	Recreation	A geothermal installation will decrease the recreational values
Tanner	Carolyn "Lina"	Burning Man Project	Recreation	Gerlach's economy significantly benefits from the tens of thousands of visitors from around the world who travel to this region year-round to experience the solitude of the vast open spaces and undeveloped vistas present in the Black Rock Desert, as well as attend numerous events and pursue a variety of recreation experiences. Even with the harmonious paint colors Ormat proposes, the number and location of the proposed well pads within this viewshed and sound range would negatively impact the experience of these tourists, and thus the vibrant tourism industry of Gerlach. The Project overlaps a significant portion of the Granite Foothills Recreation Management Zone. The RMZ plan recognizes that "national or regional visitors and constituents value the surrounding public lands as a recreation/tourism opportunity." The BLM should do a detailed study to identify the scale of the Project impacts on the identified recreation values and on the socio-economic impact on regional tourism.
Wilson	David	—	Recreation	I am concerned that the art site know as Guru road needs to be protected. Their operation near by could have detrimental effects or unintended consequences what is been done to protect this site.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Netherton	Shaaron	Friends of Nevada Wilderness	Recreation	The proposed project overlaps a portion of the Granite Mountain Special Recreation Management Zone (RMZ) and will end easy access to a favorite recreational area to outdoor enthusiasts. The RZM directs that any facilities in this area "will be developed, located and designed in such a way as to be consistent with preserving the character of the adjacent Black Rock Desert High Rock Canyon Emigrant Trails National Conservation Area.' Gerlach's economy is largely based on the tens of thousands of visitors that participate in special events, hunt, collect minerals and gems, launch rockets, camp and hike as well as simply enjoy the high-quality dark skies. Each of these visitor groups will be directly affected by the Ormat project and as a result will directly impact the local economy.
GOIN	PETER	—	Recreation	While I in principle value harvesting geothermal resources, I would expect that such efforts would take into consideration the cultural resources that would be affected. I am not empowered to speak on behalf of the citizens of Gerlach, but as a visual scholar dedicated to Nevada's identity and history, I am mindful of the importance of preserving Dooby Lane, and the artifacts contained and placed therein. This plan inevitably affects this important cultural resource, not to mention the vast viewshed that the site embellished. I believe that if Ormat truly wishes to be a good citizen, then a coordinated plan that was collaborative, inclusive, and respectful should be absolutely necessary if any further work were to be permitted. I am deeply concerned that the plan as presented would disrespect the site, and contribute to its decline and destruction.
Brooks	Christopher	—	Visual Resources	Finally, I feel that light pollution should be addressed. Lights should be only on when workers are present. Lights should be down-facing with shields.
Emmerich	Kevin	Basin and Range Watch	Visual Resources	It will impact the Massacre Rim WSA/ Dark Sky Sanctuary.
Evans	Kristy	—	Visual Resources	The BLM should conduct a detailed study of the light pollution of the Project and how it will impact the dark sky brightness and interfere with opportunities for tourism and star gazing. How can Ormat ensure there are no negative impacts from lighting? The Black Rock Desert is one of the darkest sky areas of the United States. This important resource must be protected from artificial night lighting, and the project plan should strive for near-zero light emissions.
Fiumara	Cedi	—	Visual Resources	The night skies in and around Gerlach are among the darkest in the world. I've lived in many rural towns, but thanks to the low moisture content and lack of light pollution, these skies are the only in which I have been able to see the arm of the Milky Way with the unaided eye. I fear the light pollution from this proposed project would forever alter these beautiful skies. I can walk ten feet from my front door and past a tree to see the arm of a galaxy in the sky every clear night. Perhaps it's superficial or trivial, but the loss of that ability would be extraordinarily upsetting to me.
Schimmelfing	Colin	—	Visual Resources	The one missing piece of the Operations Plan: I would like to see light pollution addressed as part of the plan. As Gerlach and the surrounding area are known as "the darkest town in America", this unique feature should be preserved. <a href="https://www.onlyinyourstate.com/nevada/darkest-towns-in-us-in-nevada/">https://www.onlyinyourstate.com/nevada/darkest-towns-in-us-in-nevada/</a> Perhaps lighting can be designed to only trigger based on movement or at least to be shielded towards the ground

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Emmerich	Kevin	Basin and Range Watch	Visual Resources	The project should be reviewed for VRM Class II impacts. The objective for VRM Class II is to "retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape."
Emmerich	Kevin	Basin and Range Watch	Visual Resources	The region is also popular for star gazing and many visit the area to view meteor showers. In the 2021 legislative session, the Nevada Legislature passed Senate Bill 52 which declared that dark sky areas "serve to specifically promote, preserve, protect and enhance Nevada's dark sky resources for their intrinsic value and their ecological, astronomical, cultural and economic importance."
Cooper	Dave	—	Visual Resources	What are the visual impacts of this industrial development project? Clearing drill pads and road construction to drill site, towering drill rigs and associated facilities will cause significant impacts on the valuable viewshed of this rural community. Tall drill rigs only a short distance away will be seen and heard from adjacent private properties and town day and night. Most of the proposed development is also at higher elevation at the base of the Granite Mountains and is highly visible throughout the area. The relatively undisturbed landscape that surrounds Gerlach is of utmost importance to the community, the residents and those that come here for the experience. Gerlach has an economy primarily based on tourism with tens of thousands of visitors from around the world traveling to this region year-round to experience the solitude of the vast wide open spaces and undeveloped vistas present from Gerlach and throughout the Black Rock Desert. Visitors also travel here to attend numerous events in the area. Thousands of visitors will travel directly through the area of proposed drilling on highway 447 and county road 34, in pursuit a variety of recreation experiences within and around the proposed developments in the Granite Mountain foothills and beyond including the Black Rock Desert - High Rock Canyon Emigrant Trails National Conservation Area. The surrounding mostly natural landscape viewshed is of more importance to residents and the local economy over the long term than geothermal development at this location.
Lyon	Sarah	—	Visual Resources	Noise and light pollution is very low in the Gerlach area and that is one of the reasons that I chose this place to live. While the Burning Man festival temporarily increases both, its far enough away that it does not affect the town as much and is temporary. Building an Ormat facility would be a year-round increase in noise and light in the desert. This may even impact bat populations in the area.
Reynolds	Margie	—	Visual Resources	Resident and visitors are proud of their dark skies. Dark skies are one of the primary draws to this region. Gerlach is a designated dark skies community. This project infringes on that.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Scott	Matthew	—	Visual Resources	The Black Rock Desert is a recognized Dark Sky region and is frequented by many professional and amateur stargazers, year-round. Night time lighting of any permanent or long-term temporary facilities associated with the project must be designed to minimize light spillage off the site. Specifically, lights must be aimed towards the ground, not horizontally or vertically, to prevent ambient light from interfering with stargazing in the region. This stipulation should not be applied to specialized emergency lighting or temporary lighting necessary for special projects or short-term construction projects. There are multiple temporary needs for additional lighting which are fine, so long as they are not permanent.
Scott	Matthew	—	Visual Resources	The majority of concerns regard the visual impact of this project on the surrounding environment.
Williams	Scott	—	Visual Resources	As you know the town of Gerlach is located at the edge of the Black Rock Desert and the desert vistas are wide open in all directions and there are very few trees and other features that would disguise or cover or "camouflage" the well's permanent infrastructure after drilling operations are completed. I did not see anything in the Operations Plan about visual quality objectives or how Ormat would mitigate visual impacts. I did notice that a Visual Resources Key Observation Points study was completed in March 2021 (Gerlach Geothermal Exploration Project, Environmental Assessment, Baseline Studies). Please make this information available to the public. In your NEPA planning please address visual quality and visual impacts mitigations.
Wittek	Stacey	Friends of Black Rock High Rock	Visual Resources	Black Rock Desert High Rock Canyon Emigrant Trails National Conservation Area (BRNCA) was created for its sublime solitude, quiet and expanse of untrammelled beauty. Ten contiguous and non-contiguous Congress designated Wilderness Areas and hundreds of mostly pristine emigrant trails make the largest National Conservation Area in the lower 48 states a jewel in the crown of public lands. The primary entrances to the BRNCA, along the paved State Route 34, are all within a few miles of the proposed project. Visitors will be compelled to travel through the Ormat drill pads and facilities to enter the BRNCA through a corridor of pipelines, drill pads and aggregate pits and pools. The first view of the Black Rock Desert will not be wild places, pristine public lands but of the geothermal operations. This view, its impact on locals and visitors bely the principals the BRNCA was created on.
Shepard	Darcy	—	Visual Resources	have a negative impact on dark skies and solitude with the increase of heavy traffic.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	Visual Resources	In an era of ever increasing urbanization and development, Dark Skies are becoming a rapidly diminishing resource. This has led to an exponential growth in the awareness of the values of preserving Dark Sky landscapes and in the growth of Astro Tourism. Currently, Gerlach is a gateway community to the Dark Sky resources of the Black Rock High Rock NCA and the Massacre Rim WSA/ Dark Sky Sanctuary. This area is a popular viewing spot for people to view meteor showers, including the Perseids in August, and the Leonids in November. In the 2021 legislative session, the Nevada Legislature passed Senate Bill 52 which declared that dark sky areas "serve to specifically promote, preserve, protect and enhance Nevada's dark sky resources for their intrinsic value and their ecological, astronomical, cultural and economic importance." Further, the Legislature determined that "Designation of dark sky places in Nevada under the program will also attract tourists and other visitors to rural communities near Nevada's dark sky assets, thereby generating increased economic activity for surrounding communities and their small businesses." The BLM should conduct a detailed study of the light pollution of the Project and how it will impact the dark sky brightness and interfere with opportunities for Astro Tourism and star gazing.
Williams	Scott	—	Visual Resources	In your NEPA planning please address night skies and night skies impacts mitigations.
Wittek	Stacey	Friends of Black Rock High Rock	Visual Resources	Light Pollution. There is an exponential growth in the awareness and values of preserving Dark Sky landscapes and communities internationally. On a local level this can be witnessed by the International Designation of Dark Skies Sanctuary at Massacre Rim just north of BRNCA. Not only is the community of Gerlach actively seeking Dark Skies Community status with the International Dark Skies Association, the BRNCA is a popular area for meteor shower campouts and astronomy.
Not Provided	Not Provided	—	Visual Resources	Nothing that creates extra light or sound should be built here, even during construction extra light would be unacceptable, we're one of the darkest towns in the entirety of the United States and we want it to stay that way.
Rolshoven	Nathan	—	Visual Resources	strongly oppose Ormat's exploration project in Gerlach due to the visual and operational impacts on the town.
Sady	Scott	—	Visual Resources	The Black rock desert is the southern end of the nationally recognized dark sky preserve in Northern Nevada and as such the illumination from this project would drastically diminish the attraction of this area which is a huge draw for both local and international solitude seekers.
Netherton	Shaaron	Friends of Nevada Wilderness	Visual Resources	There is an exponential growth in the awareness and values of preserving Dark Sky landscapes and communities internationally. On a local level this can be witnessed the International Designation of Dark Skies Sanctuary at Massacre Rim just north of the NCA. Not only is the community of Gerlach actively seeking Dark Skies Community status with the International Dark Skies Association the NCA and surrounding Wilderness areas are popular for viewing meteor showers, and for Astro-tourism.
Rankine	Dave	—	Visual Resources	They will damage the views from the Black Rock NCA. that is undesirable.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Otto	Ed	Trails West, Inc.	Visual Resources	This would be the start of changing the Black Rock area which impacts the actual Nobles emigrant trail and also greatly impacts the visual quality/experience of both the Nobles and Applegate trails. Any above ground work/structures would be visible when following either of these trails. Just the drilling of twenty-one test wells would be a visual impact and be an eyesore from Gerlach and the County roads in the area. Even if the wells are just capped off, they will need a structure around each of them due to all of the vehicle traffic there. That will be very visible.
Reynolds	Margie	—	Visual Resources	Yet this project's footprint plants itself in the forefront of this experience. It affects not just residents, but tens of thousands of visitors each year. Large pipes, cement pads, construction, lights, noise, etc., do NOT belong at the entry way to the Black Rock Desert. The maze of pipes adjacent to the roadways will be an unwelcome sight for visitors. This blight will be there for the residents to regard, every single day.
Carey	Scott	Nevada State Clearinghouse	Groundwater Resources	All wells must be noticed, drilled, constructed, and plugged in accordance with NRS Chapter 534 and NAC Chapter 534, and the work must be completed by a licensed well driller as provided by NRS Chapter 534. A water right or waiver is required prior to drilling a well in a designated basin pursuant to NRS Chapter 534 and NAC Chapter 534. Monitoring wells require a waiver from the State Engineer's Office pursuant to NRS Chapter 534 and NAC Chapter 534 and must comply with the provisions of NAC Chapter 534. Any unauthorized or unpermitted drill holes/wells (water or monitor wells or geotechnical soil boring) that may be located on existing, acquired or transferred lands, are ultimately the responsibility of the owner of the property and must be plugged and abandoned as required in NAC Chapter 534. Abandoned wells need to be reported to the State Engineer's Office and must be plugged in accordance with NAC Chapter 534. Construction and abandonment of any well, monitoring well, geotechnical soil boring, instrumentation geotechnical soil boring, or any other type of geotechnical soil boring, including but not limited to any "shot" holes, must comply with the provisions of NAC Chapter 534. The use of water issued under a waiver must comply with the provisions of NRS Chapter 534 and NAC Chapter 534 and the terms of the waiver approval. Applicable to geothermal exploration. A waiver to drill a well must comply with the provisions of NRS Chapter 534 and NAC Chapter 534 and the terms of the waiver approval.
Fiumara	Cedi	—	Groundwater Resources	Geothermal drilling near and even possibly under local private properties carries concerns related to spring production and producing unexpected geological phenomena in the area that may seriously affect locals, especially those who base their business upon geothermal features such as hot springs.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Not Provided	Not Provided	—	Groundwater Resources	How would the hot springs in the area be affected? How would ground water be affected in the local aquifers? The detail on how geothermal water and potential hazardous and noxious non-condensable gasses will be handled with the short and long term well testing phase of this proposal allow for basically anything to be done with this test water – likely just pumped into the new aggregate pit leaving odors traveling down wind. Each of the 22 wells may be tested and 16.5 million gallons from each are allowed to be disposed of in this manner according to this current proposal; this is simply unacceptable.
Whipple	Will	—	Groundwater Resources	How would the hot springs in the area be affected? How would ground water be affected in the local aquifers? The detail on how geothermal water and potential hazardous and noxious non-condensable gasses will be handled with the short and long term well testing phase of this proposal allow for basically anything to be done with this test water - likely just pumped into the new aggregate pit leaving odors traveling down wind. Each of the 22 wells may be tested and 16.5 million gallons from each are allowed to be disposed of in this manner according to this current proposal; this is simply unacceptable.
Cooper	Dave	—	Groundwater Resources	If gas or air or rock fracking is needed to lift fluid from the wells, how might that impact the aquifers and potential for subsidence in the area? What techniques and materials might be safely used? Fracking may have very significant long term impacts on the springs adjacent private lands as well as the community of Gerlach just a short distance away. Fracking may disrupt natural underground flows through the aquifer drying up springs and wetlands vital to wildlife in the desert environment with potential for contamination from drilling muds, fluids and chemicals.
Emmerich	Kevin	Basin and Range Watch	Groundwater Resources	The Black Rock Geothermal area contains important hot springs. Geothermal development frequently causes substantial changes in the flow rates and flow paths in hydro geothermal systems which could alter existing surface flows at springs in the area. Shallow groundwater can be diverted downward with geothermal development. BLM should study these springs to see how connected they are.
Cooper	Dave	—	Groundwater Resources	The region is subject to earthquakes and could cause changes in the underground hydrology. How will ORMAT mitigate the potential for damage to drill sites, wells and the potential for contamination of aquifers from earth movement?
Emmerich	Kevin	Basin and Range Watch	Groundwater Resources	There is potential for several major lost circulation of drilling fluids events in the test holes.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Netherton	Shaaron	Friends of Nevada Wilderness	Groundwater Resources	Water table and impacts on hot springs. Though geothermal energy has been utilized for a very long time some of the newer technologies to maximize energy output are lesser verified. The possibility that reserve pits could contain brine and or any hazardous materials are not adequately addressed. According to the Ormat proposal water required for well drilling could range up to as much as 35,000 gallons per day. Water requirements for grading, construction and dust mitigation will be around 6,000 gallons per day. Water necessary for these activities will be from wells drilled on site and approved by BLM under a temporary waiver. Nevada is currently facing one of the worst droughts on record so there is the real potential that this could deplete water resources outside the proposed project area. This has already occurred at the Ormat Plant in Jersey Valley Nevada
Cooper	Dave	—	Groundwater Resources	Well drilling and workers will require large quantities of water either from the aquifer or potable water purchased from the Gerlach General Improvement District. What are the potential impacts on the aquifer and to the drinking water supply for Gerlach? What will happen to the aquifers in the area if significant amounts of water are removed from this aquifer that are used by adjoining private property owners or if drilling operations contaminate the aquifer with drilling fluids or chemicals?
Emmerich	Kevin	Basin and Range Watch	Groundwater Resources	Well drilling has the potential for long-term impacts on springs/habitat, wetlands, and private wells.
Cooper	Dave	—	Groundwater Resources	What are the potential impacts on the underground aquifers particularly with flow testing of up to 15 million gallons of water per well for up to 30 days? Will the reserve pits be able to contain the brine and are any hazardous materials expected to contaminate the reserve pits and if so how will this be mitigated? There is geothermal hot water in the aquifer under the town of Gerlach. What are the potential impacts on the aquifer and to the community? What will be required to insure there is no contamination to the aquifers and if it does occur how will Ormat mitigate?
Evans	Kristy	—	Groundwater Resources	What is Ormat going to do for us if their proposed drilling and pumping disrupts the local water table, and causes our home's foundations to crack or sink? Like most Americans the citizens of Gerlach have tied up most of their wealth in their homes. And we're not a very wealthy community to start with. So none of us can afford that particular risk.
Scott	Matthew	—	Groundwater Resources	As seen in multiple areas where subterranean water is being extracted, the California Central Valley being a well known example, surface levels can drop, causing a change in the landscape and damaging an aquifer's ability to hold water. A monitoring system for ground level subsidence must be included with this permit.
Not Provided	Not Provided	—	Groundwater Resources	Nothing that effects our water in any way should be built here, get your own water.



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
McPherson	Ann	US EPA Region 9	Groundwater Resources	The BLM should estimate the quantity of water that the potential project will require for drilling and testing of the geothermal exploration wells, as well as construction of access roads. If groundwater will be used, the potentially affected groundwater basin should be identified and any potential for subsidence. The draft EA should include a discussion of cumulative impacts on groundwater resources within the hydrographic basin. Describe water supply reliability for the proposed project and discuss how existing and/or proposed sources may be affected due to trends in precipitation and groundwater recharge rates. Available technologies to minimize or recycle water should be identified.
Slechta	Kevin	—	Groundwater Resources	Was looking in to this project a bit, and it seems, locally, the concern is mainly the effects on groundwater quality and supply, and the effects on nearby springs, whether they're hot or cold. Inquiring if (1) this has been studied, and (2) is this information available?
Reynolds	Margie	—	Groundwater Resources	Water is both an economic and recreational force in the region. Access to springs to soak in, Black Rock Mud Company, Burning Man LLC's plans to have hot water/recreational campsites on their 360 property. Ranchers depend on the water table to feed their animals. What are the long-term impacts on an essential resource?
Tanner	Carolyn "Lina"	Burning Man Project	Groundwater Resources	Groundwater Contamination. Groundwater contamination is possible with exploration well drilling. The Operations Plan includes a Spill or Discharge Contingency Plan that only appears to address spills or discharges to the surface of the ground. There is no plan as to what processes should be implemented should there be an unlawful discharge to groundwater. Any resulting regulatory obligation of Ormat should include a spill and discharge plan that specifically addresses groundwater contamination, and includes immediate notification to contiguous landowners, regardless of whether the Drilling Supervisor believes the spill affects their property. Operations Plan, page 14. Ormat should provide the following pre-drilling and data collection in assessing this Project: The well testing procedures can also cause potential impacts that need to be addressed by BLM. Specifically: - There is potential for impacts on springs/habitat, wetlands, and private (domestic and/or geothermal) wells. - Again, Ormat has not specified an adaptive management approach to address such impacts. In the post-drilling and testing data phase, additional concerns arise: - Ormat has not provided short- or long-term standard operating procedures for monitoring or for the remedy of impacts on springs/habitat or private wells/owners, given mud-drilling, directional-drilling, rock-fracturing, lost circulation and "blow-out" potential or other changes (flow, level, chemistry). - It is not clear what would happen if the Project upends the heat flow wherein potable groundwater resources become non-potable or flow restricted. There must be a responsible party and process for replacing affected water supplies in the short- and long-term. - The process must also specify how and where will habitat be mitigated in the Project vicinity if ecologic changes occur.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Hickey	Chuck	—	Groundwater Resources	I am opposed to this project though I am a firm believer in alternative energy sources and resources. Previous drilling (Fly Geiser) resulted in water that was hot, but not hot enough to support this type of operation. Water is a precious resource in the West and especially so in Nevada - jeopardizing the ground water could be a major problem, but the beauty of the Black Rock Desert - which abuts just off 3 mile access road will ruin the beautiful area that it is.
Rankine	Dave	—	Groundwater Resources	I fear that water pumped from those wells may lower ground water locally causing wells to run dry or become polluted.
Sady	Scott	—	Groundwater Resources	In addition, the water resources that would be required for this project far exceed what I consider a reasonable safety margin in an era of climate uncertainty.
Evans	Kristy	—	Groundwater Resources	The BLM should consult a third-party engineering firm to study the water supply and ensure that local aquifers will be safe from depletion, alteration, or contamination.
Tanner	Carolyn "Lina"	Burning Man Project	Groundwater Resources	The Project area lies along the northeast trend of the Black Rock Geothermal area which includes many important hot springs resources. Geothermal development frequently causes substantial changes in the flow rates and flow paths in hydro geothermal systems which could alter existing surface flows at springs in the area. The BLM should do a detailed study of the connections among hot springs all along the trend noted above to estimate impacts, and set mitigation measures if appropriate. BLM should analyze the impact of development of geothermal resources on springs discharging from shallow groundwater systems. Impacts could occur if development changes the vertical gradient and causes water to flow downward from shallow groundwater significantly faster than currently occurs. While we recognize that these impacts may occur in the future upon further development, they should still be identified now.
Wittek	Stacey	Friends of Black Rock High Rock	Groundwater Resources	Water table and impacts on hot springs. Though geothermal energy has been utilized for a very long time, some of the newer technologies to maximize energy output are less verified. Will the reserve pits contain the brine and are any hazardous materials expected to contaminate those pits? Will gas or air or chemical fracking be used to lift fluids? How will this project alter groundwater temperatures? Will antifreeze be used as a heat-carrier fluid and is there a risk of groundwater contamination? According to the Ormat proposal, water required for well drilling could range up to as much as 35,000 gallons per day. Water requirements for grading, construction and dust mitigation will be around 6,000 gallons per day. Water necessary for these activities will be from wells drilled on site and approved by BLM under a temporary waiver. What are the short and long term consequences of water extraction at this level?
Carey	Scott	Nevada State Clearinghouse	Surface Water Resources and Water Rights	All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions of NRS Chapters 533 and 534 and not otherwise. Water shall not be used from any source unless the use of that water is authorized through a permit issued by the State Engineer. For underground sources, certain uses of water may be authorized through the issuance of a waiver pursuant to NRS Chapter 534 and NAC Chapter 534.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	Surface Water Resources and Water Rights	And, if the Great Boiling Springs, located on neighboring private land, reduce or cease functioning, this would adversely impact the Black Rock Mud Company that relies upon its proper function. While we understand that the Project has been scaled down from development to exploration, the potential impacts on springs and groundwater should be examined early on in the process, with mitigation strategies in place should a plant ultimately be approved for construction.
Tanner	Carolyn "Lina"	Burning Man Project	Surface Water Resources and Water Rights	As to the planning phase of the Project, Ormat should be required to do the following, at a minimum: - Test-hole mud-drilling exploration sites should avoid "targets" that could affect springs, wetlands, and wells within the Project vicinity. - Directional-drilling beneath private property should not be allowed unless authorized by the property owners, given the site-specific conditions. - Thermal studies show average heat flow and temperatures are affected in an area within roughly one mile around springs, or larger if the springs harvest heat flow over a larger area (Luijendijk, and others, 2020). These parameters should be taken into account. - Springs with connections to habitat, wetlands, and potable groundwater resources in the Gerlach area are known to contain heavy metals, including arsenic and uranium at levels requiring treatment, which could become mobilized by incremental geochemical changes due to well drilling or long-term operations (temperature). - There should be buffering/setbacks around springs, wetlands, habitat, well sites, and where geothermal and mineral lease rights areas of others reasonably could be affected. Ormat should be required to perform a hydrogeologic analysis to determine whether sensitive areas and private property are within the zone of influence of the proposed wells.
Carey	Scott	Nevada State Clearinghouse	Surface Water Resources and Water Rights	Compliance with Nevada water law is required.
Emmerich	Kevin	Basin and Range Watch	Surface Water Resources and Water Rights	Drill sites that are closest to springs wetland and private wells should be avoided.
Carey	Scott	Nevada State Clearinghouse	Surface Water Resources and Water Rights	Ensure that any water used on a project for any manner of use shall be provided by an established utility or under permit or temporary change application or waiver issued by the State Engineer's Office with a manner of use acceptable for suggested project's water needs.
Emmerich	Kevin	Basin and Range Watch	Surface Water Resources and Water Rights	Some springs in the area contain heavy metals and can become mobilized with drill tests and could contaminate other water sources. This should be considered.
Emmerich	Kevin	Basin and Range Watch	Surface Water Resources and Water Rights	The Plan of Operations has no specified monitoring actions for flow, water level, geochemical, or other alterations in springs, wetlands, and wells, and within the areas covered by lease and mineral rights of others in proximity to proposed exploration sites.
Cooper	Dave	—	Surface Water Resources and Water Rights	There should be some buffering/setbacks around springs, wetlands, habitat, well sites, and where other geothermal and mineral lease rights areas of others reasonably could be affected. Springs with connections to habitat, wetlands, and potable groundwater resources in the Gerlach area are known to contain certain heavy metals, including arsenic and uranium at levels requiring treatment, which could become mobilized by incremental geochemical changes due to well drilling and testing (pH, electrical conductance/TDS, dissolved oxygen, organic carbon, etc.), or long-term operations (temperature)

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Not Provided	Not Provided	—	Surface Water Resources and Water Rights	Additionally, many of the well sites are placed in spring-fed wetlands. BLM leases require protection of wetland vegetation. The current layout of well pads does not respect that requirement.
McPherson	Ann	US EPA Region 9	Surface Water Resources and Water Rights	Confirm with the U.S. Army Corps of Engineers that there are no jurisdictional waters requiring a Clean Water Act Section 404 permit for discharge of dredged or fill materials into waters of the United States, including wetlands and "special aquatic sites." If potential impacts on waters of the U.S. are found, specify the acreage and channel lengths, habitat types, and functions and values of these waters. Describe the potential environmental impacts and discuss alternatives to avoid or minimize those discharges, and potential measures to mitigate potential impacts.
McPherson	Ann	US EPA Region 9	Surface Water Resources and Water Rights	Consider in the draft EA the impacts of changing precipitation patterns on the project within the analysis of impacts on water resources. Discuss the anticipated extent and depth of overland flows given a 500-year flood event, as compared to a 100-year event. Identify design considerations needed to accommodate future anticipated effects (e.g., increased intensity and severity of storms) such as upsizing the stormwater management system.
Emmerich	Kevin	Basin and Range Watch	Surface Water Resources and Water Rights	Geothermal plants dry up springs! Ormat has ruined Nevada springs, In 2019, the BLM confirmed that, after flowing for over a hundred years, Jersey Valley Hot Springs water flows started to decline not long after Ormat started commercial power production at the McGinnis Hills geothermal power plant in July, 2012. Two subsequent expansions have made McGinnis Hills the largest geothermal power plant in Nevada and the largest on BLM land. This impacted bats, migratory birds, bighorn sheep and pronghorn.
Scott	Matthew	—	Surface Water Resources and Water Rights	The local area and region Ormat plans to extract geothermal water from is known for naturally occurring hot springs which are frequented by thousands of members of the public, including me. Given the methodology of the drilling and extraction proposed, hot springs on both public and private land within a 25KM radius must be monitored for changes in temperature, water level and the presence of any chemicals used in drilling mud to preserve their characteristics for the public who enjoy them.
McPherson	Ann	US EPA Region 9	Surface Water Resources and Water Rights	Under the federal Clean Water Act, any construction project disturbing a land area of one or more acres requires a construction stormwater discharge permit. The draft EA should document applicable stormwater permitting requirements and discuss specific mitigation measures that may be necessary or beneficial in reducing adverse impacts on water quality and aquatic resources.
Not Provided	Not Provided	—	Surface Water Resources and Water Rights	And I did not see any mention of a plan by the proponent to monitor surface water resources or domestic wells, whether on public land or on the neighboring private parcels.
Evans	Kristy	—	Surface Water Resources and Water Rights	Geothermal development in this proposed location has the potential for significant impacts by altering or stopping existing surface springs on private properties from functioning. This needs to be evaluated.
Egbert	Cory	—	Surface Water Resources and Water Rights	I am specifically concerned with how this project will affect the natural springs on my land, their existence, water quality and temperature.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Jamieson	David	—	Surface Water Resources and Water Rights	I am specifically concerned with how this project will affect the natural springs on my land, their existence, water quality and temperature.
Not Provided	Not Provided	—	Surface Water Resources and Water Rights	The current set of documents supplied by the project proponent suggests that the well pads and access roads would heavily impact wetland areas that are extremely rare in that region. These wetlands are of course extremely important to wildlife, agricultural interests, and public recreation, and the effects of disturbance or alteration would likely linger for generations in the fragile desert ecosystem.
McPherson	Ann	US EPA Region 9	Surface Water Resources and Water Rights	The draft EA should identify the presence of surface water bodies, including the presence of springs and rare wetlands.
Squires	Eric	—	Surface Water Resources and Water Rights	The local hot springs are culturally significant resources, with indigenous and well as modern use. Thermal energy is an amazing resource. Disruption of hot spring resources may have a exponentially higher impact should the water disappear, than areas with higher rainfall. This low moisture environment depends on these hydro-thermal resources. Let's strike a balance that allows for resource development while protecting existing resources. If that means saying no to development in order to protect resources, let's do that until development may proceed without negative impact.
Emmerich	Kevin	Basin and Range Watch	Wildlife	Night lighting will disturb nesting eagles, bats, bighorn sheep, pronghorn, migratory birds and a variety of insects.
Andrle	Katie	Nevada Department of Wildlife	Wildlife	Bighorn sheep occupy the area within and adjacent to the proposed geothermal project area year-around (Figure 1). We recommend analyzing the geothermal exploration impacts on bighorn sheep and their habitat and ask that appropriate design features be included to avoid or reduce potential impacts from noise, construction activities, habitat loss and fragmentation, etc. In addition to being a high use area for bighorn sheep, this area is winter habitat for mule deer. Below are some preliminary considerations to be included as design features: <ul style="list-style-type: none"> <li>·Timing restrictions be applied on construction/drilling activities from Apr 15 - June 30 in areas North of Highway 447 to reduce noise impacts during the lambing season.</li> <li>·Cease construction activities in the winter and spring (e.g. during large snowfall events) if sheep and/or mule deer congregate on or near the project site.</li> </ul>
Andrle	Katie	Nevada Department of Wildlife	Wildlife	The south end of the Granite Mountains has been identified as a high-risk area for potential contact to occur between bighorn sheep and trailing domestic sheep. Given that this area is currently a high-risk area, the Department has concerns regarding how the project will affect domestic sheep trailing and subsequently the risk of contact between domestic and wild sheep. We request this be analyzed and that any options that increase this risk be considered.
Andrle	Katie	Nevada Department of Wildlife	Wildlife	We recommend completing baseline surveys for Dark Kangaroo Mice (DKM) if they have not already been done for previous project proposals. If impacts are expected on DKM, we hope design features can be included to avoid, minimize and mitigate impacts.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Reynolds	Margie	—	Wildlife	The southern granites have been home to Bighorn Sheep. An elk was spotted and photographed near Transfer Rd. about a decade ago. What impact will this project have on flora and fauna? This project is sure to have negative impacts on local wildlife, and those animals that use the nearby Guzzler.
McPherson	Ann	US EPA Region 9	Wildlife	We understand that the BLM will begin to review updates to the land management plans adopted in 2015 that were designed to support sagebrush ecosystems and greater sage grouse that rely on this habitat. I See Update on BLM Greater Sage-Grouse Plans (May 11, 2021) at: <a href="https://www.blm.gov/programs/fish-and-wildlife/sage-grouse">https://www.blm.gov/programs/fish-and-wildlife/sage-grouse</a> The EPA recommends that an update on the status of 2015 plans be included in further NEPA documents including any changes, additional mitigations, or restrictions to sage-grouse related stipulations, if any, associated with the project area.
McPherson	Ann	US EPA Region 9	Wildlife	Analysis of impacts and mitigation on covered species should include: - Baseline conditions of habitats and populations of the covered species. - A clear description of how avoidance, mitigation and conservation measures will protect and encourage the recovery of the covered species and their habitats in the project area. - Monitoring, reporting and adaptive management efforts to ensure species and habitat conservation effectiveness. - Identification of nearby migration corridors.
Shepard	Darcy	—	Wildlife	Furthermore, pronghorn and our state animal the bighorn sheep roam these areas and deserve undisturbed, unfragmented habitat.
McPherson	Ann	US EPA Region 9	Wildlife	On August 23, 2021, Nevada Governor Steve Sisolak signed Executive Order 2021-18 which instructs the Nevada Departments of Wildlife, Transportation and Natural Resources to develop a plan called the Nevada Habitat Conservation Framework (Framework). Through coordination with land management agencies and other interested parties, the State will use the Framework to evaluate threats, prioritize landscapes, and develop strategies to restore and conserve at risk wildlife habitats, including migration corridors. A key component of the Framework will be the development of the statewide Nevada Wildlife Connectivity Plan that seeks to identify and conserve migratory corridors for ungulates and other key species. Given Executive Order 2021-18, the EPA encourages the BLM to work closely with NDOW, NDOT, and NDCNR to ensure that the proposed project does not impact sensitive species, critical habitat, migration corridors, and scenic landscapes within the state of Nevada.
Wittek	Stacey	Friends of Black Rock High Rock	Wildlife	The exploration project impacts important wildlife habitat. As currently projected the area of disturbance will overlap into Nevada Bighorn Sheep Habitat Allotment for grazing and management. This is also an important winter grazing habitat for pronghorn antelope. Wetlands that are hydrologically connected to the project will likely be impacted. Wetlands in the desert are rare and important habitats for invertebrates, fish, migratory and resident birds and mammals.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Netherton	Shaaron	Friends of Nevada Wilderness	Wildlife	The exploration project impacts important wildlife habitat. As currently projected the area of disturbance will overlap into Nevada Bighorn Sheep Habitat Allotment. This is also an important winter grazing habitat for pronghorn antelope. Wetlands that are hydrologically connected to the project will likely be impacted. Wetlands in the desert are rare and important habitats for invertebrates, fish, migratory and resident birds and mammals.
Tanner	Carolyn "Lina"	Burning Man Project	Wildlife	The Project has the potential to impact important wildlife habitat in a number of ways. If the likely geothermal plant development occurs, decreases in flow and temperature from springs hydrologically connected to the Project's geothermal resource may impact wetland habitat created by the springs. The 360 Property includes such valuable habitat. Wetlands in the desert are biodiversity hotspots, providing habitat for invertebrates, fish, resident and migratory birds, and a vital water source for larger terrestrial wildlife. The BLM should analyze in detail the potential changes in flow due to geothermal development to all potentially connected springs, and what the ecological consequences of such changes would be
McPherson	Ann	US EPA Region 9	Threatened and endangered species	The EPA recommends the BLM coordinate with the U.S. Fish and Wildlife Service to determine whether consultation under Section 7 of the Endangered Species Act would be required. The BLM should coordinate with the USFWS and Nevada Department of Wildlife to ensure that current and consistent surveying, monitoring, and reporting protocols are applied in all species protection and mitigation efforts. Disclose in the draft EA the status of such coordination efforts, as well as any potential impacts of construction and operations activities on habitat and species, and any measures that would be implemented to protect important wildlife habitat areas from potential adverse effects of proposed activities.
McPherson	Ann	US EPA Region 9	Threatened and endangered species	The draft EA should identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. The document should identify and quantify which species or critical habitat might be directly, indirectly, or cumulatively affected by each alternative and mitigate impacts on these species. The draft EA should indicate what measures will be taken to protect important wildlife habitat areas from potential adverse effects of proposed activities. We recommend that emphasis be placed on the protection and recovery of species due to their status or potential status under the federal or state Endangered Species legislation. Discuss whether greater sage-grouse, bighorn sheep, or mule deer occur in the project area and, if so, analyze potential impacts from the proposed project to these species.
Lassuy	Dennis	—	Threatened and endangered species	This project appears to be in a similar and not very distant geological setting to the Borax Lake geothermal site in extreme southern Oregon (Harney Basin) where the Borax Lake Chub ( <i>Siphateles boraxobius</i> ) was once emergency-listed under the ESA due to the threat of geothermal development. To my knowledge, no definitive testing of the extent of geothermal connection between the Borax Lake complex and other geothermal systems has been completed. Will such a study be undertaken before any further permitting of the Gerlach project advances? If not, the risk of an emergency re-listing of the Borax Lake Chub will remain.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Wilcox	Rob	—	Threatened and endangered species	The BLM is bound by law to evaluate the impact to Federal endangered species and endangered species in the pipeline such as the Western Sage Grouse. People make fun of the Endangered Species Act, but it identifies "canaries in the coal mine" for us all. That would require a full EIS.
Sady	Scott	—	Cultural Resources	This is an area of immense natural beauty and cultural significance. Exploratory wells along the Black Rock desert would destroy areas of cultural significance for the native communities, destruction of the guru road art drive would eliminate an area that draws international visitation and test wells would destroy the pristine views of the Calico and Granite mountains.
Wilcox	Rob	—	Cultural Resources	The power line connecting this plant to NV Energy substations to the South, and potentially to the West and East is an impact, including on archeological tribal resources, requiring an EIS.
Cooper	Dave	—	Cultural Resources	Additionally another economic development project that will enhance the economy of Gerlach is the Washoe County ArTrail. A proposed trailhead along County Road 34 for the ArTrail will be greatly impacted if not completely denied by the proposed development. Industrial development will greatly diminish the environmental setting as well as desired experiences from this important project. More ArTrail information can be found at: <a href="https://artrail.washoecounty.us/">https://artrail.washoecounty.us/</a>
Netherton	Shaaron	Friends of Nevada Wilderness	Cultural Resources	Guru Road/Dooby Lane, an intentional art and community site. From 1970 to the time of his death in 1995 DeWayne Williams built over 450 rock engravings and monuments on a long stretch of road just one mile from Gerlach and parallel to State Route 34. Nicknamed Dooby Lane it is a loving and humorous testament to the community of Gerlach. Thousands of visitors to the BRNCA have walked the road as a significant cultural site. Guru Road is in the Ormat project plan boundary and the southern end of Guru Road is less than 700 feet from a proposed well pad. Though Ormat is required to honor the right of way of Guru rd. on public lands it is impossible to believe that the beauty and integrity of the site will remain. Or that it will be accessible to the public.
Wittek	Stacey	Friends of Black Rock High Rock	Cultural Resources	Preservation of Paleoindian artifacts and archaeological sites. Extensive research on Late Pleistocene and Early Holocene has shown that the Great Basin Paleoindians occupied the lake basins of ancient Lake Lahontan and left a considerable amount of carbon dated artifacts. Shells, charcoal, bone, crescent shaped tools, fossilized coprolites, human hair and twined tule mats tell a story of early human history well over 8,000 years. The proposed Ormat site is within the lake fluctuation area of Lahontan. Many of these artifacts were found near shoreline cave areas of Handprint Cave and Elephant Mountain Cave within the BRNCA. Just two miles north of the proposed Ormat site, on ledges carved out from the tides of Lake Lahontan, crescent shaped tools used to stun waterfowl, were once abundant. The proposed Ormat site deserves a thorough review to create a baseline for understanding the potential consequence of the proposed project. As the looting of Elephant Mountain Cave has shown, once a site has been disrupted the archaeological record is unredeemable.



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Cultural Resources	The historic Nobles Trail and the historic 1842-1843 exploration route of John C Fremont lie directly adjacent to the proposed development and within the lease planning area. Fremont camped at and named the Great Boiling Springs noting the numerous springs scattered throughout the area. What are the potential impacts on settings of these historic undeveloped sites and the historic trail corridor?
Netherton	Shaaron	Friends of Nevada Wilderness	Cultural Resources	The Nobles Trail was established in 1852 to provide a new wagon route southwest from the Black Rock Desert through the Smoke Creek Desert and on to Honey Lake and Susanville. Over 700 historical markers commemorating the emigrant journey are spread across the route. Two of these markers, 'Granite Springs' (marker N6) and 'Great Boiling Springs' (marker N7) are within or at the beginning of the Ormat Geothermal Exploration build area. Marker N6 is on the site that the first water the emigrants came to after crossing the Black Rock Desert as well as the rock ruins of Fort Granite. Marker N6 is the site of a large deep and very hot spring. Fenced areas could potentially prevent visitors from stopping and reading the markers and considering the cultural history of the area.
Evans	Kristy	—	Cultural Resources	What will be expected of Ormat to have no negative impacts on Guru Road or the Historic Nobles Trail in the planning area? The BLM and Ormat must plan to allow for the preservation and public access of historic cultural resources within the planning area.
Reynolds	Margie	—	Cultural Resources	Where there was water, there was life. It's no secret that this area is culturally rich dating back thousands of years. Artifacts and evidence of encampments have been found at all springs around the Black Rock Desert area. Once these have been excavated and covered over, they are gone forever.
Netherton	Shaaron	Friends of Nevada Wilderness	Cultural Resources	Extensive research on Late Pleistocene and Early Holocene has shown that the Great Basin Paleoindians occupied the lake basins of ancient Lake Lahontan. The proposed Ormat site is within the lake fluctuation area of Lake Lahontan. The proposed project site deserves a thorough review to properly address the potential impacts on the numerous archaeological sites located in the area.
Bansen	Peter	—	Cultural Resources	One of the cultural resources of the Gerlach area (and Northern Nevada, for that matter) is Guru Lane, which is dead center in the proposed exploration area and would be destroyed by the proposed exploration. Guru Lane is an exceptional example of American folk art and a unusually large example of what is sometimes called 'visionary art' - works of art created by people without formal training or education. In some places in the United States, there are entire museums devoted to the exhibition and celebration of works of art such as this - the American Visionary Art Museum in Baltimore, Maryland is an example ( <a href="https://www.avam.org/">https://www.avam.org/</a> ). In Nevada, the BLM apparently takes a dim view of such a cultural resource such as this, which speaks poorly of the breadth and depth of the NEPA consideration of such resources.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Wittek	Stacey	Friends of Black Rock High Rock	Cultural Resources	The Nobles Trail was established in 1852 to provide a new wagon route southwest from the Black Rock Desert through the Smoke Creek Desert and on to Honey Lake and Susanville. Since 1970 a non-profit group of enthusiasts has established over 700 historical markers commemorating the emigrant journey. Two of these markers, 'Granite Springs' (marker N6) and 'Great Boiling Springs' (market N7) are within or at the beginning of the Ormat Geothermal Exploration build area. Marker N6 is on the site that the first water the emigrants came to after crossing the Black Rock Desert as well as the rock ruins of Fort Granite. Marker N6 is the site of a large deep and very hot spring. Fenced areas will prevent visitors from stopping and reading the markers and considering the cultural history of the area.
Tanner	Carolyn "Lina"	Burning Man Project	Cultural Resources	The Operations Plan notes that cultural resource surveys have been conducted; however, no detail as to the results of such surveys is noted. Operations Plan at page 11. The historic Nobels Trail and the exploration route of John C Fremont lie directly adjacent to the Project's proposed location. There must be a thorough archeological survey of all prehistoric and historic resources located in the area.
Simmonds	Jeff	Iron Butt Association, Friends of Gerlach, Friends of Black Rock	Cultural Resources	Too much natural history as well as cultural significance to drill it away. NO.
Fiumara	Cedi	—	Environmental Justice	We also don't even know if Gerlach will benefit from the production of geothermal energy here. For all we know, we might not even get access to it, and instead continue to rely on our decaying equipment while the landscape is harvested for the benefit of others who don't even know Gerlach exists.
Emmerich	Kevin	Basin and Range Watch	Environmental Justice	Please do not allow "directional drilling" near residential areas.
McPherson	Ann	US EPA Region 9	Environmental Justice	The draft EA should assess impacts on local communities consistent with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994). The draft EA should address the potential for disproportionate adverse impacts on minority and low-income populations and the approaches used to foster public participation by these populations. Assessment of geothermal project impacts on minority and low-income populations should reflect coordination with those affected populations.
Not Provided	Not Provided	—	Environmental Justice	Although I certainly support the development of renewable energy, I am not convinced that the Black Rock Desert is the appropriate place, and it would certainly not be a highest and best use of our public lands.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Socioeconomics	What are the projects impacts on the dark skies of Gerlach? The Black Rock Desert has some of the darkest night skies in the lower 48 states and is a very popular destination for visitors that travel here to view the stars and experience these dark skies throughout the year. Drill rigs will be lit at night and will impact the Gerlach dark skies initiative. In the 2021 legislative session, the Nevada Legislature passed Senate Bill 52 which declared that dark sky areas "serve to specifically promote, preserve, protect and enhance Nevada's dark sky resources for their intrinsic value and their ecological, astronomical, cultural and economic importance." Further, the Legislature determined that "Designation of dark sky places in Nevada under the program will also attract tourists and other visitors to rural communities near Nevada's dark sky assets, thereby generating increased economic activity for surrounding communities and their small businesses." Gerlach is currently in the process of applying for grants under the state program to assess and diminish the effects of lights in the community on the dark skies. The BLM should conduct a detailed study of the light pollution of the Project and how it will impact the dark sky brightness and interfere with opportunities for Astro Tourism and star gazing. Refer to the article about Gerlach and the Black Rock Desert dark skies "The Darkest Town in America": <a href="https://fivethirtyeight.com/features/darkest-town-in-america/">https://fivethirtyeight.com/features/darkest-town-in-america/</a>
Reynolds	Margie	—	Socioeconomics	Degrading the experience will likely have a longer-term impact on tourism. This project creates negative visual experiences for visitors traveling to Black Rock or Smoke Creek areas. The experience will be forever marred by big energy.
Lyon	Sarah	—	Socioeconomics	Gerlach is also a place with very few impediments to scenic views, another reason I choose to live here. Putting a facility here would change the landscape and the scenery for Gerlachians and tourists, which is one of the main ways most businesses in town survive.
Netherton	Shaaron	Friends of Nevada Wilderness	Socioeconomics	Gerlach's economy and quality of life is dependent on tens of thousands of visitors from around the world drawn to sublime beauty and solitude The location of this project within the viewshed of Gerlach and the NCA will create significant impacts on the area's visual resources.
Wittek	Stacey	Friends of Black Rock High Rock	Socioeconomics	Gerlach's economy and quality of life is dependent on tens of thousands of visitors from around the world drawn to sublime beauty, pristine places and quietude. The location of this project within the viewshed of Gerlach, the gateway community to BRNCA, is an unacceptable consequence.
Fiumara	Cedi	—	Socioeconomics	I oppose the geothermal exploration and any subsequent activities being so close to Gerlach. To be clear, I am strongly in favor of renewable energy, but I am extremely against the idea of such operations being of such intimate proximity to our town and the area around it that has been shaped by the culture here. Below, I list only a few reasons for my opposition. I speak as a resident of Gerlach, and also as an advocate of preserving what a little remains of remote American towns and their cultures. I can only hope that someone better equipped than I will step up to put forth meaningful oppositions to this proposal. There is more to be said than I can reasonably articulate.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Bansen	Peter	—	Socioeconomics	In addition to the destruction of what many people regard as an important cultural resource, the aesthetic and environmental harm to the town of Gerlach and the Black Rock Desert would be significant and permanent and could not be mitigated in any meaningful manner. BLM should reject this project out of hand - it would be devastating to an area with unique and irreplaceable value. There are lots of other places in Nevada where such a project would have little impact and would disturb no one and the proponents should be encouraged to explore opportunities in such regions.
Reynolds	Margie	—	Socioeconomics	This project will forever degrade the character of this historic and unique community. This development, in eye/earshot of our community, on the edge of a majestic and protected landscape, is a bad idea that disrespects the people who live here as well as those who enjoy it.
Not Provided	Not Provided	—	Socioeconomics	During the active drilling phase, the noise and lights from the drilling rigs and traffic would considerably impact all residents and visitors in the region.
Jamieson	David	—	Socioeconomics	I do not have any desire to prevent new business, especially the growth of the geothermal industry. I am however concerned about protecting my property, its natural, historical, and cultural value.
Egbert	Cory	—	Socioeconomics	I do not have any desire to prevent new business, especially the growth of the geothermal industry. I am however concerned about protecting my property, its natural, historical, and cultural value.
Egbert	Cory	—	Socioeconomics	If my property is negatively impacted, what remedies will be available to me? And what responsibility does the BLM or the developer have to correct any harm caused to me by these activities?
Jamieson	David	—	Socioeconomics	If my property is negatively impacted, what remedies will be available to me? And what responsibility does the BLM or the developer have to correct any harm caused to me by these activities?
Walters	Jason	—	Socioeconomics	The community of Gerlach must benefit, not suffer, from the proposed explorations before they can lead to the construction of a power plant.
Not Provided	Not Provided	—	Socioeconomics	These lands are used by many hundreds of thousands of people and there are many residents of the town of Gerlach and Empire that this project will immediately affect.
Hickey	Chuck	—	Socioeconomics	This may look like a dead dry lake, but the playa is a vast recreational resource that provides most of the income for the people of Gerlach. We have seen what happens when companies move and and move out (witness the town of Empire 9 miles up the road - which calls itself the "newest Ghost Town in Nevada" - due to the gypsum mining company that left - and the folks that lived in the "company town" found themselves homeless. There are other geothermal resources in the area that would provide opportunities that could have mitigated impacts on the Black Rock and the town of Gerlach.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Socioeconomics	This project is at our very front door and will lead to significant and controversial long term adverse impacts on the residents and the small community of Gerlach. The project will lead to permanent change of the very character and sense of place that is of utmost importance to the community and makes Gerlach what it is. Gerlach is the gateway community to the Black Rock Desert and is surviving and dependent upon tourism. The only way to mitigate the significant adverse impacts on the character of the community, the sense of place to Gerlach and adjacent private properties is to move all of the geothermal development away from the community and private properties so it is out of sight and sound.
Egbert	Cory	—	Socioeconomics	In addition to my concerns for my falconry business, my family members also operate a cosmetics business/charity based on extracting illite clay from the mud pots that naturally form on my property as a result of the geothermal activity. If outside development eliminates, contaminates, or otherwise substantially changes the surface conditions on my property, or the quality of water on my property, this business would be significantly harmed.
Jamieson	David	—	Socioeconomics	In addition to my concerns for my falconry business, my family members also operate a cosmetics business/charity based on extracting illite clay from the mud pots that naturally form on my property as a result of the geothermal activity. If outside development eliminates, contaminates, or otherwise substantially changes the surface conditions on my property, or the quality of water on my property, this business would be significantly harmed.
Griffin	Simone	BlueRibbon Coalition	Socioeconomics	Local communities rely on motorized recreation for economic opportunities. There has been a surge of use throughout the nation on public lands as well as in Nevada. The Bureau of Economic Analysis shows that in 2019, outdoor recreation alone generated \$459.8 billion . Outdoor recreation, especially motorized outdoor recreation has increased tremendously since even 2019.
Tanner	Carolyn “Lina”	Burning Man Project	Socioeconomics	Should the Project move toward development, considerations that could affect the local economy should be raised and addressed now. For instance, Ormat should address whether there are any pipeline alignments that will be requested to access private property, including Burning Man Project's 360 acres.
Emmerich	Kevin	Basin and Range Watch	Socioeconomics	This will impact tourism and recreation for the local economy. The area is a popular destination and the construction of an industrial power facility with new transmission will drive many people away.
Evans	Kristy	—	Socioeconomics	What is the socioeconomic impacts on the local community? Will Ormat provide any direct benefits to Gerlach? Gerlach's economy significantly benefits from the tens of thousands of visitors from around the world who travel to this region year-round to experience the solitude of the vast open spaces and undeveloped vistas present in the Black Rock Desert as well as attend numerous events and pursue a variety of recreation experiences. The location of the Project within this view shed could negatively impact the experience of these tourists, and thus the vibrant tourism industry of Gerlach.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Socioeconomics	With further development of the resource a thorough analysis must be completed to determine if there is a possibility of subsidence on the adjacent private properties and in the community of Gerlach that could result in damage to homes and other structures and if so what mitigation measures will be implemented to compensate for damage to life and property? Pumping large amounts of water from the aquifer has the potential to dry up the numerous springs in the area some of which are of commercial value and would result in loss of private use and business. Even with reinjection of water back into the aquifer there is still potential for significant adverse impacts. Geothermal development in this proposed location has the potential for significant impacts by altering or stopping existing surface springs on private properties from functioning. The historic Great Boiling springs on private land adjacent to the proposed development could cease to function and adversely impact the Black Rock Mud company putting them out of business.
Cooper	Dave	—	Socioeconomics	Workers will need to be required to live on site. There are no accommodations in Gerlach to house work crews. If they were to use the one motel in town it would displace the many tourists, recreationist and visitors that stay there throughout the year. These visitors are a vital and very important part of the tourism economy of Gerlach.
Wittek	Stacey	Friends of Black Rock High Rock	Socioeconomics	Geothermal development has the potential for significant impacts on local businesses, including Black Rock Mud Company, that relies on Great Boiling Springs for an array of beauty products. Burning Man Project recently acquired property with the intention of developing the property into a makerspace and sculpture garden that would be open to the public via a linking walking trail from the community of Gerlach. This commercial development is directly adjacent.
Netherton	Shaaron	Friends of Nevada Wilderness	Socioeconomics	Geothermal development has the potential for significant impacts on local businesses, including Black Rock Mud Company, that relies on Great Boiling Springs for an array of beauty products. Burning Man Projects recently acquired property with the intention of developing the property into a makerspaces and sculpture garden that would be open to the public via a linking walking trail from the community of Gerlach.
Wittek	Stacey	Friends of Black Rock High Rock	Socioeconomics	Outdoor Recreation and Ecotourism. The proposed project overlaps a portion of the Granite Mountain Special Recreation Management Zone (RMZ) and will end easy access to a favorite recreational area to outdoor enthusiasts. The RZM directs that any facilities in this area "will be developed, located and designed in such a way as to be consistent with preserving the character of the adjacent Black Rock Desert High Rock Canyon Emigrant Trails National Conservation Area." Gerlach's economy is largely based on the tens of thousands of outdoor event participants, hunters, mineral and gem enthusiasts, rocketeers, campers and hikers who visit the area.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	Socioeconomics	The Operating Plan does not reflect any specific economic benefits to the Town of Gerlach and the surrounding region. Rather, it appears that the benefits will be minimal and possibly counterproductive. While Gerlach could benefit from modernized energy infrastructure, should Ormat ultimately be allowed to construct a geothermal plant there, it is unknown if the energy generated would even remain in the State of Nevada. Even if it did, customers of Sierra Pacific Power Company would only receive some generalized benefit from additional renewable resources coming on line, without specific planning between Ormat and NV Energy to address the aging transmission and distribution of the region, which currently still utilizes glass insulators. There does not appear to be an influx of local jobs associated with the Project. The Operations Plan indicates that a maximum of 18 workers will be on site at a given drill pad location but states no preference for the employment of a local workforce. Operating Plan at 4. Moreover, as it stands, Gerlach suffers from a housing shortage. Ormat does not indicate how it might alleviate that problem, other than bringing in their own temporary trailer housing. Id. Unintended consequences of the Project could also negatively impact businesses and landowners. Geothermal development in this region has the potential for significant impacts by altering or stopping existing surface springs from functioning, as discussed more fully below. Such impacts can harm local businesses. For example, should the hot springs located on Burning Man's property cease functioning, the commercial investment to develop the property would be thwarted. <sup>22</sup> Burning Man Project is in the process of seeking approximately \$2 million in federal funding to help develop the 360 Property as a commercial enterprise supporting outdoor recreation and tourism, thereby strengthening the economy of the region. See also FN 1.
Bierle	Russell	—	Socioeconomics	This project will cause irreparable damage to quality of life and ecotourism in Gerlach with no significant benefit to the community while doing nothing to stabilize Gerlach's power supply.
Egbert	Cory	—	Socioeconomics	Will the construction/drilling operations only take place during daylight hours and on weekdays to avoid disturbing my business and that of others?
Jamieson	David	—	Socioeconomics	Will the construction/drilling operations only take place during daylight hours and on weekdays to avoid disturbing my business and that of others?
Fiumara	Cedi	—	Noise	Gerlach is easily the quietest place I've ever lived. Sound pollution is another very real effect from projects such as the one proposed here
Brooks	Christopher	—	Noise	In general, I'm very concerned about how loud the entire project will be, I'm hoping that equipment in locations other than near Dooby Lane will be as quiet as possible and behind berms.
Evans	Kristy	—	Noise	The BLM should conduct a detailed study of the noise pollution of the Project. It is very quiet in the Gerlach area - how much noise will this create and what can be done to significantly minimize the negative impact for local residents? The noise alone, even if it turns out to be only hisses and hums, will be amplified and bounced off the mountain directly at the town

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Cooper	Dave	—	Noise	With such a short distance from town, there is potential for significant noise impacts on the community of Gerlach and disruption to the quality of life in this remote town where residents enjoy the solitude and quietude. What are the noise impacts from drilling activities 24/7, construction of roads, clearing the drill pads, and the increase in truck traffic through the community of Gerlach? What is the noise impact to the surrounding areas of the Granite Mountains used for recreation including Guru Road? The backdrop of the steep Granite Mountains will reflect the noise pollution toward private properties and town. An in-depth noise analysis is required. The planned RV park and associated miniature golf course on private property are immediately adjacent to the proposed development and will be adversely impacted by and is incompatible with the sights and sounds of the proposed industrial development.
Emmerich	Kevin	Basin and Range Watch	Noise	Geothermal plants create significant noise impacts and this disturbs wildlife, recreationists and local people. Noise will disturb nesting golden eagles, pronghorn, bighorn sheep and a large list of migratory birds. Noise will also disturb recreationists, campers and local residents of Gerlach.
Not Provided	Not Provided	—	Noise	The train already causes every building in Gerlach to shake from the weight and the noise, we don't need anything else that even creates one single extra decibel of sound here.
Reynolds	Margie	—	Noise	This is a quiet community. Residents, visitors, and wildlife prefer it that way. The mountains will bounce sound back to town. Sound pollution is real.
Wittek	Stacey	Friends of Black Rock High Rock	Noise	Noise. The project lies within a mile of Gerlach residences, and despite the Ormat project plan for rock mufflers the very fact of 200 plus employees operating well drilling, moving heavy equipment, moving rocks and aggregate materials within one mile of the community 24 hours a day, 7 days a week, right next to Guru Road and adjacent to private property, is distressing.
Netherton	Shaaron	Friends of Nevada Wilderness	Noise	The project lies within a mile of Gerlach residences, despite the Ormat project plan for rock mufflers the very fact of 200 plus employees operating well drilling, moving heavy equipment, moving rocks and aggregate materials within one mile of the community, right next to Guru Road and adjacent to private property will cause significant negative impacts on the lives of local residents.
Whipple	Will	—	Noise	Will there be light and noise pollution from the planned wells and plant?



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	Noise	With the Project located within a mile of Gerlach residences, it is critical that a Noise Analysis be completed through the NEPA process to identify the impacts on residents of noise from the Project, and the efficacy of Ormat's suggested "one rock muffler" per drilling rig. In 2010, the World Geothermal Congress was presented with a white paper as to the efficacy of portable rock mufflers for well testing purposes. As to noise emissions, the authors stated, "The noise level recorded on this portable rock muffler is typically about 90 to 100 dBA at a radius of 5 m compared to the use of permanent rock muffler, which was about 80 - 90 dBA, while noise [World Health Organization] threshold is 85 dBA for 8 working hours/day. Noise measurement in the adjacent community was below 60 dB, as stated in geothermal environmental policy." Portable Rock Muffler Tank for Well Testing Purpose, 2010, page 2. The level to which a rock muffler, portable or permanent, can reduce noise to acceptable levels from well pads proposed on both the south and north borders of the 360 Property appears to be insufficient. This commercial property is currently under development to include among other things campsites, modular housing, a cafe and community space. This constant noise associated with exploration wells may also be significantly disruptive to the serenity of public land users in the nearby National Conservation Area.
Carey	Scott	Nevada State Clearinghouse	Public Health and Safety	If this facility will have at least 25 employees on site for more than six months throughout the year, then it will be required to be permitted by the Bureau of Safe Drinking Water (BSDW) as a nontransient noncommunity (NTNC) public water system. Before any water infrastructure that is intended for potable use is constructed, engineering plans and specifications will be required to be reviewed and approved by BSDW.
Dougherty	James	Tripoli Central California (Prefecture # 52)	Public Health and Safety	No discussion of the real health risks of a diversion pond - exposure to atmospheric concentrations of Hydrogen Sulfide (H <sub>2</sub> S), Benzene (C <sub>6</sub> H <sub>6</sub> ), Radon (Rn), Arsenic (H <sub>3</sub> AsO <sub>4</sub> ), and Mercury (Hg) pose potential hazards to public and occupational health. There are some serious health risks and ecological disasters which could come out of this development. Would like to see the data on how they plan to mitigate any of the above. See the aggregate number of contaminants in the LLNL publication in the References section (assuming > 1.5M gallons of geothermal brine will flow per test). References Health and Environmental Effects Document on Geothermal Energy- 1981 David W. Layton, Lynn R. Anspaugh, Kerry D. O'Banion; LAWRENCE LIVERMORE LABORATORY University of California Livermore, California <a href="https://www.osti.gov/servlets/purl/5349877">https://www.osti.gov/servlets/purl/5349877</a>
McPherson	Ann	US EPA Region 9	Public Health and Safety	Although rare in Washoe County, <i>Coccidioides immitis</i> , a fungus causing Valley Fever in humans has been identified there. Ground disturbing activities associated with the proposed project may result in dispersal of <i>Coccidioides</i> spores. A discussion of this potential health and safety impact, as well as measures that can prevent or reduce the risk of exposure to workers and residents, should be included in the draft EA.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Wilcox	Rob	—	Public Health and Safety	Electricity generation facility security is delegated to BLM's fellow agencies FERC, on to NERC, the Department of Homeland Security, and others. Their requirements increase over time. The requirement for on-site housing for security should be comprehended by a full EIS. That security is needed for the adjacent highway with significant travel by US persons and foreign nationals.
Whipple	Will	—	Public Health and Safety	Will there be odors from the planned plant? How would those odors be mitigated to not disturb local residents, visitors, and wildlife?
McPherson	Ann	US EPA Region 9	Public Health and Safety	Geothermal well drilling and servicing activities may involve the use and production of potentially hazardous materials. Potential health hazards include hydrogen sulfide, silica, noise, diesel particulates, hazardous chemicals, and naturally occurring radioactive material (NORM). The draft EA should address the potential direct, indirect, and cumulative impacts of waste generation, including hazardous waste from geothermal project development. Identify the projected waste types and volumes, and expected storage, disposal, and management. Identify the applicability of federal hazardous waste requirements. Discuss how the generation of hazardous waste would be minimized. Sludge, drilling mud, and pipe scales often contain elevated levels of NORM. Radioactive materials can be moved from site to site as equipment and materials are reused. Address the possibility that the drilling and testing may release NORM or explain why NORM is not expected to be present. If the presence of NORM cannot be ruled out, explain how it will be handled for the project. Discuss the likelihood that potential health hazards from geothermal exploration and testing could affect workers or the public and include an analysis of such health hazards within the draft EA.
Alderson	George	—	Special Designations	We ask BLM to analyze the impacts of this project against the wilderness values, recreational and tourism values, and wildlife habitat values of the public lands affected, including the Black Rock Desert National Conservation area and the lower eastern slopes of the proposed Granite Banjo Wilderness.
Netherton	Shaaron	Friends of Nevada Wilderness	Special Designations	In 2008, significant public acquisitions in the area greatly enhanced wilderness integrity, minimizing conflicts, and allowing management to enhance habitat, and as a direct result, BLM officially inventoried the Granite Range for Wilderness and found that two units qualified. That included the Granite Range unit (42,700 acres and the Buckhorn Peak Unit at 23,400 acres). The project will conflict with the eastern portion of this Wilderness Character Unit. Additionally, the project will directly impact a formal Wilderness proposal submitted to the Nevada delegation as part of the Washoe County/Truckee Meadows Public Lands bill process. Legislation is expected to be introduced in the coming months.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Netherton	Shaaron	Friends of Nevada Wilderness	Special Designations	Black Rock Desert High Rock Canyon Emigrant Trails National Conservation Area (BRNCA) was created for its sublime solitude, unique unaltered landscape and ecosystem, as well as its rich prehistoric and historic cultural significance. It is the largest National Conservation Area in the lower 48 states and a crown jewel of public lands in Nevada. The NCA encompasses seven Congressionally designated Wilderness Areas and includes a portion of an eighth. This NCA attracts tens of thousands of visitors annually. The primary entrances to the NCA, along the paved State Route 34, are all within a few miles of the proposed project. Visitors will be compelled to travel through the Ormat drill pads and facilities to enter the BRNCA through a corridor of pipelines, drill pads and aggregate pits and pools. The first view of the Black Rock Desert will not be the view that the emigrants coming across the trail experienced. The visual resources of the NCA are one of its most exemplary values and one mentioned in the enabling legislation. Geothermal development at the gateway to the NCA will significantly impact the experience of both locals and visitors alike.
Tanner	Carolyn "Lina"	Burning Man Project	Special Designations	On December 21, 2000, the Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area Act of 2000 was signed into law. This important piece of legislation was decades in the making, and takes into account multiple uses and attributes therein that provide economic stability, cultural resource preservation, and significant habitat. The location of the Project so near to the NCA is one of significant concern, as expanded upon in the following paragraphs.
Reynolds	Margie	—	Special Designations	A spur of the Applegate Trail, the Nobles Trail runs directly through the project area as Trails West markers indicate. The adjacent NCA was designated in part to preserve and protect the historic trails. This project infringes on the historic trails.
McPherson	Ann	US EPA Region 9	Native American Religious Concerns	Tribal governments whose members or traditional resources may be impacted, either directly or indirectly, by the proposed project should be invited to consult on a government-to-government basis on this effort, in accordance with Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments). Documentation of these consultations should be included in the draft EA, as should any activities to address concerns identified by tribal governments.
Wilcox	Rob	—	Native American Religious Concerns	The proposed exploration disturbance area does not comprehend tribal concerns and disturbance of tribal artifacts.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Dougherty	James	Tripoli Central California (Prefecture # 52)	Solid and Hazardous Waste	2.1.3 Well Drilling and Testing Table 3: Footnote 2 - Drilling Operation would be conducted 24hrs/day, 7 days/week Blow-out prevent consists of digging a hole and 10,0000 gallons of water with 12,000 pounds of barium sulfate to kill the well. Furthermore it goes on to state that some of the mud additives may be hazardous substances, but they would only be used in low concentrations that would not render the drilling mud toxic. Little regard is given to blow-out and the storage of contaminants and how they will seep into the groundwater or surrounding areas. This could render the entire area a hazardous waste site, especially if run-off of the 100 year flood hits. Target depths of 1500 ft to 7500 feet (1/4 mile to 1.25 miles depth) redrilling is briefly covered with all overflow going into the "reserve" pit. No mention for how the contaminated reserve pit will be cleaned up. However, each short-term well test is expected to flow approximately 1.5 million gallons of geothermal brine with no regard for how this will be contained, extrapolated, or stored only that 1.5 million gallons will flow! Long term testing would be 7-30 days, with east test flooding the reserve pit and no mention, again, of how the material would be stored and area cleaned up.
Dougherty	James	Tripoli Central California (Prefecture # 52)	Solid and Hazardous Waste	The Culvert construction alone would be an ecological disaster, with trash/water and detritus clean-up not even being discussed. How many dumpsters would be required for a crew of 10 drilling 24x7 days a week at multiple locations? How will waste be removed from each site?
Scott	Matthew	—	Solid and Hazardous Waste	Ormat states that hazardous chemicals are included in their drilling mud but do not list what those chemicals are, only giving a brief statement that they are not hazardous at the concentrations used. Since there is no way to evaluate these statements based on the information given, Ormat must provide BLM with a list of all chemicals used and test all well sites monthly within a 25KM radius monthly to ensure there is no groundwater contamination that will affect humans, livestock or wildlife in the area. Ormat must have a mitigation plan and If contamination is found, be held financially responsible or any and all mitigation required to return the ground water to its pre-drilling state.
McPherson	Ann	US EPA Region 9	Solid and Hazardous Waste	The draft EA should also address the potential effects of project wastewater discharges. If hazardous materials are used during construction, drilling, or operation, document appropriate spill control and source water protection measures to prevent soil and groundwater contamination. Describe the expected methods, including the use of reserve pits, for the disposal of geothermal fluids, produced waters, drill cuttings, and drilling mud. Consider the feasibility of using closed-loop systems instead of reserve pits. If reserve pits are used, discuss whether synthetic liners would be utilized to prevent leaching. Describe the potential environmental impacts on groundwater, surface water, springs, or wetlands.
Carey	Scott	Nevada State Clearinghouse	Minerals and mineral rights	Compliance with Nevada Department of Minerals for Geothermal Projects
Dougherty	James	Tripoli Central California (Prefecture # 52)	Minerals and mineral rights	2.4 Aggregate 44,996 yards Seems to be a lot less than is required.
Evans	Kristy	—	Lands and realty/Infrastructure	How can you ensure the Project will in no way damage, disrupt, or otherwise cause problems for Gerlach's water and sanitary sewer systems? What are the risks?

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Fiumara	Cedi	—	Lands and realty/Infrastructure	Water contamination is another very undesirable possibility. We have enough resource access problems. Clean water is one thing we don't have to worry about. I'd rather that not change.
Clough	Michael	—	Lands and realty/Infrastructure	The Bureau of Land Management should analyze and choose an alternative that incorporates acre for acre public/private land swaps to eliminate parcels isolated within private tracts, which are currently prone to abuse. Consolidation of landownership allows consistent management and monitoring while providing greater public access.
Ramsey	Kenneth	—	Lands and realty/Infrastructure	The Bureau of Land Management should analyze and choose an alternative that incorporates acre for acre public/private land swaps to eliminate parcels isolated within private tracts, which are currently prone to abuse. Consolidation of landownership allows consistent management and monitoring while providing greater public access.
Whipple	Will	—	Lands and realty/Infrastructure	It seems that just the exploration phase of this project will severely disturb and alter an otherwise beautiful and peaceful area immediately adjacent to the Black Rock Desert Conservation Area. The interconnecting piping that would be required for the plant and wells would require far more grading, leveling, road improvements, etc that would affect the area and this is simply not addressed in this proposal.
Evans	Kristy	—	Lands and realty/Infrastructure	How can you ensure the Project will in no way damage, disrupt, or otherwise cause problems for Gerlach's water and sanitary sewer systems? What are the risks?
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Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Dougherty	James	Tripoli Central California (Prefecture # 52)	Transportation	2.2 Site Access The proposed work off of 447 would create a hazard and add very long traffic delays to an area which is not designed for major traffic thoroughfare or machinery transport. Even using tractor trailers or "big-rigs" would cause considerable damage to the Hwy 447 which was only recently repaved after decades of misuse. The increase in traffic and machinery transport alone is an unnecessary environmental disaster which should be avoided at all costs. The total estimated area of surface disturbance required for improvements to existing access roads of 2.7 acres (11,959 feet x 10 feet) is grossly under-estimated as the machinery and sleeping quarters and facilities would far exceed this space.
Cooper	Dave	—	Transportation	Increased traffic of heavy vehicles and traffic on State Route 447 and particularly County Road 34 with a substandard surface, will lead to an increased deterioration of the road surface. Ormat should be required to assist in the maintenance or even upgrading of these routes and at the very least provide data and consult with the Washoe County Roads Department to determine if the roadway rating and the Roads Department's maintenance schedule are adequate for the specific transportation needs of the Project.
Dougherty	James	Tripoli Central California (Prefecture # 52)	Transportation	Section 2.3 outlines the water needs of 35,000 gallons/day. This in itself is cause for alarm as the shipping requirements would require multiple transport vehicles in route, every day to satisfy these requirements. Who is going to pay for the new highway to compensate for this unnecessary usage? We're talking about shipping 35,000 gallons of water daily to one or more sites. A typical pool size is 15 feet by 30 feet. The standard depth is approximately 5.5 feet, with a standard shallow end coming in at 3 feet and deep end at 8 feet. A pool with these dimensions would yield an average amount of 13,500 gallons of water. This is a discussion about transporting 2.5 swimming pools of water with potable water trucks daily out on the 447 Hwy. A load King 4000 Gallon water truck is the high end and a standard truck about 2500 gallons of water for an average truck. So we envision at least Fourteen (14) 2500 gallon water trucks every day driving to well sites on Highway 447 or Nine (9) 4000 Gallon water trucks every day. Water weighs 8.3lbs/gallon so that is 146 tons (35000 gallons) of water which needs to be transported on Hwy 35/447 every day. This unnecessary wear and tear on the highways needs to be paid for as it will degrade the highway and its service to an area which has only one access road! Will the roads be repaired for any damage? There will be long traffic delays from Gerlach. Having this many water trucks out in this area presents a hazard for traffic and damage to the roadways. Some mitigation needs to be made for this excessive usage. We're transporting an Olympic sized pool of water every week with trucks, the increase in traffic alone is causing an ecological impact.
Evans	Kristy	—	Transportation	Transportation Analysis. Increased traffic of heavy vehicles on State Route 447 could lead to an increased deterioration of the road surface. Analysis and consultation with Washoe County Roads Department is needed to determine if the roadway rating and the Roads Department's maintenance schedule are adequate for the transportation needs of this project.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Tanner	Carolyn "Lina"	Burning Man Project	Transportation	Burning Man Project is well aware of the potential impacts on local roads from increased traffic, as we perform detailed traffic analyses for BLM through our own EIS process. Increased traffic of heavy vehicles on State Route 447 could lead to an increased deterioration of the road surface. Thus, Ormat should be required to provide data and consult with the Washoe County Roads Department to determine if the roadway rating and the Roads Department's maintenance schedule are adequate for the specific transportation needs of the Project.
Wilcox	Rob	—	Transportation	The drilling area is adjacent to the Nevada 447 and 34 roadways, and will have a major impact on traffic, roadwear, and the option in the future to widen 34 and 447 through Gerlach for safety reasons. 34 should be at least 3 lanes from the Y to the 12 Mile entrance. The drilling areas should be set back much further from the NV highway right of way.
Clough	Michael	—	Public access	Please maintain access to and on all motorized routes and in all areas that would be affected by this project.
Dougherty	James	Tripoli Central California (Prefecture # 52)	Public access	2.2 Site Access The proposed work off of 447 would create a hazard and add very long traffic delays to an area which is not designed for major traffic thoroughfare or machinery transport. Even using tractor trailers or "big-rigs" would cause considerable damage to the Hwy 447 which was only recently repaved after decades of misuse. The increase in traffic and machinery transport alone is an unnecessary environmental disaster which should be avoided at all costs. The total estimated area of surface disturbance required for improvements to existing access roads of 2.7 acres (11,959 feet x 10 feet) is grossly under-estimated as the machinery and sleeping quarters and facilities would far exceed this space.
Griffin	Simone	BlueRibbon Coalition	Public access	BRC supports the proposed plan as long as it does not restrict access and use to the public. Surrounding the proposed area are Gerlach and Godey's Rock, which are popular recreation areas. This area is commonly used to access trails for recreation purposes. Off-roading is popular and any project proposal needs to account for the effects to the recreation and motorized use community. A thorough inventory of all current trails needs to be completed so that the BLM is working with an accurate baseline. This area has a high recreation value for locals in the surrounding community and any project proposed should be developed in a way that does not restrict access to users.
Griffin	Simone	BlueRibbon Coalition	Public access	Many of our members hold organized events that include organized rides in this area. A significant portion of the education mission of organizations like ours and the fundraising that supports organizations like ours comes from these organized events, and we see the continuation of these events as an integral expression of protected rights including freedom of speech and freedom of assembly. We believe these events such as these are protected by the First Amendment and believe they are crucial to clubs and organizations. This project should not affect any organized events or possible future permits.

Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Wittek	Stacey	Friends of Black Rock High Rock	Public access	Guru Road/Dooby Lane, an intentional art and community site. From 1970 to the time of his death in 1995 DeWayne Williams built over 450 rock engravings and monuments on a long stretch of road just one mile from Gerlach and parallel to State Route 34. Nicknamed Dooby Lane, it is a loving and humorous testament to the community of Gerlach. For two decades locals and volunteers have restored the inscriptions, removed trash, and restored work. Thousands of visitors to the BRNCA have walked the road as a significant cultural site. Guru Road is in the Ormat project plan boundary and the southern end of Guru Road is less than 700 feet from a proposed well pad. Though Ormat is required to honor the right of way of Guru Rd on public lands it is impossible to believe that the beauty and integrity of the site will remain. Or that it will remain accessible to the public.
Clough	Michael	—	Public access	Please maintain access to and on all motorized routes and in all areas that would be affected by this project.
Clough	Michael	—	Public access	Please maintain access to and on all motorized routes and in all areas that would be affected by this project.
Ramsey	Kenneth	—	Public access	Please maintain access to and on all motorized routes and in all areas that would be affected by this project.
Reynolds	Margie	—	Public access	This road is one of the few places one can go during winter months for off-pavement exploration without getting mired in the mud - on foot or in a vehicle. This is a primary local access road - an extension of the community - to get out and enjoy any time of year, even during inclement conditions.
Evans	Kristy	—	Livestock Grazing	How would this project affect livestock such as cattle and sheep that graze in the area?
Wittek	Stacey	Friends of Black Rock High Rock	Request Documents or Info	We believe, as other concerned stakeholders have expressed, that Ormat should provide the following data: - Adequate pre-drilling water/heat flow, water level, geochemistry and other baseline condition data and records for springs and spring habitat, wetlands, and wells of public lands and adjacent private property. - A detailed plan for maintaining and preserving public access to historical markers and cultural sites within and adjacent to the project. - A detailed study of the light and noise pollution (even with the consideration of portable rock mufflers) of the project and a plan to mitigate. - A thorough archaeological survey of resources. - A report on the economic impacts on the town of Gerlach to include concerns regarding housing, jobs, and impact to tourism and recreation. - A detailed plan for mitigating the impact to important wildlife habitat and the effects on migratory and resident birds. - A mitigation plan for groundwater contamination. - Prepare a Net Energy Analysis comparing the energy input with energy outputs to determine project viability. - Transportation analysis to assess the potential impacts on local roads from increased use and heavy equipment. Ormat should provide data and consult with Washoe County Roads Department and NDOT.
Whipple	Will	—	Request Documents or Info	What customers would be served by this future power plant? How large is the planned plant and where is it to be located?
Wilson	David	—	Request Documents or Info	Are they going to be held to the same cleanup standards as Burningman? What will be done to mitigate damage to route 34? Where will the gravel pit be located?



Last Name	First Name	Organization Name	Comment Code Name	Comment Text
Williams	Scott	—	Request Documents or Info	Night skies are a major issue. I noticed that a Night Sky Baseline Report Draft report is under review by the BLM. Please also make this information available to the public.
Netherton	Shaaron	Friends of Nevada Wilderness	Request Documents or Info	Ormat's Gerlach Geothermal Exploration Project raises significant and impactful issues that must be addressed. We believe, as other concerned stakeholders have expressed, that Ormat should provide the following data: <ul style="list-style-type: none"> <li>· A plan for dark sky compliant lighting that will prevent impacts on astrotourism.</li> <li>· Adequate pre-drilling water/heat flow, water level, geochemistry and other baseline condition data and records for springs and spring habitat, wetlands, and wells of public lands and adjacent private property.</li> <li>· A detailed plan for maintaining and preserving public access to historical markers and cultural sites within and adjacent to the project.</li> <li>· A detailed study of the noise pollution (even with the consideration of portable rock mufflers) of the project and a plan to mitigate.</li> <li>· A thorough archaeological survey of resources.</li> <li>· A report on the economic impacts on the town of Gerlach to include concerns regarding housing, jobs, and impact to tourism and recreation.</li> <li>· A detailed plan for mitigating the impact to important wildlife habitat and the effects on migratory and resident birds.</li> <li>· A mitigation plan for groundwater contamination.</li> <li>· Prepare a Net Energy Analysis comparing the energy input with energy outputs to determine project viability.</li> <li>· Transportation analysis to assess the potential impacts on local roads from increased use and heavy equipment. Ormat should provide data and consult with Washoe County Roads Department.</li> </ul>

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