Environmental Assessment

Prospect Mountain Project,
Eureka County, Nevada

Applicant/Address:
Gullsil, LLC
PO Box 1018
Eureka, Nevada 89316

U.S. Department of the Interior
Battle Mountain District Office
Mount Lewis Field Office
50 Bastian Road
Battle Mountain, NV 89820
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1 Introduction

Gullsil, LLC (Gullsil) is proposing to conduct mineral exploration and underground mining activities on patented and unpatented mining claims in the Eureka Mining District, located about 3.5 miles southwest of the town of Eureka in Eureka County, Nevada. The proposed Prospect Mountain Project (Project) would be located on public land administered by the U.S. Bureau of Land Management (BLM) and on private land controlled by Gullsil.

Gullsil submitted to the BLM and Nevada Division of Environmental Protection (NDEP) Bureau of Mining Regulation and Reclamation a plan of operations entitled the Prospect Mountain Project Plan of Operations and Reclamation Permit Application (NVN-092893) referred to herein as the Plan (SRK 2019a).

The Project would disturb about 82 acres for surface and underground exploration and mining activities. Dewatering of the underground workings is not proposed as part of this exploration program.

1.1 Background

1.1.1 Historical Mining

The Eureka Mining District contains numerous historic and recent gold/silver mines which produced zinc, silver, copper, lead, and gold. Mineralized outcrops on Prospect Mountain, located in the Eureka Mining District, were first discovered in 1864 on the east slope of what came to be called Prospect Ridge. Production from the Silver Connor/Wabash and Diamond tunnels started in 1868 and removed over one million ounces of gold alone up to 1883. From 1884 to 1959, gold production was estimated at 1.23 million ounces with the bulk coming from Ruby Hill and Prospect Mountain. Approximately 30 percent of this total came from mines on the Prospect Mountain area alone (Free 1997). Minor mining activity has occurred since 1930. At times, exploration and mining were revived due to recent ore discoveries, modern drilling techniques, and heap leach recovery technologies. Numerous mine workings are present in the area.

In 1971, the owner of the patented claims within the Project Area, Consolidated Eureka Mining Company, changed their name to Excel Energy Corp. In 1978, Silver Viking Corporation acquired the deed to the properties. In 1998, European American Resources Inc. acquired the deed to the properties, and in 2000 the properties reverted to Silver Viking Corporation. In 2011, the deed was transferred to Prospect Mountain Gold, and in 2015, Solarljos, LLC acquired the property. Gullsil has a lease agreement from Solarljos, LLC.

1.1.2 Authorized Activities within the Project Area

Gullsil is presently authorized by the BLM to disturb up to three acres of public land under Notice NVN-094794. Authorized activities include mineral exploration operations, the installation of one water well, and hydraulic testing operations. The water well installation and hydraulic testing operations were completed in March, 2019. Gullsil also plans to conduct exploration activities on patented claims controlled by Gullsil under this notice. The total disturbance on patented and public land would not exceed 4.98 acres.

Gullsil is presently rehabilitating the Diamond Tunnel using a Mine Safety and Health Administration (MSHA)-certified underground mining contractor. The goal of this rehabilitation is to expand the tunnel height and width to allow modern equipment to safely access the deeper areas in the underground mine. Once the rehabilitation is complete and the tunnel meets MSHA standards, ore would be collected for bench scale metallurgical and further geochemical testing.

Mt. Wheeler Power Co. maintains a power line that supplies the Prospect Peak communications site. In 2016, Mt. Wheeler Power Co. upgraded the power line and installed a transformer on Gullsil’s private land.

July 2019
1.2 Purpose and Need for Action and Decision to Be Made

The purpose of the proposed action is to provide Gullsil the opportunity to explore, locate, and delineate base metals that may contain precious metals deposits, and to extract recoverable metals in the Project Area as provided by the General Mining Law of 1872, as amended and in compliance with the Federal Land Policy and Management Act of 1976 (FLPMA) and other applicable federal and state laws.

The need for the action is established by the BLM's responsibility under Section 302 of the FLPMA and the BLM Surface Management Regulations at 43 Code of Federal Regulations (CFR) § 3809 to respond to a plan of operations proposal that would allow an operator to prospect, explore, and assess locatable mineral resources on public lands, and not authorize the Project if it is found that the Proposed Action does not comply with the 3809 regulations and the FLPMA mandate to prevent unnecessary or undue degradation.

1.3 Decision to be Made

The decision the BLM would make, based on analysis conducted pursuant to the National Environmental Policy Act (NEPA), includes the following: 1) approve the Plan with no modifications; 2) approve the Plan with additional mitigation measures that are needed to prevent unnecessary or undue degradation of public lands; or 3) deny the approval of the Plan as currently written and not authorize the Project if it is found that the Proposed Action does not comply with the 3809 regulations and the FLPMA mandate to prevent unnecessary or undue degradation.

1.4 BLM Responsibilities and Relationship to BLM and Non-BLM Policies, Plans, Programs, and Land Use Plan Conformance

The BLM has prepared this Environmental Assessment (EA) in conformance with the Council on Environmental Quality (CEQ) regulations for implementing the NEPA (40 CFR part § 1500-1508), the BLM NEPA Handbook H-1790-1 (BLM 2008), Department of Interior requirements, and Secretarial Order 3355 (BLM 2017).

The Proposed Action would be in conformance with the Shoshone-Eureka Resource Management Plan (RMP) as amended (BLM 1986), the Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (GRSG Plan Amendment) (BLM 2019), and the Eureka County Master Plan (Eureka County 2010) with one exception as noted in Section 3.14.

This EA incorporates by reference the Plan (SRK 2019a) and resource-specific reports referenced herein.

1.5 Scoping and Identification of Issues

The Project was introduced to the BLM and an Interdisciplinary Team of Resource Specialists were assigned on February 19, 2014. During this meeting, specialists discussed baseline needs and issues which would be addressed in this EA. The BLM Interdisciplinary team checklist is available in the project record. Individual resource reports were prepared for the following resources and are incorporated by reference:

- Air Quality;
- Cultural Resources;
- Noxious Weeds, Invasive, and Non-Native Species;
- Native American Cultural Concerns;
- Vegetation including special Status Plant Species;
- Wildlife including Special Status Animal Species and Migratory Birds;
- Wastes and Materials, Hazardous and Solid;
- Water Quality;
- Grazing Management;
- Land Use, Access, and Public Safety;
- Geology and Minerals;
- Paleontological Resources;
- Recreation;
Consultation letters were sent to the Duckwater Shoshone Tribe on July 26, 2017. A site visit was conducted with a representative from this Tribe on August 14, 2017. Response to public comments are included as Appendix A.

2 Proposed Action and Alternatives

2.1 Proposed Action

Gullsil is proposing exploration and underground mining. Gold and silver as well as other economically viable mineral resource exploration would be conducted using both surface and underground techniques to estimate the in-situ mineral resources and reserves. Gullsil would also develop the Diamond, Berryman, and MacIntosh tunnels to modern standards and mine oxide and sulfide resources. Activities proposed under the Proposed Action are described in detail in the Plan. Proposed facilities and activities include:

- Construction of surface exploration roads, drill sites, and sumps;
- Reverse circulation (RC) and core drilling using truck- and track-mounted equipment with support vehicles;
- Reopening and upgrading to current standards the existing underground workings at the Diamond, Berryman, and MacIntosh tunnels;
- A cemented rock fill plant with a crusher and screening plant and a cement silo;
- Drilling geotechnical boreholes for siting assessment of future potential mine facilities;
- Collecting drill hole and ore samples for metallurgical testing and geochemical characterization;
- Construction of a contained ore transfer stockpile pad;
- Construction of two waste rock disposal areas;
- Construction of ancillary support facilities (e.g., vehicle parking areas, equipment laydown yards, office space, worker change room, assay laboratory, underground explosives storage, etc.);
- Construction of infrastructure (e.g., developing regional bedrock aquifer wells as needed, developing Einar Spring, water storage, hydrocarbon storage, septic system, connection to grid power, monitoring wells, fencing, communications, and security);
- Construction of growth media stockpiles;
- Upgrading existing access/haul roads and constructing new roads;
- Installing a solar array as a secondary power source;
- Establishing stormwater controls; and
- Incorporating authorized notice-level disturbance of approximately three acres on public land.

The Project would disturb about 82 acres for surface and underground exploration and mining activities. Dewatering of the underground workings is not proposed as part of this exploration program.

Gullsil plans on initiating the proposed activities described in the Plan once the necessary authorizations and permits have been acquired. Exploration and mining activities would continue for about ten years (Year 1 through Year 10 of the project schedule).

Earthworks for reclamation would be completed during Year 11 of the project schedule with revegetation and monitoring taking an additional five years, until Year 16 of the project schedule. For the purposes of this EA, revegetation success is anticipated to occur during Year 16.
2.2 No Action Alternative

In accordance with BLM NEPA Handbook H-1790-1, this EA evaluates a No Action Alternative which is a reasonable alternative to the Proposed Action. Under the No Action Alternative, the Proposed Action would not be approved by the BLM, and no exploration or mining activities would be carried out other than those activities that are authorized. The objective of the No Action Alternative is to describe the environmental consequences that would result if the Proposed Action were not implemented. The No Action alternative forms the baseline from which the impacts of all other alternatives can be measured.

2.3 Alternatives Considered but Eliminated from Further Analysis

No other alternatives have been considered for this Project.

2.4 Environmental Protection Measures

Applicant-committed environmental protection measures and best management practices have been developed as a means of minimizing or avoiding environmental impacts. Environmental protection measures are provided in the Plan and in the applicable resource reports.

3 Affected Environment and Environmental Consequences

Gullsi’s claim block, is located within the Basin and Range Physiographic Province, which is characterized by broad valleys separated by mountain ranges that generally trend north and south. Elevations range from about 6,800 feet above mean sea level (amsl) on the valley floor to approximately 8,900 feet amsl on Prospect Peak. The claim block is a high desert environment characterized by arid to semi-arid conditions with low annual precipitation and large daily ranges in temperatures.

3.1 Air Quality

3.1.1 Affected Environment

The Project Area has been used as the analysis boundary for air quality. Eureka County and the Diamond Valley Hydrographic Basin 153, within which the Project Area is located, are considered “unclassifiable/attainment” (40 CFR § 81.329 Nevada). Emission sources within the Project Area include notice-level vehicle and mobile equipment emissions, drilling, and travel on dirt roads (SRK 2019b p. 11-13).

3.1.2 Environmental Consequences

3.1.2.1 Proposed Action

Emissions from offsite transport would not change the “attainment/unclassified” status of the Diamond Valley Hydrographic Basin 153. Impacts would last for the duration of the activity, and changes to air quality would be perceived throughout the Diamond Valley Hydrographic Basin and beyond. Therefore, the effects would be short-term and regional. No substantial adverse effects would occur (SRK 2019b, p. 14).

Hazardous air pollutant (HAP) and greenhouse gas (GHG) emissions would not change the “attainment/unclassified” status of the Diamond Valley Hydrographic Basin 153. Impacts would last for the duration of the activity and changes to air quality would be perceived throughout the Diamond Valley Hydrographic Basin and beyond. Therefore, HAP and GHG emissions effects would be short-term and regional. No substantial adverse effects would occur (SRK 2019b, p. 14).

Modelled criteria pollutants would not change the “attainment/unclassified” status of the Diamond Valley Hydrographic Basin 153. Impacts would last for the duration of the activity, and changes to air quality would be perceived throughout the Diamond Valley Hydrographic Basin and beyond. Therefore, the effects from criteria pollutants would be short-term and regional. No substantial adverse effects would occur (SRK 2019b, p. 17).
3.1.2.2 No Action Alternatives

As result of the No Action Alternative, Gullsil would continue notice-level exploration activities under Notice NVN-094784. As under the Proposed Action, pollutant concentrations under the No Action Alternative would remain below the Nevada ambient air quality standards. Direct impacts from the No Action Alternative would be less than the direct impacts from the Proposed Action. Similarly, HAP and GHG emissions would be less than under the Proposed Action. Impacts related to the No Action Alternative would not be substantial. Since no activity would occur which has not been previously authorized, a context and duration have not been assigned (SRK 2019b, p. 17).

3.2 Cultural Resources

3.2.1 Affected Environment

Two cultural resource investigations cover the Project Area. Within the cultural inventory area, 32 archaeological sites and 27 architectural resources were encountered, documented, and evaluated for the National Register of Historic Places (NRHP). The 32 archaeological sites include 31 historic-era sites and one site containing both prehistoric and historic components. Six sites are eligible for the NRHP and 26 are not eligible for the NRHP. All architectural properties are historic in age. None are individually eligible; however, 15 individual architecture resources are eligible as contributing resources to the Diamond Mine/Prospect Townsite Historic District, which is also an eligible site, while 12 are not eligible or contributing (SRK 2019c, pp. 5-6).

3.2.2 Environmental Consequences

3.2.2.1 Proposed Action

The Proposed Action would result in direct adverse impacts to one archaeological site and direct and indirect adverse impacts to contributing resources of the Diamond Mine/Prospect Townsite Historic District. Adverse effects would be localized and permanent (SRK 2019c, p. 6).

Effect reports have been prepared for BLM and SHPO review which will disclose the anticipated impacts to listed resources in detail [BLM6-3096-4(P) and BLM6-3096-5(P)]. A Memorandum of Agreement (MOA) would then be prepared between the participating parties (the BLM, SHPO, and Gullsil). Once the MOA has been signed, a treatment plan would be developed, describing how the impacted resources are to be mitigated. The treatment plan would be agreed upon by the BLM and SHPO prior to implementation of mitigation activities or activities resulting in impacts to cultural resources (SRK 2019c, p. 6).

3.2.2.2 No Action Alternatives

No additional disturbance would occur under the No Action alternative beyond that which has been previously authorized under Notice NVN-094784. No historic properties of archaeological sites would be affected (SRK 2019c, p. 6).

3.3 Noxious Weeds, Invasive, and Non-Native Species

3.3.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary for noxious weeds, invasive, and non-native species. No noxious weeds, as identified by Nevada Administrative Code (NAC) 555.010 have been observed within the Assessment Area. Poverty weed (Iva axillaris) was observed during field surveys and is listed as “Other Weed” under NAC 555.050 for the Diamond Valley Weed Control District. Additional detail is provided in the resource report (SRK 2019d, pp. 5-6).
3.3.2 Environmental Consequences

3.3.2.1 Proposed Action

Under the Proposed Action, approximately 82 acres of land would be disturbed, creating favorable conditions for the establishment of invasive and non-native plant species. Of this, approximately 55 acres are previously undisturbed. The establishment of invasive and non-native species could change the plant community from complex to more simple over time, competing with native plants for pollinators, nutrients, water, and space. The impact would be localized. The invasive and non-native plant species’ establishment opportunity would remain for the long term, until disturbed areas have been reclaimed, and vegetation has established, on all but 16 acres which will remain as post-reclamation disturbance. The potential for these species to compete with reclamation and native vegetation would remain as a long-term impact, as these species are present in the region. Considering the size of the disturbance proposed, the absence of noxious weeds as defined by NAC 555.010, and the environmental protection measures proposed by Gullsil, impacts related to noxious weeds would be minimal (SRK 2019d, p. 7).

Impacts related to the presence of poverty weed would be long term, lasting until reclamation and revegetation success on all but the 16 acres of post-reclamation disturbance (SRK 2019d, p. 7).

3.3.2.2 No Action Alternatives

No further impacts are projected from noxious weeds, invasive, and non-native species under the No Action Alternative beyond those impacts related to authorized activities. The No Action Alternative would have negligible, regional, long-term impacts to noxious weeds, non-native, and invasive species (SRK 2019d, p. 7).

3.4 Native American Cultural Concerns

3.4.1 Affected Environment

In accordance with acts and executive orders described in the cultural resource report (SRK 2019e. pp. 2-3), the BLM must provide affected tribes, organizations, and/or individuals an opportunity to participate in, comment, and consult on proposed actions that might impact resources, sites, or activities of concern. Consultation with tribal groups is described in Chapter 1.5.

3.4.2 Environmental Consequences

3.4.2.1 Proposed Action

Environmental protection measures are described in detail in the resource report (SRK 2019e, pp. 2-3). There have not been any Native American concerns identified for this Project; therefore, impacts would be negligible, short-term, and localized (SRK 2019e, p. 4).

3.4.2.2 No Action Alternatives

Under the No Action Alternative there would be no surface disturbance or other activity at the site besides those activities already authorized under Notice NVN-094784. Negligible impacts to Native American Cultural Concerns would occur under the No Action Alternative (SRK 2019e, p. 4).

3.5 Vegetation including Special Status Species and Forest and Woodland Resources

3.5.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary for vegetation. The general vegetation communities include pinyon-juniper, low sagebrush, mountain mahogany, and big sagebrush vegetation communities. Habitat may be available for the Palmer’s penstemon (Penstemon palmeri), a Nevada BLM Sensitive Species, although none were observed during baseline surveys (SRK 2019f, p. 4).
3.5.2 Environmental Consequences

3.5.2.1 Proposed Action

Approximately 82 acres of disturbance would occur under the Proposed Action. Of this, approximately 55 acres are vegetated, i.e. not previously disturbed or disturbed and revegetated. Approximately 47 acres of disturbance would be located in the mountain mahogany vegetation type. Impacts to vegetation would be short-term on approximately 66 acres, lasting until reclamation efforts are complete, and revegetation is successfully established. Impacts to vegetation would remain on approximately 16 acres of disturbance as post-reclamation features (SRK 2019f, pp. 9-10).

The post-reclamation plant communities would differ in species composition and diversity from the adjacent native plant communities. Upon successful reclamation of these areas, the vegetation communities would be modified to a predominantly grassland community until shrub species establish over time, resulting in a long-term impact (SRK 2019f, p. 10).

Environmental protection measures would be taken to minimize impacts to vegetation. Changes to vegetation would be measurable and readily apparent, but mitigation likely to be effective. Considering the size of the proposed disturbance, the vegetation types currently present, proposed reclamation, and the surrounding undisturbed areas, effects to vegetation are expected to be moderate, localized, and short-term (SRK 2019f, p. 10).

Because no special status plant species were located during baseline surveys, they are assumed to not be present. The Proposed Action would not likely adversely affect special status plant species (SRK 2019f, p. 10).

Approximately seven acres of the pinyon-juniper vegetation community would be disturbed resulting from developments under the Proposed Action. Disturbance may also occur as tree trimming. Under the Proposed Action, forest and woodland resources (namely wood from the single-leaf pinyon and Utah juniper trees and pine nuts from the single-leaf pinyon) would be removed. Trees within proposed disturbance areas would be cut down and the wood made available to the public. Gullsil would obtain woodcutting permits prior to the removal of trees (SRK 2019f, p. 10).

The Shoshone-Eureka RMP resource management calls for management for both non-commercial and commercial forest and woodland harvest (BLM 1983). Forest and woodland products removed under the Proposed Action would not be managed for consumptive use. However, considering the low number of trees to be disturbed and the lack of known use of the area for woodcutting or pine-nut gathering, the effects to forest and woodland resources would be minor, localized, and long term (SRK 2019f, p. 10).

3.5.2.2 No Action Alternative

Under the No Action Alternative, the proposed disturbance activities would not be carried out, and impacts to vegetation, special status plant species, or forest and woodland resources would be negligible (SRK 2019f, p. 10).

3.6 Wildlife Resources

3.6.1 Affected Environment

This section includes a discussion of wildlife resources, including migratory birds, general wildlife, and special status wildlife species. The analysis area for direct and indirect impacts to wildlife resources is the Assessment Area, but study areas extended beyond the Assessment Area for nesting raptors and nesting golden eagles. General wildlife and special status species including migratory birds observed during surveys or which have the potential to occur in the area, are described in the resource report (SRK 2019g, pp. 11-15)
3.6.2 Environmental Consequences

3.6.2.1 Proposed Action

Direct impacts to general wildlife and special status species including migratory birds and raptors, could involve the taking of small mammals during land clearing activities. The taking of bird nests and young is not anticipated to occur as breeding bird surveys would be conducted prior to ground disturbance during the breeding bird season. Considering the environmental protection measures and the size of the Proposed Action, direct impacts to general wildlife are considered to be long-term, localized, and minor. Direct impacts to special status species including migratory birds and raptors resulting from the Proposed Action are considered to be long-term and localized but not likely to adversely affect special status species (SRK 2019g, pp. 16-19).

Loud and sudden noises associated with the Proposed Action could result in wildlife displacement for the life of the Project as a minor, localized, long-term impact to individuals. In areas where habitats are at or near their wildlife carrying capacity, displacement could add further localized stresses to the habitat and/or reductions in wildlife populations in adjacent habitat areas. Indirect impacts to general wildlife and special status species including migratory birds and raptors would also include the removal or alteration of approximately 82 acres of potential habitat, about 55 acres of which has not been previously disturbed. For mule deer, this would result in the removal of 82 acres of crucial summer habitat and 55 acres of undisturbed crucial summer habitat. This impact would persist for the long-term on approximately 66 acres, until reclamation activities are complete, and vegetation has been reestablished. Impacts would continue on approximately 16 acres which would not be reclaimed and would remain as post-reclamation features. Considering the Project life and the environmental protection measures, the indirect impacts to general wildlife resulting from habitat loss are considered to be minor, long-term, and localized. Indirect impacts to special status species including migratory birds and raptors resulting from the Proposed Action are considered to be long-term, localized, but insignificant and not likely to adversely affect special status species (SRK 2019g, pp. 16-19).

The resulting post-mining vegetation community may differ somewhat from the existing vegetation resulting in a minor, long-term, and localized effect to wildlife. However, over time, vegetation would be expected to return to a composition matching the surrounding undisturbed environment due to the implementation of reclamation protocols and revegetation monitoring, creating available habitat for wildlife species (SRK 2019g, pp. 16-19).

For GRSG, indirect impacts would include the disturbance of approximately 50 acres of Priority Habitat Management Area and five acres of General Habitat Management Area GRSG habitats. In regards to MD SSS 1 the Project has been located where possible, within previously disturbed areas (SRK 2019g, pp. 17-18).

While two leks are located within the four-mile buffer, these leks have been inactive during the 2015, 2016, and 2017 seasons. Seasonal restriction requirements would be decided on by the BLM in consultation with the Nevada Department of Wildlife. Seasonal restrictions would be implemented in accordance with MD SSS 2 E. Neither of the leks are located within 0.25 miles of the Project activities so MD SSS 2 F would not be valid for this Project. MD SSS 4 requires the implementation of certain required design features or an explanation for their non-implementation (SRK 2019g, pp. 17-18).

Residual impacts would involve the long-term alteration of this area. The resulting post-project vegetation community would initially differ from the existing community, and over time would be expected to return to a composition matching the surrounding undisturbed environment. With consideration for the listed environmental protection measures, indirect impacts would be long-term, localized, but insignificant and not likely to adversely affect GRSG (SRK 2019g, pp. 17-18).

As stipulated by Legislative Council Bureau File Number T006-18A (a temporary regulation which will become permanent by November 2019) the BLM has contacted the Sagebrush Ecosystem Technical
Team (SETT) and geographic information has been submitted indicating known existing and authorized disturbance areas for the vicinity as well as proposed Project disturbance areas. Using the Habitat Quantification Tool desktop analysis, the SETT has estimated the Project debits to be 152. This calculation is considered conservative since not all anthropogenic features may have been accounted for. This desktop analysis utilizes 100 percent site-scale habitat function which has not been field-verified. Based on 152 debits, Gullsil’s credit obligation may range between 152 and 175 based on mitigation location using a proximity ratio.

Gullsil will continue to work with the SETT to more accurately calculate debits and develop a mitigation plan. A more detailed desktop analysis may be conducted, and field verification for the adjustment of site-scale habitat functionality values may be pursued during the appropriate field season. Mitigation or a mitigation plan will be in place prior to the commencement of Project related surface disturbance.

3.6.2.2 No Action Alternative

No adverse consequences associated with the No Action Alternative would occur beyond the impacts related to authorized activities (SRK 2019g, p. 19).

3.7 Wastes and Materials, Hazardous or Solid

3.7.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary for hazardous and solid wastes and materials. Activities within the Assessment Area are currently underway on the on the Fourth of July claims under Notice NVN-094784. Hazardous and solid wastes are contained on-site and then hauled to an approved offsite landfill or other authorized facility as appropriate (SRK 2019h, p. 5).

3.7.2 Environmental Consequences

3.7.2.1 Proposed Action

Hazardous materials employed at the site would include diesel fuel and various lubricants. All fuel and lubricants would be temporarily stored in a secondary containment area. Fuel and lubricant tanks would be transported to an approved offsite facility for recycling or for final disposal (SRK 2019h, p. 5).

No hazardous or toxic waste, waste oil, or lubricants would be disposed of on public or private lands. Trash and other debris would be contained on the work site and then hauled to an approved offsite landfill facility. Burial and/or burning of trash and other debris on public lands would not be performed without specific authorization and permits from the BLM and other appropriate agencies (SRK 2019h, p. 5).

The generation of wastes related to the Proposed Action may result in the release of these wastes or materials. The chance of this occurring would be limited due to Gullsil’s Emergency Response and Spill Control Plan. In the event hazardous or regulated material, such as diesel fuel and/or lubricants, is spilled, Gullsil would take measures to control the spill, and the NDEP and BLM would be notified as per NDEP regulations, and the spill control plan. Petroleum-contaminated soils resulting from fuel and lubricant spills would be removed and disposed of at an approved offsite location (SRK 2019h, p. 5).

Impacts related to hazardous and solid wastes or materials are considered to be short-term, localized, and minor due to Gullsil’s Project containment designs and implementation of the Emergency Response and Spill Control Plan (SRK 2019h, pp. 5-6).

3.7.2.2 No Action Alternative

No additional impacts related to hazardous or solid waste under the No Action Alternative are projected beyond those related to previously authorized activities. Impacts related to the No Action Alternative would be negligible (SRK 2019h, p. 6).
3.8 Water Quality and Quantity

3.8.1 Affected Environment

The claim block (Assessment Area) has been used as the analysis boundary for water quality. The groundwater system in the Assessment Area is part of the regional Diamond Valley Hydrographic Basin 153. Diamond Valley is a closed hydrographic basin except for inflow through Devil’s Gate, a topographic low point between Whistler Mountain and the Mountain Boy Range. USGS has recognized that there may be additional subsurface flow in underlying carbonate or volcanic rocks. Surface water flows in the Prospect Mountain area are ephemeral and are dependent on seasonal precipitation. Surface drainages contain water only during storms or intense snowmelt. Einar Spring is the only surface water feature located within the Project Area. No wetland or riparian features are associated with Einar Spring or other areas within the Assessment Area (SRK 2019i, pp. 12-14).

3.8.2 Environmental Consequences

3.8.2.1 Proposed Action

The underground workings are not anticipated to encounter groundwater based on information obtained about the water table elevation and the historically dry workings. Negligible impacts to groundwater resources are expected to occur as a result of underground exploration or mining given the environmental protection measures.

Groundwater resources would be impacted through permitted water use related to the Proposed Action. The anticipated use of 712 gallons per minute (gpm) would be taken from the Diamond Valley Hydrographic Basin. A hydrology impact analysis was conducted to investigate potential impacts related to groundwater use (SRK 2019i, pp. 14-16).

The hydrologic investigation concluded that the Project area hydrogeology is characterized by a shallow, local perched-water system and a deeper, regional groundwater system. These two groundwater systems are spatially separated by a vertical distance of approximately 1,300 feet in the Project area. Both are hosted by similar carbonate (limestone and dolomite) rocks. This separation is evidenced by the presence of water in deep boreholes ranging in elevation from 6,525 feet to 5,904 feet amsl and the observation of dry underground workings, including thousands of feet of drift at elevations between approximately 8,620 feet and 6,630 feet amsl. A vertical connection between the springs, including Einar Spring, and the regional groundwater system would create wet ground conditions in the intervening underground workings. In addition, Well 2 was airlift tested at a rate of 110 gpm while Well 2 and Einar Spring were monitored for water level responses. The lack of Einar Spring’s response to Well 2 test pumping, despite 88 feet of drawdown at Well 2, confirmed that operation of the new production well would not impact local perched groundwater systems which feed springs in the Project area (SRK 2019i, pp. 14-16).

Water quality comparative analysis results indicate that waters from Well 2 and Einar Spring are very similar and are consistent with the conceptual model that the waters originate from the same source of recharge and reside within carbonate rocks of similar geochemical nature. Quantitative water quality analyses do suggest a few analytes (e.g., tritium, Kjeldahl nitrogen, manganese, antimony, and sulfate) which help differentiate these waters. The difference in concentration of these analytes provide some confirmation of the separation of the local perched-water system and the deep district-scale groundwater system (SRK 2019i, pp. 14-16).

Conservatively assuming the regional groundwater system occurs in homogenous and isotropic deep bedrock aquifers, and without recharge, the 10-foot drawdown contour within the regional groundwater system is predicted to extend to 20,200 feet after pumping Well 2 at its maximum potential discharge capacity of 712 gpm for ten years. The analytical model does not account for mitigating factors including recharge, anisotropy, and flow barriers. The modelled drawdown resulting from Project water usage
would be lessened by recharge of the regional groundwater system, the re-infiltration of pumped water, the truncation of drawdown resulting from boundary faults, and the presence of aquitards and aquicludes. Anisotropies, introduced by fault, bedding, and joint set networks, would also likely distort the modelled 10-foot drawdown contour. In particular, the pervasive northwest-southeast trending faults can be expected to preclude significant drawdown to the NNE toward Eureka (SRK 2019i, pp. 14-16).

The anticipated water use of 712 gpm is within Gullsil’s water rights and is equivalent to approximately 1,150 acre-feet per year (AFY). The Diamond Valley hydrographic basin has an underground usage total of approximately 136,970 AFY (NDWR 2019). As of 2016, groundwater pumping for irrigation was estimated to be 76,000 AFY (State of Nevada 2019). Gullsil's water usage of 712 gpm from the regional aquifer would constitute approximately 0.9 percent of the Diamond Valley total underground water usage and 1.5 percent of the Diamond Valley irrigation underground water usage. The predicted drawdown of the regional bedrock groundwater system would persist for as long as pumping from Well 2 continued at its maximum rate. Impacts to groundwater related to water use would be long-term, minor, and localized (SRK 2019i, pp. 15-17).

Due to the vertical separation of the local perched-water system from the deep regional groundwater system described above, pumping from Well 2 is not anticipated to impact Einar Spring, other springs fed by the perched-water system, or wells placed within alluvium above the regional groundwater system. Impacts to local perched-water system springs would be negligible, long-term, and localized (SRK 2019i, pp. 14-16).

The development of and water use from Einar Spring would affect the quantity of water in the perched water system from which it is fed. This perched water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed. Impacts to these springs are unclear but may be moderate, long-term, and regional (SRK 2019i, pp. 14-16).

Surface water resources could be impacted from land clearing and the resulting increased sedimentation to drainages during snow melt and precipitation events. Gullsil's Project design and environmental protection measures would minimize these impacts. The impacts would be minor, localized, and long-term, lasting until reclamation has been completed, and revegetation success established. As described above, predicted regional groundwater withdrawals for the Project are not expected to have a measurable change on spring flows. No impacts to vegetation or habitats associated with the perched-water system are anticipated to occur as a result of regional groundwater pumping. The development of Einar Spring and water use from the perched system which feeds it may affect localized vegetation around it as well as other springs which may be fed by the same system. These impacts may be moderate, long-term, and regional (SRK 2019i, pp. 14-16).

A waste rock and ore characterization program was conducted by SRK Consulting (U.S.), Inc. (SRK). The main lithologies that would be encountered during expansion of the underground workings consist of Hamburg Dolomite and Dunderberg Shale (SRK 2019i, pp. 16-17).

The results of the static geochemical test work demonstrated that the Prospect Mountain waste rock and ore material is net neutralizing and presents a low risk for acid rock drainage and metals release. Additional details are provided in the resource report. Given the above modelling results, impacts to water quality and geochemistry would be minor, long-term, and localized (SRK 2019i, pp. 16-17).

3.8.2.2 No Action Alternatives

Under the No Action Alternative, negligible impacts to water resources, water quality, or riparian areas would occur beyond those resulting from the authorized activities (SRK 2019i, p. 17).
3.9 Grazing Management

3.9.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary grazing management. The Assessment Area is located within the Arambel Grazing Allotment and the Ruby Hill Grazing Allotment (SRK 2019j, p. 6).

3.9.2 Environmental Consequences

3.9.2.1 Proposed Action

Under the Proposed Action, approximately 82 acres of previously undisturbed vegetation would be disturbed related to site facility developments. Of this, approximately 56 acres are located on public land managed for and available for grazing use within the Ruby Hill Allotment. The Proposed Action would result in a potential temporary reduction of five animal unit months (AUMs) within the Ruby Hill Allotment (0.3 percent of the total AUMs) and no changes for the Arambel Allotment. The post-reclamation loss of AUMS would be zero. Based on the amount of loss, the size of the allotments, and forage types within the Assessment Area, potential impacts to grazing management as a result of the Proposed Action are considered to be regional and minor (SRK 2019j, p. 7).

3.9.2.2 No Action Alternative

Under the No Action Alternative, no further loss of forage would occur within the Project Area beyond those resulting from the authorized activities. Impacts to grazing management would be negligible (SRK 2019j, p. 7).

3.10 Land Use, Access, and Public Safety

3.10.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary for land use, access, and public safety. Land use, access, and public safety are described in the resource report (SRK 2019k, pp. 4-5).

3.10.2 Environmental Consequences

3.10.2.1 Proposed Action

The Proposed Action is in conformance with the Eureka County Master Plan for land use types allowed in that area. Most of the rights-of-way (ROWs) within the Assessment Area are either related to the Prospect Peak communication site and/or the three-phase powerline. Impacts to other ROW-holders within the Assessment Area as a result of the Proposed Action would not occur (SRK 2019k, p. 6).

General public access within the Assessment Area would remain open with the exception of the active exploration and mining areas. Gullsil proposes to install swing gates, fencing, and signs to restrict public entry into the mining and exploration areas as described in the Plan. Furthermore, access to the active tunnels would be controlled by two locking gate panels. During reclamation, a secure barrier such as a locked gate would be installed over the tunnel entrances of private ground to prevent unauthorized access (SRK 2019k, p. 6).

Considering these public safety features within the active area and site personnel adherence to appropriate speed limits, impacts to public safety and access would be negligible, long-term, and localized (SRK 2019k, p. 6).

Impacts to traffic patterns and road use are addressed in Section 3.14. Gullsil has committed to working with Eureka County to develop a road maintenance plan as stated in the Plan.
3.10.2.2 No Action Alternatives
Under the No Action Alternative, the proposed land use activities would not be carried out. Impacts to land use, access, and public safety would not occur beyond impacts related to authorized activities (SRK 2019k, p. 6).

3.11 Geology and Minerals
3.11.1 Affected Environment
The claim block (Assessment Area) has been used as the analysis boundary for geology and minerals. The main host of mineralization at Prospect Mountain is lower-plate Cambrian-aged Hamburg Dolomite and older El Dorado Dolomite. These mineralized host rocks are common in Nevada and have produced millions of ounces of gold and silver ore over decades of mining. Surface geology is dominated by Hamburg Dolomite and El Dorado Dolomite, which have been thrust from west to east over younger units. Almost all known mineralization and former mine workings lie under or east of and adjacent to Prospect Ridge, a north-northeast topographic high that is resistant to weathering due to silicification associated with hydrothermal alteration (SRK 2016 and 2019l, p. 6).

3.11.2 Environmental Consequences
3.11.2.1 Proposed Action
The Proposed Action would include mining at a rate of up to 1,000 tons per day. Rehabilitating the tunnels and underground work would produce an estimated 360,000 tons of waste rock that would be placed on the proposed rock disposal areas. Other waste rock would remain underground (SRK 2019l, p. 7).

Direct impacts of the Proposed Action on geologic and mineral resources would include the permanent removal of ore-grade material. There are no identified geologic conditions within the Assessment Area that would be exacerbated by Project activities which would result in geological hazards. Facilities associated with the Project would be constructed to conform to regulatory standards to minimize instability. Impacts to geology and mineral resources would be minor, long-term, and localized (SRK 2019l, p. 7).

3.11.2.2 No Action Alternative
Under the No Action Alternative, the proposed exploration and mining activities would not be carried out. Impacts to geology and minerals would not occur beyond impacts related to authorized activities (SRK 2019l, p. 7).

3.12 Paleontological Resources
3.12.1 Affected Environment
The claim block (Assessment Area) has been used for the analysis boundary for paleontological resources. No paleontological resources of critical scientific or educational value are known to occur within the Assessment Area. No vertebrate fossil localities are known to occur within the Assessment Area (SRK 2019m, pp. 5-6).

3.12.2 Environmental Consequences
3.12.2.1 Proposed Action
Paleontological resources could occur in the Assessment Area, but because no paleontological or vertebrate fossil resources have been located, such as in visible outcrops, negligible impacts to these resources would occur as a result of the Proposed Action. If impacts do occur, they would be long-term and localized. Gullisil would also implement the avoidance-directed environmental protection measures as described in the Plan should these resources be encountered (SRK 2019m, p. 6).
3.12.2.2 No Action Alternatives
Under the No Action Alternative, the proposed land disturbance, exploration, and mining activities would not be carried out and impacts to paleontological resources would not occur beyond impacts related to authorized activities (SRK 2019m, p. 6).

3.13 Recreation
3.13.1 Affected Environment
The claim block (Assessment Area) has been used for the analysis boundary for recreation. The Assessment Area is not known as a popular destination for public use, and no annual commercial or competitive permitted events occur in the area. The area is used, however, for dispersed recreational activities such as hiking, horseback riding, hunting, off-highway vehicle use, and historical explorations among other uses (SRK 2019n, p. 3).

3.13.2 Environmental Consequences
3.13.2.1 Proposed Action
The Proposed Action would result in restricted public access of the active mining and exploration area for the long term. Access and use of the remaining portions of the Assessment Area would stay open. Vegetation removal and disturbance may impact the recreational experience for some. This impact would be localized and long-term, lasting until successful reclamation and revegetation. Given the size of the Project and the low levels of recreational use of the area, impacts to recreation would be minor. Impacts to recreation would be negligible at the regional level (SRK 2019n, p. 4).

3.13.2.2 No Action Alternatives
Under the No Action Alternative, the proposed land disturbance and land use activities would not be carried out and impacts to recreation would not occur beyond impacts related to authorized activities (SRK 2019n, p. 4).

3.14 Social and Economic Values
3.14.1 Affected Environment
Eureka County has been used as the analysis boundary for Social and Economic Values. Population summaries, economic trends, employment, and social services are described in the resource report (SRK 2019o, pp. 3-5).

3.14.2 Environmental Consequences
3.14.2.1 Proposed Action
Exploration and mining activities are expected to continue for approximately ten years once the Project commences. During mining and exploration, Gullsil anticipates the employment of up to 24 personnel during two, 12-hour shifts. Employees could reside in the communities of Eureka, Diamond Valley, Ely, Carlin, or Elko. A lower number of people may be employed thereafter during earthworks which would take place during Year 11 and for monitoring continuing until approximately Year 16 (SRK 2019o, p. 7).

Individuals involved with the Project could impact the local community and the county in the following ways: impacts to the labor force and unemployment rates; impacts to personal income; impacts to population; impacts to housing; impacts to community facilities and services, including public safety, schools, health care and social services, utilities, recreational facilities, and county administrative functions; and Eureka County fiscal conditions. Because of the relatively small number of employees, these impacts would be minor and could be either positive or negative. Impacts may be localized or regional depending on where the employees reside. They would last for the long term, with most of the employment ending after about ten years (SRK 2019o, p. 7).
Because of the relatively low number of employees compared to the county population and considering that they may be commuting in from outside areas, housing resources are anticipated to be sufficient for the added demand created by the Proposed Action. There would, however, be indirect employment effects as new residents increase the demand for goods and services, which would have a positive effect on the local economy. There would also be minor increased demand for public services (schools, medical services, water, wastewater, etc.). The resulting impacts to social and economic values are considered to be minor and long-term (SRK 2019o, p. 7).

The offsite transportation of ore may impact traffic patterns, road use and maintenance, and on-highway safety. An amount of 365,000 tons/year of ore-grade material has been assumed for offsite testing and processing. The ore would be transported to sites with suitable processing facilities. Two potential processing facilities may be accessed by traveling east along Highway 50 toward Fallon, Nevada or Virginia City, Nevada for one-way distances of 180 and 240 miles respectively. On-highway trucks with 35-ton payloads would be used. Round trips per year have been calculated at approximately 10,500 (SRK 2019o, pp. 7-8).

Off-site ore transportation would increase the travel count data by approximately 58 vehicles per day resulting in a traffic increase of between three and five percent. Increased traffic would also increase road wear, maintenance requirements, and public safety hazards. However, the off-highway trucks would be operated by licensed drivers required to adhere to speed limits and other travel restrictions. Impact to roads and road travel would be minor, long-term, and regional (SRK 2019o, p. 8).

The potential temporary reduction of AUMs within the Ruby Hill allotment (SRKj, p. 7) would result in an economic impact to the affected grazing permittees. These effects would be long-term and either localized or regional depending on where the affected permittees reside. The Eureka County Master Plan states that they support “mitigation of mining activities that may impair the economic future of Eureka County citizens through bilateral or multi-lateral consultations with the Board of Eureka County Commissioners” (Eureka County 2010). No mitigation for the loss of AUMs is proposed.

3.14.2.2 No Action Alternatives

Under the No Action alternative Gullsil would not conduct the exploration or mining activities proposed under the Proposed Action. Gullsil employment would continue operating under Notice NVN-094784. Their employment would terminate upon completion of the notice-level exploration activities. There would be a negligible increase in employment opportunities for the surrounding communities and negligible changes in housing pressure, public service, or demand for goods and services (SRK 2019o, p. 8).

3.15 Soils

3.15.1 Affected Environment

The claim block (Assessment Area) has been used for the analysis boundary for soils. The ten soil associations occurring in this area are described in the resource report (SRK 2019p, p. 6).

3.15.2 Environmental Consequences

3.15.2.1 Proposed Action

Under the Proposed Action, approximately 82 acres would be disturbed, 55 acres of which are previously undisturbed. The proposed disturbance areas would remain for the long term, until reclamation efforts are complete, and revegetation success has been established. Exposed soils would be susceptible to wind and water erosion for the long term; however, the potential impacts to the disturbed and reclaimed soils would be reduced by the applicant-committed environmental protection measures. Long-term impacts to soil would include compaction and soil loss prior to reclamation and on areas which will remain unreclaimed. The changes in soil character would be readily apparent but mitigation would likely be
successful. Based on the existing disturbance at the site and environmental protection measures proposed by Gullsil, impacts to soils are expected to be moderate (SRK 2019p, p. 7).

3.15.2.2 No Action Alternatives
Negligible impacts to soils associated with the No Action Alternative would occur beyond those resulting from the prior authorized activities (SRK 2019p, p. 7).

3.16 Wild Horses
3.16.1 Affected Environment
The claim block (Assessment Area) has been used for the analysis boundary for wild horses. The Assessment Area is located within the northeast portion of the Fish Creek Herd Management Area (HMA). This area experiences only incidental use by wild horses (SRK 2019q, p. 6).

3.16.2 Environmental Consequences
3.16.2.1 Proposed Action
Under the Proposed Action, approximately 82 acres would be disturbed, 55 acres of which are undisturbed. Indirect impacts to wild horses would result from habitat loss. The proposed disturbance areas would remain for the short term, until reclamation efforts are complete, and revegetation success has been established. Habitat loss would persist on approximately 16 acres which would remain unreclaimed (SRK 2019q, p. 7).

Residual impacts would result from the post-reclamation vegetation community being more or less favorable to wild horse populations. This impact would continue until native vegetation has completely recovered. Because of the size of the Project and the existence of adjacent habitat areas for wild horses, impacts to wild horses would be localized and negligible (SRK 2019q, p. 7).

3.16.2.2 No Action Alternatives
Negligible impacts to wild horses associated with the No Action Alternative would occur beyond those resulting from the prior authorized activities (SRK 2019q, p. 7).

4 Cumulative Effects
4.1 Introduction and Assumptions
For the purposes of this EA, the cumulative impacts are the sum of all past, present (including the Proposed Action), and reasonably foreseeable future actions (RFFAs) resulting primarily from mining and mineral exploration, ROW construction and maintenance, transportation, agriculture, wildfire, grazing, and public uses. The purpose of this cumulative analysis in this EA is to evaluate the Proposed Action and No Action Alternatives contributions to the cumulative environment. The extent of the cumulative effects study area (CESA) would vary with each resource. The CESAs for each resource are described and mapped in the resource reports.

The following elements, resources, or land uses were not brought forward for cumulative analysis due to the negligible level of affects and incorporated management practices:

- Land Use, Access, and Public Safety;
- Geology and Minerals;
- Paleontology;
- Native American Cultural Concerns;
- Recreation; and
- Wastes, Hazardous and Solid.

4.2 Past and Present Actions
Disturbance acreages associated with Past and Present Actions which have been assigned an area under the BLM's Land and Mineral Legacy Rehost 2000 System (LR2000) system (BLM
or which were mapped using aerial photography or GIS data have been collected and summarized in the resource report for each given resource.

4.3 Reasonably Foreseeable Future Actions
Disturbance acreages associated with RFFAs which have been assigned an area under the LR2000 system (BLM 2017b) have been collected and summarized for each resource in each resource report.

4.4 Cumulative Impacts for the Proposed Action
This section of the EA considers the nature of the cumulative effect and analyzes the incremental impact to which components of the Proposed Action contribute to the collective impact. The analysis is considered a conservative estimate of the potential cumulative impacts as many of the disturbances permitted, such as ROWs and mineral exploration and mining activities, are subject to reclamation and do not represent permanent disturbance within a CESA.

4.4.1 Air Quality
The Air CESA includes the Diamond Valley Hydrographic basin and encompasses approximately 478,656 acres. Past and present actions within the CESA likely to contribute to air quality impacts include activities which involve land clearing or disturbance, which can result in fugitive dust emissions, or combustion or processing, which may result in point-source emissions. These activities include mining, exploration, transportation, agriculture, dispersed recreation, and wildfire. Grazing and wildlife use may also contribute to air quality impacts through vegetation removal and land disturbance. RFFAs within the Air CESA that may contribute to impacts to air quality include exploration and mining, and construction for ROWs. These activities would contribute to air quality impacts through fugitive dust and combustion emissions. Quantifiable RFFA disturbance acres have been estimated at less than one percent of the CESA. Prior to receiving authorization to commence, impacts to air quality resulting from permittable activities and operations on federally managed lands would be analyzed separately. Impacts to air quality resulting from agriculture, recreation, grazing, and wildlife use are expected to continue at their current levels (SRK 2019b, p. 17).

4.4.1.1 Proposed Action
The incremental contribution of the Proposed Action's fugitive dust emissions would be relatively small for both the short term (resulting from some additional construction activities and 82 additional acres of disturbance) and long term (resulting from 16 acres of post-reclamation disturbance). The cumulative emissions resulting from past and present actions, RFFAs, and the Proposed Action would be regional and generally dispersed. They are not anticipated to alter the Eureka County and Diamond Valley Hydrographic Basin 153 “unclassifiable/attainment” classification. In addition, applicant-committed environmental protection measures for each authorized project occurring on public land would minimize potential cumulative effects to air quality. Reclamation of proposed surface disturbance areas would gradually eliminate most sources of fugitive dust resulting from wind erosion (SRK 2019b, pp. 17-18).

4.4.1.2 No Action Alternative
Impacts to air quality from previously permitted authorizations would continue to occur under the No Action Alternative. Cumulative impacts occurring from the No Action Alternative would result in no substantial adverse effects with no measurable change to the “unclassifiable/attainment” status (SRK 2019b, p. 18).
4.4.2 Cultural Resources

The claim block has been used for the Cultural CESA. It encompasses approximately 1,935 acres. Cultural resources within the CESA have had and continue to have the potential for disturbance resulting primarily from ground-clearing activities which could disturb or remove cultural sites. Past and present actions involving surface disturbance include exploration, ROWs, agriculture, recreation, and grazing. RFFAs which may impact cultural resources within the CESA include mining, grazing, and dispersed recreation. Indirect effects, such as illegal collecting of artifacts, are likely to have occurred and most likely would continue to occur in the CESA through increased access, development, and increased human presence, as a result of past, present, and RFFAs (SRK 2019c, p. 7).

4.4.2.1 Proposed Action

The incremental cumulative contribution of the Proposed Action to cultural resource impacts is considered localized and adverse. Mitigation would be carried out as described in a treatment plan developed and agreed upon by the BLM and SHPO. Environmental protection measures would be carried out as described in the Plan (SRK 2019c, p. 7).

4.4.2.2 No Action Alternative

Cumulative impacts to cultural resources would continue to occur under the No Action Alternative from previously authorized activities. The No Action Alternative is also considered localized with the impacts defined as “no historic properties or archaeological sites affected” (SRK 2019c, p. 7).

4.4.3 Noxious Weeds, Invasive and Non-native Species

The noxious weed, invasive, and non-native species CESA is the claim block. Past and present actions within the CESA likely to contribute to the spread or establishment of noxious weeds, invasive, and non-native species are activities which involve land clearing or disturbance and vegetation removal. These activities include mining, exploration, ROW construction and maintenance, transportation, dispersed recreation, grazing, and wildlife use. RFFAs which may impact noxious weeds, invasive, and non-native species within the CESA include mining, grazing, wildfire, and dispersed recreation (SRK 2019d, pp. 4-5).

4.4.3.1 Proposed Action

The Proposed Action would increase the disturbance area within the CESA by 82 acres, equaling approximately four percent of the CESA. Implementation of environmental protection measures would help minimize the establishment and spread of noxious weeds, invasive, and non-native species in the proposed disturbance areas and, therefore, minimize the Project’s contribution to cumulative effects associated with these species. A majority of the authorized disturbance area would be reclaimed at the end of operations minimizing long-term impacts related to noxious weeds, non-native, and invasive species. The cumulative impacts would be long-term, regional, and minor (SRK 2019d, p. 7).

4.4.3.2 No Action Alternative

Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. Most of this area would be reclaimed upon project completion. The No Action Alternative would have negligible, regional, long-term cumulative impacts to noxious weeds, non-native, and invasive species.

4.4.4 Vegetation including Special Status Plant Species

The vegetation CESA is the claim block. Past and present actions within the CESA likely to contribute to impacts to vegetation including special status species are activities which involve land clearing or disturbance and vegetation removal or vegetation community alterations. These
activities include mining, exploration, ROW construction and maintenance, transportation, dispersed recreation, grazing, and wildlife use. RFFAs which may impact vegetation within the CESA include exploration, grazing, wildfire, and dispersed recreation (SRK 2019f, p. 10).

4.4.4.1 Proposed Action

A majority of the authorized disturbance areas would be reclaimed at the end of operations minimizing long-term direct impacts related to vegetation. The seeding would, however, result in a post-reclamation vegetation community which is different than the native community. Over time, the native vegetation community is anticipated to return, reducing long-term cumulative effects to minor. Cumulative impacts would likely not adversely affect special status plant species (SRK 2019f, pp. 10-11).

4.4.4.2 No Action Alternative

Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. Most of this area would be reclaimed upon project completion (SRK 2019f, p. 11).

4.4.5 Wildlife Resources including Special Status Species, Migratory Birds, and Raptors

The wildlife CESA is Hunt Unit 145. Past and present actions within the CESA likely to contribute to wildlife impacts involve land clearing, vegetation removal or alteration, the presence of humans, and the presence of equipment. These activities include mining, exploration, ROW construction and maintenance, transportation, municipal areas, agriculture, dispersed recreation, and grazing (SRK 2019g, p. 19).

RFFAs which may impact wildlife include exploration, mining, grazing, wildfire, and dispersed recreation. Quantifiable disturbances associated with mining have been estimated at less than one percent of the CESA. Disturbance acreages have not been quantified for grazing or dispersed recreation (SRK 2019g, p. 19).

4.4.5.1 Proposed Action

The Proposed Action would incrementally increase disturbance to wildlife habitat by an additional 82 acres (less than one percent of the CESA). It is assumed that portions of past mining-related disturbances in the CESA have been reclaimed, and ongoing reclamation at existing operations would continue to reduce the impacts to wildlife due to CFR 3809 requirements for reclamation. Pending completion of successful reclamation, the incremental additional impacts to wildlife, including special status species, migratory birds, and raptors, as a result of the Proposed Action would be temporary in nature for the majority of the disturbance area with the exception of those facilities which would remain as post-reclamation features (SRK 2019g, p. 19).

Indirect impacts associated with human presence and noise would incrementally increase in the CESA due to the Proposed Action. The contribution of the Proposed Action to these impacts would be long-term but temporary and would cease following completion of operations and final reclamation (SRK 2019g, p. 19).

Residual impacts to wildlife resources including special status species, migratory birds, and raptors as a result of surface disturbance-related activities would include the permanent reduction of approximately 16 acres of habitat. Other residual impacts would include the incremental habitat loss and displacement of wildlife species. Increased human presence would continue to affect the overall distribution of wildlife. Considering the size of the Proposed Action within Hunt Unit 145, the cumulative impacts to general wildlife would be minor while impacts to special status species including raptors and migratory birds would be not likely be adversely affected (SRK 2019g, p. 20).
4.4.5.2 No Action Alternative
Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. No additional cumulative impacts would occur (SRK 2019g, p. 20).

4.4.6 Water Quality
The Water CESA includes the Diamond Valley Hydrographic basin. Past and present mining, exploration, and irrigation activities have the potential to impact groundwater through groundwater removal, use, and the potential contamination of groundwater resources through the creation of pit lakes (if present), and wells. Groundwater quality may also be impacted from mine waste rock, leaching, and spills. The two largest industrial sites would be the permitted Ruby Hill Mine and the Mount Hope Mine although neither is presently in operation. Disturbed land within the CESA has the potential to impact surface water quality through sedimentation and runoff (SRK 2019i, p. 17).

Transportation within the CESA has the potential to impact surface waters and groundwater due to possibility of hazardous material, fuel, and oil spills or leaks. Agricultural activities often involve the use of chemical and fertilizers which can either run off and impact surface waters or infiltrate to impact groundwater (SRK 2019i, p. 17).

RFFAs which could impact water quality include mining, exploration, ROW construction, and maintenance, grazing, and dispersed recreation. Quantifiable RFFA disturbance acres have been estimated at less than one percent of the CESA (SRK 2019i, p. 17).

4.4.6.1 Proposed Action
The Proposed Action has the potential to impact surface and groundwater resulting from water use, drilling, waste rock and ore placement, and disturbance. The Proposed Action would result in changes to the regional groundwater system water quantity resulting from groundwater use. The cumulative impacts resulting from this water use would be minor and localized within the context of the Diamond Valley Hydrographic Basin (SRK 2019i, p. 17).

The Proposed Action may also contribute incrementally to surface water impacts resulting from sedimentation from disturbed areas. Because the proposed disturbance area is less than one percent of the CESA, these cumulative impacts would be minor (SRK 2019i, p. 17).

4.4.6.2 No Action Alternative
Impacts to surface water and groundwater quality and quantity resulting from previously permitted authorizations would continue to occur under the No Action Alternative. Cumulative impacts from previously authorized activities would be the same as previously authorized (SRK 2019i, p. 17).

4.4.7 Grazing Management
The grazing CESA includes the Arambel and Ruby Hill grazing allotments. Past and present actions within the CESA likely to contribute to grazing impacts involve land clearing and vegetation removal or alteration. These activities include mining, exploration, ROW construction and maintenance, municipal areas, transportation, agriculture, dispersed recreation, and wildlife use (SRK 2019i, pp. 7-8).

Lands which are transferred or sold from the BLM may not be made available for future grazing use. RFFAs which may impact grazing through disturbance or vegetation removal include exploration, wildlife use, and dispersed recreation (SRK 2019j, pp. 7-8).

4.4.7.1 Proposed Action
The Proposed Action would result in the short-term loss of five AUMs from the Ruby Hill Allotment. This is 0.3 percent of the available AUMs within that allotment. No AUM reduction is proposed for July 2019
the Arambel allotment. The AUM loss would be minor. These AUMs would be reinstated after reclamation has been completed and revegetation success (SRK 2019j, p. 8).

**4.4.7.2 No Action Alternative**

Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. No additional cumulative impacts would occur (SRK 2019j, p. 8).

**4.4.8 Wild Horses**

The wild horse CESA is the Fish Creek HMA. Past and present actions within the CESA likely to contribute to wild horse impacts involve land clearing, vegetation removal or alteration, the presence of humans, and the presence of equipment. These activities include mining, exploration, ROW construction and maintenance, transportation, municipal areas, agriculture, dispersed recreation, wildfire, wildlife use, and livestock grazing. Other past and present activities which may affect wild horses are wild horse gathers and population management programs. Lands which are transferred or sold to other entities are considered removed from wild horse areas and are not included in wild horse habitat capacity calculations. RFFAs which may impact wild horses include exploration, mining, ROWs, livestock grazing, dispersed recreation, wild horse gathers, and population management programs (SRK 2019q, pp. 7-8).

**4.4.8.1 Proposed Action**

The Proposed Action would incrementally increase disturbance to wild horse habitat by an additional 82 acres (less than one percent of the CESA). It is assumed that portions of past mining-related disturbances in the CESA have been reclaimed, and ongoing reclamation at existing operations would continue to reduce the impacts to wild horses. Pending completion of successful reclamation, the incremental additional impacts to wild horses as a result of the Proposed Action would be temporary in nature for the majority of the disturbance area with the exception of those facilities which would remain as post-reclamation features (SRK 2019p, p. 8).

Residual impacts to wild horses as a result of surface disturbance-related activities would include the permanent reduction of approximately 16 acres of habitat. Other residual impacts would include the incremental habitat loss and displacement of wild horses. Considering that wild horses do not frequent the vicinity of the Proposed Action, cumulative impacts would be negligible (SRK 2019q, p. 8).

**4.4.8.2 No Action Alternative**

Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. No additional cumulative impacts would occur (SRK 2019q, p. 8).

**4.4.9 Social and Economic Values**

The social and economic values CESA is Eureka County. Past and present actions and RFFAs within the CESA likely to contribute to social and economic values involve activities influencing employment and populations. These activities include mining and exploration, municipal areas, land transfers, agriculture, recreation, leases, and grazing (SRK 2019o, pp. 2-3).

**4.4.9.1 Proposed Action**

The Proposed Action would result in minor, long-term impacts to social and economic values through a 1.2 percent increase in the county population as compared to 2015 (if all employees resided in Eureka County) and the minor increased demand in public services. The past, present, and RFFAs may have slight effects on the county's population and economics, but these effects would be slight and are not reliably measurable. Together, the cumulative impacts of the Proposed Action to the social and economic values of Eureka County would be minor and long-term (SRK 2019o, p. 7).
4.4.9.2 No Action Alternative
Impacts to social and economic values resulting from previously permitted authorizations would continue to occur under the No Action Alternative. Cumulative impacts from previously authorized activities would be the same as previously authorized (SRK 2019o, p. 7).

4.4.10 Soils
The soils CESA is the claim block which encompasses approximately 1,935 acres. Past and present actions within the CESA likely to contribute to impacts to soils are activities which involve land clearing or disturbance and vegetation removal. These activities include mining, exploration, ROW construction and maintenance, transportation, dispersed recreation, grazing, and wildlife use. RFFAs which may impact soils within the CESA include exploration, grazing, and dispersed recreation (SRK 2019p, p. 7).

4.4.10.1 Proposed Action
The Proposed Action would increase the disturbance area within the CESA by 82 acres. Implementation of environmental protection measures would help minimize soil loss such as road watering and reclamation. A majority of the authorized disturbance areas would be reclaimed at the end of operations minimizing long-term direct impacts to soil (i.e. soil loss). Compacted soils and soils lost prior to reclamation would remain as long-term, minor cumulative impacts (SRK 2019p, p. 7).

4.4.10.2 No Action Alternative
Cumulative impacts from previously authorized activities would continue to occur under the No Action Alternative. Sixty-six acres would be reclaimed upon project completion (SRK 2019p, p. 8).

5 Consultation and Coordination
This EA was prepared at the direction of the BLM by SRK. Following is a list of persons, groups, organizations, and agencies consulted:

- U.S. Fish and Wildlife Service
- Nevada Department of Wildlife
- Nevada Natural Heritage Program
- Duckwater Shoshone Tribe
- Sagebrush Ecosystem Technical Team

6 References


Appendix A: Response to Public Comments

Below you will find the comments or comment summaries with responses by sender. Related comments have been cross-referenced.

Eureka County Board of Commissioners comments from a letter dated July 6, 2018:

1. The page numbering is incorrect. There are two page 2 and two page 3.

The page numbering has been corrected.

2. Page 2, Section 1.4 – There is no discussion about consideration of or consistency with Eureka County’s plans, policies, and controls.

Conformance with the Eureka County Master Plan is cited in Section 1.4 of the EA. Conformance with the Eureka County Master Plan specifics listed in the comment letter have been considered. No changes to the EA text have been made.

3. Page 2, Section 1.5 – Water quantity was not identified as a resource to be studied. This is unfortunate given that 1) this resource issue is always of primary importance to Eureka County and 2) the amount of water being proposed to be used and consumed by the Project. Water quantity is also of major interest to those with permitted water rights and claims of vested rights in the vicinity, including the Town of Eureka.

A water impact analysis has been performed. The Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019) has been included as an appendix to the revised water resources report (SRK 2019). The results are summarized in the revised water resources report as well as in the EA.

4. Page 3, Section 2.1 – The Proposed Action needs to better describe the plans for off-site transportation and processing of ore. This will have cascading effects throughout the EA. Where will this ore be transported to? What routes will be taken and how will this affect access and public safety or other resources such as wildlife (i.e., sage-grouse leks)? What are the emissions implications for the site receiving and processing the ore? The NEPA analysis needs to be complete. Places where the ore would be transported and processed need to have full disclosure of the potential impacts.

The EA states that material would most likely be transported along Highway 50 toward Fallon or Virginia City. The analysis has determined and disclosed a traffic increase in Eureka of three to five percent. Impacts to road wear, maintenance, and public safety hazards have been disclosed as being minor, long-term, and regional. Through analysis, the ore-haulage traffic increase was determined to have a negligible impact on air quality and biological resources as presented in relevant resource reports. In further coordination with NDOW, applicant committed measures to protect biological resources have been incorporated.

5. Page 3, Section 3.2.2.1 – “In” should be removed to read “…site and direct and indirect adverse….”

This change has been made.

6. Page 5, Section 3.5.2.1 and Vegetation Resource Report – Why would a woodcutting permit be required to remove pinyon or juniper trees (P-J) when this tree removal is required under the Proposed Action? Many other mining projects have removed P-J without needing a separate woodcutting permit. Also, are the existing P-J within a woodland Ecological Site Description? Are they at densities not considered detrimental to ecological function and habitat impairment? If not, the P-J would be considered encroaching into other habitat types and removal of the trees should be described as having potentially positive effects.

The BLM requires woodcutting permits for the removal of trees and for the public use of removed wood as firewood. The pinyon-juniper vegetation community is described in the vegetation resource report.
7. Page 6, Section 3.6.2.1 and Wildlife Resource Report – There needs to be inclusion of Project-related potential impacts to water and water dependent resources wildlife in the area rely on including consideration of NRS 533.367 that has a requirement to ensure customary wildlife access to springs/seeps. Please see the response to comment 3.

8. Page 7, Section 3.7.2.1 and Wastes and Material, Hazardous or Solid Resource Report – What is meant by “approved offsite landfill facility?” Is the Eureka County landfill being considered as this facility for “trash and other debris?” If so, Eureka County would appreciate disclosure and understanding the volume of material expected to be disposed of.

An approved offsite landfill facility could include the Eureka County landfill or other permitted and authorized facilities. The volume of waste is not known at this time and may vary during the construction versus operation phases. The cleaning phase of the portals on patented ground has been completed. Gullsil would obtain the necessary landfill permits when needed.

9. Page 7, Section 3.8.1 and Water Resources Report – This section incorrectly characterizes Diamond Valley. Inflow to Diamond Valley, the terminus of the Diamond Valley Flow Systems, is through Devil’s Gate as well as other interbasin flow currently attributed from Garden Valley (sub-basin of Pine Valley). The recent USGS multi-year study of the Diamond Valley Flow System concluded that substantial interbasin flow has to occur into Diamond Valley in order to get a water balance. Regarding the small flow through the alluvium at Devil’s Gate, USGS noted in their recent 2016 report on the Diamond Valley Flow System that “Although these flow estimates were only for the basin-fill aquifer, additional subsurface flow could occur in underlying carbonate or volcanic rocks” (p. 70, emphasis added). Tumbusch and Plume (2006) made a similar statement. The EA ignores this potential inter-basin flow and ignores the 810 to 1,393 AF/yr of groundwater flow through bedrock north of Whistler Mountain that is discussed in the model report supporting BLM’s EISs for the Mt. Hope Project and the Gold Bar Project. Eureka County’s Water Resources Master Plan assumes a value for this inter-basin flow from the midrange of values for inter-basin groundwater flow from Kobeh Valley to Diamond Valley through bedrock presented in the BLM’s own documents. It is in the BLM’s and Gullsil’s best interest to be consistent from one NEPA document to another. Please simply add a sentence such as “USGS has recognized that there may be additional subsurface flow in underlying carbonate or volcanic rocks (Berger et al. 2016, Tumbusch and Plume 2006) and Montgomery (2010) calculates and the Eureka County Water Resources Master Plan references groundwater flow through bedrock between 810 to 1,393 acre-feet/year.”

The USGS references have been incorporated into the Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019). Also, Gullsil/Solarljos have renamed Clarks Spring as Einar Spring and the EA uses the latter. Locals and other governmental sourced maps, including USGS, call this spring Clarks Spring. We are not opposed to the renaming of the spring, but it is important that naming conventions properly follow established guidelines and requirements through various State and Federal laws and processes including the US Board on Geographic Names (Public Law in 1890) and the Nevada Board on Geographic Names (NRS 327). Did the renaming of Clarks Spring to Einar Spring follow the proper legal and regulatory protocols? If not, the EA should use the long-recognized name of Clarks Spring.

The Erickson family has been in possession of the proposed area since 1976. Upon purchase of the property, the prior owner who had owned it for a substantial period of time referenced the water complex as the Harrub complex. At no time in any of the mining historical documents or specific local knowledge of the Diamond Mine was this complex referenced as Clark Spring. The USGS maps are not consistent in the location or naming of a spring point where the Harrub complex is located. The historical patency of
this water complex places it on the Harrub claim, surveyed in 1879. Since it was an unnamed water complex, the proponent chose to name the spring ‘Einar’, after the patriarch of the project.

10. **Page 8, Section 3.8.1 and Water Resources Report -** We were surprised by the lack of any analysis and identification of any mitigation of impacts arising from pumping 500 gpm from a localized groundwater resource that is used by the Town or Eureka, ranchers, and wildlife. Every mining project and associated EA or EIS we have ever worked with proposing using and consuming a similar quantity of water completed quantified water impacts analyses either through a numerical flow model (see Ruby Hill Mine at roughly 800 afa and Gold Bar Mine at roughly 500 afa) or a adequate analytical solution (see Klondex Fire Creek Project). Based on our experience, for a project of this size with no dewatering and shipping of ore off-site for processing, the amount of water proposed for use seems high.

An impact analysis has been performed. Water use was based upon a maximum drilling and mining water use estimate. The impact analysis concluded that the well could pump up to 712 gpm. The water analysis was performed for 712 gpm.

Page 8 of the EA and Page 15 of the resource report states “Impacts to groundwater related to water use would be long-term, minor, and localized.” No analysis is provided in support of this statement. The EA ignores cumulative effects to water quantity altogether. Also, there is no discussion of monitoring to ensure the Project has no impact to groundwater resources or springs (natural or developed groundwater discharge). There is only discussion of monitoring associated with the Water Pollution Control Permit to detect potential water degradation.

The Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019) hydrologic investigation concluded that the Project area hydrogeology is characterized by a shallow, local perched-water system and a deeper, regional groundwater system. These two groundwater systems are spatially separated by a vertical distance of approximately 1,300 feet in the Project area. Due to the vertical separation of the local perched-water system from the deep regional groundwater system, pumping from Well 2 is not anticipated to impact Einar Spring, other springs fed by the perched-water system, or wells placed within alluvium above the regional groundwater system. The Project proponent performed voluntary mitigation by sealing the first 720 feet below ground surface of the well, which prevents the borehole from capturing water which may support perched water zones. Additional information about the hydrologic investigation and potential impacts can be found in the revised Water Resources Report (SRK 2019).

Historical mining operations pre-dating the current project relied on spring sources to provide their water supply. Local knowledge and resources confirm that additional water to the historic mining were supplied from nearby springs via a pipeline.

The Harrub complex incorporated underground wells as well as springs. Archaeological studies in the proposed Plan Boundary have produced evidence of piped water, as well as evidence of groundwater utilization in the form of extant wells (Harmon 2017).

The regional water table is deep (1,100 feet below the land surface and deeper at the vicinity of the Diamond Tunnel). Water supplies in the hills above the town of Eureka used by the Town, ranchers, and wildlife, exploit shallow, perched water-bearing formations with limited catchment areas. As such, the quantity of water that can be developed in any one area is small. The Town of Eureka developed 10 springs in order to reduce reliance on groundwater in the alluvial aquifer of Diamond Valley, which is grossly over-appropriated. In combination, the springs yield approximately 50 gallons per minute (gpm), which may not seem like much but this equates to approximately 50% of Eureka’s average daily demand. Any impact to spring flows would negatively affect the hundreds of thousands of dollars invested by the County, not to mention affecting the County’s attempt to isolate itself from the problems associated with the Diamond Valley alluvial aquifer.

As presented in the Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019), the production well will not impact the perched water-fed springs used by the town of Eureka.
The EA incorrectly equates 500 gpm or 807 afa to 0.6 percent of the groundwater usage in Diamond Valley because it assumes groundwater use in Diamond Valley is approximately 133,605 acre-feet per year (AFY). Instead, it is closer to 76,000 AFA. The EA should correct the error. The primary issue we have with the water quantity analysis (or lack of) is not how the Project’s water use compares to Diamond Valley as a whole, but rather, how exploiting 807 afa from a localized, perched water resource will affect the other springs in the general vicinity that may share the same source. Candidly, the idea the Project can develop a 500 gpm well from the perched aquifer at this location is over optimistic. If the Project truly requires 500 gpm, then they will likely need to drill deep enough to encounter the regional water table, at extreme cost.

The comment indicates that Eureka County is not concerned about the site’s water used compared to Diamond Valley as a whole. Therefore, due to the County’s concerns over the perched aquifer, the well was completed in the regional aquifer. As such, no impacts to perched water-fed springs are anticipated.

Because the claims to vested rights they hope to rely on relate to springs sourced from a localized perched aquifer, they may have trouble obtaining permission from the State to exploit the regional aquifer utilizing their claims of vested rights, even if they are willing to incur the expense.

The proponent incurred the cost to protect the perched water zone-fed springs.

Water rights for the project are a combination of appropriated groundwater rights (which have been forfeited and wending their way through the courts), a change of the application that was forfeited, a permit for 0.22 cfs from Einar Spring, and claims of vested rights to 3 springs totaling 0.472 cfs. Like all claims to vested water rights in Diamond Valley, the claims have not yet been adjudicated and we have found little information suggesting the amount claimed can be verified.

The Nevada Division of Water Resources conducted a field investigation June 14, 2017 (Nevada Division of Water Resources Memorandum, dated June 14, 2018). Einar Spring (V-10880) was located during the field investigation. SRK describes the spring as having no surface expression, but includes a spring box along with an unused pipeline, (SRK, 2018). The claim for Well 2 (V10882) showed no indication of a hand dug well or any other well and it has the same location as Einar Spring. The location of claimed Well 1 (V-10881) was located, but there were “…no works to indicate it was ever equipped as a well, but its purpose remains unclear. It could possibly be an air gap for a pipeline….”. At one location, a flow of 0.5 gpm was measured, but for the most part, the memo refers to minor spring sources, some of which are only identifiable as green or brushy areas in aerial photographs.

The claims of vested rights appear to be based on the rated output of two pumps mentioned in the 1899 Report of Surveyor-General and State Land Reporter, which in combination are rated at 212 gpm. The output however is dependent on the speed at which the pumps are operated and if the pumps were operated simultaneously. There is no documentation in that respect, only a conclusion “[i]t is reasonable to assume that these steam pumps were not oversized.” (Appendix B to Claims 10880, -81, and -82 - filed by Gullsil). Local knowledge asserts that the springs fed a storage tank, which in turn, allowed pumping at a high rate for short periods of time.

The Nevada adjudication of Hydrographic Basin 153 is currently in process and does not have bearing in the EA.

We acknowledge the Proponent owns additional irrigation water rights in Diamond Valley that could be converted for mining use should the water rights listed in the resource report not be sufficient to cover the Project’s needs. These additional rights should be listed. Also, the report on p. 6 states that water “would be supplied from one of more various sources. Water may be trucked to the site from Eureka of other legal water sources as needed.” It is important to clearly
pin down with a high level of confidence the location of water pumping if water will be hauled in and the associated impacts analysis tied to this pumping.

Water rights to support the well have been incorporated into water resource report.

11. Page 8, Section 3.9.2.1, Grazing Resource Report and Socioeconomic Resource Report – Eureka County has formal policy requiring “no unmitigated loss of AUMs” regardless of how many. A few AUMs lost temporarily or forever results in major economic losses over time in addition to reduction of long-term socioeconomic stability and custom and culture tied to ranching. Any loss of AUMs, no matter how few, is detrimental to ranchers who rely upon these forage resources as a way of life. These impacts can add up substantially over the long-term and these impacts can be quantified (i.e., forage values, loss of livestock production). No unmitigated AUM loss to a rancher due to another party is not “negligible.” It is these grazing lands that have provided and will continue to provide a stable socioeconomic base to Eureka County. Any impact to grazing should be quantified, addressed, and mitigation outlined. BLM is required to outline mitigation that could offset the impact (‘relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the agency’ BLM NEPA Handbook, p. 62). There should be cross-cutting analyses where the reduction in AUMs, even if temporary, is quantified and disclosed in the socioeconomics section too. Please use the same methodology that we worked on for the Mt. Hope EIS, HCCUEP EA, Gold Bar Project, and Deep South EIS (among others) that we believe was adequate. For example, consider something similar to the following analysis: Of all the agricultural commodity sales in Eureka County, cattle/calves and sheep/lambs historically average 40% of the sales with most of the remainder made up of export hay. According to the 2007 Census of Agriculture, there was a livestock inventory in Eureka County of nearly 25,000 head and $25,015,000 worth of agriculture commodity sales. The 2012 Census of Agriculture highlighted a cattle inventory of 17,092 (the 2012 Census of Ag did not disclose sheep numbers) with $36,020,000 worth of agricultural commodity sales. Livestock accounts for 40 percent of agriculture commodity sales in Eureka County; therefore, livestock production from 2007 through 2012 was responsible for generating $10,000,000 to $14,000,000 worth of product sales in Eureka County annually. The direct and induced benefits of the livestock industry in Eureka County can be determined based upon information contained in the University of Nevada Report: Reno Technical Report UCED 2005/06-14 Updated Economic Linkages in the Economy of Eureka County. The livestock sector in Eureka County has a final demand multiplier of 2.0283. In short this means that for every $1 generated by the sector Eureka County’s economy will benefit $2.02 of total revenue. The high final demand multiplier suggests strong economic linkages of the livestock sector to other sectors of the county’s economy. Income and employment multipliers are also of importance. The livestock sector has an income multiplier of 1.6812 and an employment multiplier of 1.4439. Thus, for every $1 generated by livestock production, total county household income increases by $1.68 and for every job added by the livestock sector, total employment in Eureka County increases by 1.44 employees. In 1999 funds were appropriated through the Nevada Legislature to create a Nevada Public Land Grazing Database and Economic Analysis. In 2000, the Nevada State Department of Agriculture asked the Nevada Association of Counties to assist in fulfilling this mandate. Resource Concepts, Inc. was contracted to help complete the database and analysis. The product of this effort is the report, Nevada Grazing Statistics Report and Economic Analysis for Federal Lands in Nevada (Resource Concepts, Inc. March 26, 2001). Table 3 of the Report (p. 48) summarizes the economic impacts of 1 AUM of grazing in Nevada as follows: For every AUM lost (or gained), the overall impact to the livestock producer himself in one year equals $29.40. The total economic impacts, which include the industry impacts and value added impacts, totaled to $53.40 per AUM ($29.40 direct and $24.00 in indirect and induced impacts). The figures above do not take into account inflationary changes since 1999. Based on data reported from the Bureau of Labor Statistics for each year since 1999 through 2017, the average rate is
approximately 3% per year. Therefore applying a rate of 3% each year since 1999 gives a 2017 value of one AUM to the producer around $50.00 and the entire local economy around $80.00. The economic impact of reducing 5 AUMs would result in around $250 per year reduction to the rancher and around $400 per year reduction to the local economy. Further, forage/AUMs could also be reduced based on water drawdown impacts. Mine-related groundwater drawdown could affect forage and AUMs dependent on surface water flows, if hydraulically connected to the affected aquifer. Springs and other surface waters have associated forage that depends on spring flow.

The AUMs in question are allocated on federally managed lands. These lands are open to multiple uses inclusive of mining and ranching. As presented in the Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019), the production well will not impact the perched water-fed springs or other surface waters which may be used by livestock in the immediate area.

As presented in the revised water resource report (SRK 2019) and EA, the development of and water use from Einar Spring would affect the quantity of water in the perched-water system from which it is fed. This perched-water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed.

12. Page 9, Section 3.10.2.1 and associated resource reports (including recreation) – This section only focuses on formal BLM issued rights-of-way. All known roads and access in the parcels should be included in the analysis, not just those with a BLM authorization or right-of-way. We are not asking for adjudication of pre-FLPMA roads (i.e., RS 2477). We simply ask for all known roads and access to be included in the analysis, not just those with a BLM authorization or right of way. Data sources to easily complete this analysis are readily available. This would include county road maps and TIGER/Line GIS data (readily available through the US Dept. of Commerce at https://catalog.data.gov/dataset/tiger-line-shapefile-2014-series-information-for-the-all-roads-county-based-shapefile). The EA must look at impacts to land, access, and realty, and should look at all access that exists. A few access points that many local hunters and recreationists use in the area appear to fall within the Project area. What will be the impact to these access points? Trying to weigh impacts to local users of this access, we have no information in the EA to use to weigh these impacts. We believe that these roads and ATV trails may eventually be restricted for use due to them entering a project boundary. The restrictions that will occur on these access points needs to be clearly disclosed.

Impacts to access have been included under the recreation resource report and the analysis acknowledges unofficial roads and trails shown on aerial imagery. A statement has been added to the recreation resource report to clarify the use of official and unofficial roads and trails. The resulting changes to access in the area have been described and disclosed. Public access would be restricted within the active mining and exploration areas. Impacts to access at the local level would be minor and long-term.

Additionally, this section has no discussion about use of County Road G-203 as primary access, how increased traffic may pose a risk to the public and permitted livestock, and how Gullsil will ensure that the road does not become in disrepair for any of their use above what is customary. The County requires road maintenance agreements with all project proponents that will increase travel and road-wear above customary use. This should be referenced and committed as part of the Proposed Action similar to every other recent mining project we have worked with.

This comment has been noted. Because the road was historically developed as an access road servicing historical mining in the area, the proposed use is not considered to be above customary.

13. Page 11, Section 3.14.2.1 and Social and Economic Values Resource Report – Please add Diamond Valley as one of the areas employees would likely reside.

Should the discussion about traffic patterns, highway safety, etc. be moved to Section 3.10, Land Use, Access, and Public Safety? It does not seem to fit socioeconomics discussions.
As requested above, please include discussions regarding the socioeconomic impacts of AUM loss here.

We typically see more quantitative analysis of the economics of a project such as projected taxes (including net proceed of minerals tax). This allows us to better plan for impacts. Is this information not available for this Project?

Diamond Valley has been added as one of the areas employees may reside. The Land Use, Access, and Public Safety section focuses more on the Project Area and hazards related to public entry of the area. Changes to traffic patterns and road use at the local and regional level are addressed under Social and Economic Values. A reference to these topics has been added to the Land Use, Access, and Public Safety section of the EA. Due to the small size of the project and the anticipated personnel (24 people), impacts to socioeconomics were determined to be at a level not necessitating additional or more detailed analysis. Impacts, either positive or negative, were determined to be minor and long-term.

14. Page 12, Section 3.16.2.1 and Wild Horse Resource Report - Why is any forage loss due to mining only attributed to livestock grazing AUMs and not wild horses? Forage is allocated in an allotment for wildlife, wild horses (if in an HMA), and livestock through various decision-making documents such as RMP, FMUD, permit renewals, etc. Forage loss due to mining should be divided proportionally across the allocated uses and not fall simply on livestock grazing as easy-pickings. While the EA discusses potential forage lass for wild horses, the full impact of AUM loss is borne by the rancher.

As with livestock grazing forage above, forage could also be reduced based on water drawdown impacts. Mine-related groundwater drawdown could affect forage and AUMs dependent on surface water flows, if hydraulically connected to the affected aquifer. Springs and other surface waters have appurtenant forage that depends on spring flow.

Although the area is within a Herd Management Area, wild horses use the area only incidentally. Historic inventory indicates that wild horses have not been observed within several miles of the Project area since the late 1970’s and mid 1980’s. Impact were determined to be localized and negligible. Please see the response to comment 11 regarding potential impacts to springs.

15. Page 17, Section 4.4.7 and Grazing Resources Report - The cumulative effects to grazing on the Ruby Hill allotment has been substantial just in recent years due to mining activity. This needs to be disclosed and discussed. The Ruby Hill allotment lost 140 AUMs, comprising 10% of the permitted AUMs, just a few years ago due to Ruby Hill Mine. Note that Ruby Hill Mine did mitigate this loss through a private party agreement.

Mention of the loss of 10 AUMs has been added to the revised grazing resources report.

16. Page 19, Section 6 – The References do not include the Eureka County Water Resources Master Plan (2016). This Plan should be consulted and included, especially to more accurately describe the hydrologic setting in Diamond Valley as we noted above.

Please see the response to Comment 9. The aforementioned USGS report has been cited as part of the Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019).

17. General comment on all resource reports – There are many duplicative statements in most of the resource reports that sometimes have nothing to do with the specific resource that is discussed. For instance, the air resources report discusses water pollution permit requirements. We suggest an overarching “Proposed Action” report that outlines all of the repetitive information, including maps, and that each individual resource report focus only on that specific resource and not duplicate the same Proposed Action information each and every time.

Executive Order 3355 dictates a 25-page limit for non-controversial EAs. To meet this limitation while also providing the necessary information for decision making, the resource reports have been prepared as separate, stand-alone documents, thus resulting in repeated information between the documents. Each
resource has been discussed separately so as to distinguish between an informational report and a National Environmental Policy Act document.

18. Air Resources Report, Page 3, Section 1.2.2 – This describes the access road as being County Road G-203. While it is technically correct to state that Eureka County would maintain control of maintenance, the County will not commit to additional maintenance above what is customary. The increased traffic on this road due to the Project will not be customary. The Project will require additional maintenance and Eureka County requires a road maintenance agreement above what is customary. For air quality implications, there could be substantial fugitive dust emissions from the access road due to the Project’s traffic. It is Gullsil’s responsibility, not Eureka County’s, to ensure that this fugitive dust is controlled; again, requiring a road maintenance agreement to get all parties, including BLM, in the same page.

Impacts related to fugitive dust have been disclosed in the air resource report. Gullsil would use a water truck for dust suppression and would obtain a surface area disturbance permit.

19. Air Resources Report, Page 5, Section 1.2.4 – There needs to be a better description of the air emissions due to transport and processing off-site. Also, this paragraph references a water pollution permit that seems misplaced for an air resources report. Should this statement read “The offsite mill that receives the ore would be permitted under a Nevada air pollution permit….”?

Emissions related to offsite processing would be integrated into the receiving site’s processing rate limit, air emissions permit, and water pollution control permit. Emissions from offsite transportation beyond the access road were not included in the air dispersion modeling analysis because they were considered to be minor and transient.

20. Air Resources Report, Page 10, Section 1.5.1 and associated tables - This section (Past and Present Action) repeatedly references Table 1-7 but should instead reference Table 1-6. Also, the text on page 11 related to “Irrigated Agriculture” states that the CESA is “focused within the southern end of Diamond Valley” and the air CESA map depicts Diamond Valley as the boundary. Yet, the acreage of irrigated agriculture in Table 1-6 is over 12,000 acres more than the official State Engineer irrigated crop inventories. The State Engineer irrigated crop inventories from Diamond Valley show acreage right around 26,000 acres.

The past and present irrigated acreage was obtained using GIS technology, which captures both past and present use. The relevant resource reports have been updated to state “Potentially Irrigated Agriculture”.

21. Social and Economic Values Resource Report – On page 3, Section 1.5.3, the report assumes that agriculture operations will continue at their current levels. This is not correct. Farming in Diamond Valley will change substantially due to its designation as a Critical Management Area and the Diamond Valley Groundwater Management Plan, or curtailment if the GMP is not approved and implemented.

On page 2, Section 1.5.2, please include Diamond Valley and the two Devil’s Gate General Improvement Districts. There are as many people living in Diamond Valley as there are in the Town of Eureka. The two GIDs are developed areas with high densities of homes and municipal infrastructure.

On page 5, the EA incorrectly states that the Eureka Medical Clinic is operated by Nevada Rural Health Services. The Clinic is operated by William Bee Ririe Hospital out of Ely. Also on page 5, the EA has dated information on when the water system was upgraded. This was done since 2009 (which is the date cited pointing out “the early 1990s”) and the springs above town, in the vicinity of the Prospect Mountain Project, were upgraded recently as well.

The assumption of agricultural operations has been clarified as continued agriculture. Diamond Valley and the Devil’s Gate GID have been added to the Affected Environment description of the social and
economic values resource report. Operation of the Eureka Medical Clinic has been corrected, and the date of upgrading the water system has been corrected.

22. **Wildlife Resource Report - Some of the language in the section regarding Greater Sage-Grouse may need to be revised depending on the status and outcomes of the current LUPA process and the timing related to the Final EA and Decision Record for the Prospect Mountain Project. Further, the MOU between BLM and the State requires BLM to include use of the Conservation Credit System (CCS) and Habitat Quantification Tool (HQT) as an alternative in every EA or EIS where impacts (even if indirect) to sage grouse are identified. We do not see this analysis in this EA. We advocate for pairing for consistency with the State Plan and implementation of the CCS.**

Comment noted.

**Jim and Vera Baumann comments from a letter dated June 28, 2018:**

1. The couple hold grazing permits and numerous stock water rights associated with the Shannon Station and Spanish Gulch allotments. They expressed concern that project impacts could impact their water rights.

As presented in the *Prospect Mountain Mine Hydrology Impacts Analysis* (Piteau 2019), the production well will not impact the perched water-fed springs or other surface waters which may be used by livestock in the area. The development of and water use from Einar Spring would affect the quantity of water in the perched water system from which it is fed. This perched-water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed. The current point of diversion for Jim and Vera Baumann is not located within the Project area or the New York Canyon watershed.

Impacts to grazing rights would only affect AUMs located within the Ruby Hill Allotment.

**Kyron Davis comments on behalf of the Janice Foundation from an email dated June 26, 2018:**

1. The letter attested to the personal qualities of Ty Erickson and the family’s support of humanitarian projects in Central America and Africa.

The comments have been noted.

**Gary and Melody Garaventa comments from a letter dated June 28, 2018:**

1. The couple owns a property approximately two miles south of the Project at an elevation of about 8,000 feet. They expressed concern that the project would effect the spring water quantity and quality on their property and their water rights. They are also concerned about new drilling for the project at their elevation.

As presented in the *Prospect Mountain Mine Hydrology Impacts Analysis* (Piteau 2019), the Project area hydrogeology is characterized by a shallow, local perched-water system and a deeper, regional groundwater system. These two groundwater systems are spatially separated by a vertical distance of approximately 1,300 feet in the Project area. The production well or wells would pump water from the regional groundwater system, leaving the local perched water systems (which feed local springs), unaffected. In addition, Gullsil has effectively sealed the first 720 feet as a voluntary measure to ensure that the spring could not be affected by pumping.

The development of and water use from Einar Spring (emanating at an elevation of 7,810 feet amsl) would affect the quantity of water in the perched water system from which it is fed. This perched water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed. Because Einar Spring is located at a lower elevation than the Garaventa property, and in a separate canyon, impacts to perched-water system fed spring water quantity and quality are not anticipated to occur as a result of Project activities. The spring of concern is located within Windfall Canyon.

Mineral exploration, development, and condemnation drill holes as well as monitoring, and production wells subject to the NDWR regulations would be abandoned in accordance with applicable rules and
regulations (NAC 534.4371). Boreholes and production wells would be sealed to prevent cross contamination between aquifers, and the required shallow seal would be placed to prevent contamination by surface access. No impacts to groundwater quality are anticipated to occur as a result of Project-related drilling.

2. **Air quality is also a concern, with their property being so close to the project and at such a high elevation.**

Gullsil is committed to following environmental protection measures, some of which relate specifically to air quality. They include the observance of speed limits to minimize dust emissions, the use of a water truck or other non-hazardous dust abatement products for the management of fugitive dust, acquisition of relevant air permits, erosion and sediment control, and reclamation.

Air Sciences, Inc. was retained by Gullsil to perform an Air Quality Impact Analysis to estimate impacts to ambient air quality which may result from the Proposed Action (ASI 2017). Results are summarized in the air resources report. The modelled criteria pollutants would not change the “attainment/unclassified” status of the Diamond Valley Hydrographic Basin 153. Impacts would be short-term and regional. No substantial adverse effects would occur.

**Rosie and Chad Bliss of 2 Bit Ranch, LLC comments from a letter dated June 29, 2018:**

1. **Rosie and Chad Bliss expressed concern that the EA does not adequately address the potential impacts to the following topics:**

   *Potential impacts to existing stock watering rights and springs associated with those rights in the Ruby Hills and Spanish Gulch Grazing Allotments*

As presented in the *Prospect Mountain Mine Hydrology Impacts Analysis* (Piteau 2019), the Project area hydrogeology is characterized by a shallow, local perched-water system and a deeper, regional groundwater system. These two groundwater systems are spatially separated by a vertical distance of approximately 1,300 feet in the Project area. The production well or wells would pump water from the regional groundwater system, leaving the local perched water systems (which feed local springs), unaffected.

The development of and water use from Einar Spring (emanating at an elevation of 7,810 feet amsl) would affect the quantity of water in the perched water system from which it is fed. This perched water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed.

Gullsil would work within the limitations of their water rights as related to each point of diversion. Impacts to water rights belonging to others, regardless of their location, would not occur as a result of this Project.

**Drill sump fencing and protective covering**

Gullsil has committed to constructing sumps with industry standard wildlife and livestock egress. The EA and Grazing Resource Report have been updated.

**Impacts to livestock resulting from increased traffic and equipment**

Gullsil is committed to carrying out environmental protection measures, some of which are specifically designed for the protection of wildlife, livestock, and wild horses. Gullsil employees and contractors would adhere to a 25 mile per hour speed limit including reduced speeds on the New York Canyon Road for large trucks and in areas where there is a high potential for vehicle/animal interactions. A speed limit sign and wildlife/livestock warning sign would be posted within the Plan boundary for traffic leaving the site.

**Mitigation or compensation of the loss of AUMs; and mitigation or compensation for negative impacts to water right holders**

The AUMs in question are allocated on federally managed lands. These lands are open to multiple uses inclusive of mining and ranching. As described in the revised grazing resources report, the Proposed Action would result in a potential temporary reduction of five AUMs within the Ruby Hill Allotment. The
post-reclamation loss of AUMS would be zero. Based on the amount of the loss of AUMs, the size of the allotments, and forage types within the Assessment Area, potential impacts to grazing management as a result of the Proposed Action are considered to be regional and minor.

As presented in the *Prospect Mountain Mine Hydrology Impacts Analysis* (Piteau 2019), the production well will not impact the perched water-fed springs or other surface waters which may be used by livestock in the immediate area. As presented in the revised water resource report (SRK 2019) and EA, the development of and water use from Einar Spring would affect the quantity of water in the perched water system from which it is fed. This perched water system may be localized within the upper reaches of New York Canyon or it may be connected to a larger perched system within the New York Canyon watershed.

**NDOW Comments, Moira Kolada, from a letter dated June 29, 2018:**

1. **The first is the loss of crucial mule deer summer range.** NDOW would like to discuss the possibility of a.) The proponent assisting in a habitat restoration project to help offset the loss of mule deer crucial summer habitat and b.) Modifying the seed mix to include additional shrubs species that would help restore mule deer crucial summer range. NDOW would also like to discuss the possibility of including mountain mahogany container stock as means to help restore the acres of mountain mahogany that will be lost.

Gullsil would commit to adding shrub species to the reclamation seed mix. These species may include varieties of bitterbrush, sagebrush, serviceberry, and snowberry. Furthermore, Gullsil would coordinate with the NDOW to establish three reclamation vegetation test plots, to be used by the NDOW and Gullsil to test and examine various aspects of reclamation practices including but not limited to the development of a site-specific reclamation seed mix, with a focus on crucial summer mule deer habitat species. The test plot locations would be established in coordination with NDOW personnel, and their status would be evaluated by the two parties on a yearly basis.

2. **Second, in regards to sage grouse the EA mentions that seasonal restriction requirements will be developed in coordination with NDOW.** However, NDOW is unclear as to when this coordination would occur. Our recommendation would be that coordination occurs before additional exploration and/or construction on the site.

The seasonal restriction requirement, as outlined by MD SSS 2E, is only applicable to active or pending leks. Currently, the two leks within the four-mile buffer are inactive. In the event of a lek status change or documentation of a new lek within the buffer, NDOW would inform Gullsil. Gullsil would then coordinate with the NDOW to meet and discuss potential appropriate seasonal restrictions within three months of receiving the information.

3. **Third, it is likely that during the life of the mine and the years following recreational opportunities for hunting and wildlife viewing will be impacted in the general area of the mine due to increased human activity and habitat alteration.** NDOW appreciates the fact the EA is upfront in acknowledging that even with successful reclamation it will take many years before the project area is able to provide wildlife habitat similar to its current state due to the slow nature shrub and tree growth.

This comment has been noted.

4. **Lastly, NDOW greatly appreciates the incorporation of the Applicant Committed Environmental Protection Measures (ACEPMs) within the EA.** Ideally NDOW would like to see these consolidated into a single section, rather than spread throughout the EA. Based on our review of the EA and site visits, we would like to suggest the following additional ACEPMs:

- In combination with the reduced speeds on the New York Canyon Road for large trucks, primarily in areas that have a high potential for vehicle/wildlife interactions, please consider placing additional signage alerting vehicles of the presence of wildlife;

Gullsil would commit to adding the suggested signage within the Plan boundary where the New York Canyon road leaves the site toward the east.
• Please coordinate with NDOW prior to the installation of bat compatible closures upon the cessation of mining;

Gullsil would contact the NDOW prior to the installation of bat compatible closures.

• Development of Einar Spring as a water source for wildlife upon cessation of mining;

As discussed with the NDOW, Gullsil cannot commit to developing Einar Spring for post-mining wildlife use. Gullsil intends the keep the water use available for other commercial or industrial purposes which may be developed. Gullsil would, however, remain in communication with the NDOW regarding other post-mining actions which may benefit the area’s wildlife.

• Please coordinate with USFWS and NDOW for the development of a Golden Eagle monitoring program for those nests that are within line of sight of mining activities;

A Golden Eagle Monitoring Plan is being developed for the Project.

• Should this project require fencing NDOW recommends changing the fence design to a 3-strand fence with a smooth top and bottom wire with the top wire and bottom wire being 38 inches and 16 inches high respectively, as recommend in the BLM Fencing Handbook (H-1741-1-Fencing). This design will allow for easier movement of wildlife. The fence should also be adequately marked to alert wildlife of its presence.

While Gullsil does not currently have plans to install perimeter fencing, such fencing would either be constructed using the described design or would be discussed with the NDOW prior to installation. Exclusionary fencing may be installed around mining or process features for security purposes. Exclusionary fencing would be of adequate size and construction to exclude large wildlife.

Eureka County Board of Commissioners comments from a letter dated June 6, 2019:

1. In reference to the BLM’s response to Eureka County’s comment 2 from July 6, 2018: BLM is blindly stating that there is conformance when Eureka County is informing BLM that there is not full conformance. Specifically, there is not consistency with County plans and policies related to impacts to AUMs and access. The regulations we specifically cited have not been adhered to. 40 CFR 1502.16(c) requires the EA (in the Environmental Consequences section) shall include discussions of: ... (c) Possible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned. (See §1506.2(d).) This was not done. Further, 40 CFR 1506.2(d) requires the EA shall discuss any inconsistency of a proposed action with any approved State or local plan and laws (whether or not federally sanctioned). Where an inconsistency exists, the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law. This was not done. A simple response to our comments in a cavalier way does not meet the intent of openly and honestly addressing conflicts and inconsistencies with our plans and policies.

A statement has been added to the EA addressing the inconsistency between the Proposed Action and the Eureka County Master Plan regarding the unmitigated loss of AUMs. See response to comment 8 below.

2. In reference to the BLM’s response to Eureka County’s comment 4 from July 6, 2018: Based on previous discussions with the Proponent, we were under the assumption that transport and processing of the material was “potentially” to occur nearby, and perhaps even Diamond Valley on routes other than main highways. This is where our comment originated. We wish to ensure that additional or cumulative impacts to resources in Eureka County were fully disclosed and analyzed. If there is no possibility of this material being transported on other routes to more nearby locations for processing, then our comment was addressed.
Direct, indirect, and cumulative impacts were evaluated and disclosed for routes the Proponent may use for the transport of ore.

3. *In reference to the BLM’s response to Eureka County’s comment 3 from July 6, 2018: While the impact analysis has been performed, Section 1.5 still does not list water quantity as a resource topic included and analyzed in the EA. Also, Section 3.8 is for Water Quality but now does include some discussion regarding quantity. Please simply add the word quantity in both locations to read “Water Quality and Quantity.”*

The heading for section 3.8 of the EA has been changed to “Water Quality and Quantity”.

4. *In reference to the BLM’s response to Eureka County’s comment 9 from July 6, 2018: The Piteau report does now cite the USGS references. The EA and Water Resources Report still have the same onerous and inaccurate numbers and fail consistency with the Mt. Hope Project EIS, USGS reports, official NV DWR reports, and County Water Resources Master Plan.*

The existing environment description in the water resources report references the Mount Hope EIS, the Piteau report (which references the USGS reports referred to in the July 6, 2018 letter), as well as the Ruby Hill EIS. Other existing environment descriptions are from field observations. The EA is consistent with recent and relevant BLM documents. The Eureka County Water Resources Master Plan does not contain information which has not already been referenced through other documents, or which otherwise adds substance to the Project analysis.

5. *In reference to the BLM’s response to Eureka County’s comment 10 from July 6, 2018: Eureka County never indicated we were not concerned about the water use compared to DV as a whole. We simply elevated our concern related to the springs in the area of the Project as our "primary" concern. BLM did not even address our comment related to the impact to Diamond Valley as a whole. The numbers in the EA are still factually wrong based on the official numbers from the NV Division of Water Resources and must be corrected to give the analysis credence.*

The water resources report and EA reference the most recent NDWR data (accessed in 2019) for underground water allocation which includes irrigation, mining and milling, municipal, quasi-municipal, and stockwater uses. The 76,000 AFY referred to by Eureka County in the July 6, 2018 comment as the annual groundwater usage for Diamond Valley appears to be in reference to groundwater usage for irrigation as of 2016. This number is referenced in The Office of the State Engineer of the State of Nevada Order #1302 (2019). An analysis based on groundwater usage from solely irrigation would be inaccurate.

6. *In reference to the BLM’s response to Eureka County’s comment 10 from July 6, 2018: We do note, and are appreciative, BLM provided us an advance opportunity on May 16, 2019 to review the updated hydrological impacts analysis by Piteau Associates. We thank BLM and the Proponent for completing this water impacts analysis. This has allowed us to move on from many of our previous comments and concerns. Our primary conclusion, as stated by Dale Bugenig is his review memo, was and still is "... Piteau did a decent job assessing the hydrogeologic conditions in the vicinity of the Project. Their report offers a narrative that is consistent with my understanding of the hydrogeology of the area. It provides an acceptable level of confidence that developing the Project’s water supply from the deeper, regional aquifer will have no adverse impact on water sources that exploit the shallower, perched aquifer in this area.”*

Comment noted.

*We did provide additional comments to the Piteau report in Mr. Bugenig’s memorandum that we thought were worth considering (included by the BLM as an appendix to the EA). None of these comments were addressed in the EA or supporting documents; presumably due to the short time span between when we provided comment and when the EA was made available. The chief comments that have not been addressed in the EA or its appendix were related to the “forward modeling” of Well 2’s performance. Well 2 is the recently completed and tested well*
at the Project that derives water from the deep, presumably regional carbonate aquifer. For reasons outlined in Mr. Bugenig's May 21, 2019 memo, we believe it is unlikely that Well 2 can sustain a pumping rate of 712 gallons per minute. Is this not a concern of Gullsil or the BLM to be addressed in the EA?

The focus of the water resource report and EA was to analyze impacts related to the maximum potential pumping rate. Pumping at a lesser rate would only mean that the actual impacts would be less than those analyzed. The BLM is not concerned if pumping rates are less, only that pumping rates do not exceed the rate analyzed and that the rate analyzed is within the proponent’s water rights.

Additionally, we thought some explanation regarding aquifer coefficient of storage was warranted as well as the possibility that recovery of water levels following testing might have been affected by a "recharge boundary."

Comment noted.

The updated Water Resources Report in the EA alludes to the possibility that Einar Spring might be developed as a source of supply. The report concluded "The development of and water use from Einar Spring would [emphasis added] affect the quantity of water in the perched-water system from which it is fed. This perched water system may be localized within the upper reaches of New York Canyon or it may be connected to the perched system which feeds a cluster or springs around the Diamond Spring. Impacts to these springs are unclear but may be moderate, long-term, and regional." Since impact to the perched aquifer is "unclear" additional investigation may be warranted. If Gullsil's intent is to only exploit the deeper regional aquifer as a source of supply to the project, not the shallow perched aquifer, it should be stated so in the EA. However, if there is any change in this strategy, efforts to develop Einar Spring as a source of supply should incorporate impacts analysis from doing so and rigorous monitoring and a program to mitigate any impacts to other water sources, should they occur.

Further analysis of the potential connectivity of perched systems is not deemed necessary. The proponent has water rights for Einar Spring. The disclosure of potential impacts has been determined to be appropriate for the Proposed Action.

7. In reference to the BLM’s response to Eureka County’s comment 10 from July 6, 2018: We have broad experience with mining operations and water needs and use. Based on our experience, the amount of water proposed for use seems high. We do not see any information in the EA, Resources Report, or Impacts Report that justify how or why 712 gpm could ever be justified for such a small project with no dewatering where the ore is processed off-site. This estimate of water use needs to be better justified. It appears that this amount of 712 gpm may be a calculation of the Proponent's consumptive use of their currently owned water rights rather than tying it to the specific operations proposed under this EA.

The Proponent’s water use was set at the maximum potential pumping rate of 712 gpm which is within their water rights. An analysis was performed for the rate of use the Proponent projects they may use. Peak water usage estimates are included in the Plan of Operations. Further justification of this usage is not required by the BLM.

8. In reference to the BLM’s response to Eureka County’s comment 11 from July 6, 2018: BLM's response is off-point and has nothing to do with the comment we made. We agree that mining is an important component of multiple use and we support mining as a multiple use. We never argued that it was not. Our comment is about fully analyzing and disclosing the economic impact of AUM reduction, even if temporary, and outlining potential mitigation measures. BLM is required to include this analysis in both the grazing and socioeconomic sections and frame mitigation, even if BLM may not require it or the Proponent is unwilling to implement it. Additionally, we are confused why BLM would not strive for consistent analysis with the other mining NEPA documents we cited that have included this analysis and discussion. It is even more cavalier that this was not included when we provided the analysis for BLM that could have been easily
incorporated into the EA. Any unmitigated AUM loss, even temporarily, is against County policy (and formally stated in our Master Plan and County Code). If left unmitigated, this must be disclosed and discussed are required by the NEPA regulations at 40 CFR 1502.16(c) and 1506.2(d) and the March 16, 1981 Memorandum for Federal NEPA Liaisons, Federal, State, and Local Official and Other Persons Involved in the NEPA Process, Questions 23b and 23c and then incorporated into Section 1.4 of the EA as an area of "non-conformance."

A review of the County Code and Eureka County Master Plan resulted in no references to a “formal policy”, as stated in the July 6, 2018 comment letter, of “no unmitigated loss of AUMs”. The closest such reference is from the Eureka County Master Plan which states that Eureka County supports, in relation to mining, the “mitigation of mining activities that may impair the economic future of Eureka County citizens through bilateral or multi-lateral consultations with the Board of Eureka County Commissioners”. The socioeconomic resources report discloses that impacts to social and economic values, either positive or negative, resulting from the Proposed Action would be minor and long-term. The size of the Project does not necessitate the level of detail Eureka County has requested be included. However, a statement has been added to Section 3.14 of the EA recognizing that the temporary loss of AUMs would affect Eureka County citizens and thus is not in conformance with the Eureka County Master Plan statement listed above.

9. In reference to the BLM’s response to Eureka County’s comment 12 from July 6, 2018: While the road may have originally been developed to assist with “historical mining,” the current customary use of the road is not primarily for mining access and definitely not for increased truck traffic transporting heavy loads of ore off-site. Every single mining project in recent history that has included impacts above those that are currently customary have worked with Eureka County in good faith to develop a mutually beneficial road maintenance agreement. Again, this should be referenced and committed as part of the Proposed Action similar to every other recent mining project we have worked with.

Gullsil has committed to working with Eureka County to develop a road maintenance plan.

10. In reference to the BLM’s response to Eureka County’s comment 13 from July 6, 2018: Please include this analysis as we previously noted and even provided the analysis for easy inclusion.

Please see the response to comment 8 above.

11. In reference to the BLM’s response to Eureka County’s comment 13 from July 6, 2018: It is disingenuous to make the conclusion that 24 personnel, which would add many more people to the community when taking into account couples and children and secondary employment individuals, does not require additional socioeconomic analysis. 24 new people to a community of less than 1000 (combining Eureka and southern Diamond Valley) is like adding hundreds of new people to a community with thousands of residents.

The BLM has determined that the size of the Project does not necessitate the level of analysis Eureka County is requesting. Additional analysis would not alter the overall impact conclusion of localized or regional, minor, and long-term. Please see the socioeconomic resource report for impact definitions.

12. In reference to the BLM’s response to Eureka County’s comment 16 from July 6, 2018: We did not comment at this location about a USGS report. As previously noted, the description of the hydrologic setting is inaccurate and could be improved by incorporating the information in the County Water Resources Master Plan.

Please see the response to comment 4 regarding why the County Water Resources Master Plan is not used as a reference. Please refer to the response to comment 5 regarding the inaccuracy of information Eureka County requested be used in relation to groundwater usage rates.

13. In reference to the BLM’s response to Eureka County’s comment 18 from July 6, 2018: We appreciate Gullsil’s commitment to use a water truck for dust suppression. A surface disturbance permit from another agency does not authorize operation of equipment or water application on a
County road. Again, use of a water truck or any other equipment (other than just traveling) on the County road is not authorized without a road maintenance agreement with Eureka County. Lack of this agreement could have bearing on dust emissions due to the fugitive dust not being suppressed on the County road when needed and appropriate.

Comment noted.

14. In reference to the BLM’s response to Eureka County’s comment 22 from July 6, 2018: The EA still does not include language regarding consistency with the State Sage Grouse Plan. The 2019 Sage Grouse RMPA Record of Decision has been signed and the controlling document for management of the sage grouse must conform to the 2019 ARMPA including the habitat mapping and use of the State CCS and HQT. The Resource Report still references the 2015 ARMPA, which no longer is in place. Are the Management Decisions in the Resource Report from the 2019 ARMPA or 2015? State regulations, the State Plan, and the new ARMPA require direct and indirect impacts to sage grouse be mitigated according to the requirements of the State of Nevada. This needs analyzed, described and committed in the EA. Has the SETT been consulted as required by State regulations and the ARMPA? Where are their comments and how were they addressed? How many debits for the Project will be created as modeled under the HQT and CCS?

The 2019 Nevada and Northeastern California Greater Sage-Grouse Resource Management Plan Amendment data has been incorporated into the wildlife resource report and EA. The SETT has been contacted and consultation results have been incorporated into the EA and Wildlife Resource Report.

NDOW Comments, Moira Kolada, from a letter dated June 11, 2019:

1. The EA has not been updated to reference the most recent 2019 Nevada and Northeastern California Greater Sage-Grouse Resource Management Plan Amendment (GRSG ARMPA).

The wildlife resource report and EA have been updated to include the 2019 Nevada and Northeastern California Greater Sage-Grouse Resource Management Plan Amendment data.

2. It does not appear that this project has been reviewed by the Sagebrush Ecosystem Technical Team (SETT) regarding the use of the State of Nevada Conservation Credit System (CCS) as required by temporary regulations established under NRS 232.162 (LCB File No. T006-18) as a result of Executive Order 2018-32 (December 7, 2018). These regulations have been adopted and went into effect June 3, 2019. Please keep in mind that not all projects required to be evaluated through the CCS will require mitigation, but it is up to the SETT to make that determination. Once the SETT has evaluated project impacts to GRSG, they will provide a letter to both the proponent and to BLM describing the results of the evaluation, whether mitigation is needed or not.

The SETT has been contacted regarding this Project. Consultation results have been incorporated into the EA and Wildlife Resource Report.

Chad Bliss of 2 Bit Ranch, LLC comments from a letter dated June 11, 2019:

1. Mining Infrastructure and Drill Sump Protective Measures: The EA fails to address any protective measures to be conducted in order to prevent negative impacts on livestock regarding mining infrastructure, including drill sump locations. It is particularly known to 2 Bit Ranch, LLC and the Bliss that drill sump locations can be hazardous to livestock. Without the adequate measures to prevent livestock access to infrastructure and drill sump locations, there is a significant risk that livestock will be injured and/or killed from the dangers associated with their access. This potential loss would significantly impact 2 Bit Ranch, LLC’s operations. In the photo that we provided in our original comments, it showed a calf struggling to get out of a drill sump that had a so-called escape ramp. That calf and its mother did not survive even though the sump had an escape ramp. The problem is, the sumps are so full of silt and drill mud that the livestock sink in it and get
totally exhausted in a very short amount of time trying to get out. This is why all drill sumps should be fenced while the drill sump is open and has not been properly reclaimed.

The commenter’s concern is noted. Gullsil has proposed to provide industry standard livestock protections for the sumps.

2. With the increased amount of traffic brings great concerns to us. Not only for the livestock but more importantly the sheep herders and our children that help ride and move livestock in the area. It is stated that Employees would adhere to a 25 mile per hour speed limit. And that a sign would be posted for traffic leaving the site. We have several questions regarding this plan. Why is it that the sign will only be posted when leaving the mine site and only for the employees not anybody that is working with the mine in any way? Who will be enforcing the speed limit? Does the mine have the authority to make, as well as enforce a speed limit on a road that does not belong to them?

The commenter’s concern is noted. Eureka County has control of the road with concomitant liability for the road and activities on the road. Gullsil cannot post speed limit signs over segments of the road under Eureka County’s control. Signage would only be posted within the Plan of Operations boundary where Gullsil has control. Gullsil has committed to working with Eureka County to develop a road maintenance plan.

3. Mitigation/Reasonable Compensation for Loss of AUM’s: The EA implies that AUM loss due to the Proposed Action is minimal and insignificant. This is false. Any loss of AUMs or grazing ability is of major significance to 2 Bit Ranch, LLC and the Bliss because of the already marginal nature of our ranching operation. The AUM loss associated with the Proposed Action would essentially be on par with taking money right out of the pockets of Bliss. Further, the EA’s implication that AUM loss will be minimal is based on the EA’s failure to consider the impacts the Proposed Action may have. 2 Bit Ranch, LLC and the Bliss assume that any loss in AUM’s will be appropriately dealt with through FLMPA Section 401(g). However, the EA fails to address how any loss in AUMs resulting from the Proposed Action will be addressed if at all. Moreover, the EA fails to address the actions to be taken by Gullsil in order to prevent the potential loss of AUMs and instead implies that any loss in AUMs will be minimal. However, any loss of AUMs resulting from the Proposed Action would negatively impact 2 Bit Ranch, LLC and the Bliss’ ranching operation. It has been stated that the loss of 5 AUM’s would be minor and that it will only be short term. This is a false statement, the loss of 5 AUM’s is a significant loss to our ranching operation. Not being able to sell 5 calves a year for who knows how many years is not minor to our operation. We are very disappointed that there hasn’t been any kind of an effort to provide an alternative to help reduce such a negative impact on our ranching operation.

The commenter’s concern about impacts to their AUMs is noted. However, impact significance is determined using standard, regional definitions for consistency across projects. As disclosed in the EA, the Proposed Action would result in the short-term loss of five AUMs from the Ruby Hill Allotment (0.3 percent of the available AUMs within that allotment). The intensity level definition for minor is “effects to livestock grazing would alter the availability of resources that livestock grazing depends on. Small reductions to AUMs may be necessary”. The intensity level definition for major is, “effects to livestock grazing management on a pasture or allotment level. Reductions in AUMs and a significant change in authorized use would be required”. The AUM loss would be defined as minor. The EA discloses that the loss of vegetation would constitute a long-term reduction of forage for cattle. Long-term is defined as longer than three years.

4. 2 Bit Ranch, LLC is also concerned about Gullsil changing the water usage from 500 gpm to 712 gpm. This is of great concern to us as we have livestock water rights on many of the springs around the proposed area. That amount water being taken from underground could have a significant impact on all the springs in the area, therefore affecting the watering of livestock, wildlife, and the town of Eureka.
The focus of the water resource report and EA was to analyze impacts related to the maximum potential pumping rate. The maximum potential pumping rate of 712 gpm is within the proponent’s water rights. Furthermore, the Prospect Mountain Mine Hydrology Impacts Analysis (Piteau 2019) hydrologic investigation concluded that the Project area hydrogeology is characterized by a shallow, local perched-water system and a deeper, regional groundwater system which are spatially separated by a vertical distance of approximately 1,300 feet in the Project area. Due to the vertical separation of the local perched-water system from the deep regional groundwater system, pumping from Well 2 is not anticipated to impact Einar Spring, other springs fed by the perched-water system, or wells placed within alluvium above the regional groundwater system. In addition, Gullsil has effectively sealed the first 720 feet as a voluntary measure to ensure that the spring could not be affected by pumping. Additional information about the hydrologic investigation and potential impacts can be found in the revised Water Resources Report (SRK 2019).

References


United States Department of the Interior
Bureau of Land Management
Battle Mountain District
Mount Lewis Field Office

DOI-BLM-B010-2018-0032-EA
Case File Number: NVN-092893

Finding of No Significant Impact (FONSI) July 12, 2019

I have reviewed the above referenced Environmental Assessment (EA) dated July 2019. After consideration of the environmental effects as described in the EA, and incorporated herein, I have determined that the Proposed Action with the project design features identified in the EA will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as described in 40 Code of Federal Regulations (CFR) 1508.27. Therefore, preparation of an Environmental Impact Statement (EIS) is not required per section 102(2)(c) of the National Environmental Policy Act (NEPA). DOI-BLM-NV-B010-2018-0032-EA has been reviewed through the interdisciplinary team process, as well as being sent to the Nevada State Clearinghouse and the public for a 14-day comment period.

After consideration of the environmental effects of the Bureau of Land Management's (BLM) preferred alternative (Proposed Action) described in the EA and the supporting baseline documentation, it has been determined that the Proposed Action will not significantly affect the quality of the human environment. It has been determined that the Proposed Action is in conformance with the approved Shoshone-Eureka Resource Management Plan and its amendments, 2019 Approved Resource Management Plan Amendment, and is consistent with the plans and policies of neighboring local, county, state, tribal, and federal governmental agencies.

Context

The Bureau of Land Management (BLM) has evaluated the Plan of Operations (Plan) titled *Prospect Mountain Project Plan of Operations and Reclamation Permit Application (NVN-092893)* and has prepared an Environmental Assessment (EA), DOI-BLM-NV-B010-2018-0032-EA, that analyzes the affected environment, environmental impacts, and identifies environmental protection measures associated with mineral mining. The final Plan was submitted on April 27, 2017, and updated in May 2019, in accordance with the BLM Surface Management Regulations 43 Code of Federal Regulations (CFR) 3809, as amended. It has been assigned BLM case file number NVN-092893.

Gullsil, LLC (Gullsil) is proposing to conduct mineral exploration and underground mining activities on patented and unpatented mining claims in the Eureka Mining District, located about 3.5 miles southwest of the town of Eureka in Eureka County, Nevada. The proposed Prospect
Mountain Project (Project) will be located on public land administered by the U.S. Bureau of Land Management (BLM) and on private land controlled by Gullsil, and will disturb 82.1 acres for surface and underground exploration and mining activities.

**Proposed Action:**

Gullsil is proposing exploration and underground mining. Gold and silver as well as other economically viable mineral resource exploration will be conducted using both surface and underground techniques to estimate the in-situ mineral resources and reserves. Gullsil will also develop the Diamond, Berryman, and MacIntosh tunnels to modern standards and mine oxide and sulfide resources. Activities proposed under the Proposed Action are described in detail in the Plan. Proposed facilities and activities include:

- Construction of surface exploration roads, drill sites, and sumps;
- Reverse circulation (RC) and core drilling using truck- and track-mounted equipment with support vehicles;
- Reopening and upgrading to current standards the existing underground workings at the Diamond, Berryman, and MacIntosh tunnels;
- A cemented rock fill (CRF) plant with a crusher and screening plant and a cement silo;
- Drilling geotechnical boreholes for siting assessment of future potential mine facilities;
- Collecting drill hole and ore samples for metallurgical testing and geochemical characterization;
- Construction of a contained ore transfer stockpile pad;
- Construction of two waste rock disposal areas;
- Construction of ancillary support facilities (e.g., vehicle parking areas, equipment laydown yards, office space, worker change room, assay laboratory, underground explosives storage, etc.);
- Construction of infrastructure (e.g., developing regional bedrock aquifer wells as needed, developing Einar Spring, water storage, hydrocarbon storage, septic system, connection to grid power, monitoring wells, fencing, communications, and security);
- Construction of growth media stockpiles;
- Upgrading existing access/haul roads and constructing new roads;
- Installing a solar array as a secondary power source;
- Establishing stormwater controls; and
- Incorporating acknowledged Notice-level disturbance of approximately three acres on public land.

The Project will disturb 82.1 acres for surface and underground exploration and mining activities. Dewatering of the underground workings is not proposed as part of this exploration and mining program.

Gullsil plans on initiating the proposed activities described in the Plan once the necessary authorizations and permits have been acquired. Exploration and mining activities will continue for about ten years (Year 1 through Year 10 of the project schedule).

Earthworks for reclamation will be completed during Year 11 of the project schedule with
revegetation and monitoring taking an additional five years, until Year 16 of the project schedule. For the purposes of the EA, revegetation success is anticipated to occur during Year 16.

The BLM’s purpose of this action is to determine the terms and conditions for BLM to authorize Gullsil to conduct mining activities in response to their Plan, under BLM’s mandate to manage public lands according to the Federal Land Policy and Management Act of 1976, as amended (FLPMA; 43 USC § 35 et seq.) and the General Mining Law of 1872.

Pursuant to the NEPA and the Council on Environmental Quality regulations on implementing NEPA, the EA identifies, describes, and evaluates resource protection measures that will mitigate the possible impacts of the proposed Project. The short and long-term impacts as disclosed in the EA are not considered to be significant to the human environment.

**Intensity**

1. **Impacts that may be both beneficial and adverse.**

Potential impacts to the environment include the following: cultural and historic resources, soils, vegetation, livestock grazing, noise, visual resources, invasive species, recreation, temporary wildlife habitat loss and displacement due to Project activities and human presence; impacts to special status species/habitat; impacts to air quality; impacts to social and economic values and environmental justice; Native American religious concerns; and potential release of hazardous materials. Many of these impacts will be minimized by the applicant-committed Environmental Protection Measures (EPMs), as well as by the concurrent reclamation and other measures required in the Plan of Operations (Plan). Gullsil will continue to commit to the practices described herein that will prevent unnecessary or undue degradation during the life of the Project.

Impacts will be avoided or minimized by operating under these EPM’s and through the temporary nature of the project. Reclamation and revegetation will be in accordance with the conditions of approval. None of the environmental impacts disclosed above are considered significant. Under the No Action Alternative, Gullsil will not conduct any exploration or mining activities other than the exploration that has already been acknowledged under the existing Notice (NVN-094794).

2. **The degree to which the proposed action affects public health and safety.**

Through adherence to the applicant-committed EPM’s, the Proposed Action will not result in potentially substantial or adverse impacts to public health and safety. Public safety will be maintained throughout the life of the Project. Gullsil will commit to the following EPMs to ensure public health and safety:

**Cultural and Paleontological Resources**
A cultural resources survey was completed for the Project area. Gullsil will not remove, disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or
archaeological site, structure, building, object or artifact that qualify for listing on the National Register of Historic Places or have not been evaluated for listing on the National Register. Gullsil will be responsible for ensuring that employees, contractors, or any others associated with the Project do not damage, destroy, or vandalize archaeological, historical, or vertebrate paleontological sites or the artifacts/fossils found within the Project boundary. Should damage to cultural or paleontological resources occur within or near the Project boundary during the period of construction, operation, or rehabilitation due to the unauthorized, negligent, or inadvertent actions of the Gullsil or any other Project personnel, the proponent will be responsible for rehabilitation or mitigation costs. Individuals involved in illegal activities could be subject to penalties under the Archaeological Resources Protection Act (16 U.S.C. 470ii), the Federal Land Management Policy Act (43 U.S.C. 1701), the Native American Graves and Repatriation Act (16 U.S.C. 1170) and other applicable statutes.

Should human remains/burials or any previously unidentified cultural (archaeological or historical) resources or vertebrate paleontological resources be discovered during the activities under the approved plan, Gullsil will immediately cease all activities within 300 feet of the discovery, ensure that the discovery is appropriately protected, and immediately notify the BLM by telephone, followed with written confirmation. Work will not resume, and the discovery will be protected until the BLM Authorized Officer issues a notice to proceed.

The Project will be designed to avoid eligible or unevaluated cultural resources. A 100-foot wide buffer will be established between such properties and the Project boundary. A lesser buffer may be used if a physical barrier, such as a fence, exists between them.

If Project redesign is not a practical, or is not an effective method for mitigating adverse effects to cultural properties, data recovery in conformance with the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (48 CFR § 44716 (September 29, 1983), as amended or replaced), will be conducted by Gullsil. Once data recovery has been completed and accepted by BLM and the Nevada State Historic Preservation Office, the BLM will issue a Notice to Proceed for work at that location. Subsequent to the Class III surveys, and data recovery where needed, Gullsil may donate artifacts located on private land under their control to local museums.

Pursuant to 43 CFR § 10.4(g), Gullsil will notify the Authorized Officer by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR § 10.4(c) and (d), Gullsil will stop activities in the immediate vicinity of the discovery and protect it from additional activity for 30 days or until notified to proceed by the Authorized Officer.

**Survey Monuments**

Gullsil will protect survey monuments, witness corners, reference monuments, bearing trees, and line trees against unnecessary or undue destruction or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, Gullsil will immediately report the matter to the Authorized Officer. Prior to destruction or damage during surface disturbing activities, Gullsil will contact the BLM to develop a plan for any necessary restoration or re-establishment activity of the affected monument in accordance with Nevada Instruction Memorandum No. NV-
2007-003 and the Nevada Revised Statues (NRS). Gullsil will bear the cost for the restoration or re-establishment activities.

**Solid and Hazardous Wastes**

No hazardous or toxic waste, waste oil, or lubricants will be disposed of on public or private lands. Trash and other debris will be contained on the work site and then hauled to an approved offsite landfill facility. Burial and/or burning of trash and other debris on public lands will not be performed without specific authorization and permits from the BLM and other appropriate agencies.

Gullsil has prepared an Emergency Response and Spill Control Plan intended to provide adequate on-site control and clean up materials, and instruct on-site personnel in spill prevention and clean-up methods. Any oil, noxious fluids, fuels, and chemicals spilled onto the ground or water will be cleaned up immediately. After clean up, the oil, noxious fluids, fuels, and/or chemicals and any contaminated materials will be removed from the site and disposed of at an approved disposal facility.

In the event hazardous or regulated material, such as diesel fuel and/or lubricants, is spilled, Gullsil will take measures to control the spill, and the NDEP and BLM will be notified as per NDEP regulations and the spill control plan. Petroleum contaminated soils resulting from fuel and lubricant spills will be removed and disposed of at an approved offsite location.

Hazardous materials employed at the site will include diesel fuel and various lubricants. All fuel and lubricants will be temporarily stored in a secondary containment area. Fuel and lubricant tanks will be less than 10,000 gallons liquid capacity and will be transported to an approved offsite facility for recycling for final disposal.

**Air Quality**

Project-related traffic will observe prudent speed limits (15 mph) to enhance public safety, protect wildlife and livestock, and minimize dust (particulate) emissions. A water truck will be used as necessary to manage fugitive dust. Gullsil will apply for a Surface Disturbance Permit from the NDEP, Bureau of Air Pollution Control (BAPC).

Gullsil or their mining contractor will acquire an air permit for the CRF plant from the BAPC. Appropriate pollution control devices will be installed and operated on the stationery sources.

**Erosion and Sediment Control**

Existing stormwater control structures will be maintained or improved. BMPs will be utilized to minimize the surface disturbance and erosion potential. Haul and area access roads will receive periodic inspections for maintenance issues. Maintenance of the access and haul roads may include limited scraping or blading and re-establishment of safety berms, and stormwater swale and ditch upkeep when necessary. Gullsil will conduct erosion control monitoring during the spring and fall and opportunistically during major precipitation events to monitor the effectiveness of the erosion controls.
During winter months, snow removal will be conducted using a snow plow mounted on an over-the-highway dump truck. Snow will be piled over the side of the safety berms on the access and haul roads or will be stacked in wide, flat areas near the access roads, drill sites, and laydown yards. Snow will not be stacked or piled in areas where spring runoff could cause sediment loading in nearby streams, ephemeral drainages, or result in damage to access and haul roads. If necessary, snow removal equipment will be utilized to remove snow from areas where spring runoff could potentially contribute to sediment loading in nearby streams and ephemeral drainages.

Sediment control structures include, but are not be limited to, fabric and/or hay bale filter fences, siltation or filter berms, and down-gradient drainage ditches to prevent unnecessary or undue degradation. Preliminary locations of primary sediment control basins are provided on Figure 5 of the EA.

**Noxious Weeds**

Gulsil will be responsible for controlling all noxious weeds and other undesirable invading plant species in the reclaimed area until revegetation activities have been determined to be successful. Gulsil will be responsible for contacting the BLM for concurrence with any proposed weed control program prior to application of any chemical treatments for weeds on public lands.

Employees and contractors will be educated to identify noxious weeds that could occur in the proposed disturbance areas. Gulsil will report occurrence of noxious weeds to the BLM Authorized Officer and respond appropriately to prevent the spread of noxious weeds. BMPs include the following:

- Flagging areas of concern to prevent employees and contractors from driving through a stand of listed noxious weeds,
- Seeding growth media stockpiles as soon as practical with an interim seed mix;
- Using certified weed-free hay and straw,
- Using an approved seed mix to reduce invasive species over time by developing and maintaining desired plant communities, and
- Washing down construction equipment in accordance with BLM standard operating procedures to prevent the transfer of noxious and undesirable weed seed from other areas.

**Special Status Species**

Exploration and mining activities within known special status species habitat is subject to operational and seasonal restrictions. An inventory for special status species is required in areas of known or potential habitat for threatened, endangered, or candidate species. At a minimum, Gulsil will operate according to BLM BMPs for special status species, as follows:

- Prior to conducting noxious and invasive weed control during the nesting and brood-rearing seasons, a bird survey will be performed in the nesting and brood-rearing areas for special status species. If nest or brood-rearing activity is observed with 300 feet of the area to be treated, Gulsil will consult with the BLM biologist.
- To the greatest extent possible, Gulsil will survey all mine adits and shafts slated for closure for bat presence and use prior to being closed. Gulsil will minimize impacts to
bat roosts and bat habitat using current science, guidelines, and methodologies when closing and abandoning mine adits.

**Greater Sage-Grouse**
Approximately 50 acres of the Project area are located in an area identified by the BLM’s *Nevada and Northeastern California Greater Sage-Grouse (GRSG) Approved Resource Management Plan Amendment and Record of Decision* (ARMPA) (BLM 2019) as Priority Habitat Management Area and five acres of the Project area is located in an area identified as General Habitat Management Area for greater sage-grouse. In accordance with the ARMPA (BLM 2019), the following environmental protection measures will be implemented by Gullisil:

- New roads will be located outside of greater sage-grouse habitat to the extent practicable;
- Construction of roads within riparian areas and ephemeral drainages will be avoided, if practicable. If the construction of roads within riparian areas and ephemeral drainages is not avoidable, then low-water crossings will be constructed at right angles;
- Employees will be instructed to avoid harassment and disturbance of wildlife, especially during the greater sage-grouse breeding (e.g., courtship and nesting). In addition, pets will not be permitted on site during construction;
- To reduce predator perching in greater sage-grouse habitat, the construction of vertical facilities and fences will be limited to the minimum number and amount needed. Anti-perch devices will be installed where applicable; and
- Gullisil will collaborate with the BLM to determine if pinyon-juniper removal in the Project area will be eligible as a credit in the State of Nevada Conservation Credit System.

As stipulated by Legislative Council Bureau File Number T006-18A, the BLM has contacted the Sagebrush Ecosystem Technical Team (SETT) and geographic information has been submitted indicating known existing and authorized disturbance areas for the vicinity, as well as proposed Project disturbance areas. Using the Habitat Quantification Tool desktop analysis, the SETT has estimated the Project debits to be 152. Gullisil will continue to work with the SETT to more accurately calculate debits and develop a mitigation plan, which will be in place prior to the commencement of Project-related surface disturbance.

**Fire Protection**
The following precautionary measures will be taken to prevent wildland fires. In the event that operations should start a fire, Gullisil recognizes that it could be held liable for all suppression costs under 43 CFR § 9212.4. These are in addition to any requirements imposed by the Mine Safety and Health Administration (MSHA) or other governing agencies for work-area fire protection:

- All vehicles will carry at a minimum a shovel and five gallons of water, in addition to a conventional fire extinguisher.
- Adequate fire-fighting equipment (a shovel, a Pulaski, standard fire extinguisher(s), and an ample supply of water) will be kept readily available at each active surface drill site.
- Vehicle catalytic converters will be regularly inspected and cleaned of all flammable debris.
• All cutting/welding torch use, electric arc welding, and grinding operations will be conducted in an area free, or mostly free, from vegetation. An ample supply of water and shovel will be on hand to extinguish any fires created from sparks. At least one person in addition to the cutter/welder/grinder will be at the work site to promptly detect fires created by sparks.

• Fire restrictions or closures issued by the Battle Mountain District Office will be publicized in the local media, and notice will be posted at various sites throughout the district. Gullsil personnel will be responsible for being aware of and complying with requirements of these orders.

• Wildland fire observed will be reported immediately to the BLM Central Nevada Interagency Dispatch Center at (775) 623-3444.

**Migratory Birds**

Nesting season runs from approximately April 1 to July 15 of each year. A careful examination of each area to be disturbed (including cross-country travel routes) during the breeding season, will be completed by Gullsil to assure no nests with eggs or young are present. If such nests are discovered, they will be avoided by an appropriate distance to prevent destruction of the nest and disturbance of the nesting birds.

If active nests are located, or if other evidence of nesting is observed (mating pairs, territorial defense, carrying nesting material, transporting of food), the area will be avoided to prevent destruction or disturbance of nests until the birds are no longer present. Avian surveys will be proposed only during the avian breeding season and immediately prior to Gullsil conducting activities, that will result in disturbance. After such surveys are performed, and disturbance created (i.e., road construction and operation development), Gullsil will not conduct any additional disturbance during the avian breeding season without first conducting another avian survey. After July 15, activities will continue; in compliance with the BLM guidelines, no further avian surveys will be required until the next avian breeding season.

**Vegetation/Forestry and Woodland Resources**

Gullsil will minimize where possible any injury or removal of pinyon pine, juniper, aspen, or mountain mahogany during activities associated with drill site and road construction, although removal of pinyon-juniper may be beneficial to greater sage-grouse. Pinyon pine and juniper that have been removed due to exploration and mining activities will be made available to the public.

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

The Proposed Action is not expected to have effects on the quality of the human environment that are highly controversial.

4. **The degree to which the possible effects on the human environments are highly uncertain or involve unique or unknown risks.**

The Project is not expected to affect any particular population. The area in the immediate vicinity of the mineral exploration activities is very sparsely populated and does not have an unusually
high minority population. Environmental effects that will occur, such as air quality impacts, will be minor and will affect the population equally, without regard to race or ethnicity. Since there are no identified environmental justice impacts, no monitoring or mitigation is recommended, and no residual adverse impacts will occur.

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

The Project will not establish a precedent for future actions with significant effects or represent a decision about a future consideration. Completion of the EA does not establish a precedent for other assessments or authorization of other development projects, including additional actions at the project area. Any future projects or expansion beyond the planned mining acreage within the area or in surrounding areas will be analyzed on their own merits, independent of the actions currently selected.

6. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.**

Direct and indirect impacts of the Project were analyzed. None of the environmental impacts disclosed under item 1 was found to be significant. Past, present, and reasonably foreseeable future actions have been considered in the cumulative impacts analysis. The cumulative impacts analysis examined all of the affected resources and all other appropriate actions within the Cumulative Effects Study Area and determined that the Project will not incrementally contribute to any significant impacts. In addition, for any actions that might be proposed in the future, further site-specific environmental analysis, including assessment of cumulative impacts, will be required.

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

The Project will result in direct adverse impacts to one archaeological site and direct and indirect adverse impacts to contributing resources of the Diamond Mine/Prospect Townsite Historic District. Adverse effects will be localized and permanent.

Effect reports have been prepared for the BLM and the State Historic Preservation Office (SHPO) review that disclose the anticipated impacts to listed resources in detail [BLM6-3096-4(P) and BLM6-3096-5(P)]. A Memorandum of Agreement (MOA) will be prepared between the participating parties (the BLM, the SHPO, and Gulsit). Once the MOA has been signed, a treatment plan will be developed describing how the impacted resources are to be mitigated. The treatment plan will be agreed upon by the BLM and the SHPO prior to implementation of mitigation activities or activities resulting in impacts to cultural resources.

8. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species

Direct impacts associated with land clearing activities could result in mortality to small mammals (e.g., pygmy rabbit). Because no pygmy rabbits or definite sign were observed during baseline surveys, the Project may affect, but will not likely adversely affect, pygmy rabbits.

The taking of special status bird nests and young is not anticipated to occur as breeding bird surveys will be conducted prior to ground disturbance during the breeding bird season. Other wildlife protection measures including adherence to speed limits and construction of the power line and communication facilities according to APLIC standards will minimize impacts to wildlife including special status species. Considering the stated environmental protection measures, the relatively undisturbed surrounding areas, and the size of the Project, direct impacts resulting from the Project are considered to be long-term and localized, but not likely to adversely affect special status species.

Indirect impacts to special status species will include the removal of 82.1 acres of habitat, about 55 acres of which has not been previously disturbed. This impact will persist until reclamation activities are complete, and vegetation has been reestablished. The removal of habitat will persist on 16 acres of disturbance, left as post-reclamation features. Considering the stated environmental protection measures, the relatively undisturbed surrounding areas, and the size of the Project, indirect impacts resulting from the Project are considered to be long-term and localized, but not likely to adversely affect special status species.

9. The degree to which the action may adversely affect greater sage-grouse.

For greater sage-grouse, indirect impacts will include the disturbance of approximately 50 acres of Priority Habitat Management Area and five acres of General Habitat Management Area. In regards to MD SSS 1, the Project has been located, where possible, within previously disturbed areas.

While two leks are located within the four-mile buffer, these leks have been inactive during the 2015, 2016, and 2017 seasons. Gullisil will adhere to seasonal restriction requirements as determined by the BLM in consultation with the Nevada Department of Wildlife. Seasonal restrictions will be implemented in accordance with MD SSS 2 E. Neither of the leks is located within 0.25 miles of the Project activities so MD SSS 2 F will not be valid for this Project. MD SSS 4 requires the implementation of certain required design features or an explanation for their non-implementation.

Residual impacts will involve the long-term alteration of this area. The resulting post-project vegetation community will initially differ from the existing community, and over time will be expected to return to a composition matching the surrounding undisturbed environment. With consideration for the types of greater sage-grouse habitat affected and the listed environmental protection measures, indirect impacts will be long term and localized, but insignificant and will not adversely affect greater sage-grouse.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The Proposed Action will not violate or threaten to violate any federal, state, or local law or requirement imposed for the protection of the environment.

Joe D. Sherve  
Field Manager  
Mount Lewis Field Office

12 July 19  
Date
In Reply Refer To:
3809 (NVB0100)
NVN-092893
NVN-094784

CERTIFIED MAIL NO:  7018 2290 0001 6164 7765 RETURN RECEIPT REQUESTED

JUL 12 2019

DEcision

Gullsil, L.L.C.
Attn: Ari Erickson
P.O. Box 1018
Eureka, NV 89316

Surface Management

plan of operations approval
determination of required financial guarantee amount
notice vacated

Introduction

The Bureau of Land Management (BLM) has evaluated the Plan of Operations (Plan) titled Prospect Mountain Project Plan of Operations and Reclamation Permit Application (NVN-092893) (Project) and has prepared an Environmental Assessment (EA), DOI-BLM-NV-B010-2018-0032-EA, that analyzes the affected environment and environmental impacts, and identifies environmental protection measures associated with Gullsil, L.L.C.’s (Gullsil) Prospect Mountain Project. The final Plan was received in our office on June 17, 2019, in accordance with the BLM Surface Management Regulations 43 Code of Federal Regulations (CFR) 3809, as amended. It has been assigned BLM case file number NVN-092893.

Background

Gullsil is currently acknowledged to conduct 2.97 acres of surface disturbance, including the construction of exploration roads, drill pads, and sumps, within the Project Area under an Exploration Notice, BLM case file number NVN-094784.

Gullsil is proposing to conduct mineral exploration and underground mining activities on patented and unpatented mining claims in the Eureka Mining District, located about 3.5 miles southwest of the town of Eureka in Eureka County, Nevada. The proposed Prospect Mountain
Project (Project) will be located on public land administered by the U.S. Bureau of Land Management (BLM) and on private land controlled by Gullisil, and will disturb 82.1 acres for surface and underground exploration and mining activities.

Gullisil is proposing exploration and underground mining. Gold and silver as well as other economically viable mineral resource exploration will be conducted using both surface and underground techniques to estimate the in-situ mineral resources and reserves. Gullisil will also develop the Diamond, Berryman, and MacIntosh tunnels to modern standards and mine oxide and sulfide resources. Activities proposed under the Proposed Action are described in detail in the Plan. Proposed facilities and activities include:

- Construction of surface exploration roads, drill sites, and sumps;
- Reverse circulation (RC) and core drilling using truck- and track-mounted equipment with support vehicles;
- Reopening and upgrading to current standards the existing underground workings at the Diamond, Berryman, and MacIntosh tunnels;
- A cemented rock fill (CRF) plant with a crusher and screening plant and a cement silo;
- Drilling geotechnical boreholes for siting assessment of future potential mine facilities;
- Collecting drill hole and ore samples for metallurgical testing and geochemical characterization;
- Construction of a contained ore transfer stockpile pad;
- Construction of two waste rock disposal areas;
- Construction of ancillary support facilities (e.g., vehicle parking areas, equipment laydown yards, office space, worker change room, assay laboratory, underground explosives storage, etc.);
- Construction of infrastructure (e.g., developing regional bedrock aquifer wells as needed, developing Einar Spring, water storage, hydrocarbon storage, septic system, connection to grid power, monitoring wells, fencing, communications, and security);
- Construction of growth media stockpiles;
- Upgrading existing access/haul roads and constructing new roads;
- Installing a solar array as a secondary power source;
- Establishing stormwater controls; and
- Incorporating acknowledged Notice-level disturbance of approximately three acres on public land.

The Project will disturb 82.1 acres for surface and underground exploration and mining activities. Dewatering of the underground workings is not proposed as part of this exploration and mining program.

Gullisil plans on initiating the proposed activities described in the Plan once the necessary authorizations and permits have been acquired. Exploration and mining activities will continue for about ten years (Year 1 through Year 10 of the project schedule).

Earthworks for reclamation will be completed during Year 11 of the project schedule with revegetation and monitoring taking an additional five years, until Year 16 of the project.
schedule. For the purposes of this EA, revegetation success is anticipated to occur during Year 16.

PUBLIC INVOLVEMENT

The EA was made available for a 30-day public comment period ending on June 29, 2018, and for an additional 14-day public comment period ending on June 13, 2019. Notifications of the availability of the EA were sent to persons and agencies on the Project mailing list, and the EA and other relevant supporting documents were posted on the Battle Mountain District ePlanning website. Additionally, the BLM issued a press release the same day providing a link to the EA and other documents incorporated by reference and instructions on how to comment. Four comment letters were received. Substantive comments were evaluated and considered by the BLM during the decision-making process. The BLM reviewed and considered these comments and determined that they did not identify or present any significant new information or change circumstances such that additional NEPA analysis was warranted.

All correspondence pertaining to this analysis and decision-making process is part of the public record and available for review at the Mount Lewis Field Office.

DECISION

1. As a result of the analysis presented in the EA and making a Finding of No Significant Impact (FONSI), and carefully considering the comments and input received from the public, it is my decision to approve the Plan with the financial guarantee requirements. The BLM approval of the Plan will be subject to operating, reclamation, and monitoring measures in the Plan, the performance standards set forth in 43 CFR 3809.420, and the Applicant-Committed Environmental Protection Measures as set forth in the EA and restated in this Decision under the Conditions of Approval.

This decision constitutes concurrence with Gullisl's use and occupancy of public lands as described in the approved Plan. Gullisl must maintain compliance with the Use and Occupancy regulations at 43 CFR 3715.2, 43 CFR 3715.2-1, and 43 CFR 3715.5 throughout the duration of the approved Plan. Concurrence by the BLM on Gullisl's proposed use and occupancy is not subject to State Director review, but may be appealed by adversely affected parties directly to the Interior Board of Land Appeals as outlined in the enclosed BLM Form 1842-l. Gullisl is responsible for obtaining any Federal, State, and local permits that may be required before operations begin.

This decision has been prepared in accordance with, and meets, the requirements of Secretarial Order 3355.

AMOUNT OF FINANCIAL GUARENTTEE

This office has determined that the amount of $489,175 is sufficient to meet all anticipated reclamation requirements for the Project. The amount of the reclamation cost estimate is based upon the operator complying with all applicable operating and reclamation requirements.
All line items contained in the approved reclamation cost estimate are not to be considered as the limits of financial guarantee expenditures in that respective category or task should forfeiture of the financial guarantee become necessary. The line items listed are solely for the purpose of arriving at a total amount for the financial guarantee. This total amount may be spent however the BLM deems necessary to implement the approved reclamation plan and does not represent a reclamation cost limit or constraint, nor does it preclude you, the operator, from financial liability for reclamation costs.

**Required Financial Guarantee**

The operator must submit an acceptable financial guarantee in the amount of $489,175 to the Bureau of Land Management, Branch of Mineral Resources (Solids), 1340 Financial Blvd., Reno, NV 89502-7147. You must receive written notification from that office accepting and obligating your financial guarantee before you begin any surface disturbing operations.

The types of financial instruments that are acceptable to the BLM are found at 43 CFR 3809.555. Please contact the Branch of Mineral Resources (Solids) at (775) 861-6400 for further information on the adjudication of financial guarantees.

The BLM’s review of your proposed operations, approval of the Plan, finding that the activity will not cause unnecessary or undue degradation, and decision concerning the amount of the required financial guarantee does not relieve you, the operator, of your responsibility to comply with all applicable Federal, State, and local laws, regulations, and permit requirements. You are responsible for preventing any unnecessary or undue degradation and for reclaiming all lands disturbed by your operations.

This decision does not constitute certification of ownership to any entity named in the Plan, recognition of the validity of any associated mining claims, or recognition of the economic feasibility of the proposed operations.

2. **CONDITIONS OF APPROVAL**

   **A. Cultural and Paleontological Resources**

   1. A cultural resources survey was completed for the Project area. Gullsil will not remove, disturb, alter, injure, or destroy any scientifically important paleontological remains or any historical or archaeological site, structure, building, object or artifact that qualify for listing on the National Register of Historic Places or have not been evaluated for listing on the National Register. Gullsil will be responsible for ensuring that employees, contractors, or any others associated with the Project do not damage, destroy, or vandalize archaeological, historical, or vertebrate paleontological sites or the artifacts/fossils found within the Project boundary. Should damage to cultural or paleontological resources occur within or near the Project boundary during the period of construction, operation, or rehabilitation due to the unauthorized, negligent, or inadvertent actions of the Gullsil or any other Project personnel, the proponent will be responsible for rehabilitation or mitigation costs. Individuals involved in illegal activities
could be subject to penalties under the Archaeological Resources Protection Act (16 U.S.C 470ii), the Federal Land Management Policy Act (43 U.S.C 1701), the Native American Graves and Repatriation Act (16 U.S.C. 1170) and other applicable statutes.

2. Should human remains/burials or any previously unidentified cultural (archaeological or historical) resources or vertebrate paleontological resources be discovered during the activities under the approved plan, Gullsil will immediately cease all activities within 300 feet of the discovery, ensure that the discovery is appropriately protected, and immediately notify the BLM by telephone, followed with written confirmation. Work will not resume, and the discovery will be protected until the BLM Authorized Officer issues a notice to proceed.

3. The Project will be designed to avoid eligible or unevaluated cultural resources. A 100-foot wide buffer will be established between such properties and the Project boundary. A lesser buffer may be used if a physical barrier, such as a fence, exists between them.

4. If Project redesign is not a practical, or is not an effective method for mitigating adverse effects to cultural properties, data recovery in conformance with the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (48 CFR § 44716 (September 29, 1983), as amended or replaced), will be conducted by Gullsil. Once data recovery has been completed and accepted by BLM and the Nevada State Historic Preservation Office, the BLM will issue a Notice to Proceed for work at that location. Subsequent to the Class III surveys, and data recovery where needed, Gullsil may donate artifacts located on private land under their control to local museums.

5. Pursuant to 43 CFR § 10.4(g), Gullsil will notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR § 10.4(c) and (d), Gullsil will stop activities in the immediate vicinity of the discovery and protect it from additional activity for 30 days or until notified to proceed by the authorized officer.

B. Survey Monuments

1. Gullsil will protect survey monuments, witness corners, reference monuments, bearing trees, and line trees against unnecessary or undue destruction or damage. If, in the course of operations, any monuments, corners, or accessories are destroyed, Gullsil will immediately report the matter to the authorized officer. Prior to destruction or damage during surface disturbing activities, Gullsil will contact the BLM to develop a plan for any necessary restoration or re-establishment activity of the affected monument in accordance with Nevada Instruction Memorandum No. NV-2007-003 and the Nevada Revised Statues (NRS). Gullsil will bear the cost for the restoration or re-establishment activities.
C. Solid and Hazardous Wastes

1. No hazardous or toxic waste, waste oil, or lubricants will be disposed of on public or private lands. Trash and other debris will be contained on the work site and then hauled to an approved offsite landfill facility. Burial and/or burning of trash and other debris on public lands will not be performed without specific authorization and permits from the BLM and other appropriate agencies.

2. Gullsil has prepared an Emergency Response and Spill Control Plan intended to provide adequate on-site control and clean up materials, and instruct on-site personnel in spill prevention and clean-up methods. Any oil, noxious fluids, fuels, and chemicals spilled onto the ground or water will be cleaned up immediately. After clean up, the oil, noxious fluids, fuels, and/or chemicals and any contaminated materials will be removed from the site and disposed of at an approved disposal facility.

3. In the event hazardous or regulated material, such as diesel fuel and/or lubricants, is spilled, Gullsil will take measures to control the spill, and the NDEP and BLM will be notified as per NDEP regulations and the spill control plan. Petroleum contaminated soils resulting from fuel and lubricant spills will be removed and disposed of at an approved offsite location.

4. Hazardous materials employed at the site will include diesel fuel and various lubricants. All fuel and lubricants will be temporarily stored in a secondary containment area. Fuel and lubricant tanks will be less than 10,000 gallons liquid capacity and will be transported to an approved offsite facility for recycling for final disposal.

D. Air Quality

1. Project-related traffic will observe prudent speed limits (15 mph) to enhance public safety, protect wildlife and livestock, and minimize dust (particulate) emissions. A water truck will be used as necessary to manage fugitive dust. Gullsil will apply for a Surface Disturbance Permit from the NDEP, Bureau of Air Pollution Control (BAPC).

2. Gullsil or their mining contractor will acquire an air permit for the CRF plant from the BAPC. Appropriate pollution control devices will be installed and operated on the stationery sources.

E. Erosion and Sediment Control

1. Existing stormwater control structures will be maintained or improved. BMPs will be utilized to minimize the surface disturbance and erosion potential. Haul and area access roads will receive periodic inspections for maintenance issues. Maintenance of the access and haul roads may include limited scraping or blading and re-establishment of safety berms, and stormwater swale and ditch upkeep when necessary. Gullsil will conduct erosion control monitoring during the spring and fall and opportunistically during major precipitation events to monitor the effectiveness of the erosion controls.
2. During winter months, snow removal will be conducted using a snow plow mounted on an over-the-highway dump truck. Snow will be piled over the side of the safety berms on the access and haul roads or will be stacked in wide, flat areas near the access roads, drill sites, and laydown yards. Snow will not be stacked or piled in areas where spring runoff could cause sediment loading in nearby streams, ephemeral drainages, or result in damage to access and haul roads. If necessary, snow removal equipment will be utilized to remove snow from areas where spring runoff could potentially contribute to sediment loading in nearby streams and ephemeral drainages.

3. Sediment control structures include, but are not be limited to, fabric and/or hay bale filter fences, siltation or filter berms, and down-gradient drainage ditches to prevent unnecessary or undue degradation. Preliminary locations of primary sediment control basins are provided on Figure 5 of the EA.

F. Noxious Weeds

1. Gullisil will be responsible for controlling all noxious weeds and other undesirable invading plant species in the reclaimed area until revegetation activities have been determined to be successful. Gullisil will be responsible for contacting the BLM for concurrence with any proposed weed control program prior to application of any chemical treatments for weeds on public lands.

2. Employees and contractors will be educated to identify noxious weeds that could occur in the proposed disturbance areas. Gullisil will report occurrence of noxious weeds to the BLM authorized officer and respond appropriately to prevent the spread of noxious weeds. BMPs include the following:

   a. Flagging areas of concern to prevent employees and contractors from driving through a stand of listed noxious weeds,
   b. Seeding growth media stockpiles as soon as practical with an interim seed mix;
   c. Using certified weed-free hay and straw,
   d. Using an approved seed mix to reduce invasive species over time by developing and maintaining desired plant communities, and
   e. Washing down construction equipment in accordance with BLM standard operating procedures to prevent the transfer of noxious and undesirable weed seed from other areas.

G. Special Status Species

1. Exploration and mining activities within known special status species habitat are subject to operational and seasonal restrictions. An inventory for special status species is required in areas of known or potential habitat for threatened, endangered, or candidate species. At a minimum, Gullisil will operate according to BLM BMPs for special status species, as follows:
a. Prior to conducting noxious and invasive weed control during the nesting and brood-rearing seasons, a bird survey will be performed in the nesting and brood-rearing areas for special status species. If nest or brood-rearing activity is observed with 300 feet of the area to be treated, Gullsil will consult with the BLM biologist.

b. To the greatest extent possible, survey all mine adits and shafts slated for closure for bat presence and use prior to being closed. Minimize impacts to bat roosts and bat habitat using current science, guidelines, and methodologies when closing and abandoning mine adits.

H. Greater Sage-Grouse

1. Approximately 50 acres of the Project area are located in an area identified by the BLM’s Nevada and Northeastern California Greater Sage-Grouse (GRSG) Approved Resource Management Plan Amendment and Record of Decision (ARMPA) (BLM 2019) as Priority Habitat Management Area and five acres of the Project area is located in an area identified as General Habitat Management Area for greater sage-grouse. In accordance with the ARMPA (BLM 2019), the following environmental protection measures will be implemented by Gullsil:

a. New roads will be located outside of greater sage-grouse habitat to the extent practicable;

b. Construction of roads within riparian areas and ephemeral drainages will be avoided, if practicable. If the construction of roads within riparian areas and ephemeral drainages is not avoidable, then low-water crossings will be constructed at right angles;

c. Employees will be instructed to avoid harassment and disturbance of wildlife, especially during the greater sage-grouse breeding (e.g., courtship and nesting). In addition, pets will not be permitted on site during construction;

d. To reduce predator perching in greater sage-grouse habitat, the construction of vertical facilities and fences will be limited to the minimum number and amount needed. Anti-perch devices will be installed where applicable; and

e. Gullsil will collaborate with the BLM to determine if pinyon-juniper removal in the Project area will be eligible as a credit in the State of Nevada Conservation Credit System.

2. As stipulated by Legislative Council Bureau File Number T006-18A, the BLM has contacted the Sagebrush Ecosystem Technical Team (SETT) and geographic information has been submitted indicating known existing and authorized disturbance areas for the vicinity, as well as proposed Project disturbance areas. Using the Habitat Quantification Tool desktop analysis, the SETT has estimated the Project debits to be 152. Gullsil will continue to work with the SETT to more accurately calculate debits and develop a mitigation plan, which will be in place prior to the commencement of Project-related surface disturbance.
I. Fire Protection

1. The following precautionary measures will be taken to prevent wildland fires. In the event that operations should start a fire, Gullsil recognizes that it could be held liable for all suppression costs under 43 CFR § 9212.4. These are in addition to any requirements imposed by the Mine Safety and Health Administration (MSHA) or other governing agencies for work-area fire protection:

   a. All vehicles will carry at a minimum a shovel and five gallons of water, in addition to a conventional fire extinguisher.
   b. Adequate fire-fighting equipment (a shovel, a Pulaski, standard fire extinguisher(s), and an ample supply of water) will be kept readily available at each active surface drill site.
   c. Vehicle catalytic converters will be regularly inspected and cleaned of all flammable debris.
   d. All cutting/welding torch use, electric arc welding, and grinding operations will be conducted in an area free, or mostly free, from vegetation. An ample supply of water and shovel will be on hand to extinguish any fires created from sparks. At least one person in addition to the cutter/welder/grinder will be at the work site to promptly detect fires created by sparks.
   e. Fire restrictions or closures issued by the Battle Mountain District Office will be publicized in the local media, and notice will be posted at various sites throughout the district. Gullsil personnel will be responsible for being aware of and complying with requirements of these orders.
   f. Wildland fire observed will be reported immediately to the BLM Central Nevada Interagency Dispatch Center at (775) 623-3444.

J. Migratory Birds

1. The Migratory Bird Treaty Act prohibits the destruction of nests (nests with eggs or young) of migratory birds. Most of the “songbirds” that occur in this area are migratory birds and are protected by this provision. Nesting season runs from approximately April 1 to July 15 of each year. A careful examination of each area to be disturbed (including cross-country travel routes) during the breeding season, will be done to assure no nests with eggs or young are present. If such nests are discovered, they will be avoided by an appropriate distance to prevent destruction of the nest and disturbance of the nesting birds.

2. If active nests are located, or if other evidence of nesting is observed (mating pairs, territorial defense, carrying nesting material, transporting of food), the area will be avoided to prevent destruction or disturbance of nests until the birds are no longer present. Avian surveys will be proposed only during the avian breeding season and immediately prior to Gullsil conducting activities, that will result in disturbance. After such surveys are performed, and disturbance created (i.e., road construction and operation development), Gullsil will not conduct any additional disturbance during the avian breeding season without first conducting another avian survey. After July 15, activities
will continue; in compliance with the Mount Lewis Field Office guidelines, no further avian surveys will be required until the next avian breeding season.

K. Vegetation/Forestry and Woodland Resources

1. Gullsil will minimize where possible any injury or removal of pinyon pine, juniper, aspen, or mountain mahogany during activities associated with drill site and road construction, although removal of pinyon-juniper may be beneficial to greater sage-grouse. Pinyon pine and juniper that have been removed due to exploration and mining activities will be made available to the public. Gullsil will collaborate with the BLM to determine if pinyon-juniper removal in the Project area will be eligible as a credit in the State of Nevada Conservation Credit System.

3. BLM Notice NVN-094784 is hereby vacated with the approval of the Plan and acceptance of the financial guarantee.

Once the financial guarantee is adjudicated for the Plan (NVN-092893) by the BLM Nevada State Office, Branch of Mineral Resources (Solids), the remaining reclamation and financial guarantee requirements under NVN-094784 will be incorporated into the reclamation requirements of the Plan and the Notice terminated.

RATIONALE

The Plan, in combination with the preceding Conditions of Approval and the enclosed FONSI, show that all practicable means to avoid or minimize environmental harm have been adopted and that unnecessary or undue degradation of the public lands will not occur as a result of the activities at the Project.

The Plan is in conformance with the Shoshone-Eureka Resource Management Plan Record of Decision (ROD) which states: 1) “Make available and encourage development of mineral resources to meet national, regional, and local needs consistent with national objectives for an adequate supply of minerals (page 29),” 2) “All public lands in the planning area will be open for mining and prospecting unless withdrawn from mineral entry (page 29),” and 3) final reclamation will ensure public safety and the return of the exploration disturbance to its pre-exploration land uses of grazing, wildlife habitat, and mineral exploration. Final reclamation will also reduce visual contrast created during the exploration operation.

The Plan is in conformance with the 2019 Approved Resource Management Plan Amendment regarding conservation of greater sage-grouse habitat.

The Plan is in conformance with the President’s National Energy Policy Act of 2005 as per Instruction Memorandum (IM-2002-053), as put forth in Executive Order 13212, and will not have an adverse impact on energy development, production, supply, and/or distribution. The EA and FONSI support this decision.
AUTHORITY


APPEAL OF THE DECISION

If you are adversely affected by this decision, you may request that the Nevada BLM State Director review this decision. If you request a State Director Review, the request must be received in the BLM Nevada State Office at:

BLM Nevada State Office
State Director
1340 Financial Blvd.
Reno, Nevada 89502-7147

no later than 30 calendar days after you receive or have been notified of this decision. The request for State Director Review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director Review is pending, unless a stay is granted by the State Director. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the Interior Board of Land Appeals (IBLA). You may contact the BLM Nevada State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with this office at 50 Bastian Road, Battle Mountain, NV 89820, which we will forward to IBLA.

If you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations contained in 43 CFR 3809.801(a)(1). Your Notice of Appeal must be filed in this office at 50 Bastian Road, Battle Mountain, NV 89820, within 30 days from receipt of this decision. As the appellant, you have the burden of showing that the decision appealed from is in error. Enclosed is BLM Form 1842-1 that contains information on taking appeals to the IBLA.

This decision will remain in effect while the IBLA reviews the case, unless a stay is granted by the IBLA. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Request for a Stay
If you wish to file a petition pursuant to regulations 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by IBLA, the petition for a
stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of this notice of appeal and petition for a stay must also be submitted to each party named in the decision and to the IBLA and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay
Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal must show sufficient justification based on the following standards:

1. The relative harm to parties if the stay is granted or denied.
2. The likelihood of the appellant’s success on the merits.
3. The likelihood of immediate and irreparable harm if the stay is not granted.
4. Whether the public interest favors granting the stay.

Contact
If you have any questions pertaining to this decision, please contact Scott Distel, Environmental Protection Specialist, at (775) 635-4093 or at the above address.

Jon D. Sherve
Field Manager
Mount Lewis Field Office

Enclosure: BLM Form 1842-1

cc: BLM, Branch of Mineral Resources (Solids) (LLNV921000)