

I.0 INTRODUCTION

The Elko District Office of the United States Department of the Interior, Bureau of Land Management (BLM) received a revised Plan of Operations from Newmont Mining Corporation (Newmont) in November 2007, proposing an amendment to the Genesis-Bluestar Operations Area (NVN - 70712). The proposed Amendment to the Plan of Operations includes expansion and development of open pit mines and associated support facilities located within the previously permitted boundary for the Genesis-Bluestar Operations Project (Project) area. The Project is located on public and private land in Eureka County, Nevada, approximately 20 miles north of Carlin, Nevada (**Figure I-1** and **Figure I-2**).

Proposed facilities in the Project area would be located in part on public land administered by BLM; consequently, review and approval of Newmont's revised Plan of Operations is required by BLM pursuant to Title 43, Code of Federal Regulations (CFR), Part 3809 (43 CFR 3809) Surface Management Regulations. BLM's decision regarding the proposed Project must also conform to requirements of the National Environmental Policy Act of 1969 (NEPA). Due to the potential for the proposed Project to result in significant environmental impacts, BLM determined that an Environmental Impact Statement (EIS) would be necessary under NEPA. A Notice of Intent to prepare an EIS appeared in the *Federal Register* on March 18, 2008 (Vol. 73, No. 53, Page 1448). BLM is serving as lead agency in preparing this EIS. The Nevada Department of Wildlife (NDOW) and Elko County are cooperating agencies.

This EIS incorporates by reference Newmont's 2007 Genesis Project Plan of Operations Amendment (Newmont 2007a), and previous authorizations and other environmental analyses of mining activities in the Genesis-Bluestar Operation Area as listed in **Table I-1**. These documents are available for inspection upon request to the Elko District Office.

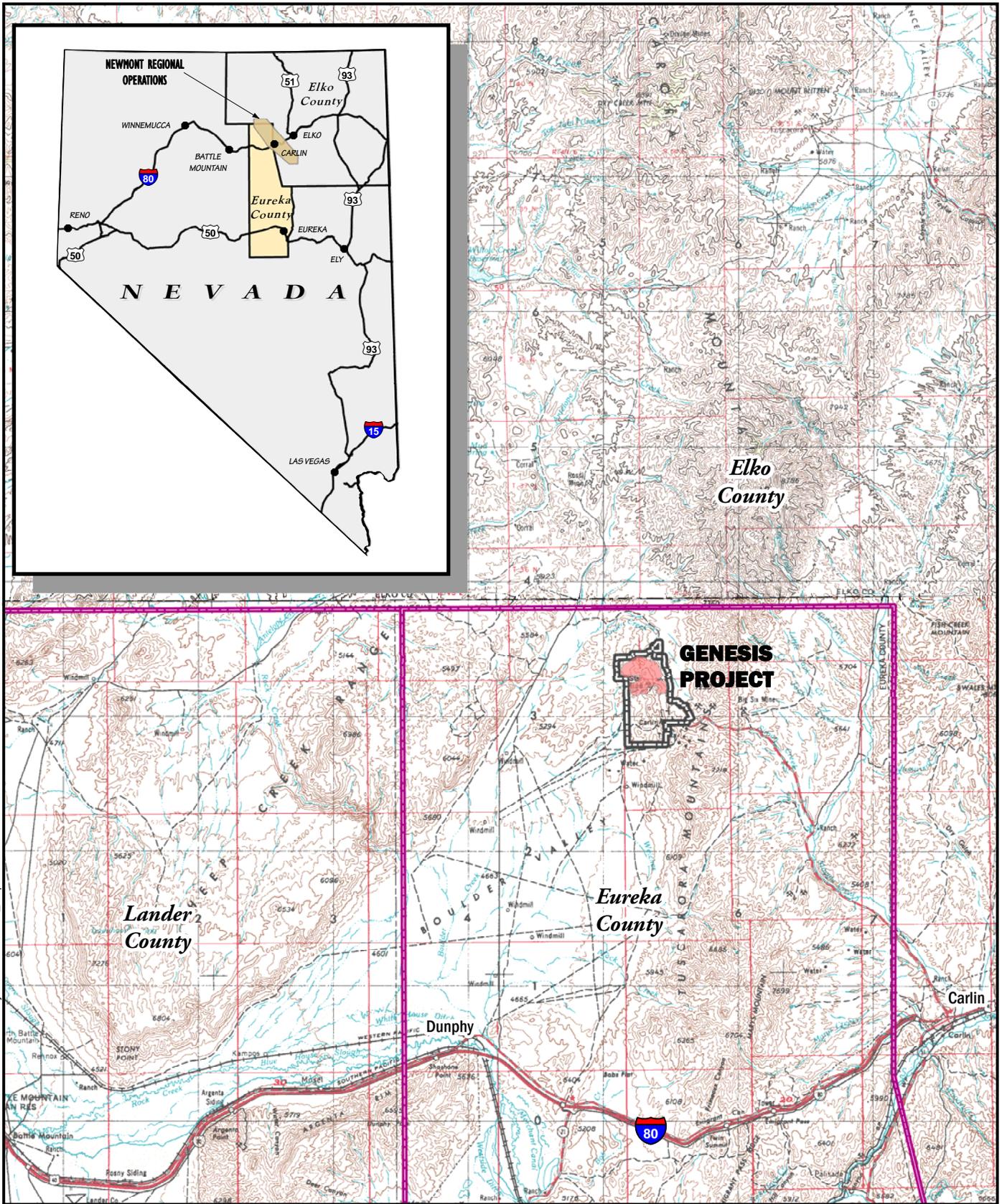
I.1 DOCUMENT ORGANIZATION

This document is compiled in accordance with regulations promulgated by the Council on Environmental Quality (CEQ) for implementing procedural provisions of NEPA (40 CFR 1500-1508) and BLM's NEPA Handbook (H-1790-1). This EIS describes components of, and environmental consequences of, proposed mining and waste rock disposal operations in the Project area. Chapter 1 describes the purpose of and need for action, the role of BLM, and identifies issues raised through public scoping. Chapter 2 provides a description of past and current mining operations, the proposed amendment to the Plan of Operations (Proposed Action), and the No Action Alternative. Chapter 3 describes the affected environment in the Project area; environmental consequences including potential direct and indirect impacts associated with the Proposed Action and No Action Alternative; past, present, and reasonably foreseeable future activities in the Project area that form the basis for disclosing potential cumulative effects; and mitigation measures that may be selected to reduce or minimize impacts. Chapter 4 identifies the consultation and coordination with public, state, and federal agencies that occurred during preparation of this EIS. Chapter 5 provides a list of preparers and reviewers of the document and Chapter 6 contains references cited in the EIS. **Appendix A** contains the Adaptive Management Plan (AMP) for Waste Rock, **Appendix B** and **B-1** contains summaries of the wall rock and waste rock geochemical reports, and expected geochemical impacts of the Proposed Action and No Action Alternatives.

TABLE I-1 Environmental Analyses Genesis Project Area	
Document	Description
Environmental Assessment (EA-NV-010-9-048) for the Newmont Gold Company's Blue Star Operations Area, Eureka County, Nevada (BLM 1989). Finding of No Significant Impact/Decision Record: Blue Star Plan of Operations 3809(NV-014); N16-88-7P (May 25, 1989).	Analyzed impacts on physical, biological, and human resources associated with mineral exploration and drilling throughout the Blue Star Operations Area, continued mining in the existing Genesis and Blue Star mines, expansion of the Section 5 Waste Rock Disposal Facility, and construction of the North Waste Rock Disposal Facility.
Environmental Assessment BLM/EK/PL-95/003 Newmont: Section 36 Project (BLM 1995). Finding of No Significant Impact/Decision Record: Newmont Section 36 Project BLM/EK/PL-95/003 N16-88-007P (February 27, 1995)	Analyzed impacts on physical, biological, and human resources associated with construction of the Section 36 Waste Rock Disposal Facility, vertical expansion of the Section 5 Waste Rock Disposal Facility, development and operation of five open pit mines (Payraise, Sold, Beast, North Star, and Bobcat), and continued exploration activities.
Environmental Assessment BLM/EK/PL-96/016 Newmont: Lantern Mine Expansion Project (BLM 1996). Decision Record: Newmont Lantern Mine Expansion Project BLM/EK/PL-96/016 N16-88-007P (September 16, 1996)	Analyzed impacts on physical, biological, and human resources associated with expansion of the Lantern open pit mine, North Area Leach Facility, and North Waste Rock Disposal Facility, construction of the Lantern South Waste Rock Disposal Facility, and development of ancillary facilities.
Cumulative Impact Analysis of Dewatering and Water Management Operations for the Betze Project, South Operations Area Project Amendment, and Leeville Project (BLM 2000)	Analyzed impacts of dewatering on physical, biological, and human resources. Analyses included the Genesis Project area.
Draft Supplemental Environmental Impact Statement Leeville Project (BLM 2007a).	Provided expanded and updated analyses of cumulative effects originally presented in the Leeville Project EIS. Analyses included the Genesis Project as a reasonably foreseeable future action.

1.2 PURPOSE OF AND NEED FOR ACTION

The purpose of Newmont's proposed Plan of Operations Amendment is to extend the mine life of Genesis-Bluestar operations using its existing work force to continue open pit mining on unpatented mining claims and fee land within the Project area to produce gold from ore reserves. BLM is responsible for managing mineral rights access on certain public land as authorized under the General Mining Law of 1872, as amended. Under the law, persons are entitled to reasonable access to explore for and develop mineral deposits on public domain lands that have not been withdrawn from mineral entry.

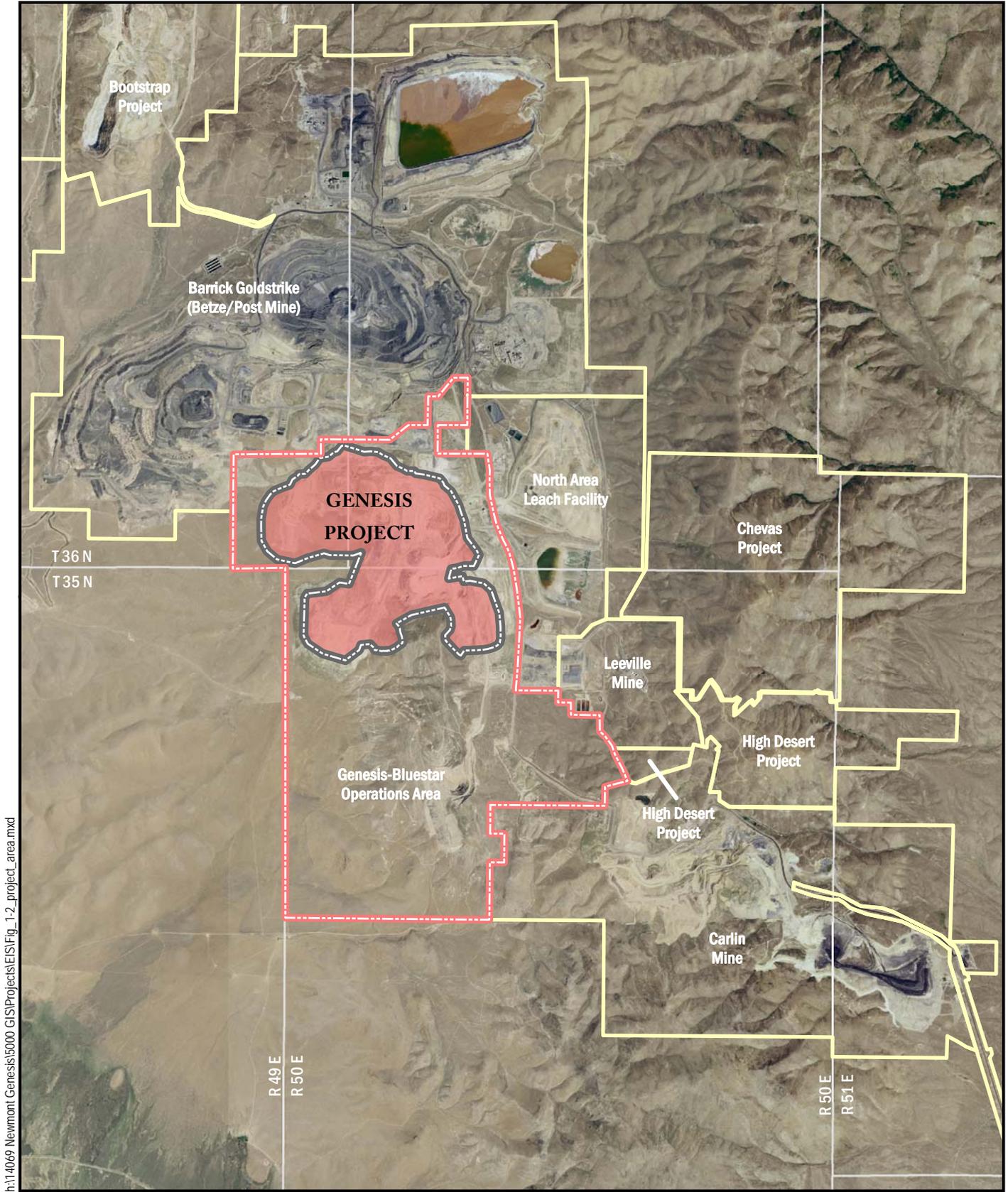


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- Genesis Project
- Genesis-Bluestar Operations Area

**General Location Map
Genesis Project
Eureka County, Nevada
FIGURE 1-1**



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 Genesis-Bluestar Operations Area

Project Area
Genesis Project
Eureka County, Nevada
FIGURE 1-2

In order to use public land managed by the BLM Elko District Office, Newmont must comply with BLM Surface Management Regulations (43 CFR 3809) and other applicable statutes, including the Mining and Mineral Policy Act of 1970 (as amended) and Federal Land Policy and Management Act of 1976. BLM must review Newmont's plans to ensure the following:

- Adequate provisions are included to prevent unnecessary or undue degradation of public land and to protect non-mineral resources of public land;
- Measures are included to provide for reclamation of disturbed areas; and
- Compliance with applicable state and federal laws is achieved.

1.3 AUTHORIZING ACTIONS

Plan amendments submitted to BLM may be approved only after an environmental analysis is completed and disclosed to the public, as required by NEPA. BLM decision options include approving Newmont's Plan of Operations for the Project as submitted, approving the Plan of Operations with stipulations to mitigate environmental impacts, or denying the revised Plan of Operations (No Action). If BLM declines to approve the proposed Genesis Project, the applicant may modify and resubmit the Plan of Operations to address issues or concerns identified by BLM on the original Plan of Operations.

The BLM must prevent abuse of public land while recognizing valid rights and uses under the Mining Law of 1872 (30 U.S.C. 22 et seq.) and related laws governing public land. BLM has determined that the use and occupancy of public land identified in the Proposed Action is reasonably incident to the Project in accordance with 43 CFR 3715 – Use and Occupancy under the Mining Laws. The mining and reclamation plans must be designed to minimize the amount of land that would be disturbed to develop mine pits, dispose of overburden, process ore, and construct haul roads and other ancillary facilities to meet Project requirements and ensure that applicable environmental protection and safety standards are met.

In addition to BLM, other federal, state, and local agencies have jurisdiction over certain aspects of the Proposed Action and are considered as connected actions under the NEPA process. A list of agencies and their respective permitting/authorizing responsibilities is shown in **Table 1-2**. In addition to securing authorization from BLM, the primary permits to be obtained by Newmont include amendments to the reclamation permit, Water Pollution Control Permit, and a storm water discharge permit.

The NDEP bonding requirements for mine reclamation in Nevada are outlined in Nevada Administrative Code (NAC) 519A.380 regulations. Surface Management Regulations (43 CFR 3809) establish BLM's bonding policy relating to mining and mineral development. In 2002, BLM and NDEP updated an existing Memorandum of Understanding (MOU) to coordinate evaluation and approval of reclamation plans, and determine bond amounts for mining and exploration operations. The MOU allows submittal of one bond by an operator to satisfy reclamation bond requirements for both agencies.

Operators must provide a reclamation cost estimate when submitting a Plan of Operations to BLM. The reclamation cost estimate must be calculated as if third party contractors would perform reclamation after the site has been vacated by the operator. The bond amount must be sufficient to cover 100 percent of the cost of reclaiming the proposed disturbance. The current reclamation bond for the Genesis-Bluestar Operations Area is \$14.6 million.

Authorizing Action	Regulatory Agency
Plan of Operations/Rights of Way	Bureau of Land Management (BLM)
National Environmental Policy Act	BLM
National Historic Preservation Act	BLM; Nevada Division of Historic Preservation & Archaeology
Native American Graves Protection & Repatriation Act	BLM
American Indian Religious Freedom Act	BLM
Clean Water Act (Section 404)	United States Army Corps of Engineers (USCOE)
Storm Water Permit	Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control
Air Quality Permit	NDEP, Bureau of Air Pollution Control
Water Pollution Control Permit	NDEP, Bureau of Mining Regulation & Reclamation
Mine Reclamation Permit/Bonding	NDEP, Bureau of Mining Regulation & Reclamation/BLM
Water Rights	Nevada Division of Water Resources

I.4 RELATIONSHIP TO BLM AND NON-BLM POLICIES, PLANS, AND PROGRAMS

I.4.1 Federal Land Use Plan Conformance

BLM has responsibility and authority to manage surface and subsurface resources on public land located within the jurisdiction of the Elko District Office. In accordance with the Record of Decision (ROD) for the Elko Resource Management Plan (BLM 1987), BLM has designated land within the Genesis Project area as open for mineral exploration and development. The Plan of Operations has been reviewed for compliance with BLM policies, plans, and programs. The proposal is in conformance with the minerals decisions in the ROD, Elko Resource Area, Resource Management Plan, approved in March 1987. The Elko Resource Management Plan Record of Decision (BLM 1987) established the objective to “Maintain public lands open for exploration, development and production of mineral resources while mitigating conflicts with wildlife, wild horses, recreation and wilderness resources” (BLM 1987).

I.4.2 State and Local Land Use Plans and Policies

The State of Nevada recognizes that mining is an important contributor to the state’s economy and encourages development of mineral resources. The State policy towards mining and reclamation is defined in NAC 519A.010 as:

- (a) The extraction of minerals by mining is a basic and essential activity making an important contribution to the economy of the State of Nevada;
- (b) Proper reclamation of mined land, areas of exploration and former areas of mining or exploration is necessary to prevent undesirable land and surface water conditions detrimental to the ecology and to the general health, welfare, safety and property rights of the residents of this state; and
- (c) The success of reclamation efforts in this state is dependent upon cooperation among state and federal agencies.

The proposed project is consistent with state policies. BLM has coordinated with NDEP Bureau of Mining Regulation and Reclamation (BMRR) in reviewing the mining operation and reclamation plans.

The Natural Resource and Land Use Element chapter of the Eureka County Master Plan (Eureka County 2007) provides general policy guidance and management objectives as the basis for County-preferred land uses and management practices on federal and state administered public land. The Planning Commission's approval of the 2007 plan recognizes that the economic and social stability of Eureka County are inseparably tied to the use of natural resources. Over 90 percent of Eureka County employment is in the Natural Resources and Mining Sector, and state and federal administered public land comprises 81 percent of Eureka County. Community stability in Eureka County is a symbiosis between the small private land base and the larger federal land base. Private property interests in minerals and other natural resource attributes of public land rest on the continued multiple-use and economic-use of state and federal land in Eureka County. The proposed Genesis Project is consistent with the policies in this plan, which includes promoting expansion of mining operations.

Elko County has formally cooperated with BLM in preparation of this EIS. The Elko County Public Lands Policy Plan (2008) provides descriptions of issues and opportunities relating to public land and a process that enables federal land management agencies to understand and respond to the concerns of Elko County in a collaborative fashion. Specific to mineral resources under Section 14, the Lands Policy Plan states that development of Nevada's mineral resources is desirable and necessary to the economy of the nation, state, and particularly Elko County and that Elko County both supports the Mining Law of 1872 and opposes any policy or regulatory revision that may result in overregulation. The plan also asserts that federal land management agencies should continue to enforce mine site, exploration, and reclamation standards that are consistent with the best possible post mine use of each specific area to ensure there is no undue degradation of public land.

I.5 SUMMARY OF ISSUES

I.5.1 Issues Raised During Scoping

Public and agency scoping comments concerning the Proposed Action are shown in **Table I-3**. This table also provides references to the sections of this EIS in which each issue is addressed.

I.5.2 Major Issues

Major issues identified by the agencies during review of the Genesis Project Plan of Operations Amendment include the following:

- Social and economic impacts to the local and regional economy from labor income, tax revenues, and continued employment resulting from the Proposed Action;
- Potential impacts of dewatering compartmentalized groundwater east of the Gen Fault on the regional water system; and
- Classification and management of potentially acid-generating (PAG) rock.

TABLE I-3 Scoping Summary	
Issue	Where Addressed
Mining and Reclamation	
Effects of backfilling mine pits with potentially acid generating waste rock.	Chapter 2 – Section 2.3.5 Chapter 3 – Sections 3.4.2.2 and 3.4.3.2
Waste rock analysis including kinetic testing	Chapter 3 – Section 3.4.2.2 & Appendix B and B-I
Potential for acid mine drainage	Chapter 3 – Sections 3.4.2.2 and 3.4.3.2 Appendix A
Backfill mine pits to blend with surrounding topography.	Chapter 2 – Section 2.3.13.3
Closure of heap leach facility and disposal of process solution.	Beyond the scope of this document
Analyze various sources and subsequent release of mercury to the atmosphere.	Chapter 3– Section 3.4.1.2 and 3.4.1.3
Water Quantity and Quality	
Analyze effects of dewatering and its cumulative impacts in the region.	Chapter 2 – Section 2.3.4 Chapter 3 – Sections 3.4.3.2 and 3.4.3.3
Model future changes in groundwater flow and post-mining levels.	Section 3.4.3.2 Appendix B and B-I
Wildlife and Vegetation	
Potential impacts resulting from mine development to wildlife habitat and migration corridors, roosting habitat for bats, and sage grouse habitat including leks, and other sensitive habitat.	Chapter 3 – Sections 3.4.6.2 and 3.4.6.3
Land Use and Access	
Describe fencing and maintenance responsibility and mitigation plans to deal with reduced public access, livestock crossing, recreational and grazing access as a result of the proposed Project.	Chapter 2 – Section 2.2.1.5 and 2.3.13.2 Chapter 3 – Sections 3.2.2, 3.2.3, and 3.2.4
Visual Resources	
Visual impacts and potential mitigation measures to reduce or eliminate impacts to the natural environment.	Chapter 3 – Section 3.2.5
Cultural Resources	
Surveys and mitigation plans for historical and archaeological artifacts identified in the Project area.	Chapter 3 – Sections 3.2.6 and 3.2.7
Impact on Native Americans to practice traditional religions in the Project area including sacred and spiritual sites, and traditional food and medicine gathering locations.	
Social and Economic Resources	
Social and economic impacts including extension of employment at the mine.	Chapter 3 – Section 3.4.7.2 and 3.4.7.3

Social and economic resources for the Elko Micropolitan Study Area (Elko, Spring Creek, Carlin and adjacent unincorporated communities) are described in Section 3.4.7.1. Potential effects of dewatering are addressed in Section 3.4.3.2 – Water Quantity and Quality. Classification and management of potentially acid-generating (PAG) rock is described in the Rock Characterization subsection of Section 3.4.2 – Geology and Minerals and in **Appendix B and B-I**.