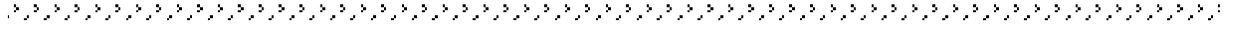


# CHAPTER 1

## INTRODUCTION



## CHAPTER 1.0

### Introduction

Battle Mountain Gold Company (BMG) proposes to expand its current operations near Battle Mountain, Nevada, to include mining and beneficiation of gold, silver, and copper. This operation is located in the Copper Canyon Mining District, which is in Lander County, approximately 12 miles southwest of Battle Mountain, Nevada (**Figure 1-1**). The proposed project would be located in portions of Sections 15, 16, 21, 22, 23, 26, 27, 28, 32, 33, and 34 of Township 31 North, Range 34 East; and portions of Sections 2, 3, 4, 8, 9, 10, 16, and 21 of Township 30 North, Range 43 East. The proposed project would involve developing the Phoenix and Reona pits and expanding the existing Midas Pit (previously identified and permitted as the South Canyon and Bonanza pits), and Iron Canyon Pit (which would incorporate the previous Northeast Extension Pit and Fortitude Pit). Mining the ore deposits would be coupled with excavating and beneficiating low-grade gold ore stockpiles associated with the previous Tomboy, Northeast Extension, and Fortitude mining operations.

Heap-leach-grade run-of-mine and crushed ore would be beneficiated at the existing and proposed expansion of the Reona heap leach facility, while mill-grade ore would be beneficiated at the proposed crushing, grinding, and milling facilities. Proposed new construction would include installing a new primary crusher, a semi-autogenous grinding (SAG) mill, two ball mills, a carbon-in-leach circuit, and ancillary conveyance systems. The proposed crushing/milling facilities would supply milled ore to a precious metal recovery plant. Tailings material from the beneficiation facility would be deposited at a new lined tailings facility south of Copper Canyon, using the existing disturbance associated with the Copper Canyon copper tailings facility. The heap leach and tailings facilities would be designed as zero-discharge facilities.

This plan integrates mining and beneficiation of new ore deposits with closure and reclamation of previous disturbances. The plan incorporates mining the Phoenix, Reona, Midas, and Iron Canyon pits, and excavating the Fortitude, Northeast Extension, and Tomboy stockpiles. The plan also includes closing and reclaiming the copper heap leach facilities, lining and isolating the previous copper tailings facility, and backfilling three existing open pits. The proposed project

would result in approximately 4,295 acres of new disturbance in the Copper Canyon area (**Figure 1-2**).

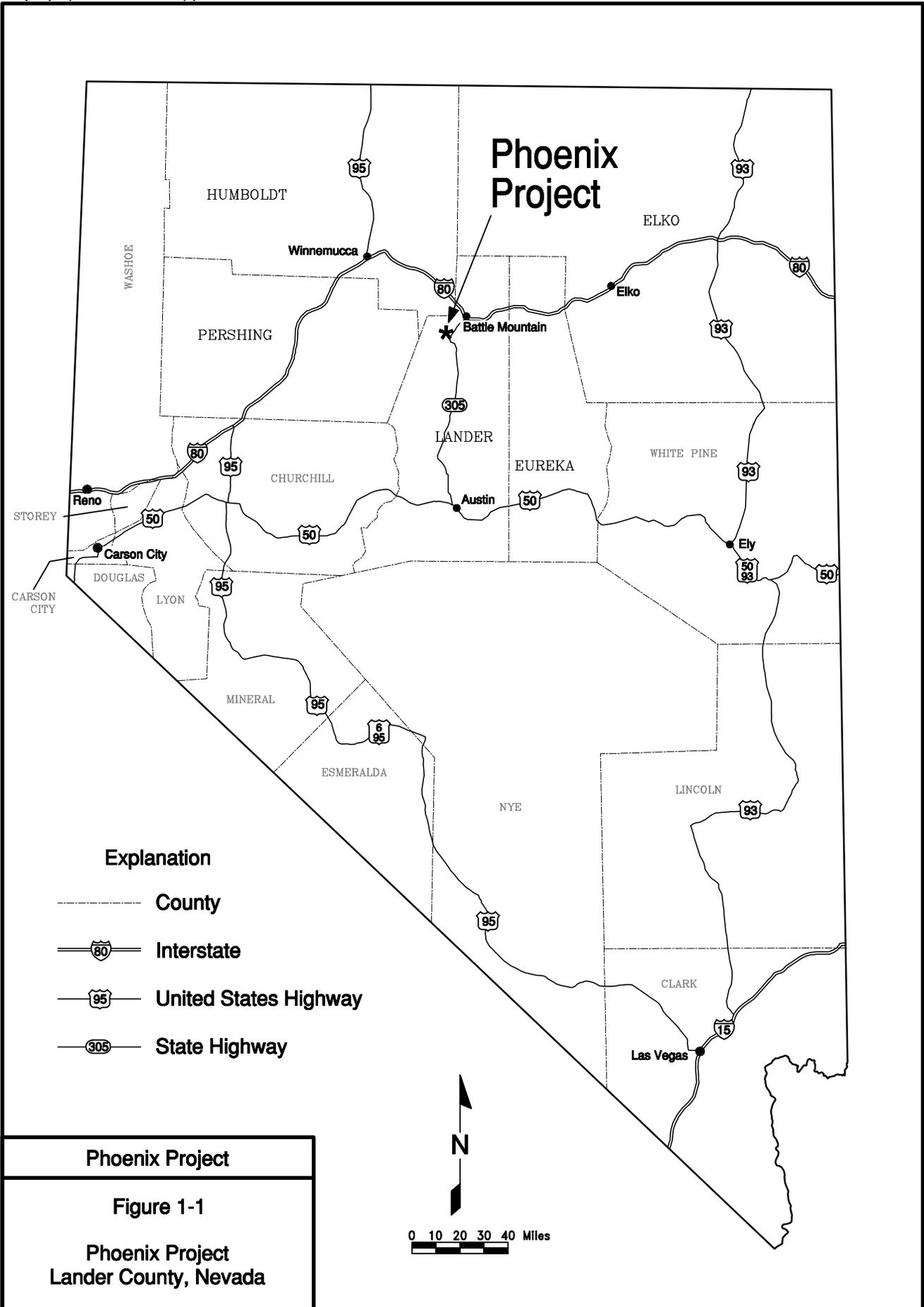
Because of the potential for the proposed project to result in significant environmental impacts, the Bureau of Land Management (BLM) determined that an environmental impact statement (EIS) would be necessary. The BLM is serving as the lead agency for preparing the EIS in compliance with the National Environmental Policy Act of 1969, the Council on Environmental Quality regulations for Implementation of Procedural Provisions of the National Environmental Policy Act (40 Code of Federal Regulations [CFR] 1500-1508), and the BLM's National Environmental Policy Act Handbook (H-1790-1). The Nevada Division of Wildlife (NDOW) is serving as a cooperating agency for preparation and review of the EIS.

This EIS describes the proposed expansion and development of the Phoenix Project (Proposed Action) and the No Action alternative. It also describes the environmental consequences of implementing the Proposed Action or the No Action alternative.

Shortly before this Draft EIS was released, Battle Mountain Gold Company merged with Newmont Mining Corporation. BMG shareholders approved the merger on January 5, 2001, and the merger closed on January 10, 2001. As a result of the merger, BMG, the proponent of the Phoenix Project, has become a wholly owned subsidiary of Newmont Mining Corporation. Under an agreement that became effective January 11, 2001, BMG (as a wholly owned subsidiary of Newmont) will continue to own the Phoenix Project, but Newmont will be the operator of the project. At this time, it is not expected that the merger will have any impact on the Proposed Action or the potential environmental impacts of the Proposed Action or the No Action alternative.

### 1.1 Purpose of and Need for Action

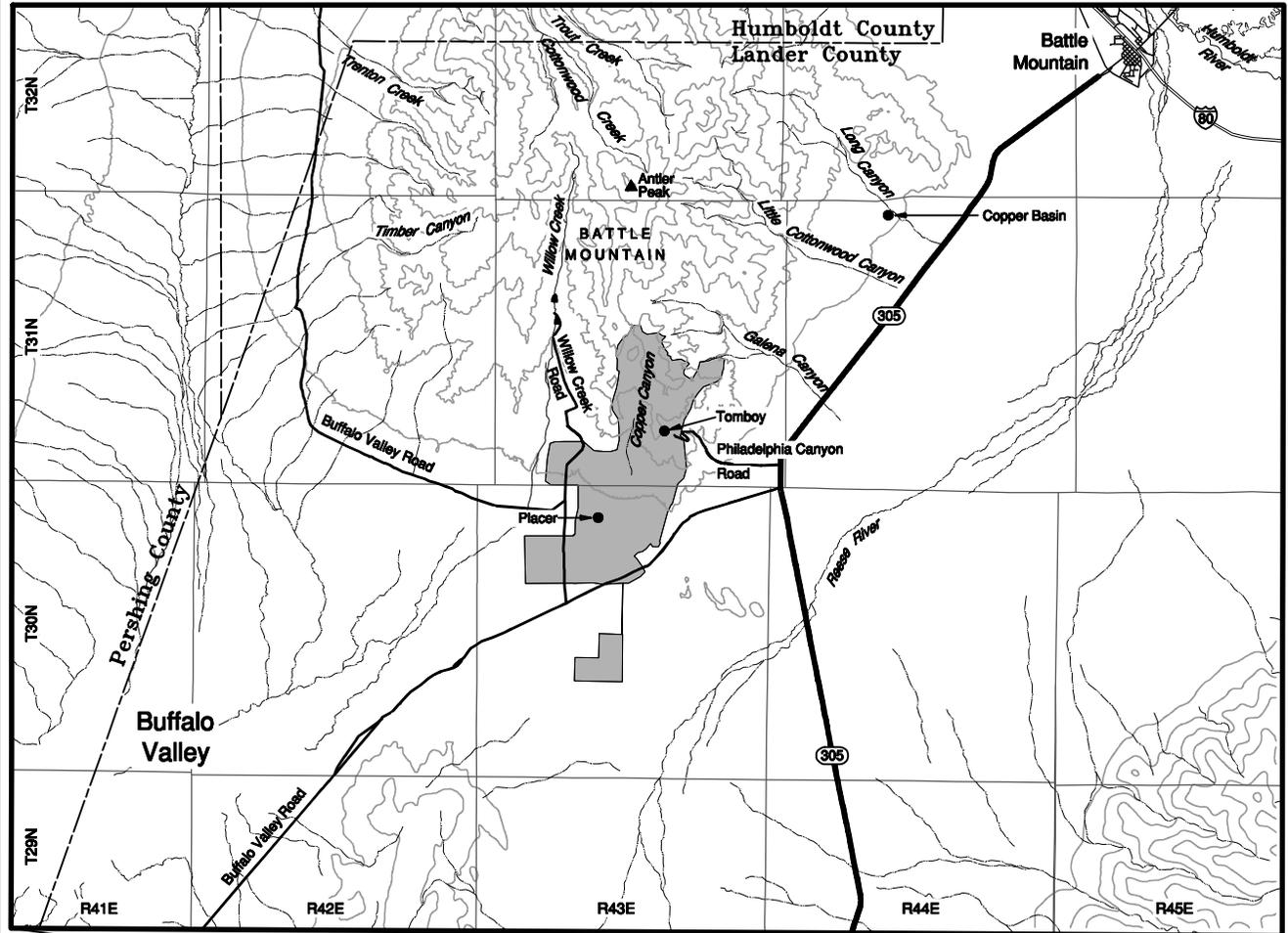
The purpose of the proposed project is to economically extract recoverable gold reserves known to exist in the project area in an economically efficient and environmentally compatible manner. To satisfy the market demand for gold (project need), BMG has economically driven objectives for the project, which include:



**Phoenix Project**

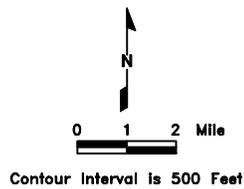
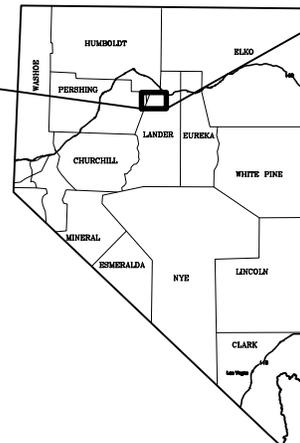
**Figure 1-1**

**Phoenix Project**  
**Lander County, Nevada**



**Explanation**

-  Interstate
-  State Highway
-  County Road
-  County
-  Drainage
-  Proposed Phoenix Project
-  BMG Meteorological Monitoring Sites



Source: USGS 1982, 1986, 1987, and 1988

**Phoenix Project**

**Figure 1-2**

**Regional Geographic Features**

## 1.0 INTRODUCTION

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- Extract economically recoverable gold, silver, and copper determined to exist in the area.
- Expand existing mining and processing facilities, and construct new facilities.
- Optimize ore recovery and minimize new surface disturbances.

## 1.2 Relationship to BLM and Non-BLM Policies, Plans, and Programs

The BLM is responsible for administering mineral rights access on certain federal lands as authorized by the General Mining Law of 1872. Under the law, qualified prospectors are entitled to reasonable access to mineral deposits on public domain lands that have not been withdrawn from mineral entry.

The BLM has the responsibility and authority to manage the surface and subsurface resources on public lands located within the jurisdiction of the Battle Mountain Field Office, and it has designated lands within the project area as open for mineral exploration and development. In its Record of Decision for the Shoshone-Eureka Resource Management Plan (BLM 1986b), the BLM states in objectives 1.0 and 2.0 under Minerals that it will:

(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," and

(2) "Assure that mineral exploration, development and extraction are carried out in such a way as to minimize environmental and other resource damage and to provide, where legally possible, for the rehabilitation of lands."

The management decisions applicable to these objectives are as follows (BLM 1986b):

### Locatable Minerals

"All public lands in the planning areas will be open for mining and prospecting unless withdrawn or restricted from mineral entry."

### Current Mineral Production Areas

"Recognize these areas as having a highest and best use for mineral production and encourage

mining with minimum environmental disturbance. Make thorough examinations of all sites proposed for other Bureau programs in these areas."

In order to use public lands managed by the Battle Mountain Field Office, BMG must comply with the BLM Surface Management Regulations (43 CFR 3809) and other applicable statutes, including the Mining and Mineral Policy Act of 1970 (as amended) and the Federal Land Policy Management Act of 1976 (as amended). The BLM must review BMG's plans for expanding and developing the Phoenix Project to ensure the following:

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

While the Phoenix Project Plan of Operations was being reviewed by the BLM, the agency adopted revisions to 43 CFR 3809 that govern mining plans of operations. The final rules were published in the Federal Register in November 2000 and became effective on January 20, 2001. ***An amendment to the new rules was published in the Federal Register on October 31, 2001, and will become effective December 31, 2001.*** The new rules include provisions to explain how the new regulations will be applied to plans of operations, such as the Phoenix Project plan, that were pending when the rules changed. Under these transition provisions, new regulations that relate to the plan content and environmental and reclamation performance standards will not apply to plans that were submitted to the BLM prior to January 20, 2001. Accordingly, the Phoenix Project Plan of Operations has been analyzed under the regulatory requirements that existed before the new rules were adopted. However, other provisions of the new rules, including new bonding requirements, inspection and enforcement procedures, and appeals procedures, are applicable to all plans of operations, including those that were submitted or approved prior to January 20, 2001. These provisions of the new rules will apply to the Phoenix Project Plan of Operations.

The Proposed Action is consistent with the Shoshone-Eureka Resource Management Plan and Section X of the Lander County Policy Plan for Public Lands (Lander County 1999), which sets forth the policy to "promote the expansion of mining operations and areas." The Lander County Policy Plan for Public Lands also states that mine site reclamation standards should be consistent with the best possible postmine use for each specific area, and that specific standards should be developed for each property.

#### Financial Guarantees

It is Nevada BLM policy that any approval of a plan of operations in compliance with 43 Code of Federal Regulations 3809 is contingent upon an operator having in place an adequate financial guarantee to cover all anticipated reclamation costs and obligations defined in the plan of operations. Operators of approved plans of operations are financially responsible for all costs associated with reclamation and closure activities, including anticipated long-term maintenance and monitoring costs. A surety bond or some other approved financial instrument is to be maintained to ensure the public is not financially burdened by these obligations.

For the BLM, closure does not occur until all obligations have been met. Therefore, the BLM requires some form of financial guarantee to cover any long-term obligations, including maintenance of long-term water treatment systems and monitoring, that are identified in an approved plan of operations. Final release of the financial guarantee may not occur until all reclamation and closure requirements are met. The BLM has the option of considering a separate financial instrument other than the reclamation bond, specific to long-term closure, water and effluent management, or monitoring requirements, if agreed to with the operator. The plan of operations and associated bond must cover the maintenance and monitoring of all fluid disposal systems.

### **1.3 Authorizing Actions**

In addition to the EIS, implementing the proposed Phoenix Project or the alternatives would require authorizing actions from other federal, state, and local agencies with jurisdiction over certain aspects of the proposed project. **Table 1-1** lists the required permits or approvals and the responsible regulatory agencies.

### **1.4 Organization of the Environmental Impact Statement**

This EIS follows the Council on Environmental Quality recommended organization (40 Code of Federal Regulations 1502.10): Chapter 1.0 provides descriptions of the purpose of and need for the Proposed Action, the role of the BLM in the EIS process, and the required regulatory actions for the proposed project; Chapter 2.0 describes the Proposed Action and alternatives, including the No Action alternative; Chapter 3.0 describes the affected environment and the direct, indirect, and cumulative impacts associated with the Proposed Action and alternatives, possible mitigation to reduce or minimize impacts, and any residual adverse effects following the implementation of mitigation; Chapter 4.0 summarizes public participation and the scoping process, and the consultation and coordination undertaken to prepare the EIS; Chapter 5.0 presents the list of EIS preparers and reviewers; Chapter 6.0 is a list of references; Chapter 7.0 contains a glossary; and Chapter 8.0 is the index. Copies of supporting documents are on file at the BLM Battle Mountain Field Office in Battle Mountain, Nevada.

***Changes to the Draft EIS are indicated in this Final EIS in bold italics.***

**Table 1-1  
Major Permits and Approvals**

<b>Federal</b>	
USDI Bureau of Land Management	Plan of Operations Rights-of-Way
U.S. Army Corps of Engineers	Jurisdictional Delineation Report concurrence
Mine Safety and Health Administration	Explosives Permit Training Plan
Federal Communications Commission	Radio Station Authorization
<b>State of Nevada</b>	
Department of Conservation and Natural Resources - Division of Environmental Protection - Bureau of Mining Regulation and Reclamation	Reclamation Permit Water Pollution Control Permit General Mining Bioremediation Facility Permit
Department of Conservation and Natural Resources - Division of Environmental Protection - Bureau of Water Pollution Control	General Permit for Storm Water Discharges Associated with Industrial Activity from Metals Mining Activities
Department of Conservation and Natural Resources - Division of Environmental Protection - Bureau of Air Quality	Class II Air Quality Operating Permit
Department of Conservation and Natural Resources - Division of Environmental Protection - Waste Management	Solid Waste Mining Site Class III Waiver
Department of Conservation and Natural Resources - Division of Wildlife	Industrial Artificial Pond Permit
Department of Conservation and Natural Resources - Division of Water Resources	Permit to Construct Tailings Dam Permit to Appropriate Public Water
Department of Human Resources – Division of Health	Radioactive Material License
Nevada State Fire Marshal	Hazardous Materials Storage Permit