ENVIRONMENTAL ASSESSMENT

Lander County Road Department
Skyline Free Use Gravel Pit

LANDER COUNTY, NEVADA

April 2009

EA NUMBER: NV063-EA07-039

Lead Agency:

BUREAU OF LAND MANAGEMENT
Battle Mountain Field Office
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ENVIRONMENTAL ASSESSMENT
SKYLINE FREE USE GRAVEL PIT
LANDER COUNTY ROAD DEPARTMENT

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1. INTRODUCTION

Introduction

Lander Country Road Department is proposing to renew the Skyline Free Use Gravel Permit. Their Free Use Application and Permit (Bureau of Land Management (BLM) case file number NVN-060483) expired on April 4, 2006. The Skyline Gravel Pit is highly used by the Lander County Road Department as it is the primary source for gravel material within the Battle Mountain Area. The gravel pit is located in MDB&M T. 32 N., R. 46 E, section 34, W2NW,NWSW and is approximately 5.88 acres in size (Figure 1).

Purpose and Need

The purpose of this action is to renew the free use gravel permit for Lander Country Road Department. Lander Country needs this renewal for maintenance of approximately 100 miles of roads within Lander County (see Figure 1).

Plan Conformance

The proposed action conforms to the Shoshone-Eureka Resource Management Plan (RMP), and is specifically provided for in the in the Shoshone-Eureka Resource Area Record of Decision, approved February, 1986:

Objective 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.

Objective 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.

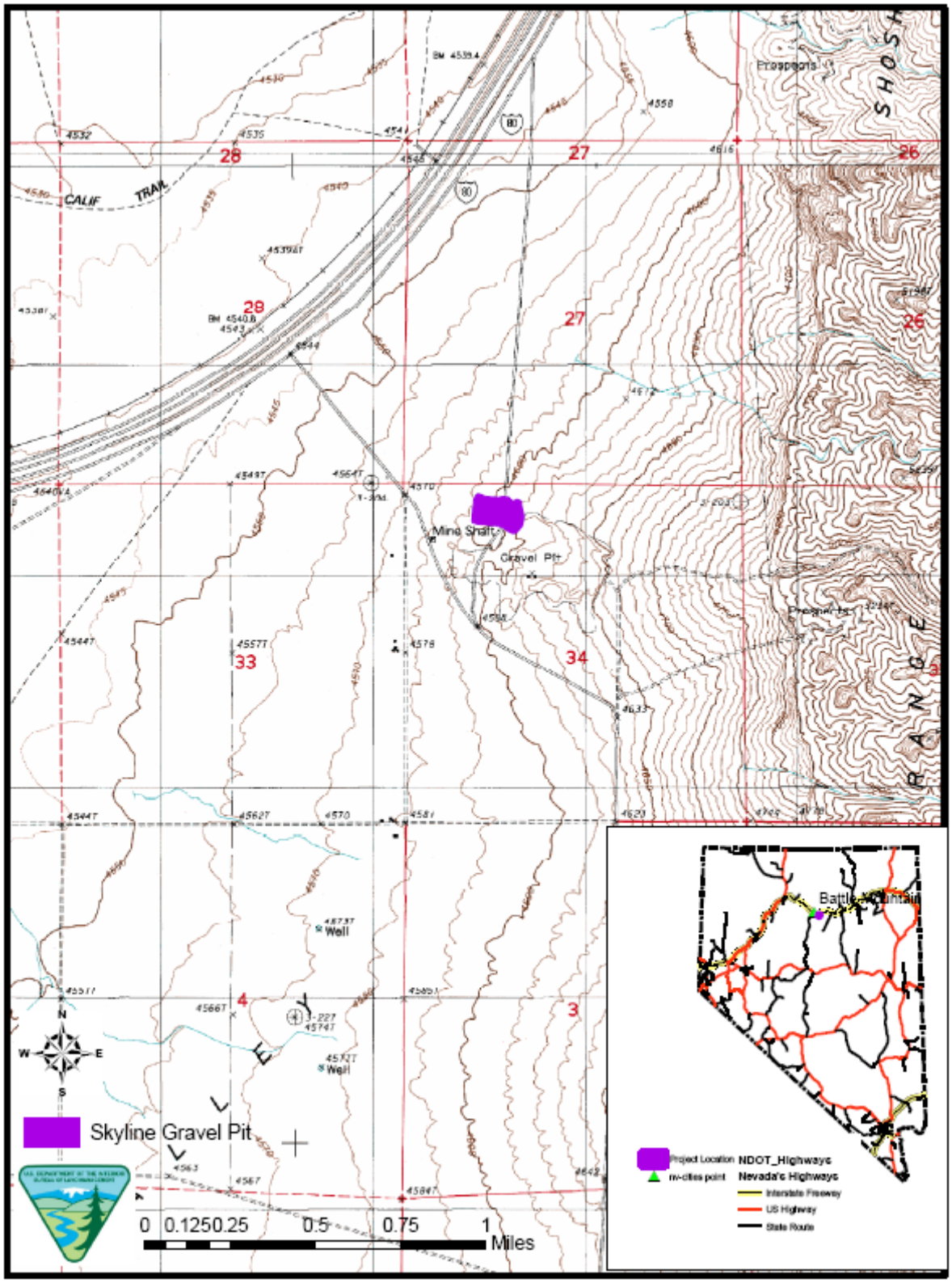
Relationship to Laws, Regulations, Policies, Plans or Other Environmental Analyses

BLM grants free use of materials to Lander County Road Department for road maintenance and construction under the Code of Federal Regulations (CFR) 3604.

Identified Issues

The Project was internally scoped to the BLM Interdisciplinary (ID) Team. BLM personnel identified the critical elements and other resources to be addressed in this document as outlined in Section 3. No specific issues related to the proposed action were identified.

Figure 1. Skyline Gravel Pit Location Map



2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Overview and Location of Proposed Project

The Skyline Gravel Pit is located in MDB&M T. 32 N., R. 46 E, section 34, W2NW,NWSW (Figure 1). Lander County Road Department proposes to renew the Free Use Gravel Permit and expand Skyline Gravel Pit from 5.88 acres to 10.0 acres. The pit would most likely be expanded in the southeast portion of the existing pit. The proposed action would result in the continuing of material removal until the material supply is exhausted, there is no longer a demand for the material, or the pit expands beyond the dimensions described in this EA, not to exceed 10 years. All surface disturbances would be restricted to the specific area needed for extraction, processing, and stockpiling of aggregate materials. All physical access to the pit site would be via existing roadways.

All stockpile slopes, which would be no steeper than 3:1 (horizontal to vertical) would be located within the disturbed area of the existing pit.
No crusher would be located on site. The material would be screened on site to ¾" minus and placed in stockpiles. As material is needed, be loaded using loaders sized 644 or smaller and placed in dump trucks or belly dump trailers.
No bulk fuels and lubricants would be located on site. Lander County Road Department would reclaim the gravel pit to BLM standards. Reclamation would consist of:

- Removal of all ancillary equipment.
- All pit sloped would be graded to slope no steeper than 3:1 and would be stabilized to prevent erosion, and
- Reseeding of the area using a BLM approved seed mixture that is certified to be weed free (Appendix A).

Site Access

Existing roads would be roads would be used to access this site and no additional road building would be required.

Alternatives to the Proposed Action

NEPA requires that a reasonable range of alternatives to the Proposed Action be considered that could feasibly meet the objectives of the Proposed Action as defined in the purpose and need for the Project [40 CFR 1502.14(a)]. The range of alternatives required is governed by a "rule of reason" (i.e., only those feasible alternatives necessary to permit a reasoned choice need be considered). Reasonable alternatives are those that are practical or feasible based on technical and economic considerations [46 Federal Register 18026 (March 23, 1981), as amended; 51 Federal Register 15618 (April 25, 1986)].
Alternatives to the Proposed Action must be considered and assessed whenever there are unresolved conflicts involving alternative uses of available resources [BLM NEPA Handbook H-1790-1, page IV-3 (BLM 1988)]. No unresolved conflicts regarding the proposed action have been identified to drive the creation of any alternatives which would meet Lander County Road Department's purpose for the Project: to obtain gravel material for maintenance of Lander County Roads. Therefore, no alternatives (other than the required "No Action Alternative") will be analyzed in this Environmental Assessment.

No Action Alternative

Under the No Action Alternative, the Free Use Gravel Permit of the Skyline Gravel Pit would remain in expiration status and no gravel material would be removed, nor would the pit be expanded. Lander County Road Department would commence reclamation of the existing pit. This alternative would also result in Lander County Road Department developing a new gravel pit to meet the gravel material needs.

3. DESCRIPTION OF THE AFFECTED ENVIRONMENT

Critical Elements

Critical elements of the human environment are subject to requirements specified in statute, regulation, or executive order and must be addressed in any document prepared pursuant to NEPA. In addition to the critical elements of the human environment, the BLM considers other resources and uses that occur on public lands and the issues that may result from the implementation of the Proposed Action. Other potential resources and uses that may be affected are listed on the bottom of Table 1.

The Proposed Action has been analyzed to assess direct, indirect, and cumulative impacts to the critical elements of the human environment and the other resources listed below in Table 1. Those elements or resources marked as “not present” in Table 1 are not present within or adjacent to the Project area and therefore will not be further analyzed in this EA. Those elements or resources marked as “present not affected” may be present within or adjacent to the Project area but would not be impacted by the Proposed Action. Those elements or resources marked as “present affected” may be found within or adjacent to the Project area and may be impacted by the Proposed Action.

Table 1. Critical Elements of the Human Environment and Other Resources Affected by the Proposed Action.

Critical Element	Present Affected	Present Not Affected	Not Present	Comments
Air Quality		X		
Areas of Critical Concern			X	The proposed Project is not located in or near any ACECs
Cultural Resources			X	The project area was inventoried in 1981 (6-351) and no cultural sites were identified.
Environmental Justice			X	There are no environmental justice issues associated with the Project Area
Floodplains			X	There are no floodplains within the proposed project area.
Noxious Weeds	X			
Migratory Birds		X		Extremely low value habitat, Migratory Birds not affected.
Native American Religious Concerns			X	There are no Native American religious concerns within the proposed Project Area.
Prime or Unique Farmlands			X	The proposed Project area does not contain and prime or unique farmlands
Threatened and Endangered Species			X	The proposed Project area does not have threatened or endangered species.
Wastes, Hazardous or Solid		X		No hazardous materials will be used on site.
Water Quality (Surface and Ground)			X	Water quality would not be affected by the proposed Project.
Wetlands and Riparian Zones			X	There are no wetlands or riparian zones within the proposed Project Area.
Wild and Scenic Rivers			X	There are no wild and scenic rivers within the proposed Project Area.
Wilderness Study Areas			X	There are no wilderness study areas within the proposed Project Area.
Other Resources				
Visual Resources		X		
Minerals	X			
Recreation		X		
Soils	X			
Vegetation	X			
Rangeland Resources		X		
Lands and Realty		X		

Air Quality

Air quality in the Project area has been designated as “attainment/unclassified” (which means it either meets, or is assumed to meet, the applicable federal ambient air quality standards) for all standard (“criteria”) air pollutants (U.S. Environmental Protection Agency 2006). The Nevada Department of Conservation and Natural Resources (NDCNR), Division of Environmental Protection (NDEP), Bureau of Air Pollution Control (BAPC) has been delegated responsibility by both the federal Environmental Protection Agency (USEPA) and the State of Nevada to regulate air pollution concentrations and the emissions of air pollutants in this area. The Project area is not located in or adjacent to any mandatory Class I (most restrictive) Federal air quality areas, U.S. Fish and Wildlife Service Class I air quality units, or American Indian Class I air quality lands.

Noxious Weeds and Invasive Species

Noxious weeds (designated so by Nevada Revised Statute) and invasive species are typically non-native plants that quickly infest an area, if left unchecked. When introduced to an area noxious weeds can quickly dominate native species, particularly in areas with ground disturbance and where their populations are uncontrolled, making them more difficult to control. Noxious weeds and invasive species can expand to such a degree that beneficial plant species can be out-competed for vital natural resources.

Inventories of noxious weeds and invasive species have been conducted throughout the Battle Mountain area, more specifically abandoned gravel pits. Road-sides and large disturbed areas close to riparian habitat (or those that retain standing water) have an increasing presence of salt cedar (tamarisk), hoary cress and Musk or Canada thistle. At this time, a survey of the Project area resulted in no noxious weeds (salt cedar) being present, however, invasive and non-native species were found including cheatgrass, Russian thistle and halogeton. Canyons, riparian areas and road-sides in close proximity to the Project area are infested with the noxious weeds salt cedar, Musk and Canada thistle, hoary cress and tall white-top, as well as those invasive species already listed.

Geology and Minerals

The Skyline Gravel Pit is located approximately 2 miles east of the base of the Shoshone Mountains. Gravel within the Skyline Pit is comprised of coarse cobbles of Cambrian to Devonian sedimentary rocks, Jurassic to Tertiary intrusive rocks that have eroded off of the Shoshone Mountains.

Soils

Soil types in the Project area were identified using the Soil Surveys of Lander County, Nevada North Part (Volume I and II); Lander County, Nevada South Part; Humboldt County, Nevada East Part; and Eureka County, Nevada Northeast Part by the National Resources Conservation Service (NRCS). Basic soil configurations are aridisols. These are found on the alluvial fans below the mountain ranges and in the intervening valleys. They can range from clayey to sandy, with gravelly loam to sandy loams.

Vegetation

Vegetation is sparse within the proposed Project area. The little vegetation that is there is dominated by cheatgrass, Russian thistle, rabbit brush, broom snakeweed and halogeton (Stamm, 2008).

Rangeland Resources

The Project area is located in the north central portion of the Argenta Allotment. The allotment consists of 148,738 acres of public land and 182,782 acres of private land. There are a total of 17,203 active animal unit months (AUMs). An AUM is the amount of forage needed to sustain one cow, five sheep, or five goats for a month.

Recreation

Recreation use within the Project area is low and mainly associated with all terrain vehicles (ATV) usage. There are no designated campgrounds or recreation facilities within the Project area.

Visual Resources

The Bureau of Land Management initiated the visual resource management (VRM) process to manage the quality of landscapes on public land and to evaluate the potential impacts to visual resources resulting from development activities. VRM class designations are determined by assessing the scenic value of the landscape, viewer sensitivity to the scenery, and the distance of the viewer to the subject landscape. These management classes identify various permissible levels of landscape alteration, while protecting the overall visual quality of the region. They are divided into four levels (Classes I, II, III, and IV). Class I is the most restrictive and Class IV is the least restrictive (BLM 1986).

The Project area is located in a VRM Class IV area. The objective of Class IV is to provide for management activities that require major modification of the existing landscape character. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the major focus of viewer attention. Every attempt, however, should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic landscape elements (BLM 1986).

Lands and Realty

A right-of-way (ROW) has been granted by the BLM on the public lands within the Project area for a road (NVN-060171). This right-of-way, which is held by Lander County is the road used to access the gravel pit.

4. ENVIRONMENTAL CONSEQUENCES

Proposed Action

Air Quality

Air Quality may be affected the by generation of dust as a result of gravel excavation, processing, and removal activities and travel on unpaved roads. However, these activities would be periodic and short in duration. Areas that are denuded of vegetation would be subject to a higher degree of wind erosion than undisturbed ground. Impacts to air quality would be reduced by requiring Lander County to implement dust suppression efforts such as application of water to dusty areas. Based on the fact that gravel removal activities are short term in nature and the dust suppression would be utilized, direct and indirect impacts to air quality, are expected to be minimal and air quality standards would not be exceeded.

Noxious Weeds and Invasive Species

Noxious weeds and invasive species are spread by the activities of people, equipment, animals and by natural processes, such as wind and water. The potential for increased weed infestations rises proportionally with increased cultural activities such as ground disturbance, road maintenance, grazing and motorized recreational use.

A large majority of abandoned gravel pits in the Battle Mountain area are infested with patches of salt cedar (tamarisk). Once established, the control of large stands of salt cedar becomes more difficult and costly and resulting in the dispersal and establishment of salt cedar off-site. Active mitigation measures, including control (treatment) and the re-vegetation of abandoned gravel pits with certified weed-free seed mixtures would reduce the spread and establishment of noxious weeds and invasive species. Following the implementation of these mitigation measures and special lease stipulations the potential for the spread of noxious weeds and invasive species would still remain, however, the impacts expected would be minimal and easier to control.

Geology and Minerals

Removal of gravel material would result in the removal of various geomorphological features within the project area. However, due to the small size of the gravel pit (10 acres) and because there is no substantial topography within the project area, this impact would be minimal.

Soils

The Project would disturb as much as 4.12 additional acres, which would reduce the productivity of the soil. However, upon completion of the project, the area would be re-sloped and re-seeded, reducing any potential long term impacts.

Vegetation

Because vegetation within the project area is minimal, impacts to vegetation would be negligible. However, these impacts would be decreased because upon completion of the project, the area would be reseeded using a BLM approved seed mix that is certified to be weed free (Appendix A.)

Rangeland Resources

This Project would disturb up to 4.12 acres, a small portion of the 148,921 total acres within the allotment. No AUMs would be reduced as a result of this Project. All Project activities would be located away from sources of water in the vicinity and would not prevent livestock access to the available sources of water in the area. There should be no residual impacts to range resources from the Project.

Recreation

The Project does not propose any activity which would prevent continued access by recreational users to the public lands within the Project area.

Visual Resources

There would be temporary visual impacts during actual mining of material. However, due to the intermittent nature of the activity, impacts are anticipated to be minimal. Class IV objectives would continue to be met.

Lands and Realty

Mining of gravel would not result in any impacts to lands and realty as no improvements or upgrades would be made to the existing roads.

The No Action Alternative

Under the No Action Alternative, the Free Use Gravel Permit of the Skyline Gravel Pit would remain in expiration status and no gravel material would be removed, nor would the pit be expanded. No activities besides reclamation of the pit would be undertaken if the No Action Alternative were selected. Reclamation activities, which would include re-sloping of the pit walls and reseeding, would result in increase in native vegetation and a decrease in recreation activities (ATV usage). There would be no effects on air quality; cultural resources; invasive, nonnative species; migratory birds; Native American consultation, special status species; wastes (hazardous or solid); water quality (surface and ground); geology and minerals; soils; wildlife; range resources; recreation; visual; water quantity; and lands and realty from implementation of the No Action Alternative.

5. CUMULATIVE IMPACTS ANALYSIS

This chapter analyzes the potential cumulative impacts from past, present, and reasonably foreseeable future projects combined with the proposed action within a cumulative assessment area. Cumulative impacts have been defined as:

> "The impact which results from the incremental impact of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (43 CFR 1508.7)."

For the purpose of this analysis, the cumulative assessment area has been defined as a one mile radius from the center of the project area and is shown on Figure 2. The time frame used for analyzing cumulative impacts associated with the proposed action is 10 years, which is the maximum time limit of a Free Use Gravel permit.

Past and Present Activities

Historic underground mining (age unknown), sand and gravel extraction, and road and interstate construction, recreation and cattle grazing have occurred within the cumulative effects area.

Reasonably Foreseeable Activities

In addition to the proposed action, additional gravel pits may be proposed within the cumulative effects area as well as road maintenance and continued cattle grazing, and recreation. Any future proposed activities within the cumulative assessment area would be analyzed in a site-specific environmental analysis (including the analysis of cumulative impacts).

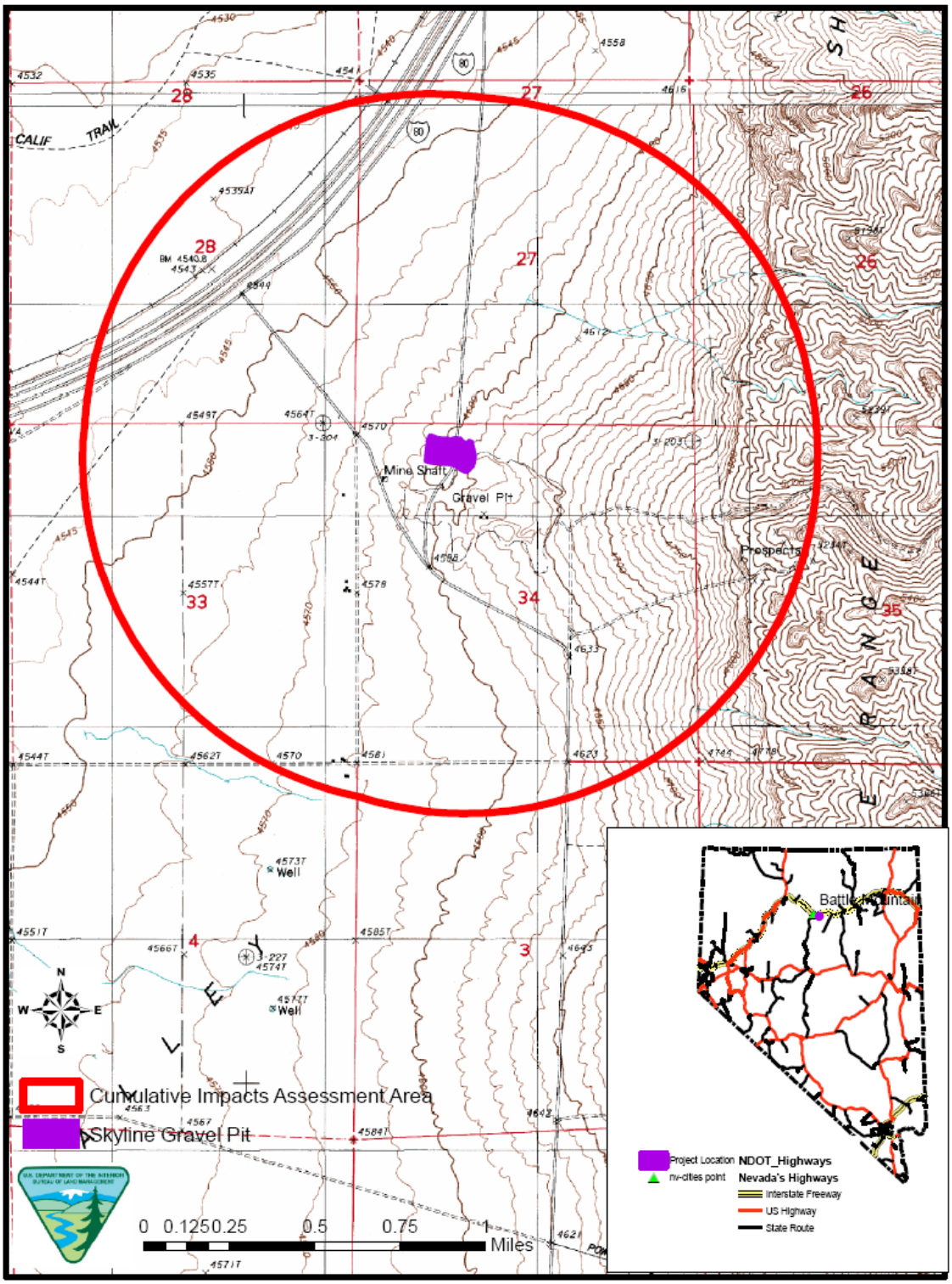
Cumulative Impacts Proposed Action

Impacts from past and present actions and reasonably foreseeable future actions are expected to be short term and minimal to all resources analyzed (air quality, invasive, nonnative species, geology and minerals, soils, vegetation, range resources, visual resources, recreation and lands and reality) since the disturbance would be reclaimed once sand and gravel resources have been exhausted or the permit expires.

Cumulative Impacts: The No Action Alternative

Under the No Action Alternative, the Free Use Gravel Permit of the Skyline Gravel Pit would remain in expiration status and no gravel material would be removed, nor would the pit be expanded. No activities other than reclamation of the pit would be undertaken if the No Action Alternative were selected. There would be no cumulative effects on air quality; invasive, nonnative species; wastes (hazardous or solid); geology and minerals; soils; vegetation; range resources; recreation; visual resources; and lands and realty from implementation of the No Action Alternative.

Figure 2. Cumulative Impacts Assessment Area



6. COORDINATION AND CONSULTATION

List of Preparers

a. Bureau of Land Management, Battle Mountain Field Office

Christopher Cook, Archaeologist

Michael Vermeys, Weeds Coordinator

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Angelica Ordaz, Planning and Environmental Coordinator

Mike Stamm, Wildlife Management Biologist

7. REFERENCES

Bureau of Land Management (BLM). 1986. Bureau of Land Management Manual Handbook H-8410-1 Visual Resource Inventory. January 1, 1986.

Bureau of Land Management (BLM). 1988. Bureau of Land Management National Environmental Policy Act Handbook (BLM NEPA Handbook H-1790-1). October 25, 1988.

Nevada Department of Conservation and Natural Resources (NDCNR), Division of Water Resources (DWR). 2006. Lander County's Hydrographic Basins, Areas and Sub-Areas. Internet Address: http://water.nv.gov/Water%20Planning/cty-bsn/la_basin.cfm Accessed June 21, 2006.

Stamm, Mike. 2008. Personal Communication. Wildlife Management Biologist, Bureau of Land Management, Battle Mountain Field Office. January 5, 2008.

Appendix A. BLM Approved Seed Mix

Salt Desert Shrub Community [1] (For elevations at or below 5,500-feet)

Shrubs

(Select four at the listed application rates)

Species Common and Scientific Names	**Lbs./Acre *(PLS)***	**Selection**
Fourwing Saltbush (*Atriplex Canescens*)	4.0	
Shadscale (*Atriplex Confertifolia*)	4.0	
Winterfat (*Ceratoides Lanata*)	4.0	
Forage Kochia (*Kochia Prostrata*)	0.5	
Nevada Mormon Tea (*Ephedra Nevadensis*)	10.0	
Spiny Hopsage (*Grayia Spinosa*)	2.0	
Douglas Rabbitbrush (*Chrysothamnus Viscidiflorus*)	0.5	

Forbs

(Select two at the listed application rates)

Species Common and Scientific Names	**Lbs./Acre *(PLS)***	**Selection**
Scarlet globemallow (*Sphaeralcea Coccinea*)	0.50	
Palmer penstemon (*Penstemon Palmeri*)	0.25	
Lewis flax (*Lewis Flax*)	0.75	

Grasses
(Select four at the listed application rates)

Species Common and Scientific Names	**Lbs./Acre *(PLS)***	**Selection**
Crested wheatgrass (*Agropyron Cristatum*)	1.0	
Indian ricegrass (*Oryzopsis Hymenoides*)	1.0	
Great Basin wildrye (*Elymus Cinereus*)	1.0	
Bottlebrush squirreltail (*Sitanion Hystrix*)	1.0	
Inland saltgrass (*Distichlis Spicata Stricta*)	0.5	
Alkali sacaton (*Sporobolus Airoides*)	0.1	
Russian wildrye (*Elymus Junceus*)	1.0	

[1] Please place an "X" in the Selection column for the species picked and submit a copy of this form to the BLM.