

# Granite Construction Conveyor and Road Right-of-Way Project

FINAL ENVIRONMENTAL ASSESSMENT

DOI-BLM-NV-C020-2016-0008-EA

U.S. Department of the Interior  
Bureau of Land Management  
Carson City District  
Sierra Front Field Office  
5665 Morgan Mill Road  
Carson City, NV 89701  
775-885-6000

March 2016



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

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## LIST OF ATTACHMENTS

**[Note: attachments are not embedded in this document in order to maintain a small file size; attachments are available on the Project website. Look under the Navigation Pane for “Documents.”]**

Attachment A	Draft Plan of Development
Attachment B	2015 Biological Survey

## LIST OF ACRONYMS AND ABBREVIATIONS

<b>°F</b>	Degrees Fahrenheit
<b>AMSL</b>	Above Mean Sea Level
<b>APN</b>	Assessor's Parcel Number
<b>ARMPA</b>	Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment
<b>BLM</b>	Bureau of Land Management
<b>BMP</b>	Best Management Practices
<b>CESA</b>	Cumulative Effects Study Areas
<b>CFR</b>	Code of Federal Regulations
<b>CRMP</b>	Consolidated Resource Management Plan
<b>EA</b>	Environmental Assessment
<b>E.O.</b>	Executive Order
<b>EPM</b>	Environmental Protection Measure
<b>ESA</b>	Endangered Species Act
<b>GHG</b>	Greenhouse Gases
<b>Granite</b>	Granite Construction
<b>I-80</b>	Interstate 80
<b>LR2000</b>	Land and Mineral Legacy Rehost 2000 System
<b>MBTA</b>	Migratory Bird Treaty Act
<b>MSHA</b>	Mine Safety and Health Administration
<b>NEPA</b>	National Environmental Policy Act
<b>NDEP</b>	Nevada Division of Environmental Protection
<b>NDOW</b>	Nevada Department of Wildlife
<b>NDOT</b>	Nevada Department of Transportation
<b>OHMA</b>	Other Habitat Management Area
<b>POD</b>	Plan of Development
<b>RDF</b>	Required Design Feature
<b>RFFA</b>	Reasonably Foreseeable Future Actions
<b>RMP</b>	Resource Management Plan
<b>ROW</b>	Right-of-Way
<b>Stantec</b>	Stantec Consulting Services, Inc.
<b>U.S.C.</b>	United States Code
<b>USFWS</b>	United States Fish and Wildlife Service
<b>VRM</b>	Visual Resource Management

## **1.0 INTRODUCTION**

### **1.1 BACKGROUND**

Granite Construction (Granite) has submitted a draft Plan of Development (POD) for a Right-of-Way (ROW) to construct, operate, and maintain portions of an overland conveyor belt and access road to transport personnel and raw aggregate material between their mining operation and processing facility. The proposed ROW would be approximately 400 feet wide and 571 feet long (Project area), and would include a 15-foot wide road, a four-foot wide conveyor belt, and 5.5 feet on each side of the road for the road shoulders and drainage swales. The remainder of the proposed ROW (approximately 370 feet) would consist of the embankment slopes on the side of the road and conveyor belt. Figure 1 shows the location of the ROW and associated surface disturbance, which encompasses 2.1 acres with 1.8 acres of the total disturbance located on public land (Project). The Project is located in Lockwood, Washoe County, Nevada, legally described as the southeast quarter of Section 8 and the northwest quarter of Section 16 of Township 19 North, Range 21 East, Mount Diablo Baseline and Meridian.

### **1.2 PURPOSE AND NEED**

The Bureau of Land Management's (BLM's) need is established by the BLM's responsibility under Section 501 of the Federal Land Policy and Management Act of 1976 and Title 43 Code of Federal Regulations (CFR) Part 2800 to respond to Granite's POD and application for the ROW grant submitted to the BLM's Sierra Front Field Office in May 2015, revised in November 2015, and revised again in February 2016.

The purpose of the ROW is to allow Granite to construct, operate, and maintain portions of an overland conveyor belt and access road to transport personnel and raw aggregate material from mining activities on private land owned by Lockwood Investments (Washoe County Assessor's Parcel Number [APN] 084-060-13) to Granite's processing facility (APN 084-060-37) (Figure 2).

### **1.3 SCOPING AND ISSUES IDENTIFICATION**

On October 14, 2015, a BLM interdisciplinary team reviewed this Project and participated in a field visit to the Project area. Issues that were raised included:

- The potential presence of diatomaceous geologic deposits within and surrounding the Project area which could provide suitable habitat for BLM sensitive species (e.g., Churchill narrows buckwheat [*Eriogonum diatomaceium*]);
- Removal of material within the ROW would require Granite to go through the material sales process with the BLM;

- The Project’s compliance with the applicable Required Design Features (RDFs) specified within Appendix C of the Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment (ARMPA) would need to be described in the Environmental Assessment (EA);
- Storm water and erosion control measures and Best Management Practices (BMPs) would need to be described in the EA;
- All activities would need to be consistent with the BLM Carson City District Office Integrated Weed Management Plan; and
- An alternative to the Proposed Action that would co-locate the ROW with the Martin Marietta Materials’ mining operation (NVN 053288) would need to be considered in the EA.

Based on this field visit, the BLM determined which resources would require analysis as a part of this final EA (see Section 3.0).

#### **1.4 DECISION TO BE MADE**

The BLM has received a ROW application and draft POD from Granite. The draft POD is included as an attachment to this final EA (Attachment A). The BLM Authorized Officer would decide which alternative presents the best option for meeting the purpose and need, and whether to add terms and conditions (stipulations) to the selected alternative. The Authorized Officer could decide to deny the ROW application. The proposed ROW would be issued to Granite for 30 years.

#### **1.5 LAND USE PLAN CONFORMANCE STATEMENT**

The Project is in conformance with the Carson City Field Office Consolidated Resource Management Plan (CRMP), May 2001. The applicable sections of the CRMP include Resource Management Plan (RMP) Standard Operating Procedures Common to All, #4, #7, and #17:

- “All areas of new surface disturbance will be rehabilitated, where such action is necessary and practical, to replace ground cover and prevent erosion.”
- “All construction, maintenance, or rehabilitation activities on public lands will use every reasonable means to minimize erosion and soil damage, including but not limited to, construction of water bars, cross ditches, or other structures as required by the authorized officer.”
- “Revegetation of disturbed areas will be required as specified by the Bureau. The appropriate seed mixture and proper planting techniques will be specified by the Bureau.”

LND-7, RMP Administrative Actions, #6:

- “Exchanges and minor-non Bureau initiated realty proposals will be considered where analysis indicates they are beneficial to the public.”

ROW-5, RMP Standard Operating Procedures, #6 and #9:

- “The Bureau will approve the location of all rights-of-way prior to construction through an analysis of the proposed action in an environmental assessment unless the proposal is categorically excluded or adequately analyzed in a previously prepared NEPA document. The environmental assessment will include cultural resource clearances, evaluations of impacts to threatened and endangered species, visual resources and other issues raised during scoping.”
- “Revegetation of disturbed land will be required as specified by the Bureau. The appropriate seed mixture and proper planting techniques will be specified by the Bureau.”

The Project would also be in conformance with the ARMPA. The Project is within the Other Habitat Management Area (OHMA) habitat category for greater sage-grouse and the nearest active lek site is approximately 12 miles away. In OHMA areas, authorized/permitted activities must adhere to the RDFs described in Appendix C of the ARMPA (BLM, 2015a). If an RDF is not implemented, at least one of the following must be demonstrated:

- A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to the site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or inapplicable (BLM, 2015a);
- An alternative RDF is determined to provide equal or better protection for greater sage-grouse or its habitat (BLM, 2015a); and
- A specific RDF would provide no additional protection to greater sage-grouse or its habitat (BLM, 2015a).

The Project is in conformance with the applicable RDFs for the OHMA category set forth in Appendix C of the ARMPA. The Project complies with the following RDFs as described below.

**RDF General 1: Locate new roads outside of greater sage-grouse habitat to the extent practical.**

The Project has been heavily burned by fires and is dominated by Russian thistle (*Salsola tragus*), and other invasive populations including cheatgrass (*Bromus tectorum*), redstem stork's bill (*Erodium cicutarium*), and tumble mustard (*Sisymbrium altissimum*). The area is not high quality greater sage-grouse habitat, and is not located near any lek sites or breeding or brood rearing habitat.

**RDF General 2: Avoid constructing roads within riparian areas and ephemeral drainages. Construct low-water crossings at right angles to ephemeral drainages and stream crossings (note that such construction may require permitting under Sections 401 and 404 of the Clean Water Act).**

This RDF does not apply to this Project because it is not located within riparian areas or an ephemeral drainage.

**RDF General 3: Limit construction of new roads where roads are already in existence and could be used or upgraded to meet the needs of the project or operation. Design roads to an appropriate standard, no higher than necessary, to accommodate intended purpose and level of use.**

A new road is required to meet the purpose and need of the Project because there are no existing roads that may be upgraded for access to the Project without adversely affecting adjacent land use authorizations (detailed further in Chapter 2). The road for the Project would be designed to an appropriate standard and no higher than necessary.

**RDF General 4: Coordinate road construction and use with ROW holders to minimize disturbance to the extent possible.**

This Project would coordinate all road construction with the BLM and adjacent ROW holders to minimize disturbance to the extent possible.

**RDF General 5: During Project construction and operation, establish and post speed limits in greater sage-grouse habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.**

The Project would comply with Mine Safety and Health Administration (MSHA) standards and Granite has committed to a 15 mile per hour speed limit on the road to reduce impacts to wildlife, as described in Chapter 2.

**RDF General 6: Newly constructed project roads that access valid existing rights would not be managed as public access roads. Proponents will restrict access by employing traffic control devices such as signage, gates, and fencing.**

The proposed road and conveyor belt are not intended for public use and the public would be restricted from within the proposed ROW to protect public safety. No fencing is proposed around the ROW because the steepness of the slopes, and the fact that the ROW is surrounded by private property on two sides would be adequate to prevent the public from accessing the Project area.

**RDF General 7: Require dust abatement practices when authorizing use on roads.**

Granite has committed to Environmental Protection Measures (EPMs), including dust abatement measures, described in Chapter 2.

**RDF General 9: Upon project completion, reclaim roads developed for project access on public lands unless, based on site-specific analysis, the route provides specific benefits for public access and does not contribute to resource conflicts.**

Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. The road surface would be ripped and seeded. Embankment slopes would remain, but would be seeded.

**RDF General 10: Design or site permanent structures that create movement (e.g., pump jack/ windmill) to minimize impacts on greater sage-grouse habitat.**

The Project would include a conveyor belt, which creates movement; however, the Project is not within high quality greater sage-grouse habitat, nor is it in close proximity to any lek sites.

**RDF General 11: Equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.**

This RDF does not apply to this Project because it would not include aboveground facilities with structures or devices that would encourage nesting and perching of raptors, corvids, and other predators. The Project is also not within greater sage-grouse nesting or brood rearing habitat.

**RDF General 12: Control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance). All projects would be required to have a noxious weed management plan in place prior to construction and operations.**

Granite has committed to EPMS, which would include washing down vehicles prior to entering the Project area. All activities would be consistent with the BLM Carson City District Office Integrated Weed Management Plan. Granite routinely manages weeds on their Lockwood Facility just south of the ROW, and they would continue to do so in the Project area. Granite trains their crew to identify invasive and noxious weeds and all staff operating within the ROW would be supplied with a State of Nevada Weed Identification Guide. Timely revegetation would occur with a BLM-approved weed-free seed mix. A noxious weed management plan is not applicable to this Project.

**RDF General 13: Implement Project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of greater sage-grouse.**

EPMs detailed in Chapter 2 would be implemented including removal of any regulated waste from the Project area.

**RDF General 14: Locate project related temporary housing sites outside of greater sage-grouse habitat.**

This RDF does not apply to this Project.

**RDF General 15: When interim reclamation is required, irrigate site to establish seedlings more quickly if the site requires it.**

This RDF does not apply to this Project. Seasonal closures are not anticipated and interim reclamation is not anticipated.

**RDF General 16: Utilize mulching techniques to expedite reclamation and to protect soils if the site requires it.**

Granite has committed to EPMS detailed in Chapter 2, which includes mulch application following seeding to reduce erosion as part of reclamation.

**RDF General 17: Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.**

Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. The road surface would be ripped and seeded. Embankment slopes would remain, but would be seeded.

**RDF General 18: When authorizing ground-disturbing activities, require the use of vegetation and soil reclamation standards suitable for the site type prior to construction.**

Revegetation would include the use of a BLM-approved weed-free seed mix, and reclamation standards are suitable to the site type.

**RDF General 19: Instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the greater sage-grouse breeding (e.g., courtship and nesting) season. In addition, pets shall not be permitted on site during construction.**

Granite personnel would be instructed to avoid harassment and disturbance of wildlife, and pets would not be permitted within the Project area. However, this RDF does not apply to this Project because no greater sage-grouse breeding or broad rearing habitat is known to occur within the Project area. The nearest active lek is 12 miles northeast of the Project area.

**RDF General 20: To reduce predator perching in greater sage-grouse habitat, limit the construction of vertical facilities and fences to the minimum number and amount needed and install anti-perch devices where applicable.**

This RDF does not apply because fencing and other vertical facilities are not proposed and greater sage-grouse are unlikely to utilize habitat in the Project area.

**RDF General 21: Outfit all reservoirs, pits, tanks, troughs or similar features with appropriate type and number of wildlife escape ramps.**

This RDF does not apply to this Project because no reservoirs, pits, tanks, troughs or similar features are proposed.

**RDF General 22: Load and unload all equipment on existing roads to minimize disturbance to vegetation and soil.**

Staging areas for the project would occur on private land.

**RDF LR-LUA 1: Where new ROWs associated with valid existing rights are required, co-locate new ROWs within existing ROWs or where it best minimizes impacts in greater sage-grouse habitat. Use existing roads or realignments of existing roads to access valid existing rights that are not yet developed.**

This RDF does not apply to this Project because there are no existing ROWs within the area that would allow for ROW co-location without adversely affecting adjacent land use authorizations, which is further described in Chapter 2.

**RDF LR-LUA 2: Do not issue ROWs to counties on newly constructed energy/mining development roads, unless for a temporary use consistent with all other terms and conditions included in this document.**

This RDF does not apply to this Project.

**RDF LR-LUA 3: Where necessary, fit transmission towers with anti-perch devices in greater sage-grouse habitat.**

This RDF does not apply to this Project.

## **1.6 RELATIONSHIPS TO STATUTES, REGULATIONS, AND OTHER PLANS**

The Proposed Action and alternatives comply with the following federal, State, and local plans to the maximum extent possible:

- National Environmental Policy Act of 1969 (NEPA) (42 United States Code [U.S.C.] § 4321 *et seq.*);
- Federal Land Policy and Management Act of 1976 (43 U.S.C. § 1701 *et seq.*);

- National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470f);
- Consultation and Coordination with Indian Tribal Governments (Executive Order [E.O.] 13175).
- Safe Water Drinking Water Act of 1974, as amended (42 U.S.C. § 300f *et seq.*);
- Migratory Bird Treaty Act (MBTA) (1918 as amended) and E.O. 13186;
- Endangered Species Act (ESA) of 1973; and
- Washoe County Master Plan and Development Code.

The Project already has approved Special Use Permits through Washoe County (SPW1-5-94 and SW04-020). The Project would require a modification to the existing Washoe County Air Quality Permit. A grading permit would need to be processed through Washoe County prior to construction of the Project.

## 2.0 ALTERNATIVES

### 2.1 DESCRIPTION OF ALTERNATIVES

#### 2.1.1 Alternative A: Proposed Action

The Proposed Action would include the construction, operation, and maintenance of portions of an overland conveyor belt and access road. The proposed ROW would allow access from private land owned by Granite (APN 084-060-37) to private land owned by Lockwood Investments Company, Ltd. (APN 084-060-13). The ROW would allow the transporting of material and personnel between the two properties. The conveyor belt would be the primary means of transporting raw aggregate material from APN 084-060-13 to APN 084-060-37, and the road would be used for vehicle access to and from the private properties as well as for construction and maintenance of the conveyor belt. However, the road may also be used to transport raw material via haul trucks (Figure 2).

The proposed ROW on BLM administered land would be approximately 400 feet wide and 571 feet long. The total proposed ROW area would be 2.1 acres, which would incorporate the entire disturbance area including the embankment slopes adjacent to the road. However, the total acres of disturbance on BLM administered land associated within the conveyor belt and road would be 1.8 acres (Figure 3). This disturbance acreage would include the total extents of disturbance associated with the road, conveyor belt, drainage swales, and embankments.

The proposed conveyor belt and access road on BLM administered land would measure approximately 33 feet long (measuring from the road center line), 30 feet wide, including 15 feet for the road travel way, four feet for the conveyor belt, and 5.5 feet on each side of the road for the road shoulder and drainage swales (Figures 3 and 4). The remainder of the ROW (approximately 370 feet) would consist of the embankment slopes on the sides of the road and conveyor belt. The drainage swales would be constructed at a 2H:1V (horizontal to vertical) gradient with a 1.5-foot minimum depth. The slopes on each side of the road cut would be constructed at a 1.5H:1V gradient (Figure 4). The road within the proposed ROW would be constructed and maintained to comply with MSHA standards.

The grade of the proposed road along BLM administered land would be approximately 1.5 percent (Figure 3). The street crown grade would be approximately two percent. The roadway would be surfaced with a minimum of four inches of Type 2 aggregate base (Figure 4). Total cut volume for construction of the proposed road and conveyor belt within the proposed ROW would be 120,100 cubic yards with a maximum cut of 117 feet. A cut and fill diagram is shown in Figure 4. All cut material removed from the ROW would be transported to private property owned by Granite for reclamation of portions of Granite's Lockwood facility. Granite would purchase this material from the BLM through a mineral materials sale agreement.

Drainage swales would be constructed between the slopes and road shoulders (Figure 4) to manage both uphill run-on and downhill run-off. Storm water run-off within the proposed ROW would be conveyed northeast within the drainage swales using rock lined ditches and check dams adjacent to the proposed road to sediment ponds on private property owned by Lockwood Investments Company, Ltd. (APN 084-060-13). Berms and swales would keep flows on site and direct flows to the rock lined ditches where appropriate.

The proposed road and conveyor belt are not intended for public use and the public would be restricted from within the proposed ROW to protect public safety. No fencing is proposed around the ROW because the steepness of the slopes and the fact that the ROW is surrounded by private property on two sides would be adequate to prevent the public from accessing the Project area.

### *Construction*

The method of construction for the proposed road and conveyor belt would be conventional earth moving equipment for the purposes of excavation and embankment construction. Granite would be responsible for all road and conveyor belt construction within the ROW. The equipment expected to be used for construction of the proposed road and conveyor belt within the ROW would include:

- One excavator;
- One bulldozer;
- One grader;
- One water truck;
- One compactor;
- Two haul trucks; and
- One pickup truck.

During construction, a water truck would be utilized to control dust. Dust control additives may also be used. All work would be conducted within the proposed ROW and no temporary use areas would be needed. All equipment storage would occur on private land on either Granite's property (APN 084-060-37) or property owned by Lockwood Investments Company, Ltd. (APN 084-060-13).

It is anticipated that a work force would require at least one person per piece of equipment used plus one construction foreman. Assuming the list of potential equipment detailed above, the estimated work force within the proposed ROW during construction would be eight persons.

No seasonal restrictions for construction activities are anticipated. When specific compaction densities are required, material would not be placed or compacted during freezing temperatures because compaction requirements are difficult to meet in freezing temperatures.

The volume of traffic anticipated is seasonal and based on the demand for aggregate material. The conveyor belt would handle most of the transferring of aggregate material from APN 084-060-13 to APN 084-060-37, so actual truck traffic (i.e., haul trucks and pick-up trucks) on the road would be reduced after the conveyor belt is constructed and fully operational. However, during construction of the road and conveyor belt, during the initial stages of operations, and for maintenance, vehicle traffic may result in up to 25 vehicle trips per hour.

The use of industrial wastes and toxic substances in the construction of the proposed road and conveyor belt would not be necessary. Construction, operations, and maintenance activities would include normal use of gasoline and diesel fuel, and lubricants for operation of equipment. Granite would comply with applicable state and local statutes regarding the use and handling of hazardous materials (i.e., petroleum products). Granite would provide appropriate spill kits for any petroleum spills resulting from normal vehicle use. All fuel storage would occur on Granite's property, which has implemented a spill prevention, control, and countermeasure plan. All hazardous materials (fuel/petroleum products) would be transported, used, stored, and disposed of in full compliance with applicable state, local, and federal law.

#### *Operation and Maintenance*

Operation within the proposed ROW would occur 365 days a year. Hours of operations would typically occur during daylight hours, but operations may occur up to 24 hours per day, seven days a week, depending on weather conditions. The most frequent use of the proposed ROW would be in the months of March through November. General maintenance of road and conveyor belt within the proposed ROW would be performed by Granite. Daily inspections would be made during workdays. If the road were inactive for any period, it would be inspected prior to use. Water trucks would be used to control dust within the proposed ROW during operation and maintenance. Equipment that would be used for maintenance work and snow removal would include, but is not limited to, graders and bulldozers. Seasonal closures would not be anticipated. Granite would inform the BLM immediately if maintenance or repair activities within the proposed ROW would involve excavation or extensive surface disturbance.

#### *Site Stabilization and Reclamation*

Soils removed during construction would be used for reclamation of surface disturbance on private land owned by Granite southwest of the proposed ROW. None of the cut material removed from the ROW would be stored within the ROW for future reclamation purposes. After construction of the road improvements, all embankment slopes constructed would be seeded with

a certified weed-free seed mix approved by the BLM. The roadway would be stabilized with aggregate base and water run-on and run-off would be controlled with drainage swales adjacent to the road shoulder.

Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. The road surface would be ripped and seeded. No structures would be left or abandoned in place. Embankment slopes would remain, but would be seeded. The seed mix used for revegetation would be approved by the BLM and all seeds would have a minimum pure live seed. Seeding procedures would be dependent upon site characteristics. The most likely method would be broadcast seeding. Broadcast seed would be covered by harrowing or raking to ensure germination and establishment. Seed application would not occur during windy days. During reclamation, soil disturbance would be minimized and limited to the areas that require ripping and seeding treatments.

Reclamation measures would comply with the conditions set forth in the Special Use Permits approved by Washoe County (SPW1-5-94 and SW04-020), which includes a Mine Plan and Reclamation Plan. This proposed Project would comply with the reclamation measures set forth in the Mine Plan and Reclamation Plan on file with Washoe County. Relevant reclamation measures are described below under the EPMs.

#### *Environmental Protection Measures*

Granite has committed to the following EPMs to prevent unnecessary or undue degradation during construction and operation activities. These EPMs include but are not limited to BMPs derived from the Truckee Meadows Construction Site Best Management Practices Handbook (Farr West Engineering, 2015).

#### Water Quality and Erosion Control

- All disturbed slopes and cut areas would be revegetated utilizing a BLM-approved weed-free seed mix following construction to help prevent erosion;
- Following construction activities, areas such as cut slopes and embankment slopes would be seeded as soon as practicable and safe;
- To reduce erosion in channels, swales or ditches caused by high flow velocities, installation of check dams would occur which would be constructed of rocks or gravel bags;
- Check dams would be inspected regularly during a runoff event for sediment buildup and signs of erosion under or around the dam;
- Check dams would be removed when no longer needed;

- Wherever possible, operations would preserve native vegetation on steep slopes;
- Construction activities would be sequenced as to minimize exposure of un-stabilized soils to erosion by wind, rain, and runoff. Construction activities would limit the amount of continuously connected disturbed soil areas;
- Fiber rolls, gravel bag barriers, and silt fences would be used where applicable to control storm water runoff and limit erosion during construction;
- Fiber rolls placed on slopes 2H:1V or steeper would be spaced 10 feet or less;
- Inspection of site design features that are intended to block or filter storm water runoff would occur weekly during construction activities to ensure they are adequate to prevent sediment transport offsite;
- All sediment and erosion control measures would be inspected regularly, and maintenance/repairs performed, as needed;
- All site design features that are intended to block or filter storm water runoff would be inspected before and after storm events to ensure they are functioning properly. For prolonged rainfall events, these site design features would be inspected daily; and
- Accumulated sediment in BMPs shall be removed within seven days after a storm water runoff event or prior to the next anticipated storm event whichever is earlier. Sediment must be removed when the BMP design capacity has been reduced by 50 percent or more.

#### Noxious Weeds

- All vehicles would be washed down prior to entering the site to reduce the spread of weeds;
- Granite would control noxious, invasive weeds within the Project area in coordination with the BLM; and
- All activities would be consistent with the BLM Carson City District Office Integrated Weed Management Plan.

#### Air Quality

- Water would be applied to the ground during construction and utilization of disturbed areas, as necessary, to control fugitive dust emissions;
- All requirements of the Authority to Construct Permit issued by Washoe County would be adhered to, and any permits, or modifications to existing permits needed for construction activities would be obtained; and
- Open burning of construction trash would not occur.

## Wildlife

- To minimize conflict and impacts to wildlife, Granite would adhere to a speed limit of 15 miles per hour when traveling on the road. Operators would be trained to monitor for the presence of larger wildlife such as deer and antelope that may cross the proposed road. If wildlife of any size is encountered while operating on the proposed road, vehicle operators would yield to the wildlife;
- If surface disturbance is initiated during the migratory bird breeding season (April 1 through July 31), a qualified biologist would survey the area prior to land clearing activities. Clearance surveys would occur within the Project area, including a 300-foot buffer around the Project area. Clearance surveys for migratory birds are only valid for 14 days. If surface disturbance for the specific location does not occur within 14 days of the survey, another survey would be needed. However, if the vegetation has been fully cleared from the work area within the 14-day clearance survey time frame, no additional clearance surveys would be required for the disturbed area because it would no longer contain potential migratory bird nesting habitat. If active nests are located, or if other evidence of nesting (i.e., mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a 300-foot buffer would be delineated and the Project area avoided, preventing destruction or disturbance to nests until they are no longer actively breeding or rearing young, or until the young have fledged. Granite's biologist would inform Granite when the birds have left the nest. Granite would not conduct surface disturbing activities within the exclusion zone until the biologist determines that the birds are no longer nesting; and
- Granite would avoid direct physical disturbance (e.g., grading) to rock outcrops that are identified by a qualified biologist (in coordination with the BLM) as providing potential bat roosting habitat on BLM administered land.

## Cultural, Paleontological, and Native American Resources

- Pursuant to 43 CFR 10.4(g), Granite would notify the BLM authorized officer, by telephone, and with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined in 43 CFR 10.2). Further, pursuant to 43 CFR 10.4 (c) and (d), the operator would immediately stop all activities in the vicinity of the discovery and not commence again for 30 days, or when notified to proceed by the BLM authorized officer;
- In the event that previously undiscovered paleontological resources are discovered in the performance of any surface disturbing activities, the item(s) or condition(s) would be left intact and immediately brought to the attention of the authorized officer of the BLM. If significant paleontological resources are found, avoidance, recordation, and data recovery would be required;
- Any cultural resource discovered by the permit holder, or any person working on their behalf, during the course of activities on federal land would be immediately reported to the BLM Authorized Officer by telephone, with written confirmation. The permit holder would suspend all operations within 100 meters (330 feet) of such discovery and protect it until an evaluation of the discovery can be made by the authorized officer. If the BLM

determines, in consultation with the Nevada State Historic Preservation Office, that the site is or may be eligible for the National Register of Historic Places, a BLM archaeologist would determine an exclusion zone adequate to protect the resource. Granite would not conduct any surface disturbing activities within this exclusion zone without further authorization from the BLM, which may require further environmental and/or cultural analyses. The holder is responsible for the cost of evaluation and mitigation. Operations may resume only upon written authorization to proceed from the authorized officer; and

- Although the possibility of disturbing Native American gravesites within the proposed ROW is extremely low, inadvertent discovery and Native American Graves Protection and Repatriation Act procedures must be followed if any human remains or associated grave goods are disturbed. Under the Native American Graves Protection and Repatriation Act, section (3)(d)(1), it states that the discovering individual must notify the land manager in writing of such a discovery. If the discovery occurs in connection with an authorized use, the activity, which caused the discovery, is to cease and the materials are to be protected until the land manager can respond to the situation.

#### Livestock Grazing

- If existing fences and gates are damaged or destroyed by construction activities, they would be repaired or replaced to their original condition, as required by the landowner or the land management agency. Temporary gates would be installed only with the permission of the landowner or the land management agency.

#### Wildland Fires

- Wildland fires would immediately be reported to the BLM Sierra Front Interagency Dispatch Center at 775-883-5995. Information reported would include the location (latitude and longitude if possible), fuels involved, time started, who or what is near the fire, and the direction of fire spread;
- List of emergency phone numbers would be available so that the appropriate firefighting agency can be contacted in case of a fire;
- All Granite vehicles would carry at a minimum a shovel and a conventional fire extinguisher;
- Vehicle catalytic converters on Granite vehicles that would enter and leave the proposed ROW on a regular basis, would be inspected often and cleaned of all flammable debris;
- Personnel would be responsible for being aware of and complying with the requirements of any fire restrictions or closures issued by the BLM Carson City District Office, and as publicized in the local media;
- All applicable state and federal fire laws and regulations would be complied with, and all reasonable measures would be taken to prevent and suppress fires; and
- Personnel would not be allowed to smoke within the proposed ROW.

### Hazardous Materials and Solid Waste

- Granite would comply with all State of Nevada and local regulations regarding the storage and transportation of petroleum products. Spill kits would be stored onsite and/or in Project equipment and vehicles during construction, operation, and maintenance activities, and would be made readily available to all personnel. Absorbent mats and pads would be immediately placed under any equipment observed to have a fluid leak to prevent possible ground contamination;
- When practicable, equipment maintenance and re-fueling would be performed off site. In the event of oil, fuel, lubricating grease, or other equipment leaks, cleanup would be conducted as soon as possible. Any contaminated soil would be removed, managed, and disposed of at an off-site facility in compliance with state, local, and federal regulations. Spill kits would be stored onsite and/or in Project equipment and vehicles during construction, operation, and maintenance activities, and would be made readily available to all personnel;
- In the event of a major spill, the following actions would be taken in addition to any federal, State, and local health and safety regulations;
  - Contain the spread or migration of the spill using the on-hand supply of erosion control structures and/or by creating dirt berms, as feasible and necessary;
  - Regulated wastes would be removed from the Project area and disposed of in a State, federal, or local designated area; and
  - If a spill of a petroleum constituent is considered to meet the reportable quantity per the Nevada Division of Environmental Protection's (NDEP) guidelines (greater than 25 gallons or greater than three cubic yards of impacted material) or a reportable quantity for hazardous waste is released based on the United States Environmental Protection Agency guidelines established under Title III List of Lists (40 CFR Part 302), the BLM and NDEP, via their Spill Reporting Hotline at 888-331-6337, would be notified within 24 hours and the appropriate remedial actions and confirmation sampling would be conducted under the direction of the NDEP. A follow-up call to the BLM Sierra Front Field Office would be provided immediately afterwards.
- All fueling equipment would be equipped with automatic shut-off nozzles to contain drips;
- All vehicles would be inspected daily for leaky hoses, gaskets, or other problems;
- No detergents, solvents, degreasers, or other chemical products would be used on site for on-site vehicle cleaning; and
- All construction waste, including trash and litter, garbage or solid waste, biodegradable debris, petroleum products and other materials would be removed from BLM-

administered public land to an authorized disposal facility. No wastes or surplus construction materials would be left on BLM-administered public land.

### Reclamation and Revegetation

- All disturbed land shall be contoured and seeded no later than the month of March in the spring or the month of November in the fall;
- Revegetation on steep slopes would include the use of a jute erosion control blanket under the seed mix or other approved method of soil stabilization to be used in conjunction with the reseeded to promote growth and soil stabilization;
- Finished slope faces shall be contoured to have a natural appearance by varying the topography both horizontally and vertically; no flat-slope faces or planes intersecting at 90-degree angles would occur;
- All slopes created by the road and conveyor construction shall be immediately stabilized and reseeded;
- Any vegetation removed during construction would be used to stabilize the road embankment slopes within the proposed ROW;
- With the exception of frozen ground conditions, permanent revegetation must be seeded no later than 14 days after final grading, unless final grading takes place outside of the seeding or planting window. In that case, temporary erosion control is required until seeding can occur; and
- Areas to be revegetated would be roughened prior to seeding. After seeding, mulch would be applied with a tackifier.

### **2.1.2 Alternative B: No Action Alternative**

The purpose of the No Action Alternative is to provide the baseline of existing conditions. Based on the No Action Alternative, this final EA is able to evaluate the degree of change from the current situation to what would occur under implementation of any other alternative.

Under the No Action Alternative, the ROW would not be approved and the conveyor belt and access road would not be constructed. The Project area would remain in the existing condition and would remain open for other multiple-use actions, as approved by the BLM. Under this alternative, Granite would not be able to use BLM administered land to transport material and staff between private properties. In order to mine the private mineral rights held on APN 084-060-13, Granite would need to locate alternate access for transporting material.

### **2.1.3 Alternative Considered but Dismissed from Further Analysis**

#### ***2.1.3.1 Alternative C: Interstate 80 Frontage Road Alternative***

The Interstate 80 (I-80) Frontage Road Alternative would require haul trucks traveling from Granite's Lockwood facility to travel eastbound on I-80 to Exit 23, and then cross under I-80 using the underpass at the intersection of Exit 23 and Independence Avenue. The haul trucks would then follow the unnamed frontage road paralleling I-80 northeast to several private roads to access the proposed mine. This alternative was eliminated from detailed analysis because of the environmental impacts that would result from increased haul truck traffic on I-80 and the increased potential for dust resulting from transferring aggregate material longer distances. The increased haul truck traffic on I-80 would result in potential public safety concerns. Implementation of the I-80 Frontage Road Alternative would require Granite to enter into agreements with private landowners and secure easements on private property. If Granite was unable to secure these easements and agreements from the private landowners, the I-80 Frontage Road Alternative would not be implemented and Granite would have to find other means to access their property. Use of the I-80 Frontage Road Alternative would not require federal authorization as vehicular use of the frontage road is under the responsibility of the Nevada Department of Transportation (NDOT).

#### ***2.1.3.2 Alternative D: Co-Located ROW Alternative***

The Co-Located ROW Alternative would co-locate the road and conveyor belt with the Martin Marietta Materials' mining operation (NVN 053288) which is an existing authorization on BLM administered land in the N ½ NW ¼ Section 16, Township 19 North, Range 21 East. This alternative would allow the road and conveyor belt to be constructed in an area with a previously authorized aggregate mining operation to reduce overall Project disturbance. This alternative was analyzed to determine the feasibility of locating the proposed ROW in an area with an existing BLM land use authorization and existing disturbance.

In order to construct the road and conveyor belt in this area, two possible routes were considered. The first potential route would follow an existing haul road and construct the proposed road and conveyor belt through Martin Marietta Materials' existing stockpile area and active mining activities. This would locate the proposed road and conveyor belt within existing disturbance areas and reduce Project disturbance (Alternative D, Route 1). However, this location would result in potential land use conflicts with the Martin Marietta Materials' activities because the road and conveyor belt would be constructed immediately adjacent to active mining activities and stockpiling, thus limiting mining area and stockpiling for Martin Marietta Materials.

The second route would construct the road and conveyor belt north of the stockpile area and active mining to avoid conflicts with Martin Marietta Materials' existing activities (Alternative D, Route 2). However, locating the road and conveyor belt north of active mining activities

would also create potential land use conflicts by limiting Martin Marietta Materials' potential to mine the area north of their existing mining activities as allowed by their existing BLM authorization. In addition, locating the proposed road and conveyor belt north of the active mining activities and stockpile area would necessitate an extensive cut area in order to get to the private land on APN 084-060-13 eliminating the primary goal of the Co-Located ROW Alternative, which is to reduce disturbance area and grading volumes. This alternative was eliminated from detailed analysis because it would create land use conflicts with the existing Martin Marietta Materials authorized activities.

### 3.0 AFFECTED ENVIRONMENT

This chapter identifies and describes the current condition and trend of elements or resources in the human environment, which may be affected by the No Action Alternative and Proposed Action. The Affected Environment is the same for all alternatives.

#### 3.1 SETTING

The area of analysis for the Proposed Action for all resources is the Project area, which is the proposed ROW for the project.

Elevations in the Project area range from approximately 4,840 feet above mean sea level (AMSL) to 4,980 feet AMSL. The nearest climate monitoring station is located at the Sparks COOP (267697). The average maximum temperature in the Project area is 68.3 degrees Fahrenheit (°F), the average minimum temperature is 36.7 °F, average total precipitation is 7.7 inches, and average total snowfall is 7.2 inches (WRCC, 2015). The Southwest Regional Gap Analysis Project indicates the land cover within the Project area is within Inter-Mountain Basins Big Sagebrush Shrubland (approximately 0.57 acre), Inter-Mountain Basins Mixed Salt Desert Scrub (approximately 0.90 acre) and Sierra Nevada Cliff and Canyon (approximately 0.69 acre) (Figure 5). The Project area, as well as the surrounding area, has been affected by wildland fire and previous disturbance, and the area currently supports a vegetation community dominated by Russian thistle, with smaller amounts of scattered shrubs including Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), rubber and yellow rabbitbrush (*Ericameria nauseosa* and *Chrysothamnus viscidiflorus*, respectively), and four-wing saltbush (*Atriplex canescens*).

##### 3.1.1 Resources Considered for Analysis

The BLM is required to address specific elements of the environment that are subject to requirements in statute or regulation or by executive order (BLM, 2008). Table 1 lists the elements that must be addressed in all environmental analysis and indicates whether the Proposed Action and Alternatives affect those elements. Other resources of the human environment that have been considered for analysis are listed in Table 2.

**Table 1 Supplemental Authorities\***

Resource	Present Yes/No	Affected Yes/No	Rationale
Air Quality	Y	N	The Project area is within the Washoe County air basin, which is in non-attainment status for PM 10. During construction activities there would be negligible emissions from motor vehicles and equipment, and fugitive dust (particulates). These negligible increases in emissions and particulates would be minimized by implementation of BMPs and Project EPMs. Maintenance activities over the long-term would also contribute to negligible increases in emissions and particulates.
Areas of Critical Environmental Concern	N	N	Resource not present.
Cultural Resources	N	N	Based on a class III cultural resources inventory, there are no prehistoric or historic properties present in the Project area (CRR 3-2723(P)).
Environmental Justice	N	N	Resource not present.
Farm Lands (prime or unique)	N	N	Resource not present.
Floodplains	N	N	Resource not present.
Invasive, Non-Native Plant Species	Y	Y	Carried forward for analysis.
Migratory Birds	Y	Y	Carried forward for analysis.
Native American Religious Concerns	N	N	The BLM is coordinating with the Reno-Sparks Indian Colony on this Project. To date no concerns have been identified.
Threatened or Endangered Species (wildlife)	N	N	Resource not present.
Threatened or Endangered Species (plants)	N	N	Resource not present.
Wastes, Hazardous or Solid	Y	N	BMPs and Project EPMs would be implemented to minimize potential for spills from equipment or vehicles.
Water Quality (Surface/Ground)	N	N	Resource not present.
Wetlands/Riparian Zones	N	N	Resource not present.
Wild and Scenic Rivers	N	N	Resource not present.
Wilderness/WSA	N	N	Resource not present.

*\*See H-1790-1 (January 2008) Appendix I Supplemental Authorities to be Considered.*

*Supplemental Authorities determined to be Not Present or Present/Not Affected need not be carried forward or discussed further in the document.*

*Supplemental Authorities determined to be Present/May Be Affected may be carried forward in the document.*

**Table 2 Resources or Uses Other Than Supplemental Authorities**

Resource or Issue**	Present Yes/No	Affected Yes/No	Rationale
BLM Sensitive Species (Wildlife)	Y	Y	Carried forward for analysis.
BLM Sensitive Species (Plants)	N	N	Resource not present.
Fire Management	Y	N	The Proposed Action would not affect access into the Project area during wildfire suppression activities. Project EPMs would adequately address fire prevention measures.
Forest Resources	N	N	Resource not present.
General Wildlife	Y	Y	Carried forward for analysis.
Global Climate Change	Y	N	Although there is public and scientific debate about human-caused global climate change, no methodology currently exists to analyze to what extent the negligible contributions of greenhouse gases (GHG) would contribute to climate change from implementation of the Proposed Action.
Greenhouse Gas Emissions	Y	N	Although under the Proposed Action there would be negligible contribution of GHG from vehicle/equipment emissions, no methodology exists to assess resource impacts within the Project area from such contributions of GHG.
Land and Realty	Y	Y	Carried forward for analysis.
Lands with Wilderness Characteristics	N	N	Pursuant to Sections 101, 201, and 202 of the Federal Land Policy and Management Act, Geographic Information System spatial imagery was reviewed by the BLM. No Lands with Wilderness Characteristics were identified within the Project area.
Livestock Grazing	Y	N	The Project area is within the boundary of the Spanish Springs/Mustang Grazing Allotment. The Proposed Action would not affect grazing activities due to the minimal disturbance proposed.
Minerals	N	N	Resource not present.
Paleontological	N	N	Resource not present.
Recreation	Y	N	Although dispersed recreational activities occur throughout the Project area, construction and long-term maintenance activities would not affect these uses.
Socioeconomics	N	N	Resource not present.
Soils	Y	Y	Carried forward for analysis.
Travel Management	N	N	Resource not present.
Vegetation	Y	Y	Carried forward for analysis.
Visual Resources	Y	N	The Proposed Action area is within Visual Resource Management (VRM) Class III, which allows for moderate changes to the visual character of the Project area. The Proposed Action is consistent with VRM III and is consistent with other mining activities on nearby private lands.
Wild Horses and Burros	N	N	The Project area is not within a Herd Management Area.

*\*\*Resources or uses determined to be Not Present or Present/Not Affected need not be carried forward or discussed further in the document.*

*Resources or uses determined to be Present/May Be Affected may be carried forward in the document.*

### 3.2 VEGETATION, INCLUDING INVASIVE, NON-NATIVE SPECIES

A vegetation survey was conducted by Stantec Consulting Services Inc. (Stantec) on December 2, 2015, to identify which vegetation communities and species were present in the Project area. The baseline biological report (Stantec, 2015), including a complete vegetation species list, is included in Attachment B. Although the Southwest Regional Gap Analysis Project indicated that the area supports a predominately Inter-Mountain Basins Mixed Salt Desert Scrub (Figure 5), the entire area has been affected by wildland fire and currently supports a vegetation community dominated by Russian thistle and other invasive, non-native species including tumble mustard, redstem stork's bill, and cheatgrass. Other vegetation within the Project area includes Indian rice grass (*Achnatherum (Stipa) hymenoides*), Wyoming sagebrush, low sagebrush (*Artemisia arbuscula*), four-wing saltbrush, rubber rabbitbrush, yellow rabbitbrush, bottlebrush squirreltail (*Elymus elymoides*), green ephedra (*Ephedra viridis*), annual buckwheat (*Erigonum* sp.), Herman's buckwheat (*Erigonum heermannii*), nude buckwheat (*Erigonum nudum*), Nevada greasebush (*Glossopetalon spinescens*), spiny hopsage (*Grayia spinosa*), matchweed (*Gutierrezia sarothrae*), Tansy-aster (*Machaeranthera tanacetifolia*), blazing star (*Mentzelia laevicaulis*), gooseberry-leaved globemallow (*Sphaeralcea grossulariifolia*), smooth horsebrush (*Tetradymia canescens*), desert fiddleneck (*Amsinickia tessellata*) shadscale (*Atriplex confertifolia*), and brickellbush (*Brickellia incana*) (Stantec, 2015).

### 3.3 GENERAL WILDLIFE

As stated in Section 3.2, the entire area has been affected by wildland fire and currently supports a vegetation community that is dominated by Russian thistle, as well as other invasive weed species. Smaller amounts of scattered shrubs occur throughout the Project area including Wyoming big sagebrush, rubber and yellow rabbitbrush, and four-wing saltbush. A baseline biological survey was conducted by Stantec on December 2, 2015, which included the Project area and a 500-foot buffer on each side of the Project area (Stantec, 2015). Wildlife species observed in and near the Project area during the survey either directly or from sign include the following mammals: pronghorn antelope (*Antilocapra americana*); coyote (*Canis latrans*); black-tiled jackrabbits (*Lepus californicus*); packrat (*Neotoma* sp.); and kit fox (*Vulpes velox*) (Stantec, 2015). These are the species observed (directly and indirectly) during surveys; however, habitat for other wildlife species is available in the Project area.

Additionally, bats are common in arid shrubland areas where water is available (i.e., the Truckee River is located south of the Project area). Bat species may be present as discussed in the BLM Sensitive Species (Wildlife) (Section 3.5).

Big game species that have the potential to occur include mule deer (*Odocoileus hemionus*) and pronghorn antelope (pellets were discovered during the survey), and the Nevada Department of

Wildlife (NDOW) has mapped the Project area as occupied habitat for mule deer and pronghorn antelope (NDOW, 2015).

A number of bird species were observed in, or have the potential to occur in, the Project area. Section 3.4 (Migratory Birds) contains a list of all the bird species observed during the 2015 field survey. No raptor nests were discovered during the survey. One raptor species was observed during the survey and is discussed in Section 3.5 BLM Sensitive Species (Wildlife). Cliffs that represent potential raptor nesting habitat were noted approximately one mile north of the western end of the Project area (Stantec, 2015). In addition, the NDOW identified one eagle nest within one to two miles of the survey area, and indicated that there are six other raptor and/or corvid nests located within ten miles of the Project area (NDOW, 2015). The NDOW has identified that several raptor species have been directly observed in the vicinity of the Project area, including the American kestrel (*Falco sparverius*), bald eagle (*Haliaeetus leucocephalus*), barn owl (*Tyto alba*), burrowing owl (*Athene cunicularia hypugaea*), Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), merlin (*Falco columbarius*), osprey (*Pandion haliaetus*), and red-tailed hawk (*Buteo jamaicensis*) (NDOW, 2015). Potential habitat for golden eagles and western burrowing owl are discussed in Section 3.5 BLM Sensitive Species (Wildlife).

### **3.4 MIGRATORY BIRDS**

Migratory birds include species of birds that may breed in the Project area and then would migrate south, out of the area, prior to the onset of winter. Migratory birds are protected under the MBTA. On January 11, 2011, President Clinton signed E.O. 13186 placing emphasis on the conservation and management of migratory birds. E.O. 13186 addresses the responsibilities of federal agencies to protect migratory birds by taking actions to implement the MBTA. BLM management for migratory bird species on public lands is based on Information Bulletin No. 2010-110 (BLM, 2010). This Information Bulletin transmits the 2010 Memorandum of Understanding between the BLM and the United States Fish and Wildlife Service (USFWS) for the conservation of migratory bird populations. BLM priority migratory birds include migratory birds that are either those species listed in the periodic report Birds of Conservation Concern (USFWS, 2008) or identified by the USFWS Division of Migratory Bird Management as “game birds below desired condition.”

The Intermountain West avifaunal biome where the Project area occurs is the center of distribution for numerous western birds. Over half of this biome's Species of Continental Importance have 75 percent or more of their population here. Many breeding species from this biome migrate to winter in central and western Mexico or in the Southwestern biome (Rich et al., 2004). Shrub-nesting species comprise the largest number of Species of Continental Importance in this biome (Rich et al., 2004).

A number of migratory bird species have the potential to occur in the Project area, or make use of particular habitat features at different times of the year. During the 2015 biological baseline survey, the following species were observed in the Project area and vicinity: common raven (*Corvus corax*), loggerhead shrike (*Lanius ludovicianus*), and rock wren (*Salpinctes obsoletus*) (Stantec, 2015). The Project area provides habitat for migratory bird species year-round, and additional migratory bird species are expected to be present in the Project area during the other seasons. The loggerhead shrike is discussed in detail under Section 3.5 BLM Sensitive Species (Wildlife). Additional migratory birds that may use habitat in the Project area include golden eagle, western burrowing owl, sage thrasher (*Oreoscoptes montanus*), and Brewer’s sparrow (*Spizella breweri*) (Stantec, 2015). These species are discussed in detail in Section 3.5 BLM Sensitive Species (Wildlife).

### 3.5 BLM SENSITIVE SPECIES (WILDLIFE)

BLM Manual 6840 provides policy and guidance for the conservation of BLM sensitive species and the ecosystems upon which they depend on public lands. Objectives include: 1) to conserve and/or recover ESA listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species; and 2) to initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA (BLM, 2008). BLM sensitive species are: 1) species listed or proposed for listing under the ESA; and 2) species requiring special management considerations to promote their conservation and reduce the likelihood and need for future listing under the ESA, which are designated as sensitive by the State BLM Director(s) (BLM, 2008).

Prior to conducting the December 2, 2015, biological baseline survey, a list of BLM sensitive wildlife species was reviewed and utilized to evaluate which species may potentially occur in or near the Project area (Table 3). Species with potential habitat in the Project area are discussed further below.

**Table 3 Potential for Sensitive Wildlife Species to Occur within the Project Area**

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
<b>Birds</b>			
Golden eagle ( <i>Aquila chrysaetos</i> )	--/SP/NS	Mountains, canyons, sagebrush steppe, deserts, plains (Floyd et al., 2007). Nests on rocky scarps with large expanses of hunting territory. Also nests in coniferous and deciduous trees when rocks are unavailable (Ryser, 1985).	NDOW identified one eagle nest within one to two miles of the Project area, which dates to 1979 and the species of eagle was not specified (NDOW, 2015). The NDOW files indicate there are six other raptor and/or corvid nests

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
		Primary food base are rabbits and hares, particularly black-tailed jackrabbit.	located within ten miles of the Project area. Nesting habitat within the survey area is limited and the nearest nesting habitat would be located in the mountainous area surrounding the Project. The Project area is potential foraging area for golden eagle.
Western burrowing owl ( <i>Athene cunicularia hypugaea</i> )	--/SP/NS	The burrowing owl is a small (nine to 10 inches) ground-dwelling owl with long legs, white chin stripe, round head, and stubby tail (NatureServe, 2015). It often nests in burrows that have been abandoned by other burrowing mammals and usually in open areas with good surrounding visibility. Burrowing owls are present in northern Nevada in the spring and summer months and winter in the southwestern states. Western burrowing owls can be in urban/suburban and disturbed sites, and appear to be fairly tolerant of human activities (GBBO, 2010).	Suitable habitat is very limited on the steep slopes and shallow soils of the Project area. The NDOW has a record of burrowing owl nesting in the Truckee Meadows, several miles east of the Project area, and indicates burrowing owls have been observed in the vicinity of the Project area (NDOW, 2015).
Greater sage-grouse ( <i>Centrocercus urophasianus</i> )	FC/SP/NS	The greater sage-grouse occupies habitats dominated by sagebrush, which the birds utilize for both cover and forage. During the breeding season, sage-grouse congregate on historic open sites known as leks where males display in attempt to attract females. Nesting habitat is generally adjacent to lek sites and is comprised of denser brush canopy for concealment of nests, while brood-rearing and summer habitat encompasses sagebrush and meadow interfaces or other habitats, which supply a diversity of forbs and insects consumed by	The Project area is mapped as OHMA by the Nevada Sagebrush Ecosystem Program. General Habitat Management Area is mapped just to the north of the Project area. The majority of the vegetation cover mapped on the Project area consists of communities with Wyoming or low sagebrush comprising up to 30 percent of the vegetation community (USDA, 2015), though much of the area has been affected by wildland fire, greatly reducing the amount of sagebrush present. There are no

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
		growing chicks. The majority of the year sage-grouse feed on sagebrush (Schroeder et al., 1999; GBBO, 2010).	known greater sage-grouse lek sites within the Project area or surrounding vicinity (NDOW, 2015).
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	--/SS/NS	Open country in greasewood, sagebrush, and agricultural areas, where this avian predator can hunt reptiles, insects, small mammals and birds (Floyd et al. 2007). Large prey are always impaled (barbed wire or vegetation) before eating (Yosef, 1996).	Few to no large shrubs are present in the Project area. The species may be a potential forager in the area.
Sage thrasher ( <i>Oreoscoptes montanus</i> )	--/SS/NS	The sage thrasher is considered a sagebrush obligate and is commonly found in habitats of intact, fairly dense stands of sagebrush. Nonetheless, they may also occur in greasewood or bitterbrush (Floyd et al., 2007). Sage thrashers situate their nests within dense brush or on the ground. They primarily feed on insects but occasionally eat berries (Reynolds et al., 1999).	Limited habitat occurs within the Project area where sagebrush stands exist.
Brewer's sparrow ( <i>Spizella breweri</i> )	--/SS/NS	This species is found throughout Nevada in sagebrush and mixed shrub communities. Brewer's sparrows nest in brush communities with low shrubs and grasses, and primarily feed on insects and seeds (Floyd, et al., 2007).	Likely in sagebrush habitats.
<b>Mammals</b>			
Spotted bat ( <i>Euderma maculatum</i> )	--/ST/NS	Found in a wide variety of habitats from low elevation desert scrub to high elevation coniferous forest habitats, pinyon-juniper, sagebrush, riparian and urban high-rise (cliff analog) habitats. Closely associated with rocky cliffs. Habitats may range from desert to montane coniferous stands, including	No potential roosting habitat (large cliffs or cliff analogs) present in Project area, but may possibly forage in the Project area.

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
		open ponderosa pine, pinyon juniper woodland, canyon bottoms, riparian and river corridors, meadows, open pasture, and hayfields. Active foraging may be mostly in open terrain, including forest clearings, meadows, and open wetlands, sometimes in open areas near buildings or even golf courses. Roosts, including maternity roosts, generally are in cracks and crevices in cliffs, sometimes in caves or in buildings near cliffs. Winter habitats are poorly known. Diet includes a variety of insects but predominantly moths (NatureServe, 2015; Bradely, et al., 2006).	
Pallid bat ( <i>Antrozous pallidus</i> )	--/SP/NS	The pallid bat inhabits low desert shrubland, juniper woodlands, and grasslands. Pallid bats most commonly occur in low, dry regions with rock outcrops, usually near water, and roost in rock crevices, buildings, rock piles, tree cavities, shallow caves, and abandoned mines (NatureServe, 2015; Bradley, et al., 2006). Their primary food sources are arthropods such as crickets, grasshoppers, beetles, scorpions, and spiders.	Little potential roosting habitat occurs within Project area. May forage in the area.
Big brown bat ( <i>Eptesicus fuscus</i> )	--/--/NS	The big brown bat is a medium- to large-sized bat that is known to roost in buildings, bridges, mines, caves, rock crevices, and even in giant saguaro cacti (BCI, 2013). Their primary diet includes beetles and they usually forage within a few kilometers of their roost. This bat can be locally common in some urbanized environments (Bradley, et al., 2006).	Little potential roosting habitat occurs within Project area. May forage in the area.

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
Hoary bat ( <i>Lasiurus cinereus</i> )	--/--/NS	The hoary bat is known for its relatively large size and golden-colored fur. Common roosting sites include coniferous and deciduous trees and caves. In the Pacific Northwest, hoary bats are common where they are highly associated with forested habitats (Bradley, et al. 2006; BCI, 2013). Primary food sources include beetles, moths, grasshoppers, dragonflies, and wasps.	Project area lacks suitable woodland or cave roosting habitat. May forage in the area.
California myotis ( <i>Myotis californicus</i> )	--/--/NS	The California myotis inhabits riparian woodlands, canyons, grasslands, and desert habitats and utilizes rock crevices, caves, buildings, and abandoned mine workings for roosting, maternity and hibernation. These bats forage on insects along margins of tree canopy and over water (NatureServe, 2015; Bradley, et al., 2006).	Little potential roosting habitat occurs within Project area. May forage in the area.
Little brown myotis ( <i>Myotis lucifugus</i> )	--/--/NS	Wide-ranging bat, typically found in mesic or forested habitats (Rainey 1998; Bradley, et al., 2006).	Typical habitat types do not occur within the Project area, but may forage in the area.
Yuma myotis ( <i>Myotis yumanensis</i> )	--/--/NS	The Yuma myotis inhabits riparian areas, scrublands, deserts, and forests and is commonly found roosting in bridges, buildings, cliff crevices, caves, mines, and trees. Its primary diet is emergent aquatic insects such as caddis flies, midges, and small moths and beetles (Bradley, et al. 2006). Typically forages over water in forests (BCI, 2013).	Project area does not provide suitable roosting habitat. May forage in the area.
Brazilian free-tailed bat ( <i>Tadarida brasiliensis</i> )	--/SP/NS	Occurs in a wide range of habitats from caves, cliffs, and bridges to tree hollows, generally occurring in large colonies. Lactating females are voracious feeders,	Suitable roosting habitat does not occur within the Project area. Species is a possible forager within the area.

Common Name (Scientific Name)	Listing Status (Federal/State/BLM)	General Habitat	Potential to Occur in the Project Area
		generally feeding on moths. Considered migratory in northern Nevada (BCI, 2013; Bradley et al., 2006).	
Western pipistrelle ( <i>Pipistrellus Hesperus</i> )	--/--/NS	The western pipistrelle is the smallest of all North American bats and is usually associated with rocky canyons and outcrops where they are known to roost in small crevices. It is also known to occupy mines and caves (BCI, 2013; Bradley, et al., 2006). Its food sources include ants, mosquitoes, fruit flies, and leafhoppers.	Little potential roosting habitat occurs within Project area. Species is a possible forager in the area.
Pygmy rabbit ( <i>Brachylagus idahoensis</i> )	--/--/NS	The pygmy rabbit occurs throughout much of the Great Basin in areas of tall, dense sagebrush ( <i>Artemisia</i> spp.) (USFWS, 2012) or mixed sagebrush habitats (Utah DWR, 2003). Pygmy rabbit burrows are typically found in relatively deep, loose soils of wind- or water-born origin suitable for burrowing (USFWS, 2012; Utah DWR, 2003). Pygmy rabbit may occur in areas of shallower or more compact soils with sufficient shrub cover because abandoned burrows of other species (USFWS, 2012). In addition to direct sighting, indirect evidence of pygmy rabbits includes the presence of trail systems established in understory vegetation, often leading to burrows under sagebrush or rabbitbrush, and groups of small, dark pellets (Utah DWR, 2003).	Little to no dense shrub cover or deep, friable soils within the Project area.

**Key:**

**Federal (USFWS):**

FE = Listed as Endangered by the federal government  
 FT = Listed as Threatened by the federal government  
 FC = Candidate for listing by the federal government

**BLM Species Classification:**

NS = Nevada Sensitive Species

Source: Stantec, 2015

**State:**

SE = State-listed endangered  
 ST = State listed threatened  
 SP = State protected  
 SS = State listed sensitive

The BLM sensitive species that were determined not to have potential habitat in the Project area are included in Attachment B, and are not analyzed further in this final EA.

Only one BLM sensitive species was detected during the survey; a loggerhead shrike flew to a post east of the Project area (Stantec, 2015). The site may support foraging or dispersal habitat for the loggerhead shrike as well as a number of raptor species. Nesting by loggerhead shrikes is unlikely in the Project area, due to the scarcity of tall shrubs or trees. The 2015 survey confirmed that there is no nesting habitat for golden eagles in the Project area or 500-foot buffer of the Project area. Cliffs that represent potential raptor nesting habitat were noted approximately one mile north of the western end of the Project Area. Smaller cliffs and outcrops occur closer to the Project area, but no stick nests or areas of whitewash were noted on these features (Stantec, 2015). Potential foraging habitat occurs within the Project area for golden eagle.

No potential bat roosting habitat occurs within the Project area. However, potential bat roosting habitat does occur outside of the Project area in small rock outcrops and boulders (Stantec, 2015). These rock outcrops could support day roosting for a number of bat species including the pallid bat, a number of myotis species, or the western pipistrelle/canyon bat. These rock outcrops outcrops are not expected to support many individual bats given their size. Potential foraging habitat occurs within the Project area for the BLM sensitive bat species identified in Table 3.

No potential burrowing owl burrows were discovered in the Project area. According to the Natural Resources Conservation Service soil data, the majority of the survey area lacks suitably deep soils for burrowing owl burrows (USDA, 2015). Small mammal burrows were found on ridgetops but none approached the size of a burrow that might be used by burrowing owls (Stantec, 2015). No dense sagebrush habitat that may be used as potential pygmy rabbit habitat was present in the Project area.

The BLM identified greater sage-grouse habitat in the Project area as OHMA (Figure 6); however, the entire survey area has been affected by wildland fire and sagebrush occurs only as scattered shrubs in the area. The nearest active lek is 12 miles northeast of the Project area.

### **3.6 LANDS AND REALTY**

The Project is located in Washoe County, Nevada, at the southern flank of the Pah-Rah Range. The proposed Project is located on public land administered by the BLM Carson City District, Sierra Front Field Office. The Project area is administered according to the CRMP (BLM, 2001), and specific goals and policies set forth in the CRMP that are applicable to the proposed Project are detailed in Chapter 1. Since the Project area is within Washoe County, the development within the Project area is also guided by the Washoe County Master Plan, which provides goals

and policies for various elements including land use and transportation and open space and natural resource management. This includes goals and policies for community design, compatibility and land use patterns, infrastructure availability and minimum levels of service, visual and scenic character, and recreation resources. The open space and natural resources element of the Washoe County Master Plan has designated the Pah Rah Range as having high visual and scenic values. Construction of the Project would also be subject to Washoe County Development Code requirements and design standards, and the proposed Project already has approved special use permits for the proposed operations through Washoe County.

The surrounding area is primarily undeveloped and consists of the following: Granite’s Lockwood Facility adjacent to the south, which includes aggregate quarry activities, aggregate processing and an asphalt hot batch plant; Martin Marietta Materials’ existing aggregate mining activities adjacent to the southeast; and the Federal Aviation Administration Reno Vortac site to the northwest. The Project area is situated on steep slopes and is surrounded by private land on two sides (Figure 2) which would restrict potential public access and recreational activities. However, the site may be used for recreational activities such as hiking. Since the Project area is surrounded by private land on two sides, livestock grazing is likely limited within the Project area; however, the Project area is within the Spanish Springs/Mustang grazing allotment, so grazing may occur within the Project area. The BLM Land and Mineral Legacy Rehost 2000 system (LR2000) was queried to determine ROWs and land use authorization within the Project area. There are several land use authorizations with legal descriptions within the same quarter section as the Project that may be affected by the Project. Table 4 lists the land use authorizations with legal descriptions within the same quarter section as the proposed Project area (Figure 2).

**Table 4 Potential Affected Land Use Authorizations**

Description/Holder	LR2000-Type of Authorization	Document Number
BLM	Community Pit	NVN 061040
Martin Marietta Materials	Mineral Material Sale	NVN 053288

Source: BLM, 2015b

According to NVN 066363, and Public Land Order No. 7491, the Project area is withdrawn from surface entry and mining, but not from mineral leasing and mineral material sales. Table 5 describes active unpatented mining claim files with legal descriptions within the same quarter section as the Project.

**Table 5 Potential Affected Unpatented Mining Claims**

Claim Name	Claim Holder	Legal Description	Document Number
NANCE 2	Southwest II	Northeast ¼ and Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682376
NANCE 4	Southwest II	Northeast ¼ and Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682378
NANCE 5	Southwest II	Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682379
NANCE 6	Southwest II	Northeast ¼ and Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682380
NANCE 7	Southwest II	Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682381
NANCE 8	Southwest II	Northeast ¼ and Southeast ¼, Township 19 North, Range 21 East, Section 8	NMC682382

Source: BLM, 2015b

Project access would be via I-80 east to the Lockwood Exit, then traveling northeast on Canyon way to Granite’s Lockwood Facility. The ROW would then be accessed through Granite’s Lockwood Facility. The NDOT publishes an annual traffic report providing details on the amount of traffic on certain locations on Nevada roads. Table 6 details annual average daily traffic levels from 2010 to 2014 at several monitoring stations along the access route to the Project area.

**Table 6 Annual Average Daily Traffic (2010-2014)**

Monitoring Station	Route/Location	Average Annual Daily Traffic				
		2010	2011	2012	2013	2014
0310054	I-80, East Bound Off-ramp of the Lockwood Interchange ‘Exit 22’	1,100*	1,100	1,100*	950	850
0310058	I-80, West Bound Off-ramp of the Lockwood Interchange ‘Exit 22’	100	90	90	100	100
0310060	I-80, West Bound On-ramp of the Lockwood Interchange ‘Exit 22’	1,200*	1,200	1,100	1,100*	850

\*Data Adjusted or Estimated

Source: NDOT, 2015

### 3.7 SOILS

According to the National Resources Conservation Service soils database, the Project area is within the Skedaddle-Pahrang-Lemm association (1550) (Figure 7).

The Skedaddle-Pahrang-Lemm association soils are typically on hills at elevations of 4,400 to 7,000 feet AMSL, and they are typically well drained. Map unit composition is as follows:

Skedaddle and similar soils consisting of 35 percent of the soil type; Pahrange and similar soils consisting of 30 percent of the soil type; Lemm and similar soils consisting of 20 percent of the soil type; and minor components consisting of 15 percent of the soil type (USDA, 2015). Table 7 describes a typical profile of the Skedaddle-Pahrange-Lemm association soil type.

**Table 7 Typical Profile of the Skedaddle-Pahrange-Lemm Association**

<b>Map Unit Composition</b>	<b>Typical Profile</b>	<b>Slope</b>	<b>Available Water Storage Capacity</b>
Skedaddle	Very Stony Loam and Bedrock	15 Percent to 70 Percent	Very Low (approximately 0.4 inches)
Pahrange	Very Cobbly Sandy Loam, Cobbly Clay Loam, and Bedrock	15 Percent to 70 Percent	Very Low (approximately 2.6 inches)
Lemm	Stony Sandy Loam, Very Gravelly Coarse Sandy Loam, and Very Gravelly Loamy Coarse Sand	15 Percent to 30 Percent	Low (approximately 4.6 inches)

Source: USDA, 2015

## **4.0 ENVIRONMENTAL CONSEQUENCES**

### **4.1 INTRODUCTION**

This chapter describes and compares the environmental consequences predicted to result from implementing the Proposed Action or No Action Alternative described in Chapter 2.0. The purpose of this chapter is to present the impact analysis of the alternatives and to disclose the impacts of the actions on affected resources by the Proposed Action or No Action Alternative.

The potential consequences or impacts of each alternative are addressed in the same order of resource topics in Chapter 3.0. This parallel organization allows readers to compare existing resource conditions (Chapter 3.0) with potential impacts (Chapter 4.0).

#### **4.1.1 Types of Effects**

This chapter describes the potential direct, indirect, and residual effects to resources that may result from the Proposed Action or No Action Alternative, as well as identifies the potential monitoring needs associated with the specific resources. In this document, the word “minor” characterizes non-significant, detrimental effects to a resource, and “negligible” is used in characterizing non-significant detrimental effects to a resource that are generally undetectable. “Beneficial” effects would have a positive effect on the resource. In this document, the terms “effect” and “impact” are used synonymously. Effects fall into two categories, direct (caused by the action, same time and place) and indirect (caused by the action, but later in time or further in distance). Assessment of effects can be for short-term (generally considered during initial Project implementation or construction) or the long-term (occurring during operations, maintenance, or after the operations have been completed).

## **4.2 VEGETATION, INCLUDING INVASIVE, NON-NATIVE SPECIES**

### **4.2.1 Alternative A: Proposed Action**

Under the Proposed Action, Granite would construct, operate, and maintain portions of an overland conveyor belt and access road. The total proposed ROW area would be 2.1 acres, which would incorporate the entire disturbance area including the embankment slopes adjacent to the road. However, the total acres of disturbance on BLM administered land associated within the conveyor belt and road would be 1.8 acres. Direct impacts to vegetation would result from plant removal within the 1.8 acre disturbance area during construction. The Project area has been burned by past wildland fires and the vegetation in the Project area is dominated by Russian thistle (an invasive, nonnative species) with smaller amounts of native shrub species including Wyoming big sagebrush, rabbitbrush, and four-wing saltbush. No noxious weeds were discovered within the Project Area during the 2015 biological baseline survey (Stantec, 2015). Indirect impacts may result from the introduction and spread of noxious weeds as a result of Project related disturbance. In order to prevent the introduction and spread of noxious weeds in

the Project area, Granite would revegetate all disturbed slopes and cut areas with a BLM-approved weed-free seed mix following construction and all vehicles would be washed prior to entering the site to reduce the introduction or spread of noxious weeds. The final closure measures specified in Section 2.1 would also reduce long-term impacts to vegetation resources. Due to the fact that the Project area has previously burned in wildland fires, is dominated by invasive, non-native species, is small in size, and will comply with EPMs described in Section 2.1, impacts to vegetation would be long-term, but negligible and continue until reclamation has been completed following closure of operations.

#### **4.2.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. The Project area would remain in existing conditions, which would include the large invasive, non-native species population. Since no disturbance of vegetation or noxious weed control would occur under this alternative, no impacts to vegetation are expected.

### **4.3 GENERAL WILDLIFE**

#### **4.3.1 Alternative A: Proposed Action**

Under the Proposed Action, Granite would construct, operate, and maintain portions of an overland conveyor belt and access road. The total proposed ROW area would be 2.1 acres located on BLM administered land, with 1.8 acres of total disturbance associated with the Project. Short-term, direct impacts to general wildlife from Project-related activities may occur during construction and may include temporary habitat disturbance and loss of forage area from human activity and noise, as well as temporary displacement and habitat fragmentation. After construction is completed, Granite would revegetate all disturbed slopes and cut areas with a BLM-approved weed-free seed mix, which would reduce impacts to wildlife and would restore habitat and forage area within the Project area once revegetation becomes established.

During operations and maintenance of the conveyor belt and road, long-term, indirect impacts would include the loss of 1.8 acres of habitat and forage area, and/or mortality associated with Project operations and maintenance, including from vehicle collisions, trampling of smaller wildlife, and/or destruction of burrows. Revegetation of disturbed areas would reduce the long-term impacts to wildlife habitat and forage area. Granite would minimize the potential impacts to wildlife from traffic by following a speed limit of 15 miles per hour when traveling on the road. Additionally, Project employees would be trained to monitor for the presence of larger wildlife such as deer and antelope that may cross the proposed road. If wildlife of any size are encountered while operating on the proposed road, vehicle operators would yield to the wildlife.

Operations and maintenance activities would result in long-term, indirect impacts to wildlife from displacement and/or habitat fragmentation, which would occur for the life of the Project. Displacement and fragmentation may occur because the activities required for operations and maintenance, including the operation of the conveyor belt, may result in habitat avoidance and may restrict typical wildlife movement through the Project area for certain wildlife species. Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. Final reclamation would reduce long-term displacement and fragmentation impacts to wildlife.

The Project area has been affected by wildland fire and the subsequent introduction and spread of invasive species which results in lower quality habitat for wildlife. Indirect impacts from Project activities may result from the introduction or spread of weeds, which may reduce available wildlife habitat and forage area. However, this impact would be short-term, primarily occurring during construction, and Granite would implement EPMs which would reduce the spread of weeds in the area, including washing down vehicles before they enter the site. In addition, Granite would revegetate disturbed areas as soon as practical after disturbance activities are completed to prevent the establishment or spread of weeds.

As stated above, the Project area has previously been affected by wildland fires, making it lower quality habitat for wildlife. In addition, the disturbance area is relatively small compared to the undeveloped habitat located adjacent to the Project area, which would continue to provide habitat for general wildlife. Reclamation measures and Project EPMs would also reduce impacts to wildlife and their habitat. Therefore, impacts from the Project are expected to be long-term, but negligible and would continue until reclamation has been completed following closure of operations.

#### **4.3.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. The Project area would remain in existing conditions, and no impacts to general wildlife would be expected under this alternative.

### **4.4 MIGRATORY BIRDS**

#### **4.4.1 Alternative A: Proposed Action**

Under the Proposed Action, Granite would construct, operate, and maintain portions of an overland conveyor belt and access road. The total proposed ROW area would be 2.1 acres, with 1.8 acres of total disturbance associated with the Project. Ground disturbance and vegetation removal during construction would result in short-term, direct impacts, which include temporary spatial redistribution of individuals or habitat-use patterns. Construction activities would also result in direct impacts from the temporary reduction of foraging and breeding habitat for

migratory birds. In order to avoid short-term impacts to migratory birds, Granite would implement the wildlife EPM described in Section 2.1 that would ensure that a pre-disturbance nest survey be conducted by a qualified biologist prior to any land clearing activities during the migratory bird breeding season (April 1 through July 31). Clearance surveys would occur within the Project area, including a 300-foot buffer around the Project area. This EPM would greatly reduce the likelihood of migratory bird nesting behavior being disrupted or nests being destroyed. In addition, revegetation of disturbed areas would occur as soon as practical after construction is complete, which would reestablish portions of migratory bird habitat and foraging area within the Project area.

During operations and maintenance activities, long-term, indirect impacts would include the loss of 1.8 acres of habitat and forage area, and/or mortality associated with collisions during Project operations. In addition, operations and maintenance activities would result in long-term, indirect impacts from Project activities and noise, which may result in spatial redistribution of individuals or habitat-use patterns during the life of the Project. Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. Final reclamation would reduce long-term impacts to migratory bird habitat and forage area.

The Project area has been affected by wildland fire and the subsequent introduction and spread of invasive species which results in lower quality habitat for migratory birds. Additionally, undeveloped habitat is located adjacent to the Project area and would continue to provide habitat for migratory birds during Project operations. Therefore, long-term impacts from the Project are expected to be negligible and would continue until reclamation has been completed following closure of operations.

#### **4.4.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. The Project area would remain in existing conditions, and no impacts to migratory birds would be expected under this alternative.

### **4.5 BLM SENSITIVE SPECIES (WILDLIFE)**

#### **4.5.1 Alternative A: Proposed Action**

Under the Proposed Action, Granite would construct, operate, and maintain portions of an overland conveyor belt and access road. The total proposed ROW area would be 2.1 acres, with 1.8 acres of the total disturbance associated with the Project. Short-term, direct impacts to BLM sensitive wildlife species from Project-related activities may occur during construction, which may include temporary disturbance from human activity and noise, and temporary displacement and habitat fragmentation. Long-term, indirect impacts would include the loss of 1.8 acres of

habitat and forage area, displacement and habitat fragmentation during operations and maintenance activities, and/or mortality associated with Project operations.

Habitat within the Project area is not considered quality nesting, roosting, or foraging habitat for BLM sensitive wildlife species because it has been previously affected by wildland fires and is dominated by invasive species. However, Project operations and maintenance activities would have a long-term, indirect impact on foraging area within the Project area. Potential impacts to golden eagle nests are not expected because they are not known to nest within the Project area or immediate vicinity. However, foraging habitat for BLM sensitive avian species (i.e., loggerhead shrike, sage thrasher, Brewer's sparrow, and golden eagle) is present and a loggerhead shrike was detected flying to a post east of the Project area during the 2015 biological baseline survey (Stantec, 2015). The site may support foraging or dispersal habitat for the loggerhead shrike as well as a number of raptor species. However, nesting by loggerhead shrikes is unlikely in the Project area, due to the scarcity of tall shrubs or trees. No potential burrowing owl burrows were discovered in the Project area, and the Project area does not provide suitable habitat for burrowing owl. Additionally, undeveloped habitat is located adjacent to the Project area, and these areas would continue to provide habitat or forage area for BLM sensitive avian species. A pre-disturbance nest survey would be conducted on public lands during the nesting season to prevent impacts to avian species. Therefore, impacts from the Project to BLM sensitive avian species are expected to be negligible and would continue until reclamation has been completed following closure of operations.

No potential bat roosting habitat occurs within the Project area. However, potential bat roosting habitat does occur outside of the Project area in small rock outcrops and boulders. These rock outcrops are not expected to support many individual bats given their small size. Granite would minimize potential impacts to BLM sensitive bat species roosting habitat by avoiding direct physical disturbance (e.g., grading) to rock outcrops that are identified by a qualified biologist (in coordination with the BLM) as providing potential bat roosting habitat on BLM administered land. While potential long-term, indirect impacts to BLM sensitive bat species' foraging habitat may occur as a result of operations and maintenance activities, additional foraging habitat is located adjacent to the Project Area and would continue to provide forage for those species. Impacts from the Project to BLM sensitive bat species are expected to be negligible and continue until reclamation has been completed following closure of operations.

No impacts to pygmy rabbits would occur because the Project area does not provide suitable habitat for pygmy rabbits. The Project is located in greater sage-grouse OHMA. The 2015 biological baseline survey found that the area has been affected by wildland fire and sagebrush occurs only as scattered shrubs in the area. There was no evidence of greater sage-grouse use in the Project area, and based on the invasive vegetation species present, lack of dense sagebrush

cover, habitat fragmentation from previous disturbances, and distance from active lek sites, it is unlikely to provide greater sage-grouse foraging, nesting or brood-rearing habitat. Therefore, impacts from the Project to greater sage-grouse or their habitat are not expected.

#### **4.5.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. The Project area would remain in existing conditions, and no impacts to BLM sensitive species would be expected under this alternative.

### **4.6 LANDS AND REALTY**

#### **4.6.1 Alternative A: Proposed Action**

Under the Proposed Action, Granite would construct, operate, and maintain portions of an overland conveyor belt and access road. The proposed ROW on BLM administered land would be approximately 400 feet wide and 571 feet long. The total proposed ROW area would be 2.1 acres, which would incorporate the entire disturbance area including the embankment slopes adjacent to the road. However, the total acres of disturbance on BLM administered land associated within the conveyor belt and road would be 1.8 acres (Figure 3). The ROW would be used to transport personnel and raw aggregate material between Granite's mining operation on private land and their processing facility on private land.

The Proposed Action is in conformance with the CRMP and the Washoe County Master Plan because the Project EPMs and design features provide for adequate post-disturbance revegetation, as well as appropriate erosion control measures during construction, operations, and maintenance activities. In addition, the Project is consistent with the surrounding land uses, which are primarily associated with aggregate mining and processing activities.

Direct impacts to lands and realty from Project activities would result from restricting land uses (primarily dispersed recreation activities and wildlife habitat) within the Project area during construction. Operations and maintenance activities within the ROW would result in long-term, indirect impacts to lands and realty because the 2.1 acres within the ROW would no longer be open for other multiple use authorizations during the life of the Project, which would be in operation for at least 30 years. However, because the ROW is relatively small (approximately 0.3 percent of the total public lands within the same Township, Range and Sections as the Project), and because there would still be large areas surrounding the Proposed Action that would be open for multiple use authorizations, the Proposed Action would have long-term but negligible impacts on potential future multiple use authorizations in the area.

The proposed road and conveyor belt are not intended for public use and the public would be restricted from within the proposed ROW to protect public safety. Since public access would be restricted for the life of the Project, this may result in long-term, indirect impacts to access for land uses such as dispersed recreation and livestock grazing during operations and maintenance. However, there is adequate area for dispersed recreation and livestock grazing around the Project, and the ROW would reduce the potential area used for these activities by a negligible amount. Impacts from the Project on public access are expected to be long-term, but negligible.

The legal description for NVN 053288 falls within the same quarter section as the proposed Project area. NVN 053288 is an authorized mineral materials sale to Martin Marietta Materials. The proposed ROW would affect the northwestern tip of the NW ¼ of Township 19 North, Range 21 East, Section 16, which is included in the Martin Marietta Materials' authorization legal description. However, impacts to the Martin Marietta Materials' authorization are not anticipated because all disturbances within this area would consist of slopes. The conveyor belt and road would be constructed on Township 19 North, Range 21 East, Section 8, which would not impact the Martin Marietta Materials' authorization (Figure 3). As a result, impacts to the Martin Marietta Materials' authorization are expected to be long-term, but negligible.

The only other land use authorization from Table 4 that would fall within the same quarter section of the Proposed Action would be NVN 061040. NVN 061040 is a BLM Community Pit authorization in which the legal description for the authorization includes Township 19 North, Range 21 East, Section 8, Subdivision Lot 1, which is where a portion of the Proposed Action would occur. However, the Project would not impact any existing activities currently occurring under this authorization, and the Project would be a small portion (approximately 0.6 percent) of the total 320 acres authorized under NVN 061040; thus, any impacts to this land use authorization would be long-term, but negligible.

There are six unpatented mining claims described in Table 5 that have legal descriptions within the same quarter section of the Project. These include Nance 2, Nance 4, Nance 5, Nance 6, Nance 7, and Nance 8, which are held by Southwest II. However, the Project is not anticipated to result in any impacts to these unpatented mining claims, and Granite would coordinate with any claim holders to prevent any impacts if they were to occur. The Project is not anticipated to result in any impacts to the unpatented mining claims described in Table 5.

The estimated work force would be limited to approximately eight personnel within the ROW at any given time during construction, operation, and maintenance of the conveyor belt and road. Construction, operations, and maintenance of the conveyor belt and road are not anticipated to result in any increase in traffic from the baseline conditions shown in Table 6 because traffic within the ROW would be limited to transferring material and personnel between two private

properties, and additional traffic on I-80 or other roads in the area would be unnecessary. Impacts to traffic from the Project are not anticipated to occur.

#### **4.6.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. Existing land uses (primarily dispersed recreation) would continue at current levels. The area would remain open for multiple use actions, as approved by the BLM. No impacts to lands and realty would be expected under this alternative.

### **4.7 SOILS**

#### **4.7.1 Alternative A: Proposed Action**

The Proposed Action would result in direct impacts to soil resources by disturbing approximately 1.8 acres of soil during construction. The Project would remove a total of 120,100 cubic yards of soil from within the ROW and would result in a maximum cut of 117 feet. Operations and maintenance would result in a long term, indirect impact from the removal of soil within the ROW that would last the life of the Project. Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed. The road surface would be ripped and seeded with a BLM approved weed free seed mix. Embankment slopes would remain, but would be seeded. These reclamation measures would help to reduce long-term impacts to soils after Project completion. However, the removal of the 120,100 cubic yards of material would result in a long-term, indirect impact that would last beyond the life of the Project because this material would not be stockpiled and used for reclamation on site after Project completion. Material that is removed from site during construction would be hauled off-site for use as reclamation material on private property.

Direct impacts to soils may result from increased erosion resulting from the Project disturbance and soil compaction resulting from Project construction and vehicles/equipment operating within the ROW. The Project would surface the roadway with four inches of Type 2 aggregate base, which would decrease soil permeability and porosity, and increase surface run-off and erosion potentials. This impact would be short-term (lasting primarily during construction), because the Project would revegetate disturbed areas (e.g. slopes) as soon as practical after construction and the road and conveyor belt design includes appropriate stormwater control measures, including drainage swales and berms that would convey stormwater run-off to stormwater control features (e.g. sediment ponds) on private land. Granite would also employ erosion control measures as outlined in the EPMs (Section 2.1) which would reduce impacts to soils from water erosion.

Project disturbance and construction would have a direct impact on increased dust potential because disturbed areas have a higher probability to wind erosion. This impact would primarily be short-term, and would last only during construction. After construction of the road and

conveyor belt, revegetation of disturbed areas would occur which would reduce the potential for dust and wind erosion. In addition, the Project would include surfacing the road with aggregate base, which would reduce dust potential after construction. Granite would also implement specific dust abatement measures detailed in the EPMs in Section 2.1, which would include the application of water during construction to control fugitive dust.

Direct impacts to soils may also occur from accidental spills from Project equipment or vehicles during construction. However, Project EPMs include measures to reduce impacts from accidental spills and no equipment or vehicle storage would occur within the Project area. All storage of vehicles and equipment would occur on private land to the south, which is owned by Granite and has a fully implemented Spill Prevention Control and Countermeasure Plan associated with it. Spill kits would be made available for any accidental petroleum spills.

Impacts to soil resulting from the Project would be long-term, except water and wind erosion impacts, which would be short-term and minor because Project design and EPMs would reduce short-term and long-term impacts to soil resources

#### **4.7.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, the ROW would not be approved and the conveyor belt and the road would not be constructed on public lands. There would be no impacts to soils under this Alternative because there would be no disturbance from the proposed Project.

## 5.0 CUMULATIVE EFFECTS

### 5.1 INTRODUCTION

A cumulative effect is defined under NEPA as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (RFFAs) regardless of what agency (federal or non-federal) or person undertakes such other action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR Part 1508.7). Past, present, and RFFAs are analyzed to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the Proposed Action and No Action Alternative may have an additive and significant relationship to those effects. The significance of effects should be determined based on context (i.e., the setting of the Proposed Action) and intensity (40 CFR 1508.27(b)(7)). Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Intensity refers to the severity of effect. Factors that could be used to define the intensity of effects include the magnitude (relative size or amount of an effect), geographic extent, duration, and frequency of the effects.

#### Cumulative Effects Geographic Area

Cumulative effects and the geographic area to be analyzed for cumulative effects vary by the type of resource. To determine the size of the Cumulative Effects Study Areas (CESAs), each environmental resource was analyzed to determine the geographic extent to which the environmental effect from the Proposed Action would be reasonably detected. However, for simplicity, ease of cumulative effects analysis, and in an attempt to avoid having only slightly different CESAs for a number of resources, CESA boundaries were left identical for multiple resources where it seemed reasonable and conservative to do so. Table 8 details the different CESAs that have been developed for the various resources.

**Table 8 Cumulative Effects Study Area by Resource**

Resource	CESA Boundary	Approximate Acres			Description	Figure Number
		BLM	Private	Total		
Vegetation, Invasive, Non-Native Species, General Wildlife, Migratory Birds and BLM Sensitive Species (Wildlife)	Vegetation and Wildlife CESA	21	28	49	2015 Biological Baseline Survey Area	Figure 8
Lands, Realty and Soils	Lands, Realty and Soils CESA	90	91	181	Project Area and a 0.25 Mile Buffer of the Project Area	Figure 9

### Timeframe for Effects Analysis

The timeframe for past, present, and RFFAs begins with the earliest recorded data in LR2000 and extends into the future 10 years to capture the most likely RFFAs that may result in cumulative impacts when combined with the Proposed Action. Analyzing data beyond 10 years would be speculative, and it would not provide an accurate analysis of cumulative effects.

#### **5.1.1 Past, Present and Reasonably Foreseeable Future Actions**

Information utilized in the cumulative impacts assessment was gathered from the following sources: BLM's LR2000, aerial photography and Washoe County data. The BLM LR2000 database was queried for authorized and pending multiple land use activities, ROW grants, mineral and non-mineral exploration and mining permits. Aerial photography was used to locate potential disturbances not within the LR2000 database (i.e., development on private land). The BLM's land ownership Geographic Information System file was used to determine which past, present and RFFAs within the CESA were on BLM administered land, and which actions were on private land. Past and present actions, as well as RFFAs, occurring within each CESA are discussed under each resource.

## **5.2 VEGETATION, INCLUDING INVASIVE, NON-NATIVE SPECIES**

### **5.2.1 Alternative A: Proposed Action**

Past and present actions within the Vegetation CESA (Figure 8) include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land. The Martin Marietta Materials aggregate mining activities occur within the southeastern portion of the CESA on BLM administered public land, and Granite's approved aggregate mining and processing activities occur within the southern portion of the CESA on private land. LR2000 was queried for ROWs and other land use authorizations that occur on public land within the CESA. These authorizations are detailed in Table 9 and are broken out by authorized actions (i.e., past and present actions) and pending actions (i.e. RFFAs).

**Table 9 BLM Authorizations within the Vegetation and Wildlife CESA**

<b>Description/Holder</b>	<b>LR2000-Type of Authorization</b>	<b>Document Number</b>
<b>Authorized</b>		
BLM	Community Pit	NVN 061040
Martin Marietta Materials	Mineral Material Sale	NVN 053288
<b>Pending</b>		
Norwest Exploration Company	Surface Management-Plan	NVN 069612

Source: BLM, 2015b

As Table 9 details, besides the Martin Marietta Materials' aggregate mining activities discussed above, other past and present authorizations on public land include an authorized BLM community pit.

RFFAs within the CESA would include continued dispersed recreation and livestock grazing on public land; continued aggregate mining and processing activities at Granite's Lockwood Facility on private land and continued aggregate mining on Martin Marietta Materials' authorized activities on BLM administered land. Additional BLM land use authorizations detailed in Table 9 include the Norwest Exploration Company's pending mining operation within Township 19 North, Range 21 East, Sections 8 and 16. In addition, Granite has an approved Special Use Permit (SW04-020) through Washoe County for mining activities on private land on Township 19N, Range 21 East, Section 9 (APN 084-060-13).

The Proposed Action would result in approximately 1.8 acres of total disturbance on public land, which would result in cumulative impacts from vegetation removal when combined with past, present and RFFAs within the CESA. Past and present activities have likely contributed to the spread of invasive species within the CESA. The proposed Project may result in cumulative impacts through the spread of weed populations within the CESA. However, the Project would revegetate all disturbed areas after construction is completed, and it would implement the EPMS detailed in Section 2.1, which would reduce the spread of weeds within the CESA. Due to the small size of the disturbance area (approximately four percent of the CESA), site stabilization and reclamation measures and Project EPMS, the proposed project is anticipated to have long-term, but negligible cumulative impacts to vegetation resources when combined with past, present and RFFAs.

### **5.2.2 Alternative B: No Action Alternative**

No impacts to vegetation are anticipated under Alternative B: No Action Alternative; therefore, there are no cumulative impacts to vegetation from Alternative B: No Action Alternative when added to past, present and RFFAs.

## **5.3 GENERAL WILDLIFE**

### **5.3.1 Alternative A: Proposed Action**

Past, present and RFFAs within the General Wildlife CESA (Figure 8) are the same as described under Section 5.2.1. As described in detail in Section 5.2.1, past, present and RFFAs include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land.

Past, present and RFFAs have likely resulted in, or may result in, habitat disturbance, loss of forage area, potential habitat fragmentation and wildlife displacement. In addition, past and

present actions have likely resulted in the spread of invasive weed populations, which has likely reduced the quality of wildlife habitat in the area. The Proposed Action would result in approximately 1.8 acres of additional disturbance on public land within the CESA, which would result in cumulative impacts from habitat disturbance, loss of forage area, wildlife displacement, and habitat fragmentation. The Project may also result in cumulative impacts from the potential establishment or spread of weed populations resulting from Project disturbance activities. The Project would revegetate all disturbed areas after construction is completed, and it would implement the EPMs detailed in Section 2.1, which would reduce impacts to wildlife and their habitat. Due to the small size of the disturbance area (approximately four percent of the CESA), site stabilization and reclamation measures and Project EPMs, the proposed project is anticipated to have long-term, but negligible cumulative impacts to general wildlife and their habitat when combined with past, present and RFFAs.

### **5.3.2 Alternative B: No Action Alternative**

No impacts to wildlife are anticipated under Alternative B: No Action Alternative; therefore, there are no cumulative impacts to wildlife from Alternative B: No Action Alternative when added to past, present and RFFAs.

## **5.4 MIGRATORY BIRDS**

### **5.4.1 Alternative A: Proposed Action**

Past, present and RFFAs within the Migratory Bird CESA (Figure 8) are the same as described under Section 5.2.1. As described in detail in Section 5.2.1, past, present and RFFAs include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land.

Past, present and RFFAs have likely resulted in, or may result in, loss of habitat and forage area for migratory birds and spatial redistribution of individuals or habitat-use patterns. The Proposed Action would result in approximately 1.8 acres of additional loss of habitat and forage area for migratory birds and would potentially result in additional spatial redistribution of individuals or habitat-use patterns. Upon final closure of operations, the conveyor belt would be removed and the road would be reclaimed and completely closed which would reduce long-term impacts from the Project to migratory birds and their habitat. Due to the small size of the disturbance area (approximately four percent of the CESA), site stabilization and reclamation measures and Project EPMs, the proposed project is anticipated to have long-term, but negligible cumulative impacts to migratory birds and their habitat when combined with past, present and RFFAs.

#### **5.4.2 Alternative B: No Action Alternative**

No impacts to wildlife are anticipated under Alternative B: No Action Alternative; therefore, there are no cumulative impacts to migratory birds from Alternative B: No Action Alternative when added to past, present and RFFAs.

### **5.5 BLM SENSITIVE SPECIES (WILDLIFE)**

#### **5.5.1 Alternative A: Proposed Action**

Past, present and RFFAs within the BLM Sensitive Species (Wildlife CESA) (Figure 8) are the same as described under Section 5.2.1. As described in detail in Section 5.2.1, past, present and RFFAs include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land.

Past, present and RFFAs have likely resulted in, or may result in, habitat disturbance, loss of forage area, impacts to bat roosting areas, potential habitat fragmentation and displacement. In addition, past and present actions have likely resulted in the spread of invasive weed populations, which has likely reduced the quality of BLM sensitive species habitat in the area. The Proposed Action would result in approximately 1.8 acres of additional disturbance on public land within the CESA, which would result in cumulative impacts from habitat disturbance, loss of forage area, displacement, and habitat fragmentation for certain BLM sensitive species. The Project may also result in cumulative impacts from the potential establishment or spread of weed populations resulting from Project disturbance activities. The Project would revegetate all disturbed areas after construction is completed, and it would implement the EPMs detailed in Section 2.1, which would reduce impacts to BLM sensitive species and their habitat. Due to the small size of the disturbance area (approximately four percent of the CESA), site stabilization and reclamation measures and Project EPMs, the proposed project is anticipated to have long-term, but negligible cumulative impacts to BLM sensitive species and their habitat when combined with past, present and RFFAs.

#### **5.5.2 Alternative B: No Action Alternative**

No impacts to BLM sensitive species are anticipated under Alternative B: No Action Alternative; therefore, there are no cumulative impacts to BLM sensitive species from Alternative B: No Action Alternative when added to past, present and RFFAs.

### **5.6 LANDS AND REALTY**

#### **5.6.1 Alternative A: Proposed Action**

Past and present actions within the Lands and Realty CESA (Figure 9) include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land. The Martin Marietta

Materials aggregate mining activities occur within the southeastern portion of the CESA on BLM administered public land, and Granite’s approved aggregate mining and processing activities occur within the southern portion of the CESA on private land. LR2000 was queried for ROWs and other land use authorizations that occur on public land within the CESA. These authorizations are detailed in Table 10 and are broken out by authorized actions (i.e., past and present actions) and pending actions (i.e. RFFAs).

**Table 10 BLM Authorizations within the Lands and Realty and Soils CESA**

<b>Description/Holder</b>	<b>LR2000-Type of Authorization</b>	<b>Document Number</b>
<b>Authorized</b>		
BLM	Community Pit	NVN 061040
Martin Marietta Materials	Mineral Material Sale	NVN 053288
Lockwood Investments Co LTD	ROW-Roads	NVN 078423
Federal Aviation Administration	ROW-Roads Federal	NVN 037434
Nevada Bell	ROW-Telephone-Telegraph	NVN 002370
<b>Pending</b>		
Norwest Exploration Company	Surface Management-Plan	NVN 069612

Source: BLM, 2015b

As Table 10 details, besides the Martin Marietta Materials’ aggregate mining activities discussed above, other past and present authorizations on public land include the following: an authorized BLM community pit; a road ROW for both Lockwood Investments and the Federal Aviation Administration used for access to Lockwood Investments property in Township 19 North, Range 21 East, Section 9 and the Federal Aviation Administration’s Reno Vortac Site in Township 19 North, Range 21 East, Section 8; and a telecommunication authorization for Nevada Bell.

RFFAs within the CESA would include continued dispersed recreation and livestock grazing on public land; continued use of the access road within the CESA; continued aggregate mining and processing activities at Granite’s Lockwood Facility on private land and continued aggregate mining on Martin Marietta Materials’ authorized mining activities on BLM administered land. Additional BLM land use authorizations detailed in Table 10 include the Norwest Exploration Company’s pending mining operation within Township 19 North, Range 21 East, Sections 8 and 16. In addition, Granite has an approved Special Use Permit (SW04-020) through Washoe County for mining activities on private land on Township 19N, Range 21 East, Section 9 (APN 084-060-13).

The Proposed Action would result in approximately 1.8 acres of total disturbance on public land, which would be a cumulative disturbance increase of approximately one percent when analyzed against the total CESA area. Most of the CESA area has been previously disturbed by past or

present authorizations or wildland fires, so the one percent disturbance increase from the Project is anticipated to have a negligible cumulative impact within the CESA when combined with past, present and RFFAs. The Project would restrict access to and remove approximately 2.1 acres (approximately one percent of the CESA) of public land from being used for other land uses such as recreation and livestock grazing. This restricted access and the change of existing land use within the Project area would be a cumulative impact when combined with the Martin Marietta Materials' existing authorization on public land and the RFFA of the Norwest Exploration Company project which likely restrict, or may restrict certain land uses to some extent. However, there is adequate public land within the CESA, which may be used for other land uses, and the one percent of the CESA affected by the Project is expected to have long-term, but negligible cumulative impacts to lands and realty when combined with past, present and RFFAs.

### **5.6.2 Alternative B: No Action Alternative**

Under Alternative B: No Action Alternative, existing land uses within the CESA would remain unchanged and impacts to lands and realty from current land uses would continue. Cumulative impacts from Alternative B: No Action Alternative, when added to past, present, and RFFAs, on lands and realty within the CESA are expected to be negligible.

## **5.7 SOILS**

### **5.7.1 Alternative A: Proposed Action**

Past, present and RFFAs within the Soils CESA (Figure 9) are the same as described under Section 5.6.1. As described in detail in Section 5.6.1, past, present and RFFAs include dispersed recreation and limited livestock grazing on public land; aggregate mining and processing on public and private land; and past wildland fires on public and private land.

The Proposed Action would result in approximately 1.8 acres of total disturbance on public land, which would be a cumulative disturbance increase of approximately one percent when analyzed against the total CESA area. The proposed disturbance would remove vegetation and increase impermeable surfaces (e.g., the road surfaced with compacted aggregate base). The past, present and RFFAs within the CESA have resulted, or may result in soil disturbance throughout the CESA, including soil removal, vegetation removal and soil compaction. The proposed disturbance, when combined with past, present and RFFAs may result in short-term, cumulative impacts from increased surface water run-off, as well as wind and water erosion potential. However, the Project would implement the EPMs specified in Section 2.1 and the Project design includes stormwater control features that would reduce long-term cumulative impacts from increased surface water run-off and wind and water erosion. The Project, when combined with past, present and RFFAs would result in short-term, minor cumulative impacts.

The Project would remove a total of 120,100 cubic yards of soil from within the ROW and would result in a maximum cut of 117 feet. Soil has likely been removed from within the CESA from past and present actions including the Martin Marietta activities on public land and Granite's aggregate mining and processing activities on private land. The RFFA of the Norwest Exploration Company would also likely remove soil from within the CESA. The permanent removal of soil from the site would result in a long-term, minor cumulative impact within the CESA when combined with past, present and RFFAs within the CESA.

The Project may also increase the potential for petroleum spills from vehicles and equipment within the CESA that may have a cumulative impact on soils within the CESA. However, Project EPMs include measures to reduce impacts from accidental spills and no equipment or vehicle storage would occur within the Project area. Cumulative impacts from petroleum spills resulting from the Project are expected to be negligible.

#### **5.7.2 Alternative B: No Action Alternative**

No impacts to soils are anticipated under Alternative B: No Action Alternative; therefore, there are no cumulative impacts to soils from Alternative B: No Action Alternative when added to past, present and RFFAs.

## **6.0 CONSULTATION AND COORDINATION**

### **6.1 PUBLIC REVIEW AND COMMENT**

On February 22, 2016, the BLM announced a 15-day public review period for the draft EA. Notification was sent to the Project mailing list, which consisted of eight companies or individuals, and to the Nevada State Clearinghouse. Maps, the draft EA, and information on how to comment were made available through the BLM's national "NEPA Register" also known as ePlanning. The public comment period closed on March 7, 2016. The BLM received no substantive comments.

Substantive comments:

- 1) Question, with reasonable basis, the accuracy of information in the EA;
- 2) Question, with reasonable basis, the adequacy of, methodology for, or assumptions used for the environmental analysis;
- 3) Present new information relevant to the analysis;
- 4) Present reasonable alternatives other than those analyzed in the EA; and/or
- 5) Cause changes or revisions in one or more of the alternatives.

No response is necessary for non-substantive comments (BLM, 2008).

### **6.2 INDIVIDUALS, TRIBES, AND ORGANIZATIONS CONSULTED**

The following individuals, organizations and Tribes were contacted during the preparation of this EA:

#### **6.2.1 Tribes**

- Reno-Sparks Indian Colony

#### **6.2.2 Individuals/Organizations**

- Martin Marietta Materials
- Federal Aviation Administration
- Lockwood Investment Company, Ltd.
- Southwest II
- Northwest Exploration
- Nevada Bell
- Edwin L. Depaoli
- Steven C. Felton

### 6.3 LIST OF PREPARERS

BLM staff that contributed to this document are listed below.

**Table 11 List of Preparers (BLM)**

Name	Role/Resource
Brian Buttazoni	Project Manager, NEPA Compliance
Shaina Shippen	Lands and Realty

Representatives from Stantec that contributed to the preparation of this document are listed below.

**Table 12 List of Preparers (Stantec)**

Company	Name	Role/Resource
Stantec Consulting Services Inc.	Kristi Schaff	Senior Review, Quality Assurance/Quality Control
	Steve Morton	Project Manager for Stantec, Lands and Realty, Soils, Wildlife, Vegetation, BLM Sensitive Species (Wildlife), Invasive Non-native Species, Migratory Birds, Cumulative Effects
	Michele Lefebvre	Resource Specialist, Wildlife, Vegetation, BLM Sensitive Species (Wildlife), Invasive Non-native Species, Migratory Birds
	Kim Carter	Project Administrator

**Table 13 Proponent**

Company	Name	Role/Resource
Granite Construction	Brian McClure	Proponent
	Tina Mudd	Proponent

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