COUNTY OF SANTA BARBARA
Planning and Development

Final Environmental Impact Report
For the Proposed Bee Rock Quarry Expansion

Draft EIR Case Nos.
06EIR-00000-00002 (State Clearinghouse No. 2005051102)
03CUP-00000-00092 and 03RPP-00000-00004

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July, 2006
BEE ROCK QUARRY EXPANSION PROJECT EIR

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5.0 CA Natural Diversity Database Data, Lake Cachuma, Santa Ynez, and San Marcos Pass Quadrants
6.0 2004 Traffic Study
7.0 Response to Comments
1.0 INTRODUCTION

This document is a Draft Environmental Impact Report (EIR) combined with responses to comments thereto (including revisions where necessary) that taken together comprise the Final EIR for the proposed expansion of the Bee Rock Quarry. It evaluates the physical impacts to the environment that could occur as a result of the proposed expansion of the Bee Rock Quarry. The information and analysis contained herein focuses on the three main components of the proposed expansion: 1) the increase in the annual production rate and associated revision of the mining facility’s operational characteristics, 2) the additional nine acres to be mined, and 3) the subsequent reclamation of the expanded area of the Quarry.

The requested modification of the operational limitations would increase the annual production of rock materials from 175,000 tons per year to a five-year rolling average of 300,000 tons per year over any five year period with a maximum of 400,000 tons in any given year. The impacts of this 125,000 ton per year increase are evaluated in this EIR. The requested expansion would enlarge the excavation area from 22.5 to 31.5 acres. Impacts resulting from the disturbance (excavation) of a new nine acre area to be excavated are described herein.

Granite Construction Company is the existing operator of the Bee Rock Quarry and is the project applicant. The property-owner is San Lucas Ranch, LLC.

1.1 Project Location

Bee Rock Quarry is situated approximately 1.5 miles south of State Route 154, immediately opposite the entrance to the Bradbury Dam observation site at Lake Cachuma, approximately 5.25 miles southeast of the intersection of State Route 154 and Route 246 near Santa Ynez, California (see Figures 1-1 and 1-2). The approximately 37.5-acre site is located on a portion of the San Lucas Ranch within the Santa Ynez Valley. It is described as Assessor Parcel Numbers 141-290-056 [5,411 acres] and 141-290-029 [72 acres]; a portion of SW1/4 Section 31, Township 6 North Range 29 West.

Figure 1-1: Regional Project Location
1.2 Project Background

Bee Rock Quarry has been in operation since 1952 when the extraction of limestone material began as part of the construction of Bradbury Dam at Lake Cachuma. The quarry highwall or working face is characterized by vertical slopes and intervening horizontal benches of white to light-gray exposures of limestone. All excavation activities have occurred on the south-facing slope of the hill designated “Bee Rock” on the U.S. Geological Survey topographical map of the area. The current reclamation plan requires this excavation method continue as the remaining north-facing slope at the end of mining activities is to remain visually unimpacted, albeit lower in elevation. The working face of the quarry is not visible from Lake Cachuma, nor is it visible from State Route 154 (a County and State designated Scenic Highway), except for one instance. The exception is a point on the highway about 5 miles to the east of the quarry where the top of Bee Rock Hill is visible to westbound traffic for a few seconds. The western edge of the quarry excavation is also remotely visible from a few vantage points in the Santa Ynez community area, including the east-facing seating of the Santa Ynez High School football stadium. The working face is not visible elsewhere in the Santa Ynez valley.

The original Conditional Use Permit (CUP) and Reclamation Plan for the Bee Rock Quarry were put into effect on November 24, 1987 by the Planning Commission with its approval of Case Nos. 87-CP-029 and 87-RP-002. Among other items, the CUP limited the annual rock production to 175,000 tons per year.
Table 1-1 identifies the mine’s approved definition and operational characteristics.

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<td>Production Rate</td>
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<td>Rock production</td>
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<td>Duration of Activities</td>
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In 1992, Granite Construction Company assumed operation of the Bee Rock Quarry. The Company leases the site from the property-owner: San Lucas Ranch, LLC.

In 1997, the Planning Commission granted a one-time, one year expansion of the Quarry’s production rate with its approval of Case No. 87-CP-029 RV01. This revision authorized an additional 256,000 tons to be mined specifically to provide materials for reconstruction of Bradbury Dam at Lake Cachuma.

In 1998, severe regional flooding served to increase market demand for emergency construction materials. This, in turn, led Granite Construction Company to submit another application in 1999 to revise the original CUP and Reclamation Plan. Among other items, the application sought County approval of: 1) an increase in the production rate from 175,000 tons per year to a five-year “rolling average” of 300,000 tons per year over any five year period with a maximum of 400,000 tons per year in any given year and 2) a modification of the excavation plan. The genesis of the application was to obtain flexibility so as to account for variations in weather (such as occasional major flood events) and economic activity, as well as to lower the final quarry floor elevation from 1,700 to 1,650 feet. This application was deemed incomplete and subsequently withdrawn when the current project submittal was filed in December, 2003.

The current project application proposes to modify the operational limitations imposed by Conditional Use Permit 87-CP-029 RV01, as well as expand the area to be mined. The ongoing environmental effects of the existing Bee Rock Quarry mining operation with 175,000 tons per year of production within the existing 21.5 acre area of disturbance are not a part of the proposed project under review at this time and are outside the scope of this environmental document.
1.3 EIR Scope and Content

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the County Guidelines for the Implementation of CEQA, as amended. As set forth in the State CEQA Guidelines, the purpose of an Environmental Impact Report (EIR) is to:

*Inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This report is to serve as an informational document for the public and County of Santa Barbara decision-makers. The process will culminate with the County Planning Commission hearings to consider certification of a Final EIR and a decision whether to approve the proposed revisions to the CUP and reclamation plan.

This EIR is a project EIR. It focuses primarily on the changes in the environment that could occur as a result of the proposed Quarry expansion, including the increased annual production limits, the expanded area to be mined, and the operational changes. It examines all phases of the project, including planning, implementing, and monitoring the changes.

The Planning & Development Department prepared an Initial Study (IS) for the proposed Quarry expansion. The IS contains the information and analysis upon which the County made its preliminary determinations that: 1) there could be potentially significant impacts as a result of the proposed project and 2) an EIR must be prepared.

On May 16, 2005, a Notice of Preparation (NOP) of an EIR together with the IS was circulated for public review and comment (see Appendix A). The EIR scope centers on examining the potentially significant environmental impacts of the proposed Bee Rock Quarry expansion project on the following:

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<td>☑ Air Quality ☑ Noise</td>
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On July 19, 2005, the County held an environmental hearing to review the EIR process, answer questions, and receive input on the proposed EIR scope. Two individuals provided oral comments at the hearing, requesting that the EIR address: 1) traffic safety and driving hazards on Highway 154 and 2) the affect, if any, of blasting and excavation on groundwater supply. This EIR addresses these comments.

On September 1, 2005, the public and agency comment period on the proposed scope of the EIR was closed. Two public agencies submitted comments to the County: California Department of Transportation and the California Department of Fish and Game. This EIR addresses the comments received.
The contents of this EIR, including the level of detail provided within it, meets the requirements set forth in Sections 15120 to 15132 of the State CEQA Guidelines and recent court decisions. Section 15120 identifies the information to include in an EIR while allowing flexibility in the format of the document. Section 15151 outlines the standard of review to use when determining whether the EIR is adequate. It states that:

“An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among experts. The courts look not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.”

This EIR evaluates potential impacts in each of the eight areas listed in the NOP and accompanying IS. It addresses both the site-specific and cumulative impacts of the proposed project. Further, it identifies recommended potentially feasible mitigation measures that could be incorporated into the project so as to reduce or eliminate adverse environmental effects.

This EIR reviews a number of reasonable alternatives to the project that could attain the basic project objectives. An alternate location was not evaluated due to its infeasibility; the County does not have any other sites where limestone is found in comparable quantity. Bee Rock Quarry is the only significant limestone deposit in the County. As a result, the alternatives evaluated are limited to variations in the proposed operational limits or extent of mine expansion.

1.4 EIR Organization
This EIR is organized into Chapters as follows:

Chapter 1.0  Introduction
Chapter 2.0  Environmental Setting
Chapter 3.0  Project Information
Chapter 4.0  Consistency with Policy
Chapter 5.0  Environmental Analysis
Chapter 6.0  Alternatives
Chapter 7.0  Preparers, Contacts, and References

1.5 Lead, Responsible, and Trustee Agencies

The State CEQA Guidelines define “lead,” “responsible,” and “trustee” agencies. The County serves as the lead agency for the proposed mine expansion because it has the principal responsibility for its approval. As such, the County oversees the preparation and processing of the environmental impact report, and assumes responsibility for its certification.
In addition to the County, there are other public agencies with discretionary authority over certain aspects of the proposed project. These agencies are called “responsible” or “trustee” agencies that are responsible for approving and/or carrying out/implementing a specific project component or that have jurisdiction by law over natural resources affected by the project, respectively. Other agencies may use this EIR as input when issuing approvals or permits for project implementation. The County is required to solicit comments from responsible and trustee agencies, as well as the public before the EIR can be certified as adequate.

Responsible agencies for this project include:

- **U.S. Army Corps of Engineers** - regulates activities that have the potential to affect navigable waters under Section 10 of the Rivers and Harbors Act of 1899 (Section 10 permits) and waters of the United States under Section 404 of the Clean Water Act (Section 404 permit).

- **Environmental Protection Agency** - oversees the analysis of the Army Corps of Engineers regarding the issuance of permits for filling wetlands under Section 404 permits and issues permits for point source discharges to waterways.

- **National Marine Fisheries Service** - administers the Federal Endangered Species Act and the Marine Mammal Protection Act as they pertain to marine and anadromous species.

- **U.S. Fish and Wildlife Service** - administers the Federal Endangered Species Act and the Marine Mammal Protection Act. The USFWS is an advisory agency to the Army Corps on Section 10 and Section 404 permits.

- **Department of Transportation** - issues encroachment permits for projects that involve work within Caltrans right-of-way.

- **Office of Planning and Research** - circulates EIRs for review by State agencies.

- **California Highway Patrol** - responsible for traffic safety on State Highways.

Trustee agencies for this project include:

- **California Department of Conservation (Office of Mine Reclamation)** - oversees implementation of the State Surface and Mining Reclamation Act.

- **California Department of Fish and Game** - oversees work done in streams pursuant to Fish and Game Code 1601 and 1603. An applicant proposing to substantially divert the natural flow of a stream, substantially alter its bed or bank, or use any material from the streambed must first enter into a "Streambed Alteration Agreement" with CDFG.

- **California Regional Water Quality Control Board** - regulates discharges to waterways through the adoption of Waste Discharge Requirements (WDR) and National Pollution Discharge Elimination System (NPDES) permits.

- **Santa Barbara County Air Pollution Control District** - prepares a Plan and implementing regulations to address California Clean Air Act mandates as required by the 1988 California Clean Air Act and the 1990 Federal Clean Air Act Amendments. Regulates stationary and mobile sources of air pollutant emissions through its permit process.

This EIR is intended to fulfill CEQA's requirements for the lead, responsible, and trustee agencies, to the extent that the proposed project is not substantially altered during the permit approval process.
1.6 Environmental Review Process

The major steps in the environmental review process are presented below.

1. **Notice of Preparation.** The first step is release of a Notice that an EIR will be prepared. The purpose of this Notice is to solicit comments from public agencies and other individuals/interested parties on the EIR scope.

2. **Draft EIR Preparation.** The second step is release of a Notice that the Draft EIR has been completed. The purpose of this Notice is to announce that the Draft EIR is available for public review and comment for at least 45-days and that an environmental public hearing on the Draft EIR will be held.

3. **Final EIR Preparation.** The third step is preparation of a Final EIR reviewing and responding to the comments received on the Draft EIR, including revisions where necessary. The Final EIR includes:
   a) The Draft EIR, modified through responses to comments;
   b) Copies of comments received during public review;
   c) A list of persons and entities commenting; and
   d) Responses to comments.

4. **Final EIR Certification.** The last step is for the Planning Commission to review and consider certifying the Final EIR as to its compliance with CEQA. Prior to making a decision on the proposed project, the Commission must certify that:
   a) The Final EIR was presented to the Commission in its capacity as the decision-making body for the proposed project;
   b) The information in the Final EIR was reviewed and considered the information in the EIR prior to approving a project; and
   c) The Final EIR reflects the Commission’s independent judgment and analysis.

5. **Project Decision.** After Final EIR certification, the Commission will be asked: (a) to make findings relating to the environmental review completed (including findings and a statement of overriding considerations [if required]) and (b) to take an action to approve, deny, or modify the project.

   **Environmental Findings.** For each significant impact, the Commission must find, based on substantial evidence, that either:
   a) The project has been changed to avoid or substantially reduce the magnitude of the impact;
   b) Changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or
   c) Specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible.

Lastly, when making these findings, the Commission is required to adopt a reporting or monitoring program for the mitigation measures that have been made conditions of project approval to mitigate significant effects.
Statement of Overridding Considerations (If Required)

If the Final EIR identifies unavoidable significant environmental effects, the Commission must also issue a written Statement of Overridding Considerations ("Statement") identifying the specific reasons that support its action in approving the project. The Statement is to identify the specific social, economic, or other reasons supporting the decision made. It sets forth the Commission’s views on the ultimate balancing of the merits of approving the project despite its environmental damage.

Commission Action/Project Decision. For this project, the County Planning Commission is the decision-making body responsible for approving, conditionally approving, or denying the project; on appeal, the Board of Supervisors would be the final decision-making body.

The Commission may:

a) Disapprove a project because of its significant environmental effects;

b) Require changes to a project to reduce or avoid significant environmental effects; or

c) Approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted.

Because Granite Construction Company is requesting a revision to its CUP and associated reclamation plan, the County will evaluate the applicant’s request as it relates to the entire CUP. Therefore, other aspects of the CUP (i.e., conditions of approval) will be re-evaluated based upon the proposed revisions and the existing conditions that the mine operates under today. Additional conditions of approval or revised conditions of approval, for example, may be implemented in the CUP as a result of the environmental analysis.

1.7 Baseline for EIR Analysis

The EIR impact analysis contained in Chapter 5.0 herein includes a description of the existing physical setting and applicable regulatory setting for each issue area, followed by an analysis of the project’s impacts. The existing permitted facility encompasses 21.5 disturbed acres and is authorized to produce and export a maximum of 175,000 tons per year of rock product. These existing conditions constitute the baseline from which the project’s impacts are measured and are more fully described in Chapter 2.0. The focus of analysis of this EIR is on the incremental environmental effects of an additional 9 acres of site disturbance and the production of an additional 125,000 tons per year over baseline conditions.

1.8 Classification of Environmental Impacts

Each specific impact is called out separately and numbered, followed by an explanation of how the level of impact was determined based upon the County’s adopted thresholds of significance. Pursuant to these thresholds, each impact is classified as one of the following types.
Class I Significant and Unavoidable Impact. An impact that cannot be avoided or reduced below the level of significance given reasonably available and feasible mitigation measures. If an impact is identified as Class I, a Statement of Overriding Considerations must be issued if the project is to be approved.

Class II Significant Impact that can be avoided or feasibly mitigated. An impact that is potentially significant, but that can be avoided altogether or reduced to below the level of significance given reasonably available and feasible mitigation measures. If an impact is identified as Class II, specific environmental findings must be made if the project is to be approved.

Class III Less Than Significant Impact. An impact that is not significant. If an impact is identified as Class III, it does not exceed a significance threshold and thus does not require mitigation.

Class IV Beneficial Impact. An impact that is beneficial in that it improves an existing environmental resource or condition.

Table ES-2 of the Executive Summary briefly outlines these potential impacts, identifies feasible mitigation measures, and lists the residual impacts after mitigation.
2.0 ENVIRONMENTAL SETTING

2.1 Regulatory Background and Permit History for Bee Rock Quarry

In October, 1952, County Ordinance 700 was put into effect requiring a Conditional Use Permit for mines in the Cachuma watershed. The Bee Rock mine was already in operation at that time and thus the on-going mining operation became a non-conforming land use as result of its operation without a Conditional Use Permit.

In 1975, the State Legislature enacted the California Surface Mining and Reclamation Act (SMARA). On October 23, 1978, the County adopted its implementing ordinance, Ordinance 3065. SMARA was substantially amended in 1987. Surface mining operations in existence prior to and continuing after January 1, 1976 were not required to obtain permits to mine. These vested rights operations, however, were required to have a reclamation plan submitted to the lead agency by March 31, 1988. Lead agencies were mandated to have the reclamation plans reviewed and approved or denied by July 1, 1990.

On January 7, 1987, the Supervising Zoning Enforcement Officer sent a letter to the operator of the Bee Rock Quarry indicating that an approved Surface Mining Permit, a Reclamation Plan, and a Major Conditional Use Permit were to be obtained. The operator filed applications with the County, on March 10, 1987, seeking approval of the above-referenced entitlements.

The original Conditional Use Permit (CUP) and Reclamation Plan for the Bee Rock Quarry were put into effect on November 24, 1987 by the Planning Commission with its approval of Case Nos. 87-CP-029 and 87-RP-002. Among other items, the 1987 CUP limited the annual rock production to 175,000 tons per year.

In 1997, the Planning Commission granted a one-time expansion of the Quarry’s production rate with its approval of Revision No. 1 to Case No. 87-CP-029. This revision authorized an additional 256,000 tons to be mined for a single construction project, the reconstruction of the Bradbury Dam at Lake Cachuma.

2.2 Environmental Setting

Bee Rock Quarry is located on the San Lucas Ranch in the Santa Ynez Valley near the Bradbury Dam observation site at Lake Cachuma, approximately 5.25 miles southeast of the intersection of State Route 154 and Route 246 near Santa Ynez, California. The Quarry haul road is situated on the south side of State Route 154 opposite the entrance to the Bradbury Dam observation site at Lake Cachuma.

The approximately 37.5-acre mining site extends across the boundary of Assessor Parcel Numbers 141-290-056 [5.411 acres] and 141-290-029 [72 acres] and is further described as a portion of the SW1/4 of Section 31, Township 6 North, Range 29 West, Lake Cachuma Quadrangle, California - Santa Barbara County, 7.5-minute series (see Exhibit 1).

The area around Bee Rock Quarry is very sparsely populated; the nearest residence not associated with San Lucas Ranch is more than one mile from the site.
EXHIBIT 2-1 - BEE ROCK QUARRY SITE LOCATION MAP

U.S. Geological Survey, Lake Cachuma Quadrangle, California - Santa Barbara County, 7.5-minute series (Topographical Map)
The existing area affected by the mining operations (i.e. the “mined lands”) includes the excavation site, the product stockpile area, the scalehouse and haul road, the equipment storage yard, and the segments of “Bee Rock Creek” and Hilton Creek downstream of the facility. A small area of the Sweetwater Creek watershed is also affected by mining operations. These areas are delineated on Map Sheets 1 and 2 of the proposed reclamation plan (see pages 3-3 and 3-4 of this EIR for Map Sheet 1; see Appendix A for Map Sheet 2).

The proposed project involves the expansion of mining into a nine-acre area located along the northern boundary of the current excavation area or highwall. Chapparal (Coastal Sage Scrub) vegetation covers this expansion area. The adjoining active working face of the mine and the material processing and stockpile areas are not vegetated.

Three watercourses are present in the vicinity of Bee Rock Quarry. These include Hilton and Sweetwater creeks, and an unnamed tributary of Hilton Creek locally known as “Bee Rock Creek” roughly paralleling the south-southwest side of the road to the quarry. Of the three watercourses, only Hilton Creek exhibits perennial surface flow. Bee Rock Creek is located immediately adjacent to the quarry and is an ephemeral tributary of Hilton Creek. Substantial riparian oak woodland vegetation is present along Bee Rock and Hilton creeks. Vegetation in the portion of the Sweetwater Creek watershed affected by mining operations is primarily chaparral.

A seasonal spring-fed wetland of less than 0.01 acres is present in the vicinity of the Quarry’s equipment storage yard. No new disturbance is proposed for this area.

The nearest identified archaeological site is located about one mile east of the Quarry in Tequepis Canyon at the Drake Boy Scout Camp. However, the quarry site and vicinity have not been surveyed for cultural resources. The area of new ground disturbance associated with the proposed expansion of the mining area encompasses approximately nine acres located on the steep northern flank of Bee Rock Hill. The ground slope in this area ranges in slope from 30 to 70%. It is characterized by a very thin soil horizon with scattered outcrops of limestone. The natural ground surface on the southern flank of Bee Rock Hill, and most of the top of this Hill, has been removed by past mining excavation. According to archaeologist David Stone in an e-mail dated 5-11-04, prehistoric sites are very rarely located on slopes exceeding 20%, and are not common on slopes of over 30%. Exceptions to this include temporary hunting areas and rock art sites, spiritual shrine areas on the tops of ridgelines and quarries for collecting stone tool-making material (primarily cherts). The project site does not contain these exceptional characteristics.

No permanent structures are present within the boundaries of the mined lands. An existing single family dwelling is located within San Lucas Ranch about 1,000 feet south of the quarry. A Boy Scout Camp is located in Tequepis Canyon about one mile east of the quarry.

Bee Rock Quarry has been evaluated in two previous environmental documents including 87-ND-58 (adopted 10-15-87) and 97-ND-5 (adopted 5-28-97).
2.3 Existing Operational Characteristics

2.3.1 Processing, Processing Equipment, Materials, and Mobile Equipment

The mined materials are transported by front end loader (Cat 980 or equivalent) from the quarry floor and benches to a hopper which feeds the crushing plant. The crushing and screening plant is an electrically powered facility running on line power. Material is transported through the plant by a series of conveyor belts and pass the unsorted material through a series of crushers and screen decks, which respectively reduce the material size and sort according to the mesh of the screens, into various segregated material stockpiles.

The process plant operates under the authority of air quality emission control permits issued by the Santa Barbara County Air Pollution Control District. The crushing plant operates under an Air Pollution Control District Permit to Operate (ATC/PTO #11088) that limits plant production to 600,000 tons per year based on the faceplate capacity of the plant. This permit would not have to be amended as the proposed increased production rate (300,000 tons/year) would be less than these limits.

A front-end loader (Cat 980 or equivalent) then loads the products into transport trucks, the trucks are weighed and the loads are directed to various customers throughout the market area.

2.3.2 Administration, Security, and Public Safety

The Quarry staff includes a gate security/safety person, weighmaster, plant foreman and one or two operators; additional service staff travel from Granite’s Santa Barbara yard to service equipment as needed. Access to the quarry is restricted to authorized personnel and all visitors are subject to mine safety requirements of the State of California Mine Safety and Health Administration. The quarry gate is locked at all times, except when the facility is open.

2.3.3 Hours and Days of Operation and Employment

The Quarry typically operates on weekdays, 52 weeks a year, during the hours of 6:00 a.m. to 3:30 p.m. Periodically, the Quarry staff report to work at 5:30 a.m. for safety meetings or other company business.

The Quarry staff includes a gate security/safety coordinator, weighmaster, plant foreman and one or two operators; additional service staff travel from Granite’s Santa Barbara yard to service equipment as needed.

Loading and hauling operations, from stockpiles, would occasionally be extended to 24 hours per day, seven days per week; the extended operations would typically occur when so required by Local, State and Federal public works agencies so as to avoid daytime traffic disruption during roadway and airport construction projects. Extended hours of operation would also occur during emergencies such as severe flooding.
2.3.4 Truck Traffic and Circulation

The majority of materials are transported as 25-ton loads, equating to approximately 7,000 annual truck trips (round trips). The daily truck traffic ranges from about 13 to 45 two-way trips per day which equates to an average of 28 two-way trips per day (see Traffic Section 5.8 for additional information). Northbound rock transport trucks have a left turn pocket available so as to avoid blocking traffic when turning into the facility. Southbound trucks, however, must decelerate in the single highway lane prior to making the turn onto the Bee Rock Quarry haul road. This turning movement causes a traffic delay and potential hazards should drivers attempt to pass the decelerating truck on the solid yellow line.

The existing safety practices for truck departures onto State Route 154 include use of a full-time flag person utilizing CB radio communications and video camera monitoring of the southbound traffic conditions to control truck departures from the Quarry to assure safe entry onto State Route 154 at all times.

2.4 Baseline for CEQA Evaluation

The existing permitted facility encompasses 21.5 disturbed acres and is authorized to produce and export a maximum of 175,000 tons per year of rock product for a total of 47 years from 1987 to 2034. These existing conditions constitute the CEQA baseline from which impacts are measured. Thus, the incremental environmental effects of an additional 9 acres of site disturbance and the production of an additional 125,000 tons per year for the time period from 1999 to 2043 for a total of 44 years are evaluated in this document.
3.0 PROJECT DESCRIPTION

This section describes the applicant’s proposal, including the project site, site characteristics and uses, and the project objectives.

3.1 Project Site

Bee Rock Quarry is located approximately 1.5 miles south of Lake Cachuma in the southeast corner of the San Lucas Ranch. The Quarry road is situated on the southbound side of State Route 154, immediately opposite the entrance to the Bradbury Dam observation site at Lake Cachuma, approximately 5.25 miles southeast of the intersection of State Route 154 and Route 246 near Santa Ynez, California.

3.2 Project Description

The applicant proposes to: 1) modify the operational limitations of Conditional Use Permit 87-CP-029 and Revision 01 thereto which governs the facility; 2) expand the area to be mined by nine acres; and 3) revise the Reclamation Plan to incorporate the additional acreage. Each of the proposed changes is described below.

3.2.1. Conditional Use Permit (03CUP-00000-00092)

The applicant proposes to modify the limitations of the existing Conditional Use Permit 87-CP-029 and Revision 01 thereto (hereinafter “the 1987 CUP”) including the annual production of mined material, the avoidance of southbound trucking operations during morning peak hour traffic, and the effective life of the permit.

Per the 1987 CUP, annual production (i.e. export of rock product from the site) is limited to 175,000 tons. Market demand for the rock material produced has increased in recent years with annual production averaging about 261,000 tons over from 1999 through 2003. The applicant proposes to validate this past exceedance and to revise the annual limit thereafter to a rolling average of 300,000 tons per year over any five-year period with a maximum of 400,000 tons in any one year.

Per the 1987 CUP, the applicant is required to stagger “truck trips to avoid early morning commuter rush hour peak traffic” on State Route 154. The applicant proposes to clarify that this condition was put into effect so as to prohibit loaded southbound departures from the quarry from 6:30 am to 8:00 am to avoid conflicts with the southbound commuter traffic and to allow for unrestricted unloaded truck arrivals and northbound loaded truck departures. The applicant also proposes to install a 200-foot long southbound deceleration lane/turn-pocket on State Route 154 at the quarry entrance/exit. (Note: This project component was deleted by the applicant per the written comments submitted on the Draft EIR; refer to Appendix 7.0 of this EIR for further information).
The applicant has re-evaluated the available mineral reserves at the quarry site and has determined the total rock reserves to be approximately 16 million tons (as of January 2001), of which 12.5 million tons are located within and adjacent to the existing excavation area. The additional 3.5 million tons of mineral reserves have been identified in the area just west of the proposed excavation limit. Extraction of these reserves is not included in the current proposal. When the application for the Quarry expansion was filed on December 31, 2003, approximately 700,000 tons had been excavated and sold since 2001. Thus, 11.8 million tons currently (January 2004) remains in place in the vicinity of the existing excavation area of the mining facility. The 1987 CUP and reclamation plan authorize the extraction of 7.9 million tons (of which 4 million tons currently remain) over a 47-year period ending in the year 2034. The operator proposes to modify the permit to authorize the extraction of the 11.8 million tons of limestone rock remaining in the vicinity of the existing quarry over a 39-year period ending in the year 2043.

Material production at Quarry over this time period is identified in the following Table 3-1 and is based on the proposed permit limit of an **a rolling** average of 300,000 tons per year over each five years with a maximum of 400,000 tons in any given year.

**TABLE 3-1 -- MATERIAL PRODUCTION (estimated after 2003)**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL LIMESTONE PRODUCED (TONS)</th>
<th>TOTAL LIMESTONE PRODUCED (CUBIC YDS)</th>
<th>YEAR</th>
<th>TOTAL LIMESTONE PRODUCED (TONS)</th>
<th>TOTAL LIMESTONE PRODUCED (CUBIC YDS)</th>
<th>YEAR</th>
<th>TOTAL LIMESTONE PRODUCED (TONS)</th>
<th>TOTAL LIMESTONE PRODUCED (CUBIC YDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>485,845</td>
<td>285,791</td>
<td>2013</td>
<td>300,000</td>
<td>229,000</td>
<td>2029</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>1998</td>
<td>415,323</td>
<td>244,308</td>
<td>2014</td>
<td>300,000</td>
<td>229,000</td>
<td>2030</td>
<td>300,000</td>
<td>229,000</td>
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<tr>
<td>1999</td>
<td>297,041</td>
<td>174,730</td>
<td>2015</td>
<td>300,000</td>
<td>229,000</td>
<td>2031</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2000</td>
<td>261,391</td>
<td>153,759</td>
<td>2016</td>
<td>300,000</td>
<td>229,000</td>
<td>2032</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2001</td>
<td>261,682</td>
<td>153,931</td>
<td>2017</td>
<td>300,000</td>
<td>229,000</td>
<td>2033</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2002</td>
<td>246,895</td>
<td>145,232</td>
<td>2018</td>
<td>300,000</td>
<td>229,000</td>
<td>2034</td>
<td>300,000</td>
<td>229,000</td>
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<tr>
<td>2003</td>
<td>239,421</td>
<td>140,836</td>
<td>2019</td>
<td>300,000</td>
<td>229,000</td>
<td>2035</td>
<td>300,000</td>
<td>229,000</td>
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<tr>
<td>2004</td>
<td>300,000</td>
<td>229,000</td>
<td>2020</td>
<td>300,000</td>
<td>229,000</td>
<td>2036</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2005</td>
<td>300,000</td>
<td>229,000</td>
<td>2021</td>
<td>300,000</td>
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<td>2006</td>
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<td>2007</td>
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<td>2023</td>
<td>300,000</td>
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<td>2039</td>
<td>300,000</td>
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<td>2008</td>
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<td>229,000</td>
<td>2024</td>
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<td>2040</td>
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<td>2009</td>
<td>300,000</td>
<td>229,000</td>
<td>2025</td>
<td>300,000</td>
<td>229,000</td>
<td>2041</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2010</td>
<td>300,000</td>
<td>229,000</td>
<td>2026</td>
<td>300,000</td>
<td>229,000</td>
<td>2042</td>
<td>300,000</td>
<td>229,000</td>
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<tr>
<td>2011</td>
<td>300,000</td>
<td>229,000</td>
<td>2027</td>
<td>300,000</td>
<td>229,000</td>
<td>2043</td>
<td>300,000</td>
<td>229,000</td>
</tr>
<tr>
<td>2012</td>
<td>300,000</td>
<td>229,000</td>
<td>2028</td>
<td>300,000</td>
<td>229,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The proposed additional mining would involve an increased ultimate depth of the excavation and an associated lateral expansion outside of the current permitted mine boundary. The excavation area would expand by approximately 9 acres to a total of 31.5 acres along the northern boundary of the quarry where the proposed deepened southward-sloping final quarry face would project onto the north side of Bee Rock Hill. The increase in the vertical depth of excavation would vary depending upon location and would not exceed a maximum depth of 250 feet.

The proposed mining of the quarry would occur in four distinct phases as per the detailed maps and cross sections included as part of the project application. The timing and area involved in each phase is listed below:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Project Area (acres)</th>
<th>Estimated Date of Completion of Mining</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>28.5</td>
<td>2017</td>
</tr>
<tr>
<td>II</td>
<td>28.5</td>
<td>2027</td>
</tr>
<tr>
<td>III</td>
<td>31.5</td>
<td>2033</td>
</tr>
<tr>
<td>IV</td>
<td>31.5</td>
<td>2043</td>
</tr>
</tbody>
</table>

Quarry slopes would consist of 40-foot high vertical working faces separated by horizontal benches during mining (excavation) operations. At the end of mining, the final reclaimed surface in the quarry highwall area would be created by reshaping the vertical faces to a maximum overall slope of 1.5 to 1 with 25 to 35-foot wide benches every 40 feet in vertical height. Further, the ultimate floor of the quarry would be graded to form a shallow valley at an approximate elevation of 1600 feet above mean sea level (MSL). This valley would be designed to drain to the un-named creek (aka “Bee Rock Creek”) that borders the mining site on the south. The ultimate quarry floor would include a defined drainage channel and a series of check dams to minimize erosion and sedimentation from the excavation area as plantings are established. The geometry of the final reclaimed surface is depicted on map sheets 6 through 10 of the proposed reclamation plan (03RPP-00000-00004).

Other operational aspects of the Bee Rock Quarry facility would not be changed. Mining would continue to be accomplished by a drilling and controlled blasting method. Blasting would continue to occur on a bi-weekly basis with the number of blasts ranging from 15 to 25 per year. Blasted material would be either sold in large blocks (rip-rap) or crushed and screened into various sizes of limestone products.

The hours of the facility operations would continue to vary as a result of market demand and weather conditions. Employees typically arrive at work at 6:00 a.m. and leave around 3:00 or 3:30 p.m.; periodically employees are asked to report to work at 5:30 a.m. for safety meetings or other company business.
The excavation activities would generally occur only on weekdays between 6:30 am and 3:00 pm. Loading and hauling operations, from stockpiles, would occasionally be extended to 24 hours per day, seven days per week; the extended operations would typically occur when so required by Local, State and Federal agencies so as to avoid daytime traffic disruption during local roadway construction projects. Extended hours of operation would also occur during emergencies such as severe flooding. A flag person utilizing radio communications and video camera monitoring of traffic conditions would continue to control southbound truck departures from and arrivals to the quarry to assure safe entry onto State Route 154 at all times. (Note: the video camera faces southbound traffic only).
3.2.2. Reclamation Plan (03RPP-00000-00004)

The applicant proposes to revise the current reclamation plan (87-RP-02) for Bee Rock Quarry to authorize a greater total depth of excavation, to reconfigure final slopes within the current permitted boundary of the facility, and to extend the life of the mining operation to the year 2043. The proposed reclamation plan would allow the quarry to be excavated in four phases as designated on the detailed maps and cross sections included as part of the application. The timing and area involved in each phase is listed below:

### Proposed Mining and Reclamation Completion Dates

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Project Area (acres)</th>
<th>Estimated Date Completion of Mining</th>
<th>Estimated Date Completion of Reclamation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>28.5</td>
<td>2017</td>
<td>2034</td>
</tr>
<tr>
<td>II</td>
<td>28.5</td>
<td>2027</td>
<td>2046*</td>
</tr>
<tr>
<td>III</td>
<td>31.5</td>
<td>2033</td>
<td>2046*</td>
</tr>
<tr>
<td>IV</td>
<td>31.5</td>
<td>2043</td>
<td>2046*</td>
</tr>
</tbody>
</table>

*Indicates dates that include a three year monitoring period for evaluation of reclamation success.

### Table 3-2: Phasing of Mining and Reclamation Activities

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Project Area (acres)</th>
<th>Estimated Date of Completion of Mining per Phase</th>
<th>Acres Reclaimed</th>
<th>Estimated Date of Completion of Reclamation</th>
<th>Active Mining Area (acres)</th>
<th>Working Face Elevation After Phase 1 Excavation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>28.5</td>
<td>2017</td>
<td>None</td>
<td>2034</td>
<td>26.5</td>
<td>1850 MSL</td>
</tr>
<tr>
<td>II</td>
<td>28.5</td>
<td>2027</td>
<td>None</td>
<td>2046*</td>
<td>27.8</td>
<td>1810 MSL</td>
</tr>
<tr>
<td>III</td>
<td>31.5</td>
<td>2033</td>
<td>7.5</td>
<td>2046*</td>
<td>29.9</td>
<td>1730 MSL</td>
</tr>
<tr>
<td>IV</td>
<td>31.5</td>
<td>2043</td>
<td>31.5</td>
<td>2046*</td>
<td>24.2</td>
<td>Variable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1600 to 1650 MSL</td>
</tr>
</tbody>
</table>

*Indicates dates that include a three year monitoring period for evaluating the success of the reclamation.

Final reclamation of the site would primarily occur upon the completion of mining. At the time excavation of Phase III is completed, approximately seven acres of the final reclaimed surface would have been created and be ready for reclamation. The remaining 25 acres would be reclaimed upon the completion of mining excavation.
Quarry slopes would consist of 40-foot high vertical working faces separated by horizontal benches during mining (excavation) operations. At the end of mining, the final reclaimed surface in the quarry highwall area would be created by reshaping the vertical faces to a **proposed** maximum overall slope of 1.5 to 1 with 25 to 35-foot wide benches every 40 feet in vertical height. The ultimate quarry floor area at the time of final reclamation would be graded to form a shallow valley at an approximate elevation of 1600 feet MSL and would be designed to drain to the unnamed creek (aka “Bee Rock Creek”) that borders the mining site on the south. The ultimate quarry floor would include a defined drainage channel and a series of check dams to minimize erosion and sedimentation from the excavation area as plantings are established. The geometry of the final reclaimed surface is depicted on Map Sheets 6 through 10 of the proposed reclamation plan.

The proposed revegetation activities include the planting of a minimum of 100 oak trees **along the northerly side of the existing haul road** and the seeding of the final reclaimed surface with native species. Seeding the quarry rock slopes and other disturbed surfaces with native species would occur in the October to December period to coincide with the start of the winter rain season.

Two different seed mixes are proposed for the reclaimed quarry highwall (Zone 1) and the gently-sloping areas (Zone 2) of the site as described **in detail** on Map Sheets 10 and 11 of the proposed reclamation plan.

The Zone 1 seed mix reflects a “Chapparal/Coastal Scrub” habitat consistent with the existing native vegetation on the adjacent undisturbed slopes **as shown below**.

| Reclamation Zone 1 Chaparral/Coastal Scrub Habitat, Proposed Seed Mix |  |
|---|---|---|
| **Species** | **Common Name** | **Lbs/Acre** |
| Poa pratensis | Kentucky bluegrass | 2 |
| Agastache urticifolia | Horsemint | 2 |
| Baccharis californica | Coyote bush | 1 |
| Rosa californica | Wild rose | 1 |
| Trifolium pretense | Red clover | 1 |
| Umbellularia californica | Laurel | 1 |
| Nassella pulchra | Purple needlegrass | 10 |
| Quercus wislizenii | Interior live oak | 1 |
| Salvia apiana | White sage | 5 |
| Lotus scoparius | Deerweed | 2 |
| Salvia mellifera | Black sage | 5 |
| Mimulus aurantiacus | Bush monkeyflower | 1 |
| Adenostoma fasciculatum | Chamise | 10 |
| Erigeronum fasciculatum | Buckwheat | 2 |

**Source:** Revegetation Site Plan (Sheet 11 of 11)
The Zone 2 seed mix is designated for an “Upland Communities” habitat compatible with the gently-sloping meadow areas adjacent to the mining facility as shown below.

<table>
<thead>
<tr>
<th>Species</th>
<th>Common Name</th>
<th>Lbs/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poa pratensis</td>
<td>Kentucky bluegrass</td>
<td>5</td>
</tr>
<tr>
<td>Bromus carinatus</td>
<td>California brome</td>
<td>5</td>
</tr>
<tr>
<td>Bromus wildenowii</td>
<td>Prairie brome</td>
<td>5</td>
</tr>
<tr>
<td>Salvia apiana</td>
<td>White sage</td>
<td>2</td>
</tr>
<tr>
<td>Nassella pulchra</td>
<td>Purple needlegrass</td>
<td>10</td>
</tr>
<tr>
<td>Baccharis salicifolia</td>
<td>Mulefat</td>
<td>1</td>
</tr>
<tr>
<td>Heteromeles arbutfolia</td>
<td>Toyon</td>
<td>2</td>
</tr>
<tr>
<td>Lotus scoparius</td>
<td>Deerweed</td>
<td>1</td>
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<tr>
<td>Salvia mellifera</td>
<td>Black sage</td>
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</tr>
<tr>
<td>Mimulus aurantiacus</td>
<td>Bush monkeyflower</td>
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<tr>
<td>Adenostoma fasciculatum</td>
<td>Chamise</td>
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<tr>
<td>Eriogonum fasciculatum</td>
<td>Buckwheat</td>
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In the quarry highwall area, revegetation efforts would be concentrated on surfaces where fractures or loose earth materials are present that could support vegetative growth. Topsoil salvaged from the new areas proposed for excavation would be stockpiled during the operational period and subsequently placed on the highwall horizontal benches as part of this revegetation work. Solid exposed limestone outcrops would not be anticipated to support plant growth. These outcrops would, however, be subject to broadcast seeding with the expectation that rainfall and wind would transport the seeds and topsoil into nearby fractures. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops).

Oak tree seedlings, including Interior Live Oak, Blue Oak and Valley Oak, would be propagated from acorns collected onsite. Reclamation activities proposed during the Phase IV mining would include the collection, propagation and planting of oak trees. These seedlings would be established in a small on-site nursery or would be outsourced to a commercial nursery. The seedlings would be planted adjacent to the outer edge of the mined lands along the north side of the existing quarry road as shown on the proposed revegetation site plan (Sheet 11 of 11). These seedlings would be planted in the gently-sloping areas of the site.
As proposed, the reclamation plan boundary would be extended to include the segment of Hilton Creek between the quarry site and State Route 154. This section of Hilton Creek was affected in the late 1990s by sedimentation from Bee Rock Quarry. Measures to minimize erosion and downstream sedimentation have been implemented at the quarry site and have been included in the proposed revised reclamation plan to address this issue. No other reclamation activities are proposed in the Hilton Creek drainage area.

3.3 Project Objectives

The overall objectives of the proposed Bee Rock Quarry Expansion are to:

- Ensure that the available mineral reserve at the site is mined to the maximum extent allowable;
- Provide flexibility in the annual production rate to respond to market demands;
- Validate the mine's annual production rate during the period beginning in 1997 and ending in 2003; and,
- Establish a new production rate limit of 300,000 tons per year based on a five-year rolling average (or 1,500,000 tons in any consecutive five years) with a maximum of 400,000 tons in any given year.
4.0 CONSISTENCY WITH ADOPTED GOALS AND POLICIES

4.1 Site Information

<table>
<thead>
<tr>
<th>Bee Rock Quarry Site Information</th>
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<tr>
<td>Comprehensive Plan Designation</td>
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4.2 Consistency with the County Comprehensive Plan

The following provides a preliminary analysis of the proposed project’s consistency with the applicable policies of the County Comprehensive Plan. This discussion pertains only to the proposed expansion of the quarry boundary and the increase in the annual production limit from 175,000 to a 5-year rolling average of 300,000 tons per year for the 44-year time period from 1999 to 2043, as set forth in Table 3-1 (Material Production) in Section 3.0, Project Description of this EIR.

**Land Use Development Policy 4.** Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project.

**Analysis.** The proposed operational changes to Bee Rock Quarry would be consistent with this policy. The mining methods and onsite facilities utilized at the Quarry would not be substantially changed with the approval/validation of the increased annual production limit. The creation of the final reclaimed slope would not require engineering steps substantially different from the current reclamation plan.
With installation of a deceleration lane on State Route 154 taken together with continued implementation of the 1997 Caltrans required traffic control system, adequate and safe access to the facility for rock transport trucks would be assured. Except for fire protection, no other new facilities, services or resources would be required beyond those already available at the site. With respect to fire protection, the Santa Barbara County Fire Department has recommended that the quarry gate be equipped with a Knox Lock or Knox Box system prior to land use clearance. Further, the Department has provided a list of conditions to be satisfied prior to land use clearance which have been recommended for incorporation into the project conditions of approval (refer to Appendix 7.0, Response to Comments, for further information).

Hillside and Watershed Protection Policy 1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Analysis. Although it involves the creation of an extensive cut slope and substantial alteration of the natural terrain, the proposed project would be consistent with this policy. Hardrock surface mining facilities, such as Bee Rock Quarry, invariably result in substantial excavation and alteration of the natural terrain. The proposed mining expansion project would include the minimum volume of excavation necessary to recover the amount of limestone material intended to be produced. In this case, the “development” (site excavation and reclamation) could not be carried out with less alteration of the natural terrain. The proposed mine expansion, if approved, would allow for the majority of the County’s only source of a significant limestone deposit to be excavated. Continued excavation of the Bee Rock Quarry, a unique mineral resource of local and statewide significance according to the State Department of Mines and Geology, could result in postponing exploration of other less significant sites throughout the region and the state.

Hillside and Watershed Protection Policy 2. All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited for development because of known soils, geologic, flood, erosion, or other hazards shall remain in open space.

Analysis. The proposed project would be consistent with this policy. It is designed to fit the underlying geologic conditions so as to recover the majority of the limestone deposit up to 11.8 million tons with another 3.5 millions tons to be left in reserve. limestone mineral materials. The grading and other site preparation is the minimum necessary to recover the amount of limestone material intended to be produced. Natural features, such as Bee Rock Hill, would be preserved to the extent feasible. It is recognized, however, that hardrock surface mining facilities such as Bee Rock Quarry invariably result in substantial excavation and alteration of the natural terrain. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops).
Hillside and Watershed Protection Policy 3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.

**Analysis.** The proposed project would be consistent with this policy. The reclamation plan requires phased reclamation of the site which would minimize the acreage of un-vegetated slopes on the site at any one time. Continued implementation of the Sediment Control Plan (2001) and Storm Water Pollution Prevention Plan (2003) included in the Reclamation Plan together with implementation of an augmented/updated Sediment and Erosion Control Plan identified as a required mitigation measure in this EIR, would minimize erosion and offsite sedimentation.

Hillside and Watershed Protection Policy 4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained throughout the development process to remove sediment from runoff waters. All sediment shall be retained onsite unless removed to an appropriate dumping location.

**Analysis.** Erosion control measures specified in the Sediment Control Plan (2001) and Storm Water Pollution Prevention Plan (2003) included in the proposed, revised Reclamation Plan (submitted to the County as part of the Bee Rock Quarry expansion project) have already been implemented. These measures include sediment basins and barriers that have proven to be effective in limiting the volume of limestone sediment transported from the site by runoff. In its May 22, 2006 DEIR letter, the California Regional Water Quality Control Board (RWQCB), Central Coast Region stated, in part, that: “The finer particles are calcium carbonate powder and are best prevented from off-site transport by measures such as paving certain road segments and entryways, which Granite has made progress on, and by covering stockpiles and surrounding them with straw rolls, which Granite has not made as much progress on. These measures focus on preventing entrainment of these powdery fines in stormflows. A sediment basin would not serve to significantly reduce transport of these finer particles in large storm events, since the particles typically remain in suspension during high flows. However, we would expect coarser material to be trapped by an appropriately designed sediment basin.” With the implementation of the augmented/updated Sediment and Erosion Control Plan (Biological Resources Mitigation Measure #1 of this EIR), additional best management practices would be put into effect and new sediment control facilities (or other methods acceptable to the RWQCB) to entrain the coarser limestone materials on-site would be installed. Based on With implementation of the existing and planned erosion control improvements required pursuant to the proposed project conditions of approval, the proposed project Bee Rock Quarry mine expansion would be consistent with this policy.
Further, within the next 5 to 7 years, the Quarry would be reconfigured such that runoff would be collected in the floor of the pit, which in turn would effectively serve as a sediment basin.

Hillside and Watershed Protection Policy 5. Temporary vegetation, seeding, mulching, or other suitable stabilization method shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized immediately with planting of native grasses and shrubs, appropriate nonnative plants, or with accepted landscaping practices.

Analysis. As with any mining project, the operation of Bee Rock Quarry involves continual grading and site disturbance. The Quarry’s active mining face is comprised of temporary vertical slopes and horizontal benches of exposed limestone bedrock. Temporary vegetation in this setting is not feasible as the solid limestone does not support plant growth and the slope would be subject to repeated excavation. The reclamation plan, however, requires phased reclamation of the site as slopes reach final grade. This requirement would minimize the acreage of unvegetated slopes on the site at any one time. The revegetation of the site would be accomplished consistent with Surface Mining and Reclamation Act (SMARA) performance standards to the satisfaction of the State Department Office of Mine Reclamation and the County Planning & Development Department, subject to compliance with the project conditions of approval. With implementation of the reclamation plan as discussed above, the proposed project would be consistent with this policy.

Hillside and Watershed Protection Policy 6. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater recharge.

Analysis. Implementation of the Sediment Control Plan (2001) and Storm Water Pollution Prevention Plan (2003) included in the revised Reclamation Plan, and the augmented/updated Sediment and Erosion Control Plan identified as a required mitigation measure in this project EIR, would convey runoff to appropriate watercourses and serve to minimize erosion and offsite sedimentation. With implementation of the existing and planned erosion control improvements required pursuant to the proposed project conditions of approval, the proposed expansion project would be consistent with this policy.

Hillside and Watershed Protection Policy 7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Analysis. The project would not involve the discharge of chemicals, fuels, lubricants, sewage or other harmful waste into nearby drainage courses. Erosion control measures specified in the Sediment Control Plan (2001) and Storm Water Pollution Prevention Plan (2003) included in the proposed, revised Reclamation Plan (submitted to the County as part of the Bee Rock Quarry expansion project).
have already been implemented. These measures include sediment basins and barriers that have proven to be effective in limiting the volume of limestone sediment transported from the site by runoff. In its May 22, 2006 DEIR letter, the RWQCB stated, in part, that: “The finer particles are calcium carbonate powder and are best prevented from off-site transport by measures such as paving certain road segments and entryways, which Granite has made progress on, and by covering stockpiles and surrounding them with straw rolls, which Granite has not made as much progress on. These measures focus on preventing entrainment of these powdery fines in stormflows. A sediment basin would not serve to significantly reduce transport of these finer particles in large storm events, since the particles typically remain in suspension during high flows. However, we would expect coarser material to be trapped by an appropriately designed sediment basin.” With the implementation of the augmented/updated Sediment and Erosion Control Plan (Biological Resources Mitigation Measure #1 of this EIR), additional best management practices would be put into effect and new sediment control facilities (or other methods acceptable to the RWQCB) to entrain the coarser limestone materials on-site would be installed. Based on With implementation of the existing and planned erosion control improvements required pursuant to the proposed project conditions of approval, the proposed project Bee Rock Quarry mine expansion would be consistent with this policy.

Visual Resource Policy 2. In areas designated as rural ..., the height, scale, and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms; shall be designed to follow the natural contours of the landscape; and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Analysis. The proposed mine expansion would not result in any substantive change in the mining methods employed at the Quarry or onsite facilities currently in use; no new structures have been proposed. As for the Quarry itself, albeit Although the quarry is visually dominant and incompatible with the surrounding lands when viewed from public viewing areas located along the ridgeline of the Santa Ynez Mountains, the proposed project would not substantially affect this existing condition. The visual character of the quarry from southerly viewpoints when seen from State Route 154 and other areas within the Santa Ynez valley was substantially the same in 1967 as the current condition. Per the proposed reclamation plan, the top of Bee Rock hill would be dropped in elevation from the currently permitted final configuration by approximately 70 feet due to the proposed additional excavation. With this drop in elevation, the quarry would be less visible from public viewing places upon implementation of the proposed project. In addition, the proposed reclamation plan includes re-vegetation requirements that would reduce the visual dominance of the excavated quarry slopes that are able to support vegetation. Not all areas of Bee Rock hill are suitable for plantings as some areas will be exposed limestone rock outcroppings. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops).

Thus, as a result of the fore-going, the proposed project would be consistent with this policy.
4.3 Consistency with the County Article III (Inland Zoning Ordinance)

The following provides a discussion of the compliance of the Bee Rock Quarry Expansion Project with the applicable provisions of Article III of the Santa Barbara County Code, Sections 35-320, Reclamation and Surface Mining Permits. This discussion pertains only to the proposed expansion of the quarry boundary and the increase in the annual production limit from 175,000 tons to a 5-year rolling average of 300,000 tons per year with a maximum of 400,000 tons in any given year for 45-years from 1999 to 2043.

Section 35-320.4.3. Earthwork. Reclamation activities shall be consistent with the appropriate provisions of the County’s Grading Ordinance (Chapter 14 of the Santa Barbara County Code), and with other appropriate engineering and geologic standards.

Pursuant to Section 14-6(a) of the County Code, the grading activities at the quarry (i.e. excavation of the final reclaimed slope) are not subject to the provisions of the County Grading Ordinance. The design steepness of the final cut slope (1.5:1), however, conforms to the County’s Grading Ordinance requirements. The benching details and the stability of the cut slope have been reviewed and recommended for approval by the P&D Engineering Geologist. Further, as recommended by the State Department of Conservation, Office of Mine Reclamation in its DEIR comment letter (refer to Appendix 7.0, Response to Comments), the project conditions require that a qualified professional observe the slopes during the annual inspection process as mining progresses to assure slope stability of the final, reclaimed slopes.

Sec. 35-320.7. Performance Standards for Surface Mining Operations and Reclamation Plans. (Added by Ord. 4098, 5/18/93)

1. Performance Standards for Surface Mining Operations

All surface mining operations for which a new or revised Conditional Use Permit (CUP) is required shall comply with the requirements contained in SMARA and implementing State Regulations. In addition, the following County performance standards apply as may be appropriate to surface mining operations that are subject to a new or substantially revised CUP.

a. Appearance. Mining operations shall be conducted in a neat and orderly manner, free from junk, trash, or unnecessary debris. Where in public view, salvageable equipment stored in a non-operating condition shall be suitably screened or stored in an enclosed structure.

The operations of Bee Rock Quarry are conducted in a neat and orderly manner. The site is enclosed within a perimeter of K-rails, rock berms and bedrock cut slopes. There is no trash or junk on the ground and only a few pieces of currently-unused mining equipment are stored on the site. None of the operations are visible from State Route 154. The existing remote views of the quarry from the public trail on the crest of the Santa Ynez Mountains would not change with implementation of the proposed project. Further, the project conditions of approval require that additional measures be implemented to limit, control, or avoid the creation of limestone dust and sediments.
b. **Noise and Vibration.** Noise and ground vibration shall be controlled so as to minimize any disturbance of neighbors. The volume of sound measured outside during calm air conditions, generated by any use on the property shall not exceed 65 dB(A)_{LDN} as measured at the location of the nearest noise sensitive use (as defined in the County Noise Element) beyond the property boundary of the mining operation.

The proposed project would involve increased noise at a higher level of truck traffic. This incremental change in noise levels would not be expected to cause a noise-related disturbance of neighbors because of the site’s remoteness. No sensitive offsite receptors (i.e. residences) are located near the site; the closest offsite residence is situated at least a mile away, over 5,280 feet from the site, within 1,650 feet of the site. Furthermore, the noise generated by materials processing activities and controlled blasting does not reach offsite parcels as it is contained by the site’s topography. The mining site is located in a small valley bounded on the north and east by Bee Rock Hill and on the south by the Santa Ynez Mountains. Materials processing and blasting occurs only on and below the active quarry face on the south side of Bee Rock Hill. The sounds of these activities do not reach State Route 154 or other offsite areas located north of Bee Rock Hill or the quarry.

c. **Traffic Safety.**

1) **Parking shall be provided as required in DIVISION 6, PARKING REGULATIONS.** Adequate provision shall be made for queuing and loading of trucks.

The existing quarry access roads, scalehouse and communication system are adequate to provide for the safe queuing and loading of rock transport trucks at the facility. The new deceleration lane on State Route 154, a Caltrans recommended mitigation measure, taken together with continued implementation of the Caltrans’ recommended traffic safety control program for the Quarry, would be adequate to provide for safe arrivals and departures of rock transport trucks. Adequate parking is available for employees and service vehicles. Transport trucks do not park on the site.

2) **Haul roads, as defined in Sec. 35-320.2, shall be located away from property lines where possible, except where adjoining property is part of the mining operation.** Where processing facilities are not located on the same site as the mining operation, off-site haul routes shall be specified in the permit application. Such haul routes as well as other transport routes from the processing facilities to market destinations shall avoid to the maximum extent feasible, routing through residential neighborhoods.

The existing haul road is located entirely on the project parcels except where it connects with State Route 154. Except in the area of its connection to the highway, the haul road is located several hundred feet from adjoining properties. The rock processing facilities are located on the same site as the mining operation. The transport routes to market
involve northbound or southbound State Route 154 and connections to U.S. Highway 101 and avoid residential neighborhoods.

3) Number and location of access points to the mining operation shall be specified.

   The quarry entrance road off of State Route 154 (depicted on project plans) is the only access point to the mining operation.

d. Dust Control. During hours of operations, all access roads shall be wetted, protected or contained in such a manner as to minimize the generation of dust.

   The quarry operation includes a water truck that regularly wets the access roads to minimize dust generation. The quarry operator recently paved several thousand lineal hundred feet of the quarry access road. This paving has further reduced dust generation at this facility. Further, the project conditions of approval require that additional measures be implemented to limit, control, or avoid the creation of limestone dust.

e. Public Health and Safety.

   1) Appropriate measures, including fencing, shall be provided where necessary to provide for public safety. The Planning Commission may require fencing of all or a portion of an excavation. In determining the amount and type of protective measures that are required, the Planning Commission shall take into consideration the extent to which the property upon which the mining operation is located is adequately protected by existing security measures.

   Bee Rock Quarry is located in a remote area of a large, privately-owned ranch. There is no public access to the site. An attendant is stationed at the entrance gate of the access road at all times when the quarry is open to control entry to the site. The entrance gate is locked when the quarry is not in operation. These measures are adequate to ensure public safety.

   2) Where necessary for public safety, the Planning Commission may require that excavations be posted to give reasonable public notice.

   Bee Rock Quarry is located in a remote area of a large, privately-owned ranch. There is no public access to the site. Posting of excavations would not be required.

   3) Any body of water created during operations within the excavation shall be maintained in such manner as to provide for mosquito control and to prevent the creation of health hazards or public nuisance.

   To date, no substantial bodies of water have been created as part of quarry operations. The project conditions of approval provide that any temporary closed depressions as may be created in the future as part of mining would be required to be drained or treated to minimize mosquito generation to the satisfaction of the County and State officials.
involved in regulating mining activities and/or mosquito abatement. Any future basins required for sediment control would be required to fully drain to minimize standing water.

4) Any generation of offensive odors or fumes, noxious gases or liquids, heat, glare, or radiation and all other activities shall be conducted in such a manner so as not to be injurious to the health, safety, or welfare of persons residing or working in the neighborhood by reason of danger to life or property.

No offensive odors, heat, glare or noxious materials are generated by the mining operations. There are no neighbors living within 2,000 feet of the facility. Thus, this facility poses no danger to life and property of nearby residents. In addition, mining operations are subject to the following:

(a) The safety regulations of and inspections by the Mining Safety and Health Administration (MSHA). MSHA is responsible for assuring worker safety.

(b) The safety and hazardous materials regulations set forth in the California Health and Safety Code. The Santa Barbara County Fire Department is responsible for administering the applicable provisions of this Code, including requiring the filing of hazardous materials business plans.

f. Screening. To the extent feasible, screening or other aesthetic treatments, such as berms, fences, plantings of suitable shrubs and/or trees shall be required, where necessary, to minimize visibility from public view of cut slopes or mining operations, structures and equipment. Mining operations that are visible from scenic highways designated in the Comprehensive Plan, as well as from routes classified as having highest scenic values in the Open Space Element, shall be screened or other aesthetic treatments shall be used to minimize impacts on scenic resources.

The Bee Rock Quarry is located approximately two miles north of State Route 154, a County and State designated scenic highway. The visual character of the quarry from southerly viewpoints taken from State Route 154 and from other areas within the Santa Ynez valley area are substantially the same today as they were in 1967. As recommended by Caltrans in its June 16, 2006 letter, a mitigation measure (TRAFFIC-3) has been included as part of the proposed project conditions of approval requiring installation of a deceleration lane on the south side of State Route 154. Installation of the deceleration lane on the south side of State Route 154 would result in the frontage of both sides of the scenic highway looking similar in terms of lack vegetation. Given the event of the existing visual intrusions within the vicinity, the incremental effect attributable to installation of the proposed deceleration lane would not dominate the landscape nor would it substantively degrade or obstruct scenic views of the natural hillsides and of Lake Cachuma.
Although the quarry is visually dominant and incompatible with the surrounding lands when viewed from public viewing areas located along the ridgeline of the Santa Ynez Mountains, the proposed project would not substantially affect this existing condition. The visual character of the quarry from southerly viewpoints was substantially the same in 1967 as the current condition. Under the proposed reclamation plan, the top of Bee Rock Hill would be dropped in elevation from the currently permitted final configuration by approximately 70 feet due to the proposed additional excavation. With this drop in elevation, the quarry would be less visible from public viewing places upon implementation of the proposed project. In addition, the proposed reclamation plan includes re-vegetation requirements that would reduce the visual dominance of the excavated quarry slopes. The proposed project would not affect views from State Route 154, a designated state and local scenic highway. With one limited exception, the quarry is not currently visible from the highway and would not be visible after implementation of the project.

g. Protection of Streams and Groundwater Basins. All applications for surface mining operations that could affect streams and/or groundwater basins shall be reviewed as necessary by other agencies as required by law.

This draft EIR has been provided to the State Clearinghouse for distribution to various State agencies. These agencies include the Regional Water Quality Control Board and the California Department of Fish and Game. As required by the California Surface Mining and Reclamation Act (SMARA), the State Office of Mine Reclamation must review and comment on any proposed reclamation plan after conceptual approval has been granted by the County Planning Commission and prior to final approval of same by a local lead agency such as the County of Santa Barbara.

To date, comments and recommended conditions of approval have been received from the Regional Water Quality Control Board and OMR concerning, among other items, protection of downstream water courses. As appropriate, the project conditions of approval require implementation of the Sediment Control Plan (2001) and Storm Water Pollution Prevention Plan (2003) incorporated into the revised Reclamation Plan application, as well as the amendments thereto recommended by the Central Coast RWQCB and OMR, to convey runoff to appropriate on-site areas and to minimize or avoid subsequent release to downstream water courses. This conveyance to water courses would be stopped altogether over the next 5 to 7 years as a result of the Quarry's configuration such that runoff would be collected in the floor of the pit.

h. Annual Reports. Surface mining operators shall forward an annual status report to the Director of the Department of Conservation and the Planning and Development Department on a date established by the Director of the Department of Conservation upon forms furnished by the State Mining and Geology Board (P.R.C. Sec. 2207 (a)-(g)).

The operator of Bee Rock Quarry regularly files the required annual report with the State and County. Such reporting is mandated for all active mining operations in the State.
2. Performance Standards for Reclamation Plans. All new or substantially amended Reclamation Plans shall conform to the minimum statewide performance standards required pursuant to SMARA Sec. 2773(b), and set forth in CCR3700 et. seq., regarding wildlife habitat; backfilling, regrading, slope stability, and recontouring; revegetation; drainage, diversion structures, waterways, and erosion control; prime agricultural land reclamation, other agricultural land; building, structure, and equipment removal; stream protection, including surface and groundwater; topsoil salvage, maintenance, and redistribution; and tailing and mine waste management; and closure of surface openings.

The discussions enumerated in Section 5.4 of this document address the compliance of the proposed Reclamation Plan with the applicable SMARA performance standards.

In addition, the following County Standards shall apply as may be appropriate to new or substantially amended Reclamation Plans:

(a) Revegetation. All revegetation and/or reestablishment shall be in conformance with an approved Landscaping Plan:

Revegetation of the disturbed areas of the quarry shall be accomplished in conformance with the proposed Revegetation Plan included on Plates 10-11 of the Reclamation Plan, the mitigation measures identified in this environmental document, and any additional measures imposed by the County decision-makers during the public hearing process.

(b) Visual Resources. The Reclamation Plan shall, to the extent feasible, provide for the protection and reclamation of the visual resources of the area affected by the mining operation:

The proposed, revised Reclamation Plan, to the extent feasible given the limited topsoil and the geometry and hard bedrock nature of the final quarry slope, project would not adversely affect public views in the vicinity of Bee Rock Quarry. The Quarry working face is located on the south side of Bee Rock Hill and is essentially not visible from State Route 154. All interim slopes and the final reclaimed slope will have a similar geometry and not become visible from the highway as a result of the proposed project. The Quarry is located about 2 miles north of Santa Ynez Peak and Broadcast Peak and is very visible from the area along West Camino Cielo at the ridgeline of the Santa Ynez Mountains. Looking north from this area, the light-colored limestone rock appears in stark contrast to the surrounding forested areas and Lake Cachuma. Although the Quarry is visually dominant and incompatible with the surrounding lands when viewed from public viewing areas located along the ridgeline of the Santa Ynez Mountains, the proposed project would not adversely affect or exacerbate this existing condition.

Under the proposed reclamation plan, the top of Bee Rock Hill would be dropped in elevation from the currently permitted final configuration by approximately 70 feet due to the proposed additional excavation. With this drop in elevation, the Quarry would be less visible from public viewing places upon implementation of the proposed project. In addition, the proposed reclamation plan includes re-vegetation requirements that would reduce the
visual dominance of the excavated quarry slopes to the extent feasible. Thus, the project would be in conformance with this performance standard.

(c) Grading Regulations. All Reclamation Plans shall comply with appropriate provisions of the County’s Grading Ordinance (Chapter 14 of the Santa Barbara County Code):

Reclamation grading activities at the Quarry will be consistent with applicable provisions of the County’s Grading Ordinance. The design steepness of the cut slopes (1.5:1) conforms to County Grading Ordinance requirements. The benching detail of the cut slopes have been modified through discussions between the applicant and the P&D Geologist to assure the stability of the final reclaimed surface.

(d) Phasing of Reclamation. Reclamation Plans shall include a description of and plan for the type of surface mining to be employed and an estimated time schedule that will provide for the completion of surface mining on each segment of the mined lands so that reclamation can be initiated at the earliest possible time on those portions of the mined lands that will not be subject to further disturbance by the surface mining operation. Each phase of reclamation shall be specifically described in the Reclamation Plan and shall include the estimated beginning and ending dates for each phase, all reclamation activities required, criteria for measuring completion of specific reclamation activities, and estimated costs as provided in Sec. 35-320.9 (Financial Assurances):

The proposed Reclamation Plan includes a phasing plan for reclamation of the site. The proposed phasing of mining and reclamation activities would expand on the sequence approved as part of the existing Conditional Use Permit (87-CP-029RV01) and Reclamation Plan (87-RP-002). The mineral reserve would be excavated in four phases (I, II, III and IV) as described in the engineered grading plans and would be reclaimed as final surfaces are reached. The project phases are proposed to be mined as follows:

Phase I - current active mine area (mining complete in 2017)
Phase II - currently disturbed, inactive mine area (mining complete in 2027)
Phase III - future mine area (mining complete in 2033)
Phase IV - future mine area (mining complete in 2043)

Table 1.0 - Proposed Mining and Reclamation Completion Dates

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<th>Completion of Reclamation (Estimate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>28.5</td>
<td>2017</td>
<td>2034</td>
</tr>
<tr>
<td>II</td>
<td>28.5</td>
<td>2027</td>
<td>2046*</td>
</tr>
<tr>
<td>III</td>
<td>31.5</td>
<td>2033</td>
<td>2046*</td>
</tr>
<tr>
<td>IV</td>
<td>31.5</td>
<td>2043</td>
<td>2046*</td>
</tr>
</tbody>
</table>

Note: * indicates dates that include a three year monitoring period for evaluation of reclamation success.
A Financial Assurance of $222,000 is currently posted with the County for this active mining facility. This Assurance will be updated as part of the annual mine inspection to reflect any additional disturbance that has occurred or is anticipated to occur within the following year. This assurance shall also reflect the requirements of the applicable approved reclamation plan.

4.4 Consistency with the reclamation standards of the California Surface Mining and Reclamation Act

The historic and ongoing mining activities at Bee Rock Quarry have involved the progressive excavation of the southern side of Bee Rock Hill to recover limestone mineral product. New rock surfaces are continuously exposed as the excavation area expands toward the current permitted mine boundary. At this time, no final surfaces ready for reclamation have been created. Re-vegetation efforts are required only on final surfaces intended to remain after the cessation of mining activities. The following sections provide a discussion of the compliance of the proposed reclamation plan with SMARA’s reclamation regulations and standards.

SURFACE MINING AND RECLAMATION ACT OF 1975 - SECTION 2773.1, FINANCIAL ASSURANCES

A Financial Assurance of $222,000 is currently posted with the County for this active mining facility. This Assurance will be updated as part of the annual mine inspection to reflect any additional existing disturbance or any disturbance expected to occur within the following year. This assurance shall also reflect the requirements of the applicable approved reclamation plan.

STATE MINING AND GEOLOGY BOARD RECLAMATION REGULATIONS - SECTION 3502

Section 3502. The Reclamation Plan, (b) Reclamation Plan Elements

(1) The Environmental Setting Of The Site Of Operations And The Effect That Possible Alternate Reclaimed Site Conditions May Have Upon The Existing And Future Uses Of Surrounding Lands.

Environmental Setting: Bee Rock Quarry is located on a rocky outcropping of exposed limestone on the flanks of the Santa Ynez Mountains. Prior to the onset of mining in 1952, this land was only suitable to livestock grazing and open space land uses due to the steepness of the slopes.

Effects: The final reclaimed mine surface would remain as a steep rocky slope, although somewhat reduced in gradient. This slope would be re-vegetated to the extent feasible and would be suitable for uses similar to the pre-mining use. Site topography and vegetative cover would be similar to and compatible with adjacent native lands. The excavation and ultimate reclamation of the Bee Rock Quarry site would not affect the existing agricultural and future uses of the surrounding lands.
(2) The Public Health and Safety, Giving Consideration to the Degree and Type of Present and Probable Future Exposure of the Public to the Site.

During the proposed mining and reclamation activities, the locked gate at the entrance to the quarry access road near Highway 154 will remain locked to preclude unauthorized vehicle access. All mining and backfill sites will comply with all Federal (MSHA) and State (OSHA) mine safety regulations concerning operating standards and operation of equipment. Workers, including contract labor, are trained in mine safety and first aid. Refresher courses are conducted periodically in accordance with applicable regulations.

Mine operators carry portable cellular phones for off-site communication. All visitors, outside vendors and truck drivers are required to check in and check out with the scale weigh master. Conditions affecting safety are continually monitored by a dedicated safety coordinator based out of Granite’s Santa Barbara Office.

San Lucas Ranch is private property, and after reclamation of Bee Rock Quarry is completed, as well as during the interim while mining operations continue, the general public will not be admitted to these lands. When the mining has concluded and reclamation has been completed, there will be no open shafts or any hazardous materials present on these lands.


Reclamation grading activities at the quarry will be consistent with applicable provisions of the County Grading Ordinance. The design steepness of the cut slopes (1.5:1) conforms to the County’s Grading Ordinance requirements. The benching detail of the cut slopes have been modified through discussions between the applicant and the P&D Geologist to assure a stable final reclaimed surface. According to the P&D Geologist, the remaining benched limestone surface would meet established standards of stability based on the nature of the limestone material and the moderate slope angle.

(4) Areas Mined To Produce Additional Materials For Backfilling And Grading, As Well As Settlement Of Filled Areas, Shall Be Considered In The Reclamation Plan. Where Ultimate Site Uses Include Roads, Building Sites, Or Other Improvements Sensitive To Settlement, The Reclamation Plans Shall Include Compaction Of The Fill Materials In Conformance With Good Engineering Practice.

No fill areas exist or are proposed on site. No backfill or improvements sensitive to settlement are anticipated.
(5) Disposition of Old Equipment.

When mining activities cease, all mobile and processing equipment not required for reclamation will be removed from the site. All buildings and fixtures not included in the final approved reclamation plan will be removed. Ground water wells, water pipelines and related utilities useful to grazing and future agricultural production will be left in place.

SURFACE MINING AND RECLAMATION ACT OF 1975 REGULATIONS, ARTICLE 9, RECLAMATION STANDARDS

The following sections provide discussions of the compliance of Bee Rock Quarry’s Reclamation Plan with the applicable provisions of Surface Mining and Reclamation Act (SMARA) Regulations, Article 9, Reclamation Standards.

Section 3703 - Performance Standards for Wildlife Habitat

(a) Rare, Threatened or Endangered Species shall be conserved:

No rare, threatened or endangered species are known to exist on the proposed project site. The existing mine site has been in continuous operation for approximately 50 years, and biological studies performed in support of this reclamation plan application did not identify any species of concern or their habitats in the project area, but did note that biological resources within the immediate vicinity in the downstream reaches of Hilton Creek west and northwest of the Bee Rock Quarry (Refer to Section 5.4, Biological Resources, for further information). Mitigation measures are included to address potentially significant effects of long-term, limestone sedimentation in these stream systems that can affect fish habitat by changing habitat suitability, species composition, and aquatic biomass. Of particular note are potential effects of the sedimentation on Southern Steelhead and/or the downstream habitats that could support them.

In September and October, 2005, Bumgardner Biological Consulting conducted protocol-level surveys for California Red-Legged Frog within Bee Rock Creek downstream from the quarry and along the reach of Hilton Creek 0.25 miles downstream from the confluence with Bee Rock Creek (Bumgardner 2005, Appendix A of this EIR). Nighttime surveys for RLF were conducted on September 28, and 29, 2005. Daytime surveys were conducted on October 26 and 27 2005. No RLF were found during the protocol surveys of Bee Rock and Hilton Creeks, and none were found at the two off-channel ponds near the quarry scale house.

There is potential for the project to cause indirect effects on sensitive habitat downstream of the mining site. Downstream transport of limestone sediment eroded from the mining site has occurred in the past and would be expected to occur in the future.

Improvements in erosion control facilities and practices have substantially reduced the level of offsite sedimentation over the last several years. The continued implementation of these practices, with the required mitigation measures included in this EIR, serve to minimize the potential effects on sensitive species. As discussed in Section 5.4 of this document, impacts would be reduced to a less than significant level.
(b) Wildlife shall be established on disturbed land in a condition at least as good as that which existed before the lands were disturbed by surface mining operations:

As part of site reclamation, the expansion area will be re-vegetated and returned to a condition similar to the pre-existing condition (i.e. a steep mountain slope with chaparral vegetation). Wildlife, such as raptors, would be able to use this reclaimed open space as habitat.

(c) Wetland Habitat shall be avoided. Any wetland habitat impacted as a consequence of surface mining operations shall be mitigated at a minimum of one to one ratio for wetland habitat acreage and wetland habitat value:

The proposed project does not include disturbance of any wetland areas.

**Section 3704 - Performance Standards for Backfilling, Regrading, Slope Stability, and Recontouring**

(a) Where backfilling is proposed for urban uses (e.g., roads, building sites, or other improvements subject to settlement), the fill material shall be compacted in accordance with Section 7010, Chapter 70 of the UBC, or the local grading ordinance:

Not applicable. No backfilling or urban uses are proposed.

(b) Where backfilling is required for resource conservation purposes, fill material shall be backfilled to the standards required for the resource conservation use involved:

Not applicable. No backfilling or urban uses are proposed.

(c) Piles or dumps of mining waste shall be stockpiled in such a manner as to facilitate phased reclamation. They shall be segregated from topsoil, etc.:

The mining activities at Bee Rock Quarry essentially do not involve the generation of mining waste as virtually all of the limestone material produced is sold. Also, very little topsoil is encountered during excavation. Where encountered, topsoil will be segregated and stockpiled for reclamation purposes.

(d) Final reclaimed fill slopes shall not exceed 2:1 (horizontal to vertical), except with support of geologic and engineering analysis:

Not Applicable. No fill slopes are proposed.

(e) At closure, all fill slopes, including permanent piles or dumps of mine waste and overburden, shall conform with the surrounding topography and/or approved end use:

The final reclaimed slopes shall conform to surrounding topography and the proposed livestock grazing and open space end land use, as shown on the 03RPP-00000-00004 Reclamation Plan.
(f) Cut slopes, including final highwalls and quarry faces, shall have a minimum slope stability factor of safety that is suitable for the approved end use and conform with the surrounding topography and/or approved end use:

The proposed reclamation surface of the quarry bench faces are proposed to be 1.5:1 (H:V), and have been reviewed and determined stable by a Certified Engineering Geologist. These slopes would conform to the surrounding topography and would be suitable for the proposed end use.

(g) Permanent placement of piles or dumps of mining waste and overburden shall not occur within wetlands, unless mitigation acceptable to the lead agency has been proposed to offset wetland impacts and/or losses:

Not applicable. No piles or dumps of mining wastes are proposed.

Section 3705 - Performance Standards for Revegetation

(a) Suitable Vegetative Cover shall be provided:

A majority of the mine site existed as a steeply sided natural rock outcrop prior to mining; thus, reclamation of the majority of the site will not include vegetative cover. Reclamation surfaces, however, shall be provided with available native soils and vegetative debris recovered in mining and these materials will be placed in crack systems where plants could potentially propagate. Seed will be broadcast on appropriate slopes and earthen surfaces other than solid exposed limestone. Additional oak seedlings will be planted in suitable low-lying areas of the quarry roads, scalehouse area, stockpile areas and the former plant site. As a required mitigation measure to increase the potential for successful reclamation, topsoil is required to be imported to the site. This soil would be placed in discreet areas of the horizontal benches of the final quarry slope and used to establish coastal sage scrub vegetation.

The above efforts are anticipated to provide suitable and sufficient vegetative cover.

(b) Test Plots shall be provided:

Due to the nature of the deposit and the downward and outward expansion of the mine, test plots will be infeasible until the upper benches of the mine reach their final configuration at the end of Phase III. Mine Phase I (a total of 7.5 acres) will be reclaimed at that time, concurrent with mining of Phase IV. Thus, the “test plot” would be the final reclamation re-vegetation efforts on the Phase I area. Details of the revegetation plan are provided on Plates 10 and 11.

(c) Where surface mining activities result in compaction of the soil, ripping or diskng shall be used in areas to be revegetated:

Where possible, compacted surfaces such as roads to be abandoned or areas around the process plant, will be ripped to a minimum depth of 24 inches prior to revegetation. Due to the dense nature of the exposed rock on the floor of the quarry (which will remain in place), ripping of that surface will not be possible.
(d) Prior to closure, all access roads shall be stripped of roadbase materials:

The paved asphalt access road and most quarry roads will remain in place as ranch access roads. All other areas with road base materials will be stripped of those materials prior to revegetation.

(e) Soil analysis shall be required to determine the presence of essential elements for plant growth:

Due to the outcropping hard rock limestone that defines the majority of the mine site, soils are minimal on site. Where soils are encountered, they will be recovered and will be stockpiled for use in reclamation. At the time of reclamation, stockpiled soils will be analyzed to determine the presence of essential elements for plant growth.

(f) Temporary access for exploration shall not disrupt the soil surface except where necessary to gain safe access:

All exploration in the proposed plan will occur on previously disturbed ground.

(g) Native species shall be used for revegetation:

A mixture of native plant species is proposed for revegetation as described in the Revegetation Plan (Plates 10 -11).

(h) Planting shall be conducted during the most favorable period of the year:

Seeding of the quarry slope surfaces will be conducted in October to December to coincide with the start of the annual wet season. Seed germination will then be initiated by natural rainfall.

(i) Soil stabilizing practices shall be used where necessary to control erosion:

Soil stabilizing practices are not anticipated to be necessary because of the exposed hard rock surface of the reclamation area. However, where necessary, methods such as the use of a hydroseed mixture with a tackifier, or emplacement of a mulch layer over seeded areas will be employed to stabilize soils.

(j) If irrigation is used, the operator must demonstrate that the vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of financial assurances:

Not applicable. No irrigation is proposed.

(k) Noxious weeds shall be managed:

Weeds will be controlled and eradicated in the reclamation area consistent with established agricultural practices. Invasive weeds shall be eradicated.

(l) Protection measures, such as fencing of vegetated areas, shall be used where needed to protect from grazing, trampling, etc.:
Fencing of revegetated areas will be provided during the demonstration period of the reclamation phase. However, livestock grazing is the final end use, and fence installation and use following mine closure will be at the prerogative of the land owner.

(m) Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use:

Ongoing monitoring of revegetation will be conducted to insure the success of the plantings. However, this requirement is not applicable to the portions of the site which will remain an exposed hard rock surface.

Inspections with County personnel will be conducted at least annually, or more frequently, as part of the annual SMARA inspection requirement, and the reclamation monitoring plan. Corrections will be made as necessary based on the approved reclamation plan.

Section 3706 - Performance Standards for Drainage, Diversion Structures, Waterways and Erosion Control

(a) Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses:

The Storm Water Pollution Prevention Plan and the annual implementation of Best Management Practices will limit impacts to down stream resources and users. The updated Sediment and Erosion Control Plan, a required mitigation measure of this EIR, requires additional access road paving and other measures and best management practices to protect downstream uses.

(b) The quality of water, recharge potential, and storage capacity of groundwater aquifers shall not be diminished:

Mining of the mineral reserve and establishment of the final reclamation surface will not impact recharge potential or the storage capacity of ground water aquifers.

Potential ground water quality impacts from fuels and lubricants will be minimized by the use of a very small mobile equipment fleet in the mine area, storage of equipment away from the stream course, and regular maintenance of that equipment to limit potential releases of fuels or lubricants from that equipment. No hazardous materials will be stored on site unless provided secondary containment.

(c) Erosion and sedimentation shall be controlled:

Implementation of the additional best management practices pursuant to the SWPPP including the updated Sediment and Erosion Control Plan shall control erosion and sedimentation (refer to Section 3706(a) above).

(d) Surface runoff and drainage from surface mining operations shall be controlled:

See Section 3706(a) above.
(e) Where natural drainages are covered, restricted, rerouted or otherwise impacted by surface mining activities, mitigating alternatives shall be proposed and specifically approved in the reclamation plan to assure that runoff shall not cause increased erosion or sedimentation:

No stream diversion is included in the proposed reclamation plan. A sedimentation basin (or other equivalent alternative acceptable to the Regional Water Quality Control Board and P&D staff), however, is identified in this EIR as a required mitigation measure; this basin or other measures would serve to reduce erosion and sedimentation.

(f) When stream diversions are required, they shall be constructed in accordance with the stream and lake alteration agreement between the operator and State Department of Fish and Game; and the requirements of the Federal Clean Water Act:

No stream diversion is included in the proposed reclamation plan. A sedimentation basin (or other equivalent alternative acceptable to the Regional Water Quality Control Board and P&D staff), however, is identified in this EIR as a required mitigation measure; this basin would serve to reduce erosion and sedimentation. The California Department of Fish & Game shall review and approve of the design through the required streambed alteration agreement.

(g) When no longer needed, stream diversions shall be removed:

Refer to Section 3706(f) above.

Sections 3707 and 3708 - Performance Standards related to Agricultural Lands

Not applicable. No prime agricultural lands are involved in the proposed project.

Section 3708 - Performance Standards related to Other Agricultural Lands

Reclamation performance standards will include success criteria as described in the re-vegetation plan (see Plate 10-11).

Section 3709 - Performance Standards for Building, Structure and Equipment Removal

(a) All equipment, supplies and other materials shall be stored in designated areas:

All equipment and materials will be stored in areas and structures designated for such uses.

(b) All buildings, structures and equipment shall be dismantled and removed prior to final mine closure, except as necessary for the end use.

All buildings, structures and equipment shall be removed, with the exception of water wells and power lines which will serve the ranch after reclamation activities have been concluded.
Section 3710 - Performance Standards for Stream Protection, including Surface and Groundwater

(a) Surface and groundwater shall be protected from pollutants:

Diesel fuel and oils are used onsite for operating equipment. Fuels and lubricants are not stored on site; instead, a mobile fuel and lubricant service vehicle serves the equipment. All waste oil generated at the project site is collected and transported for off-site disposal by properly trained and licensed personnel. This procedure will continue throughout this project life. This method of handling potential pollutants serves to protect surface and groundwater from pollutants.

The Storm Water Pollution Prevention Plan and the annual implementation of Best Management Practices will limit impacts to downstream resources and users. The updated Sediment and Erosion Control Plan, a required mitigation measure included in this EIR, requires access road paving and other measures to protect surface water in Hilton Creek from substantial sedimentation.

(b) Not Applicable (In-stream mining)

(c) Not Applicable (Sand and Gravel extraction from rivers)

(d) Not Applicable (Relates to in-stream mining activities)

Section 3711 - Performance Standards for Topsoil Salvage

(a) All salvageable topsoil suitable for revegetation shall be removed as a separate layer from mining area. Topsoil removal shall not precede mining activities by more than one year without approval:

Topsoil will be removed as a separate layer and stockpiled for use in ongoing reclamation activities where it is encountered.

(b) Topsoil resources shall be mapped prior to stripping and the location of topsoil stockpiles shall be shown on the reclamation plan:

Mapping of topsoil resources is not feasible at this site. Topsoil accumulations are very thin as limestone bedrock is present at or near the ground surface.

(c) Soil salvage operations and phases of reclamation shall be carried out in accordance with a schedule that: 1) is set forth in the approved reclamation plan; 2) minimizes the area disturbed; and 3) is designed to achieve maximum revegetation success:

Mapping of topsoil resources is not feasible at this site. Topsoil accumulations are very thin as limestone bedrock is present at or near the ground surface.

Refer to the above discussion of Section 35-320.7.2(d) of the Article III Zoning Ordinance regarding the phasing of reclamation.
(d) Topsoil and suitable growth media shall be used to phase reclamation as soon as can be accommodated by the mining schedule presented in the approved reclamation plan following the mining of an area. Topsoil that cannot be used immediately should be stockpiled where it will not be disturbed. Topsoil shall be clearly identified to distinguish it from mine waste. Protect stockpiles from erosion and weed growth. Relocation of topsoil stockpiles must be approved:

Although limited in quantity, any encountered topsoil will be stockpiled near areas to be reclaimed and undisturbed until its use is required. No mine waste will be generated or stockpiled on the project site.

(e) Topsoil and growth media shall be redistributed in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration and drainage:

Topsoil gathered onsite will be redistributed pursuant to the revegetation plan, which includes limited placement of soils in crack systems and slope surfaces of the final reclamation surface. As a required mitigation measure, additional topsoil shall also be imported to the site to augment the available onsite soils.

Section 3712 - Performance Standards for Tailing and Mine Waste Management

State Water Resources Control Board mine waste disposal regulations in Article 7 of Chapter 15 of title 23, California Code of Regulations, shall govern mine waste and tailings and mine waste disposal units shall be reclaimed in conformance with this article:

Section 3712 of the SMARA regulations (Title 14, CCR) provides that the State Water Resources Control Board Mine Waste Disposal Regulations (Article 7, Chapter 15, Title 23, CCR) shall govern mine waste and tailings and that mine waste disposal units shall be reclaimed in conformance with Article 7. However, these provisions are no longer applicable. Effective July 18, 1997, Article 7, Chapter 15, Title 23 was repealed. The text of Article 7 now appears in Article 1, Subchapter 1, Chapter 7 (Sections 22470, 22480, 22490, 22500, 22510) Title 27, CCR. The note that precedes Section 22470 states, “Note: Regulations in this article were promulgated by the State Water Resources Control Board (SWRCB), are administered by the appropriate Regional Water Quality Control Board (RWQCB) through the issuance of waste discharge requirements (WDRs), and are applicable to the owner or operator of a waste management unit for the treatment, storage, or disposal of mining waste (Mining Unit).”

Section 22470: SWRCB - Applicability

(a) General: This article applies to all discharges of mining wastes.

Section 22480: SWRCB - Groups of Mining Waste

(a) Definition: Mining waste is waste from the mining and processing of ores and mineral commodities. Mining waste includes: 1) overburden; 2) natural geologic material which have been removed or relocated but have not been processed (waste rock); and, 3) the solid residues, sludges, and liquids from the processing of ores and mineral commodities.
Not applicable. No tailing or mine waste will be generated by the proposed project.

(b, c) Waste Group Classification: Not applicable. No tailing or mine waste will be generated by the proposed project.

(d) Treatment: Not applicable. No tailing or mine waste will be generated by the proposed project.

Section 22490: SWRCB - Mining Unit Siting and Construction Standards

(a) Proximity to Faults - New Mining Units

1. Holocene Faults: Not applicable. No tailing or mine waste will be generated on the proposed project.

2. Areas of Rapid Geologic Change: Not applicable. No tailing or mine waste will be generated on the proposed project.

(b) Flooding - All mining units shall be protected from flooding as shown on Table 1.2 of this article.

1. Floodplain Siting Criteria - Group C Waste: Preclude increased sediment in surface water. Not applicable. No tailing or mine waste will be generated on the proposed project.

(c - g) Not applicable.

(h, i) Precipitation and Drainage Controls; Design Storm: Not applicable. No tailing or mine waste will be generated on the proposed project.

Section 22510 - Closure and Post-Closure Maintenance of Mining Units

(a) Closure Performance Standard: Not applicable as no mining waste fills are proposed. Note that the reclamation plan includes the incorporation of permanent sediment control measures including grading, installation of check dams on the mine floor, drainage and limited revegetation of the proposed mine site. The reclaimed land would also meet applicable State and County standards for stability. These measures would avoid substantial erosion of the final reclaimed slopes and preclude the potential for substantial sedimentation of nearby streams.

(b) Plan: Not applicable. No tailing or mine waste will be generated on the proposed project.

(c) Reclamation: Not applicable. No tailing or mine waste will be generated on the proposed project.
(d) **Oversight and Monuments**: Not applicable. No tailing or mine waste will be generated on the proposed project.

(1) **Closure Supervision**: Not applicable. No tailing or mine waste will be generated on the proposed project.

(2) **Surveying Monuments**: Not applicable. No tailing or mine waste will be generated on the proposed project.

(e) **Inactive Units**: Not applicable.

(f, g) **Financial Assurance**: The operator’s financial assurance to be established under SMARA for this reclamation plan will be adequate to comply with any and all closure and post-closure maintenance requirements as verified by County and State Office of Mine Reclamation staff. A current reclamation bond is already in place in the amount of $222,263.

(h) **Ending Post-Closure**: Post closure monitoring will be ended upon achievement of the revegetation success criteria and release of the reclamation bond.

(i) **Vegetation**: Revegetation of the project site will not impair the integrity of any of the containment features provided for site reclamation. No irrigation of the vegetation is proposed.

(j, k, l) Not applicable. No tailing or mine waste will be generated by the proposed project.

(m) **Erosion and Sedimentation Protection**: The erosion, sedimentation control and revegetation features of the proposed reclamation plan are designed to minimize erosion and the threat of water quality degradation from sedimentation.

**Section 3713 - Performance Standards for Closure of Surface Openings**

(a) Except those used solely for blasting or those that will be mined through within one year, all drill holes, water holes, water wells, and monitoring wells shall be completed or abandoned in accordance with each of the following: (1) Water Code sections 13700, et seq. and 13800, et seq.; (2) the applicable local ordinance adopted pursuant to Water Code section 13803; (3) the applicable Department of Water Resources report issued pursuant of Water Code section 13800; and (4) Subdivisions (1) and (2) or section 2511(g) of Chapter 15 of Title 23 regarding discharge of waste to land:

All drill holes will be mined through or abandoned in accordance with the applicable regulations. Water wells will be left in place to serve future agricultural needs.

(b) Prior to closure, all portals, shafts, tunnels, or other surface openings to underground workings shall be gated or otherwise protected from public entry to protect the public and wildlife:
No underground workings exist or are planned as part of the proposed project. The main access road to the site will remain protected with a locked gate.

4.5 CLEAN WATER ACT (1972) APPLICABILITY

The Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (hereafter Act, 33 U.S.C 1251 et. seq.) established national goals for controlling and reducing pollution in the nation’s waters. Two of these goals specifically pertain to the reclamation plan for the Bee Rock Quarry.

“It is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983” (33 U.S.C. 1251).

“It is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution” (33 U.S.C. 1251 (a)(7)).

Regulations promulgated in various sections of the Act (Section 402 and 404) cover discharges into waters of the United States, and to monitor the conditions of the nation’s waters.

4.5.1 Section 402 (40 CFR Part 122): This section of the Act provides for the National Pollutant Discharge Elimination System (NPDES) regulatory permit program. Under this program, the U.S. Environmental Protection Agency regulates stormwater discharges for point and nonpoint sources pollution, including stormwater discharges that violate water quality standards or significantly contribute pollutants to U.S. waters. Any person responsible for the discharge of a pollutant or pollutants into any waters of the U.S. from any point source must apply for and obtain a permit. The authority to issue NPDES permits may be delegated to the States by the U.S. EPA, as is the case in California.

Section 402 defines pollution as “...man-made or man-induced alteration of chemical, physical, biological, and radiological integrity of water” (Clean Water Act). Point sources of pollution include runoff and drainage water from active mines. Diffuse or non-point sources of pollution include sources that are diffuse in nature and which are not discharged from a few localized points, including land disturbing activities. Principal pollutants of concern include chemical inputs, gaseous emissions, heavy metals, acid rain, and sediment.

Bee Rock Quarry currently operates under an NPDES Industrial Activities general storm water discharge permit WDID No. 3 42S012692.

4.5.2 Waters of the U.S.: Waters of the U.S. are defined at 33 CFR Part 328. Although this section defines the term “waters of the U.S.” as it applies to the jurisdictional limits of the authority of the U.S. Corps of Engineers under Section 404 of the Act, these definitions are also applicable to regulations promulgated under Section 402. The term “waters of the U.S.” includes:
a. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters which are subject to the ebb and flow of the tide.

b. All interstate waters including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) which are used or could be used for industrial purpose by industries in interstate commerce.

d. All impoundments of waters otherwise defined as waters of the U.S. under the definition.

e. Tributaries of waters identified above.

f. The territorial seas.

g. Wetlands adjacent to waters.

Section 404 (33 CFR Part 320-330) enables the U.S. Army Corps of Engineers to issue permits for the discharge of dredged or fill material into waters of the U.S. at specific sites. The term “discharge of fill material” means the addition of fill material into waters of the U.S. The term “fill material” means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody (33 CRF Part 323.2 (f)). It does not include any pollutant discharged into the water primarily to dispose of waste as that activity is regulated under Section 402 of the Act (33 CFR Part 323.2 (e)).

The proposed project does not include any disturbance of jurisdictional waters. Previous consultation with the U.S. Army Corps of Engineers and the California Department of Fish and Game was conducted to design and implement the existing drainage and sediment control plan.

PORTER-COLOGNE WATER POLLUTION CONTROL ACT APPLICABILITY

A Sediment Control Plan has been developed in accordance with provisions of the Porter-Cologne Water Pollution Control Act and the National Pollutant Discharge Elimination System regulatory program. Additional sediment control measures are identified as required mitigation in the project EIR. Bee Rock Quarry currently operates under an NPDES Industrial Activities general storm water discharge permit WDID No. 3 42S012692.
5. ANALYSIS OF ENVIRONMENTAL IMPACTS

5.1 Geologic Processes

5.1.1 Setting

Bee Rock Quarry is located on the northern side of the Santa Ynez Mountain range and occupies the southern flank of Bee Rock Hill. This hill is underlain by the only substantial deposit of pure limestone known to be present in the County of Santa Barbara. This Miocene age deposit is bounded on the north, east and west by a conformable contact with an un-named sandstone of Eocene age. This contact dips southward at an angle of about 30 degrees. The limestone deposit is truncated on the south by the active Santa Ynez Fault. Prior to the onset of excavation in 1952, the limestone deposit was as much as 400 feet thick, measured vertically. A generalized geologic map of the site is provided in Figure GEO-1. An Engineering Geologic Report for the Bee Rock Quarry by Mr. James E. Fisher, CEG 1007, Fisher Geologic Engineering dated September 8, 2001, is provided in Appendix D of the application on file at the Planning & Development Department.

5.1.2 Impacts

IMPACT GEO-1. The proposed project would not be affected by or create unstable slopes. The material mined at Bee Rock Quarry is a moderately fractured, massive limestone. This is very stable material that must be excavated through the use of explosives. The proposed 1.5:1 gradient benched slopes proposed as the final surface of the remnant quarry highwall would be generally stable and not subject to substantial slope failure. Minor rock fall may occur with isolated loose blocks, especially during future earthquakes. This level of downslope movement of material is not anticipated to be extensive or frequent. The overall final slope is expected to be very stable given the character of the material and the proposed slope configuration. The applicant’s geologist (Fisher, 12-8-03) and the former P&D Geologist (Baca) concur on this opinion. The active Santa Ynez Fault crosses the quarry site, including the materials processing area. The hazards posed by this geologic feature would not change with the proposed project. No new buildings or facilities would be affected as a result of the proposed project. Based on the above discussion, impacts in this issue area would be less than significant (Class III).
Figure GEO-1  Generalized Geologic Map

Legend
Qg = Stream Channel Deposits
Qoa = Older Alluvium (Terrace Deposits)
Qog = Cobble-Boulder Fan Gravel
Tm = Monterey Shale (Tml = Lower Unit)
Tmis = Monterey Shale limestone of Bee Rock
Tr = Rincon Shale
Tvq = Vaqueros Sandstone
Tsp = Sespe Formation (s=sandstone)
Tess = Unnamed Sandstone (Matilija Sandstone?)
Kjsh = Jalama Formation


Project Site
Granite Construction
Bee Rock Quarry
IMPACT GEO-2. The proposed mining project, by its nature, involves extensive excavation (grading), permanent changes in topography, and the extraction of minerals. Geologic impacts under the County’s CEQA Thresholds involve the creation of new geologic hazards, the exposure of people or structures to known hazards or offsite geologic effects caused by the project. Thus, extensive excavation or a substantial change in topography, by itself, does not constitute a potentially significant geologic impact. (Impacts on aesthetics, biological habitat or other resources affected by substantial excavation are addressed in other sections of this environmental document.) Therefore, impacts in these issue areas are less than significant (Class III).

IMPACT GEO-3. Bee Rock Hill is a unique geologic feature as it is the only substantial outcrop of pure limestone known to exist in Santa Barbara County. The excavation of a large portion of this feature has already been authorized (and largely accomplished) under the current CUP and Reclamation Plan. Although the proposed project would involve an expansion of the area and depth of excavation, the resulting removal of most of the exposed limestone would be similar to that currently authorized in terms of the loss of a unique geologic deposit. Under either the existing or the proposed reclamation plan, a substantial amount of limestone would be permanently left in place and available for future geologic research. Thus, impacts would be less than significant (Class III).

IMPACT GEO-4. Limestone sediment derived from Bee Rock Quarry has been, and continues to be, deposited in the segments of Bee Rock, Sweetwater and Hilton creeks downstream of the mining site. An increase in such sedimentation is possible with the proposed increase in the rate of material extraction. This constitutes a potentially significant geologic impact (Class II). Refer to the discussion of this issue in Section 5.4 (Biological Resources) of this environmental document.

IMPACT GEO-5. The project would not involve a change in the existing sanitation facilities. Impacts would be less than significant (Class III).

IMPACT GEO-6. Only a thin veneer of topsoil is present in the proposed area of mining expansion. The reclamation plan (as required by SMARA) includes the requirement that topsoil be salvaged to the extent feasible and stockpiled for use in future reclamation. Given this requirement, the ultimate end use of the site as open space and the very limited volume of topsoil that would be potentially lost, impacts are considered less than significant (Class III).

IMPACT GEO-7. The vibrations associated with materials processing activities would increase in duration and frequency with the proposed increase in the annual tonnage limit. The explosive detonations at Bee Rock Quarry would involve additional blasts or an increase in the materials discharged during a single blast. There are no sensitive offsite receptors, however, within 2,000 feet of the site. Thus, impacts would be less than significant (Class III).
IMPACT GEO-8. The project would not generate spoils or tailings that would be generally classified as mining waste. All of the size fractions of the limestone material excavated from the quarry are sold as product. Thus, impacts would be less than significant (Class III).

IMPACT GEO-9. Effect of blasting on natural springs distinct from the mine. In response to the Notice of Preparation Scoping Meeting held on July 19, 2005, a letter of comment dated August 3, 2005 was submitted by Frank and Anke Haas. In their letter, a number of issues were raised involving impacts on biological resources and on water supply. The issues involving biological resources are addressed in Section 5.4 of this EIR. The issue involving water supply, as outlined in the August 3, 2005 letter and Mr. Haas’ testimony at July 19, 2005 hearing, is whether the blasting that would occur under the proposed project would affect the flow of natural springs that occur on the Haas property located about one mile north of Bee Rock Quarry.

The August 3, 2005 letter and Mr. Haas’ testimony on July 19, 2005 do not contain any evidence that blasting at Bee Rock Quarry has ever or will ever affect the flow of water from the natural springs in question. Bee Rock Quarry has been in operation since 1952 with blasting historically occurring at much higher levels than today during the construction of Bradbury Dam. The existing setting for the current permit process is the level of blasting required to produce 175,000 tons per year. This level of blasting is already permitted and not under review. The proposed increase in rock production to an average of 300,000 tons/year would involve an increase in the frequency of blasting to produce an additional 125,000 tons/year. This level of production and blasting, however, has already been occurring for the past six years while the County has processed the revised permit application. The August 3, 2005 letter and Mr. Haas testimony on July 19, 2005 do not include any claim that an effect on the springs has occurred in the past six years or at any time in the past.

According to former P&D Geologist Brian R. Baca (pers. commun.), the potential for the localized blasting utilized for rock production at Bee Rock Quarry to affect spring flow a mile away is negligible. Furthermore, if an effect did occur it would not be discernible from the natural variation in spring flow that results from weather conditions. It should also be recognized that 58% (175,000/300,000=0.58) of the blasting being conducted at Bee Rock Quarry is a fully-permitted part of the existing setting that is not under review with the current proposal. Finally, any assertions regarding geologic or hydrologic effects of the project must be made by a qualified professional (Geologist or Engineer) licensed to practice in the State of California. Thus, potential impacts on the natural springs are considered less than significant (Class III).
5.1.3 Cumulative Impacts

The cumulative impact of additional mining activity at Bee Rock Quarry would be less than significant (Class III) for the primary impacts GEO-1 to GEO-3, and GEO-5 to GEO-9 and the secondary effects GEO-2 related to increased offsite sedimentation.

5.1.4 Mitigation Measures and Residual Impact.

The offsite sedimentation effects associated with the proposed project constitute a potentially significant impact. This issue is addressed and mitigation is identified in Section 5.4 (Biological Resources) of this document. No further mitigation is required. Residual geologic impacts are potentially significant but subject to feasible mitigation (Class II).
5.2 Water Resources

5.2.1 Setting

The project site, Bee Rock Hill on the San Lucas Ranch, is located on the northern foothills of the Santa Ynez Mountains in an area of bedrock outcrops outside of any alluvial groundwater basin. Water for the existing Bee Rock Quarry operation is obtained from onsite groundwater wells that tap bedrock aquifers truncated by the Santa Ynez Fault.

5.2.2 Impacts

**WAT-1. Water demand** for the existing Quarry operation is supplied by onsite groundwater wells. Approximately 15,000 gallons/day of water is used for dust control and materials processing. At 260 working days per year, the annual water demand is about 12 AF (Note: This demand includes the current 300,000 tons/year operation). Most of the water is used for dust suppression on the quarry access roads and in the processing area. This demand would not be substantially affected by the proposed increased annual tonnage of rock production as the dust suppression requirements are related to the acreage that is being actively disturbed. As a result of the paving of several hundred feet of the quarry access road, ongoing dust suppression water demand would be reduced. Thus, the water demand associated with quarry operations is not anticipated to substantially change as a result of the proposed project. As the topography and character of the site would not substantially change, no substantial changes in surface water flow or flooding hazards would be anticipated. Impacts would be less than significant (Class III).

**WAT-2. Deposition of limestone sediment** derived from Bee Rock Quarry has been, and continues to be, deposited in the segments of Bee Rock, Sweetwater and Hilton creeks downstream of the mining site to the detriment of natural functions. Refer to the discussion of this issue in Section 5.4 (Biological Resources) of this environmental document. Impacts would be potentially significant (Class II).

5.2.3 Cumulative Impacts

The cumulative impact of additional mining activity at Bee Rock Quarry would be less than significant (Class III) for impact WAT-1 (Water Demand) and could be potentially significant (Class II) for impact WAT-2 (Limestone Deposition).

5.2.4 Mitigation Measures and Residual Impact

The offsite sedimentation effects associated with the proposed project constitute a potentially significant impact. This issue is addressed and mitigation is identified in the Biological Resources section of this EIR. No further mitigation is required. Residual water resources impacts are potentially significant but subject to feasible mitigation (Class II).
5.3 Air Quality

The proposed project involves an increase in annual rock production from 175,000 tons/year to a rolling average of 300,000 tons/year over any five consecutive years with a maximum of 400,000 tons in any given year (Refer to Table 3-1 Material Production in Section 3.0 Project Description of this EIR for a detailed chart identifying the production by year from 1997 to 2043). This 125,000 ton/year increase would result in increased emissions from onsite quarry operations and increased transport truck traffic. These two sources of new emissions are evaluated below.

5.3.1 Setting

The 2004 Clean Air Plan (CAP) for Santa Barbara County describes the air quality setting, the current and projected ambient air quality, and the regulatory framework. The 2004 CAP is incorporated by reference herein; it is available for public review at the Santa Barbara County Air Pollution Control District (APCD) web site at www.sbcapcd.org. It was developed by the APCD to satisfy the 1988 California Clean Air Act (State Act) and the 1990 Federal Clean Air Act Amendments (Federal Act) requirements; it identifies the actions to be taken to meet the requirements. Per the State Act, the APCD is to report its progress in meeting the state mandates and revise the 1991 Air Quality Attainment Plan to reflect changing conditions on a triennial basis. The APCD is responsible for maintaining and improving air quality within the county.

A. Local Climate and Meteorology

Bee Rock Quarry is located within the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The meteorological and topographical influences that are important to air quality in the Santa Ynez Valley are as follows:

“In the northern portion of the county (north of the ridgeline of the Santa Ynez Mountains), the sea breeze (from sea to land) is typically northwesterly throughout the year while the prevailing sea breeze in the southern portion of the county is from the southwest. During summer, these winds are stronger and persist later into the night. At night, the sea breeze weakens and is replaced by light land breezes (from land to sea). The alternation of the land-sea breeze cycle can sometimes produce a “sloshing” effect, where pollutants are swept offshore at night and subsequently carried back onshore during the day. This effect is exacerbated during periods when wind speeds are low.” (2004 CAP).

Two types of temperature inversions (warmer air on top of cooler air) affect air quality in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high-pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the
summer months. Radiational inversions are formed by the more rapid cooling of air near the ground during the night, especially during winter. This type of inversion is typically lower (e.g. 0-500 feet at Vandenberg Air Force Base) and is generally accompanied by stable air. Both types of inversions limit the dispersal of air pollutants within the regional airshed. More stable air (low wind speeds, uniform temperatures) limits the amount of pollutant dispersion.

B. Air Quality Regulations, Standards, and Responsibilities

The federal and state Clean Air Acts regulate airborne pollutant emissions. Each establishes ambient air quality standards for the protection of public health. The U.S. Environmental Protection Agency administers the federal regulations, while the California Air Resources Board (ARB) is the state’s equivalent. The ARB delegates local control of stationary sources to the county or regional (multi-county) air pollution control districts (APCDs). Whereas the ARB establishes and enforces air quality standards for mobile emission sources, the local APCDs are responsible for enforcing standards and regulating for stationary sources. The ARB has established 14 air basins statewide. Santa Barbara County APCD has jurisdiction over that portion of the South Central Coast Air Basin within Santa Barbara County. Federal and state standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, lead, and fine particulates (PM$_{10}$ and PM$_{2.5}$). Table AQ 5.3-1 summarizes the standards.

Table AQ 5.3-1 Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>California Standards</th>
<th>Federal Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>0.09 ppm* (1-hr avg) 0.07 ppm (8-hr avg)</td>
<td>0.08 ppm (8-hr avg)</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>9 ppm (8-hr avg) 20 ppm (1-hr avg)</td>
<td>9 ppm (8-hr avg) 35 ppm (1-hr avg)</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>0.25 ppm (1-hr avg)</td>
<td>0.05 ppm (annual avg)</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)</td>
<td>0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)</td>
</tr>
<tr>
<td>Lead</td>
<td>1.5 μg/m$^3$ (30-day avg)</td>
<td>1.5 μg/m$^3$ (calendar qtr)</td>
</tr>
<tr>
<td>Particulate Matter (PM$_{10}$)</td>
<td>20 μg/m$^3$ (annual avg) 50 μg/m$^3$ (24-hr avg)</td>
<td>50 μg/m$^3$ (annual avg) 150 μg/m$^3$ (24-hr avg)</td>
</tr>
<tr>
<td>Particulate Matter (PM$_{2.5}$)</td>
<td>12 μg/m$^3$ (annual avg)</td>
<td>15 μg/m$^3$ (annual avg) 65 μg/m$^3$ (24-hr avg)</td>
</tr>
</tbody>
</table>

*Notes: ppm = parts per million and μg/m$^3$ = micrograms per cubic meter

The pollutants of concern for the proposed project are ozone, nitrogen oxides (NO$_x$), reactive organic compounds (ROCs), hydrocarbons (HCs), and particulate
matter less than 10 microns in diameter (PM$_{10}$). ROCs and NO$_x$ are ozone precursors. Ozone is formed in the atmosphere through a series of chemical reactions involving NO$_x$, ROCs, and sunlight. Ozone is classified as a “secondary” pollutant because it is not emitted directly into the atmosphere. The County’s major sources of ozone are motor vehicles, the petroleum industry, and the use of solvents (paint, consumer products, and certain industrial processes). PM$_{10}$ is generated by a variety of sources, including windblown dust, grading, agricultural tilling, road dust, and quarries. Particulate matter is a respiratory irritant; large particles are effectively filtered in the upper respiratory tract, but particles smaller than 10 microns can cause serious health effects. The chemical makeup of the particles is an important factor in determining the health effect. PM$_{10}$ is produced either by direct emissions of particulates from a source (primary PM$_{10}$), or by the formation of aerosols as a result of chemical reactions in the atmosphere involving precursor pollutants (secondary PM$_{10}$). Based on emissions data, the largest single source of PM$_{10}$ emissions in the County is entrained paved road dust.

The APCD has 17 air quality monitoring stations; two are located within the vicinity of the quarry (One at the Santa Ynez airport and the other at Paradise Road). Since 1988, ozone pollution has steadily improved at these stations and the number of days exceeding the state and federal standards has decreased.

<table>
<thead>
<tr>
<th>Monitoring Station</th>
<th>1980s</th>
<th>1990s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88</td>
<td>89</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>91</td>
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<td>03</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paradise Road</td>
<td>24</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>5</td>
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<tr>
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<td>11</td>
<td>3</td>
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<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Ynez</td>
<td>3</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
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<td>0</td>
<td>2</td>
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<td>1</td>
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<td>0</td>
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<td>1</td>
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<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

The U.S. Environmental Protection Agency has designated areas of the state that are in attainment or non-attainment of the National Ambient Air Quality Standards (NAAQS). Similarly, the California ARB designates areas of the state that are in attainment or non-attainment of the California Ambient Air Quality Standards (CAAQS). An area is in non-attainment for a pollutant if the CAAQS for that pollutant has been exceeded more than once in three years.

In August, 2003, the County was re-designated as a federal ozone attainment area for the one-hour ozone and 8-hour standard. Portions of the county, however, continue to violate the more restrictive state ozone standard. The county remains designated as a non-attainment area for the state ozone standard; the state ozone standard (1-hour) has been exceeded 3 to 15 times during the period 1998-2003. The state particulate matter standard for PM$_{10}$ was exceeded twice in 2001. There have been no exceedances since that year. However, Santa Barbara County remains a non-attainment area for the state PM$_{10}$ standard.
5.3.2 Impacts

The County’s Environmental Thresholds & Guidance Manual has thresholds for determining the significance of air quality impacts, as follows:

- The long-term operational emissions exceed 25 pounds per day of ROG or NOX from combined stationary and mobile sources.
- A project will have a significant air quality impact if it causes, by adding to the existing background carbon monoxide (CO) levels, a carbon monoxide “hotspot” where the California one-hour standard of 20 parts per million CO or the 8-hour CO standard of 9 ppm is exceeded.

The County no longer has quantitative emission significance thresholds for short-term construction activities, as construction emissions from development projects have been accounted for in the 2001 Clean Air Plan. However, since the County currently violates the state standard for PM10, construction activities that generate fugitive dust (PM10) emissions would be required to implement SBAPCD standard dust control measures to ensure that these emissions remain less than significant.

APCD has also developed significance criteria to be used in CEQA documents, which are included in the APCD’s Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District. The APCD has determined that a proposed project would not have significant impact if operation will:

- Emit less than the daily trigger for offsets or Air Quality Impact Analysis set in the APCD New Source Review Rule 1 for any pollutant (i.e., 240 pounds/day for ROC or NOx; and 80 lbs/day for PM10. There is no daily operational threshold for CO; it is an attainment pollutant).
- Emit less than 25 pounds per day of NOx or ROC from motor vehicle trips.
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone).
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board.
- Be consistent with the adopted federal and state air quality plans for Santa Barbara County.

Impact AQ-1 (Dust Emissions). Existing operations at the site include controlled blasting of limestone rock from the quarry working face or highwall, transport of the rock to the hopper of the primary crushing plant, and processing of the rock through primary and secondary rock crushers to create the final products. The proposed increase in permitted annual production from 175,000 to 300,000 tons would result in increased dust emissions from plant operation and associated product stockpiles. Table AQ-5.3-2 lists the existing permitted annual dust emissions and the estimated increase based on the emission generation figures (Attachment D of ATC/PTO #11088) provided in the current APCD Permit to Operate.
Table AQ 5.3-2. Dust Emissions - Rock Crushing Plant

<table>
<thead>
<tr>
<th>Bee Rock Quarry Production Rate</th>
<th>Dust Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PM$_{10}$</td>
</tr>
<tr>
<td>175,000 tons/year (Current annual permit limit)</td>
<td>0.62 tons/year</td>
</tr>
<tr>
<td>300,000 tons/year (Proposed permit limit)</td>
<td>1.06 tons/year</td>
</tr>
</tbody>
</table>

The County does not have any adopted thresholds of significance for short-term or long-term dust emissions. During short term construction, dust generation is of concern as a result of its potential to create objectionable public nuisance dust impacts and to be a respiratory irritant. Large particles are effectively filtered in the upper respiratory tract, but particles smaller than 10 microns can cause serious health effects. The potential to create significant dust impacts depends on the proximity of offsite sensitive receptors and residences.

The Quarry is more than a mile from the nearest offsite residence or public road. Thus, the increase in dust generation would not affect any nearby residents or sensitive receptors and would not have the potential to create a significant impact. Further, dust generation from operation of the Quarry has been minimized through the dust control requirements included in the APCD Permit to Operate and through the paving in 2004 of the upper 2,000 feet or so of the access road leading to the gate at State Route 154 (*This paving appears to have been effective in reducing overall dust emissions*). Although the County is in non-attainment for PM$_{10}$, impacts would be considered less than significant given the required dust control and the Quarry’s isolated location (Class III).

An existing residence is located on the same parcel (APN 141-290-029) as the quarry about 1,200 feet southwest of the active quarry face. It is owned by the applicant and is part of the San Lucas Ranch operation. The resident is an employee of San Lucas Ranch who works at Bee Rock Quarry. Although this residence could conceivably be affected by dust emissions, such effects are not considered in this evaluation of impacts as they would not expose individuals not otherwise involved in the quarry operation and would not involve offsite sensitive receptors.

**Impact AQ-2 (Emissions from Heavy Equipment Operation).** The emissions generated by the operation of the motorized heavy equipment used to transport and load rock within the quarry area would increase as a result of the proposed annual tonnage increase in rock production. Two Caterpillar loaders and a water truck are currently used in the Quarry operation. The emissions from the Quarry operation under the existing permit limits are estimated in Table AQ 5.3-3, as are also the emissions with implementation of the proposed project. The estimates are based on: (1) an 8-hour workday with equipment operating 50% of the time and standard AP-42 emission factors and (2) the ratio between the existing permitted annual production rate and the proposed production rate (300,000 tons ÷ 175,000 tons =
The estimated increase in emissions over the existing condition would be an impact of the proposed project. As shown in Table AQ-5.3-3, the NOx emissions due to heavy equipment operation would increase by an estimated 15.63 pounds per operating day with the proposed project.

Table AQ 5.3-3. Daily Emissions - Heavy Equipment Operation

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Hours per Day</th>
<th>Caterpillar Loader #1 and #2 (factors are for two diesel loaders)</th>
<th>Water Truck (gasoline-powered)</th>
<th>EXISTING Total emissions under existing conditions</th>
<th>PROPOSED Total estimated emissions with the proposed project</th>
<th>INCREASE Estimated increase in emissions as a result of the proposed project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Emission factor lbs/hr</td>
<td>Emissions lbs</td>
<td>Emission factor lbs/hr</td>
<td>Emissions lbs/day</td>
<td>Emissions lbs/day</td>
</tr>
<tr>
<td>CO</td>
<td>4</td>
<td>1.144</td>
<td>4.576</td>
<td>0.675</td>
<td>2.7</td>
<td>7.28</td>
</tr>
<tr>
<td>NOx</td>
<td>4</td>
<td>3.78</td>
<td>15.12</td>
<td>1.691</td>
<td>6.76</td>
<td>21.88</td>
</tr>
<tr>
<td>SO</td>
<td>4</td>
<td>0.364</td>
<td>1.456</td>
<td>1.143</td>
<td>0.572</td>
<td>2.03</td>
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<tr>
<td>HC</td>
<td>4</td>
<td>0.582</td>
<td>2.328</td>
<td>0.183</td>
<td>0.732</td>
<td>3.06</td>
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<tr>
<td>PM</td>
<td>4</td>
<td>0.344</td>
<td>1.376</td>
<td>0.139</td>
<td>0.556</td>
<td>1.93</td>
</tr>
</tbody>
</table>

The proposed project would also involve an increase in truck traffic on State Route 154 associated with the pick-up and delivery of an additional 125,000 tons/year of rock materials produced and sold at Bee Rock Quarry. Based on a truck capacity of 25 tons and two trips per load, the proposed increase in rock production would involve approximately 5,000 (round trip) or 10,000 (one-way) truck trips per year.

At 250 work days per year and an 8-hour day, an average of approximately 40 one-way truck trips per day or 5 trips per hour would result from the increased production limit. To determine average trip length, the applicant compiled information on actual product deliveries made over the 2000-2004 period. This analysis, reviewed and accepted by the APCD, indicates that the average one-way trip length is 16.5 miles. Based on the trip length of 16.5 miles, the APCD staff has estimated the emissions resulting from the transport of an additional 125,000 tons per year of rock product to be as follows.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions (Pounds per day)</th>
<th>Threshold of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROC</td>
<td>0.8</td>
<td>25 lbs/day</td>
</tr>
<tr>
<td>NOx</td>
<td>22.3</td>
<td>25 lbs/day</td>
</tr>
<tr>
<td>CO</td>
<td>3.6</td>
<td>None</td>
</tr>
<tr>
<td>PM10</td>
<td>0.5</td>
<td>80 lbs/day</td>
</tr>
</tbody>
</table>
The analysis indicates that quarry operations and the transport of rock products would result in an increase in NOx emissions of **37.93 pounds per day** of NOx (15.63 + 22.3 = 37.93). In order for the proposed project to be accomplished, truck traffic would be increased to the level indicated. A reduction in the volume of truck trips is not a feasible mitigation measure. Thus, the project emissions would exceed the threshold and impacts on air quality would be significant (Class I).

### 5.3.3 Cumulative Impacts

Air pollutant emissions due to increased truck traffic and increased intensity of quarry operations would exceed the project-specific threshold of significance. This threshold is also the point at which impacts are considered cumulatively considerable. Thus, air quality impacts for the project would be cumulatively considerable (Class I).

### 5.3.4 Mitigation Measures and Residual Impact

The APCD has suggested two possible mitigation methods: 1) The purchase of pollution offset credits from offsite sources which the APCD has estimated to cost $10,000/ton if the APCD were to find offsite mitigation measures for the applicant and 2) permanent retrofitting of Granite Construction Company vehicles to offset increased emissions at Bee Rock Quarry. At this time, it is unknown whether these methods can feasibly reduce emissions to less than the 25 pounds per day threshold. (The APCD is continuing to evaluate potential mitigation methods to address the estimated new Bee Rock Quarry emissions.) The APCD in its Draft EIR comment letter dated May 2, 2006 (Refer to Appendix 7.0, Response to Comments) has indicated that “The APCD is no longer administering an onsite mitigation program. The APCD is able, however, to review any emissions reductions proposals and calculations submitted by the lead agency to verify their accuracy.” Thus, residual impacts would be significant (Class I).
5.4 Biological Resources

5.4.1 Baseline for Environmental Review

The biological environmental baseline includes (1) upland habitat adjacent to and surrounding the existing mine operation; and (2) aquatic and riparian habitats, and surface waters, in Hilton Creek and its eastern tributary, located immediately south and west of the existing mine. These areas were affected in the late 1990’s by sedimentation from the ongoing operations of the mine; however, erosion control measures implemented since that time appear to have stopped the sedimentation process. Due to these ongoing operations and effects, the baseline habitat and water quality has been somewhat dynamic.

CEQA Guidelines Section 15125(a) states: “An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.”

The environmental impacts of the proposed project include the effects of the intensification of mining operations resulting from the approximate 71 percent increase in annual rock production (from 175,000 to 300,000 tons/year), and the effects of site reclamation including the creation of the final reclaimed surface. Operational effects may include the deposition in downstream watercourses of fine sediments eroded from excavation areas. Reclamation effects include the expansion of the mine area from 21.5 to 30.5 acres, resulting in removal of 9 acres of native vegetation to create the final reclaimed surface.

5.4.2 Existing Setting and Methods

The Bee Rock Quarry is located approximately 1.5 miles south of State Route 154, on the east side of Hilton Creek. Hilton Creek is mapped as a blue-line stream on the USGS topographic map (Lake Cachuma quadrangle), and the entirety of the approximate 3.6-mile-long main stem is mapped on National Wetland Inventory (NWI) maps as a temporarily flooded palustrine forest (PFOA).

A Biological Assessment and Revegetation Plan Report, prepared by URS Corporation (January, 2002) for this project, is used for this analysis, in addition to scientific literature and other documents that cover the immediate area (e.g., Lower Santa Ynez River Fish Management Plan/Biological Opinion EIR/EIS, 2004). Plant species names are taken from Hickman et al., 1993, and Smith 1998.

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An additional study was prepared by URS in August 2000 to assess the sediment conditions along Hilton Creek\(^2\). In addition, the author of this section conducted reconnaissance site visits to Hilton Creek on January 27, 2004, and to the main quarry area on April 5, 2005.

**Vegetation**

The existing quarry working face, the materials processing plant area, the product stockpile area and the equipment yard support little to no vegetation as a result of past (and ongoing) excavation activities. The surface of the quarry working face is comprised of exposed limestone bedrock.

The largely undisturbed areas that surround the operational areas of the quarry include the following vegetation types:

**Upland Communities:**

- **Chaparral** - the predominant vegetation type in the area, occurring along the flanks of Bee Rock hill to the north of the active excavation area. Soils are very thin (only a few inches deep), with native bedrock commonly exposed at the surface. The native chaparral within this area is sparse, dominated by chamise (*Adenostoma fasciculatum*), deer brush (*Ceonothus integerrimus*), black sage (*Salvia mellifera*), and occasional scrub oak (*Quercus berberidifolia*). Scattered coast live oak trees are present, primarily at the outer edges of the expansion area.

- **Oak Woodland/Forest** - scattered on north-facing slopes to the north and south of the quarry. Dominated by coast live oak (*Quercus agrifolia*).

- **Coastal Sage Scrub** - on shallow soils along the access road. Dominated by California sagebrush (*Artemisia californica*) and black sage (*Salvia mellifera*).

- **Native and Annual Grasslands** - on the south side of Bee Rock Creek.

**Riparian Communities:**

- **Oak Riparian** - Along the main stem of Hilton Creek. Dominants include coast live oak (*Quercus agrifolia*) and western sycamore (*Platanus racemosa*).

- **Riparian Scrub** - along Bee Rock Creek. Dominated by mulefat (*Baccharis salicifolia*) and arroyo willow (*Salix lasiandra*).

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Hilton Creek and its Tributaries:

As mentioned, Hilton Creek and its tributaries were assessed in a URS Sediment Assessment Study (Appendix B to Appendix C of the Conditional Use Permit Application, submitted December 2003). In this study, the Creek was separated into reaches for the purpose of describing conditions that were present in 2000. The reaches are shown in Figure Bio-1. A “blue line” tributary of Hilton Creek, herein designated “Bee Rock Creek” (but shown as drainage “B” on Figure Bio-1), flows through the study area. Bee Rock creek is located along the southern edge of the disturbed area of the quarry facility. The confluence of Bee Rock and Hilton creeks is located about 2,000 feet west of the quarry. Substantial Oak Riparian vegetation is present along the main stem of Hilton Creek (reaches A and D). Dominant riparian species include western sycamore (*Platanus racemosa*), coast live oak (*Quercus agrifolia*), willows (*Salix spp.*) and alders (*Alnus rhombifolia*). Shrubs occurring in the understory along the main stem include silk tassel (*Garrya elliptica*), poison oak (*Toxicodendron diversiloba*), and occasional currants and gooseberries (*Ribes spp.*). Bee Rock Creek is less densely vegetated, and contains mostly willows and only scattered sycamores and oaks.

Hilton Creek also contains riffle and pool habitat, as documented in the URS Sediment Assessment Study. For ease of reference, Hilton Creek is often separated into Upper and Lower sections. Lower Hilton Creek is the area north of State Route 154 on U.S. Bureau of Reclamation land; Upper Hilton Creek is generally everything upstream (south) of that point.

**Special Status Plant Species**

Special status plant species that have the potential to occur in the region are listed in Table 5.4-1. The following species are known from the immediate vicinity:

- Santa Ynez false lupine (*Thermopsis macrophylla*, CNPS 1B), occurs within one mile of the project site. This species, however, typically occurs in grasslands, in openings in chaparral habitats, and none are found in the project impact area. Thus, this species is not expected to be affected by the proposed project.

- An occurrence of the Ojai fritillary (*Fritillaria ojaiensis*) is documented on the Lake Cachuma quadrangle, on the crest of the Santa Ynez Mountains about three miles southwest of the project area. This species occurs primarily in oak woodland, but could potentially occur in the project area. It was not found in the project impact area.
Figure Bio-1

Figure 1. Drainages at and near the Bee Rock Quarry

5.4-4
<table>
<thead>
<tr>
<th>Scientific Name/Common Name</th>
<th>Status (Federal/State/CNPS)</th>
<th>Habitat and Description</th>
<th>Distribution in project area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federally or State Listed Threatened or Endangered Plant Species</strong></td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Sensitive Plant Species</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Agrostis hooveri  
Hoover’s bent grass | --/--/1B  
SBBG LC | Sandy soils in chaparral, cismontane woodland, valley and foothill grassland; perennial grass; blooms April to July | Harris Grade, Purisima Hills; Low potential |
| Allium howellii var. clokevi  
Mt. Pinos onion | --/--/1B | Deep soils in pinyon-juniper woodland; perennial herb; blooms May to June | Hurricane Deck; Low potential |
| Arctostaphylos refugioensis  
Refugio Manzanita | --/--/1B  
SBBG LC | Sandstone outcrops, opening in chaparral scrub; blooms Nov. to May | Summit of Santa Ynez Mtns. about 2.5 mi. SW of project area; Low potential |
| Atriplex serenana var. davidsonii  
Davidson’s saltbush | --/--/1B | Coastal bluff scrub, coastal scrub/alkaline; annual herb; blooms April to Nov. | Solomon Hills; San Rafael Mountains; Low potential |
| Arctostaphylos refugioensis  
Refugio Manzanita | --/--/1B  
SBBG LC | Sandstone outcrops, opening in chaparral scrub; blooms Nov. to May | Summit of Santa Ynez Mtns. about 2.5 mi. SW of project area; Low potential |
| Baccharis plummerae  
Plummer’s Baccharis | --/--/4 | Oak forest, chaparral, woodland, coastal scrub/shrub; blooms May to October | No. and So. canyons of Santa Ynez Mtns; Moderate potential |
| Calochortus palmeri var. palmeri  
Palmer’s mariposa lily | --/--/1B  
SBBG LC | Rocky places within chaparral, pinyon-juniper woodland; blooms June to July | Manzana Creek; Low potential |
| Calochortus weedii var. vestus  
late-flowered mariposa lily | --/--/1B  
SBBG LC | Dry, rocky places in chaparral; blooms July to August | Summits and foothills on So side of Santa Ynez Mtns; Low potential |
| Caulanthus amplexicaulis var. barbarae  
Santa Barbara jewel-flower | --/--/1B  
SBBG LC | Endemic; serpentine chaparral and outcrops; annual herb; blooms May to July | Cachuma Saddle, Figueroa Mtn area; Low potential |
| Delphinium umbraculorum  
umbrella larkspur | --/--/1B  
SBBG LC | Blooms April to June | Refugio Pass, Cachuma Saddle; Moderate |
| Erodium macrophyllum  
Round-leaved filaree | --/--/2 | Clay in cismontane woodland, valley and foothill grassland; annual herb; blooms March to May | West slopes of Figueroa Mtn.; Low potential |
<p>| Fritillaria ojaiensis | --/--/1B | Southern Oak Woodland; perennial herb; blooms March to May | N. slopes and summits of Santa Ynez Mtns about 3 mi SW of |</p>
<table>
<thead>
<tr>
<th>Scientific Name/Common Name</th>
<th>Status (Federal/State/CNPS)</th>
<th>Habitat and Description</th>
<th>Distribution in project area</th>
</tr>
</thead>
</table>
| *Horkelia cuneata* ssp. *puberula*  
Mesa horkelia | FSC/--/1B | Sandy or gravelly soils in chaparral, cismontane woodland; perennial herb; blooms Feb. to Sept. | Subspecies difficult to distinguish from more common H. c. ssp. *cuneata* |
| *Lonicer a subspicata* var. *subspicata*  
Santa Barbara honeysuckle | --/--/1B | Coastal sage scrub, chaparral, openings in oak woodland; viny shrub; blooms May to August | Mostly south coast; one occurrence along Alamo Pintado Creek, at the base of Figueroa Mtn |
| *Oxytheca parishii* var. *abramsii*  
Abram’s oxytheca | --/--/1B | Open, gravelly or sandy slopes; annual; blooms June to August | Big Pine Mtn to Cachuma Mtn.; Low |
| *Scrophularia atrata*  
Black-flowered figwort | --/--/1B | Diatomaceous and calcareous hills in chaparral, coastal scrub, riparian scrub; perennial herb; blooms April to July | Lompoc Hills; Low-Moderate potential |
| *Senecio aphanactis*  
Rayless ragwort | --/--/2 | Disturbed places in coastal sage scrub, chaparral; annual; blooms March to April | Eastern Santa Ynez Mountains |
| *Sidalcea hickmanii* ssp. *parishii*  
Parish’s checkerbloom | FSC/R/1B | Disturbed places in chaparral; perennial herb; blooms May to July | San Rafael Mountains, McKinley Mountain; Big Pine Mountain |
| *Solanum xantii* var. *hoffmanii* | --/--/4 | Coastal sage scrub, openings in chaparral; shrub; blooms February to July | N. and So. Slopes of Santa Ynez Mtns. within two to three miles of project area; High potential |
| *Thelypteris puberula* var. *sonorensis*  
Sonoran maiden fern | --/--/2 | Wetland habitats along banks of creeks; fern | Occurs mostly on the south side of the Santa Ynez Mountains |
| *Thermopsis macrophylla*  
Santa Ynez false lupine | --/R/1B | Openings in chaparral habitats within Santa Ynez Mtns.; local endemic; suffrutescent perennial; blooms April to July | Known locations approximately one mile S of project site |


Key to Status Categories:
### Federal ESA Definitions (USFWS or NMFS)

**Endangered:** Any species which is in danger of extinction throughout all or a significant portion of its range.

**Threatened:** Any species which is likely to become and endangered species within the foreseeable future throughout all or a significant portion of its range.

**Proposed:** Any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under Section 4 of the Act.

### California ESA

**Endangered:** "Endangered species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. Any species determined by the commission as "endangered" on or before January 1, 1985, is an "endangered species."

**Threatened:** "Threatened species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as "rare" on or before January 1, 1985, is a "threatened species."

**Candidate:** "Candidate species" means a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list. (Fish and Game Code, 2068)

### California Native Plant Society (CNPS)

- **List 1A:** Plants presumed Extinct in CA
- **List 1B:** Rare, Threatened, or Endangered in CA and elsewhere
- **List 2:** Plants Rare, Threatened, or Endangered in CA, more common elsewhere
- **List 3:** Need more info
- **List 4:** Plants of Limited Distribution: Watch List
Common Wildlife

Wildlife present on site is characteristic of the mosaic of grassland and chaparral oak woodland habitats. There is essentially no constraint to wildlife movement between the site and adjacent habitat areas. Mammals include California ground squirrel, black-tailed jackrabbit, coyote, black tail deer, and grey fox. Common birds observed during URS field assessments include mourning dove, tree swallow, barn swallow, American crow, Northern mockingbird, American robin, European starling, Brewer’s blackbird, house finch, savannah sparrow, house sparrow, lark sparrow, red-tailed hawk, American kestrel, scrub jay, turkey vulture, western meadowlark, California quail, and killdeer. Common reptiles include western fence lizard, side-blotched lizard, and gopher snake. (URS 2002).

Special Status Animal Species

**California Red-legged frog - Threatened (USFWS).** The California Red-legged frog (CRLF) is generally confined to aquatic habitats, such as creeks, streams, and ponds in areas where pools are two to three feet deep and contain overhanging dense vegetation. The species breeds from November to March, and generally remains within riparian areas, although they do leave breeding areas to forage. The project site is within an area (Unit 24) that was formerly proposed by the USFWS to be designated as critical habitat (USFWS, April 2004). Critical Habitat has since been reproposed (Federal Register, November 17, 2005 with a final ruling on April 13, 2006), and the Bee Rock quarry area is no longer within any of the revised critical habitat units. The nearest CNDDB-documented location of RLF is in Quiota Creek, approximately 6 miles west of Bee Rock (Bumgardner 2005). In addition, Bumgardner reports that the U.S. Forest Service has reported three occurrences of CRLF within five miles of the Bee Rock quarry. These occurrences are associated with Tequepis Canyon and the lower Santa Ynez River near Calabazal Creek. Hilton Creek has been identified as an area that may support California red-legged frog (COMB FEIR, 2004, pg. 5-69 and Figure 5-4). Bumgardner suggests that nearby locations (within 5 miles of the quarry) are likely small, scattered, and likely remnant populations.

In September and October, 2005, Bumgardner Biological Consulting conducted protocol-level surveys for California Red-Legged Frog within Bee Rock Creek downstream from the quarry and along the reach of Hilton Creek 0.25 miles downstream from the confluence with Bee Rock Creek (Bumgardner 2005, Appendix A of this EIR). After informal consultation with USFWS (Ventura Field Office), it was agreed that the surveys would follow the 1997 *Guidance on Site Assessment and Field Surveys for California Red-Legged Frogs (Rana aurora draytonii).* Aquatic and terrestrial habitats within one mile of the of the project boundaries were assessed for suitability to support CRLF; it was concluded that Bee Rock cannot support breeding, egg-laying, and larval development of CRLF, and it is unlikely that the creek supports use by adult CRLF. It was also determined that two ponds near the quarry’s scale house contained little vegetative cover to support CRLF adults or...
subadults. Lastly, it was concluded that the suitability of Hilton Creek for CRLF is low. Use of the creek by this species was not precluded, however.

Nighttime surveys for CRLF were conducted on September 28 and 29, 2005. Daytime surveys were conducted on October 26 and 27, 2005. No CRLF were found during the protocol surveys of Bee Rock and Hilton Creeks, and none were found at the two off-channel ponds near the quarry scale house.

Southwestern pond turtle - CSC. Suitable habitat (large, deep pools with permanent standing water) is not present in the study area; therefore, the species is not expected to occur.

Arroyo southwestern toad - Threatened (USFWS). According to the COMB FMP/BO FEIS/EIR, this species is not known from any of the tributaries flowing into Cachuma Lake, and it is not known to occur below Bradbury Dam. One arroyo toad was found above the Lake in 2000 during surveys conducted by the COMB biologist. Potentially suitable habitat consists of aquatic, riparian, and upland habitat in or adjacent to low-gradient reaches of medium to large-sized streams that flood naturally and periodically. Areas of sandy soil are necessary for burrowing, which is how arroyo toads seek shelter (FWS, 2004, 2005). The upper Santa Ynez River has been designated as critical habitat; the lower portions (below Lake Cachuma) have not been designated. The species is not expected in the Bee Rock project area due to a lack of suitable habitat.

Two-striped garter snake - CSC. The two-striped garter snake is generally found in aquatic sites where there is permanent water. It is not expected to be present in the immediate vicinity of the project, although portions of Hilton Creek may provide habitat.

Southern Steelhead - Threatened (NOAA). Although there has been disagreement regarding the potential for Upper Hilton Creek to support steelhead\(^3\), Hilton Creek has been identified as a Southern California Steelhead Stream by the California Natural Diversity Data Base, and is considered to be a high priority candidate for habitat enhancement by SYRTAC (2000). Steelhead and the quality of habitat within Upper and Lower Hilton Creek is covered extensively in the COMB FMP/EIR/EIS (COMB, 2004), and much of the discussion in this EIR is based on the studies, analysis, and information submitted as comments on that EIR.

The COMB FMP/BO FEIS (2004), which considers changes to the culvert at the State Route 154 road crossing, concludes that Hilton Creek contains potential spawning habitat and good rearing habitat, at least up to its confluence with Sweetwater Creek, and possibly further (See Figures 5-1 and 5-2 in COMB FMP/BO FEIS). This is based on a limited 2003 site visit conducted by the COMB biologist with the Upper Hilton Creek landowner Nancy Crawford-Hall, and her biologist, Ms. Alice Rich.

\(^3\) See COMB FMP/BO FEIS/EIR, Vol. I, page 2-30, and Vol II, comments and responses to comments on the EIR.
However, Ms. Rich disagrees with the COMB biologists’ characterization of Hilton Creek. Although she indicated during the COMB site visit that she had captured a three-inch steelhead/rainbow trout upstream of one of the road crossings during a 2002 electrofishing survey (COMB FMP BO FIES/EIR, page 7-7), she maintains that Hilton Creek lacks perennial stream flow, and does not contain suitable steelhead habitat. Nevertheless, the COMB EIR concludes that, with implementation of the proposed culvert removal project at State Route 154, steelhead occurrence will be “more frequent and more abundant” on upper Hilton Creek “compared to current conditions.”

URS, in their 2000 Sediment Assessment, indicates that steelhead are not likely to be present in Upper Hilton Creek due to the downstream barrier. On the other hand, Caltrans has indicated that steelhead are present in the upper reaches of Hilton, and that the State Route 154 barrier is an impediment, not a barrier, to passage.

There is general agreement that steelhead do occur in the lower reaches of Hilton Creek below the State Route 154 crossing (Lower Santa Ynez River Fish Management Plan, October 2, 2000).

Bald eagle - Endangered (USFWS). The bald eagle inhabits coastal bays, estuaries, and deepwater lakes. One or more pair of bald eagles breed regularly at Cachuma Lake, and appear to be year-round residents. Winter counts at Lake Cahuma over the past ten years range from 2 to 18 birds.

Least Bell’s Vireo - Endangered (USFWS). The least Bell’s vireo is a state and federal endangered species that breeds in the upper Santa Ynez River (above Gibraltar Reservoir). Suitable riparian habitat is present along the Lower Santa Ynez River, and transient individuals have been seen in the area between Buellton and the Narrows (Comb FEIS/EIR). However, the species is not expected in the immediate project area due to lack of suitable habitat (very dense and wide riparian vegetation).

Southwestern Willow Flycatcher -Endangered (USFWS). The southwestern willow flycatcher is an insectivore that breeds along the Lower Santa Ynez River in dense riparian vegetation. It usually nests near surface water, where there is abundant standing water. It is not expected along Hilton Creek due to the lack of dense, wide riparian vegetation.

White-tailed kite - CA Fully Protected. White-tailed kites forage in the Santa Ynez Valley and along the Santa Ynez River in search of rodents. In 1994, at least three pairs were nesting near the Santa Ynez River just north of Highway 246 near Buellton, and an additional nest was found in the Santa Ynez riverbed about five miles west of Buellton. This species is not likely to nest in the vicinity of the project site due to the lack of abundant grassland foraging habitat in the immediate area (i.e., within 5 miles).
5.4.3 Impacts

Thresholds of Significance

CEQA Section 15065 states that a Lead Agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where the project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal (County Thresholds and Guidelines Manual, October 2002, pg. 35).

CEQA Appendix G states that: a project will normally have a significant effect if it will: (c) substantially affect a rare or endangered species of animal, plant, or the habitat of the species; (d) interfere substantially with the movement of any resident or migratory fish or wildlife species; or (e) substantially diminish habitat for fish, wildlife or plants (Thresholds, pg. 35).

The County of Santa Barbara Environmental Thresholds and Guidelines Manual further states (page 38) that disturbance to habitats or species may be significant if it would impact resources by substantially:

a. reducing or eliminating species diversity or abundance;
b. reducing or eliminating the quantity or quality of nesting areas;
c. limiting reproductive capacity through loss of individuals or habitat;
d. fragmenting, eliminating, or otherwise disrupting foraging areas and/or access to food sources;
e. limiting or fragmenting range and movement (geographic distribution or migration routes);
f. interfering with natural processes, such as fire or flooding, upon which the habitat depends.

The Thresholds and Guidelines Manual also includes Habitat-Specific Impact Assessment Guidelines (beginning on page 39). The following describes impacts for specific habitats that may be potentially significant. Habitats not discussed below would be assessed based upon the general guidelines set forth above.

1. Wetlands. Types of impacts to wetlands that may be considered significant, include:

(a) Net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or by threatening the continuity of wetland-dependent animal or plant species.
(b) Substantial interruption of wildlife access, use and dispersal in wetland areas.
(c) Substantial alteration of the hydrology.

2. Riparian Habitats. Riparian habitat is defined as “the terrestrial, or upland area adjacent to freshwater bodies, such as the banks of creeks and streams, shores of lakes and ponds, and aquifers that emerge at the surface such as springs and seeps.” The following types of project-related impacts may be considered significant:

(a) Direct removal of riparian vegetation.
(b) Disruption of wildlife habitat, particularly animal dispersal corridors and or understory vegetation.
(c) Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers listed in the previous section), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion.
(d) Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e.g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential.
(e) Construction activity which disrupts critical time periods (nesting, breeding) for fish and other wildlife species.

3. Native grasslands (Thresholds, page 43). This habitat is defined in the County’s Environmental Thresholds and Guidelines Manual as “an area where native grassland species comprise 10 percent or more of the total relative cover.”

Removal or severe disturbance to a patch or patches of native grasses less than one-quarter (1/4) acre, which is clearly isolated and is not a part of a significant native grassland or an integral component of a larger ecosystem, is usually considered insignificant.

4. Oak Woodlands (Thresholds, page 43). A project’s impacts may be considered significant due to changes in habitat value and species compositions such as:

(a) Habitat fragmentation,
(b) Removal of understory,
(c) Alteration of drainage patterns,
(d) Disruption of the canopy,
(e) Removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland.

5. Individual Native trees (Thresholds, page 43). Of particular concern are rare native trees, which are very low in number or isolated in distribution, and
specimen trees, which are “mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species.” The County Guidelines state that “[i]n general, the loss of 10% or more of the trees of biological value on a project site is considered potentially significant (the number of trees present onsite [from] which the 10% is measured may be calculated either by counting individual trees or by measuring the area of the tree canopy with a planimeter).”

**Impacts**

**Impact BIO-1. Loss of 9 acres of chaparral vegetation.** The proposed project would involve an expansion of the quarry excavation area in order to produce an additional 7,700,000 tons of limestone product over the life of the mine. This expanded excavation would result in the **loss of approximately 9 acres of chaparral** vegetation located on the north-facing slope near the top of “Bee Rock” Hill. This hilltop area would be excavated away and the entire area would become a remnant quarry slope facing south. The revegetation efforts included in the proposed reclamation plan, and those additional measures that may be required as part of project approval, are not likely to result in complete revegetation of the site given the limited topsoil, and the geometry and hard bedrock nature of the final quarry slope. Thus, some of this habitat loss could be permanent. Much of the 9 acres of denuded land would remain in that state long after the cessation of mining. The loss or degradation of 9 acres of native chaparral habitat represents a **potentially significant** impact.

A **Biological Assessment and Revegetation Plan Report for Bee Rock Quarry** is included as part of the project submittals (URS 2002, incorporated by reference and available at Santa Barbara County Planning and Development Dept.; Appendix C of Application). Sheets 9-11 of Appendix 1 of the Conditional Use Permit Application show the post reclamation site plans. The Revegetation Plan prepared for this project is included as Appendix B of this EIR. The URS plan includes objectives, methods, proposed plant species, a conceptual schedule, irrigation methods, and monitoring plans for a phased restoration to follow mine excavation in a sequential fashion. This report has been reviewed by the P&D staff biologist. The general approach is to revegetate the benches and slopes as the mine **reaches its final configuration, most likely at the beginning of Phase IV, in 2033**. Because of the difficulty of re-establishing vegetation on bare rock, it is not likely that extensive cover of vegetation will result. Two basic restoration seed mixes are proposed: one for the benches, and a slightly different mix for the low areas after the final phase of excavation. In addition, at least 100 interior, valley, or blue oak trees will be grown in a small on-site nursery, and outplanted to areas of the site that are suitable for oak trees (See Sheet 11 of Appendix 1 of the CUP application). Overall performance criteria include reaching a 20% cover for planted species (a relatively low value), as the report indicates that this closely approximates the pre-existing conditions on Bee Rock. In addition, the plan indicates that weedy species will be removed to achieve a 20% cover level of weedy species over a period of three years.
The URS Revegetation plan could be improved by revising the weed criteria to include zero tolerance of weedy species, and by clarifying the timing of the various phases. For example, it is estimated that it will take 13 years to excavate Phase I alone. It is likely that restoration techniques will change during the lifetime of the project. The plan should be updated to reflect state-of-the-art restoration every five years, and adaptive management provisions should also be included. In addition, the monitoring program schedule (Table 8 in the URS Plan) could be revised to include the minimum number of site visits necessary to allow for success. Because of the difficulties associated with restoration on exposed rock, and the length of time that slopes will remain unvegetated, the impact of this loss of vegetation is considered to be Class I.

**Impact BIO-2. Loss of wildlife habitat and populations of common wildlife species resulting from removal of chaparral vegetation.** Although the chaparral and coastal scrub vegetation is not considered a sensitive plant community, it does provide habitat for native fauna. Loss of nesting sites for avian species common to the chaparral community could potentially occur, with resultant displacement of breeding individuals. This habitat loss would contribute incrementally to regional loss of habitat. Due to the proximity of the site to adjacent open lands containing chaparral, it is anticipated that wildlife would move to adjacent areas, and not be significantly affected by the project. Impacts would be adverse, but less than significant. (Class III).

**Impact BIO-3. Expansion of the mine would result in increased sedimentation in and degradation of aquatic and riparian habitats in Bee Rock and Hilton Creeks.** The proposed increase in annual production and proposed expansion of the area of excavation would adversely affect biological resources in the immediate vicinity and in the downstream reaches of Hilton Creek west and northwest of Bee Rock Quarry.

Limestone sediment derived from Bee Rock Quarry has been, and continues to be, deposited in the segments of Bee Rock, Sweetwater and Hilton creeks downstream of the mining site. This sediment ranges in size from fine carbonate powder to sand and pebble-sized chips of limestone. Runoff from the active working face, processing area, stockpile area and a portion of the access road flows into and delivers sediment to Bee Rock Creek. Other parts of the access road drain directly into Hilton Creek and the Sweetwater Creek watershed. In the past, sediment eroded from the unpaved portion of the quarry access road has been deposited directly in Hilton Creek and a portion of the Sweetwater Creek watershed.

Control of downstream sedimentation at Bee Rock Quarry has been an issue that the applicant, the county, and other agencies have dealt with for many years. Undoubtedly, substantial volumes of limestone sediment were deposited in Bee Rock and Hilton creeks between 1957 and 1976, prior to regulation of the site under the Surface Mining and Reclamation Act (SMARA). The magnitude of this problem was recognized during the winter storms of 1998. In that year, a substantial volume of
white limestone sediment derived from the quarry (in the form of small chips) was deposited in Bee Rock and Hilton creeks. Various erosion control and drainage improvements were subsequently implemented at the facility.

These creeks were inspected in 1998 and early 2004 by former P&D Geologist Brian R. Baca. Mr. Baca reports that the volume of limestone sediment remaining in the creek is substantially less now than was present in 1998. This is most likely because sediment control improvements were designed and installed at the quarry in mid- to-late 2004. In an inspection conducted in 2004 after a heavy rainstorm, substantial fine sediment was observed to have been recently deposited in Bee Rock Creek and in areas downstream of the unpaved segment of the access road (see photo below). Sediment control continues to be an ongoing subject of the required annual inspections of the quarry. However, the upper 2,000 feet or so of the access road leading to the entrance gate to the quarry was paved in 2004. This paving appears to have been effective in reducing overall downstream sedimentation from ultra-fine powders.

The proposed project includes an increase in the annual limit for material production from 175,000 to 300,000 tons/year. This increase involves a 70% increase in the truck traffic arriving and departing the site. Currently, about 3,000 feet of the quarry access road is unpaved and is surfaced with limestone gravel obtained from the quarry. During February 2004 inspections of the quarry site, County and State personnel have observed that substantial sediment derived from the quarry road is being conveyed into Bee Rock and Hilton creeks. Some sediment has also been transported into the Sweetwater Creek watershed. The limestone sediment is white to light tan in color and includes very fine limestone powder as well as sand and pebble-sized debris. As illustrated in the photograph below, pools in a 300-foot long segment of Hilton Creek were observed in February 2004 to have been coated with fine limestone powder.
Based on observations made by former P&D Geologist Brian Baca and P&D Biologist Melissa Mooney, fine sediment and limestone sand is generated through the abrasion and crushing of the limestone gravel placed on the access roadway as it is traveled by heavy rock transport trucks. Rainfall washes this fine sediment into roadside drainage ditches that ultimately deliver this sediment to the adjoining creeks. As the proposed project involves a substantial increase in truck traffic, it is likely that increased sedimentation of Bee Rock and Hilton creeks would occur. Given the sensitive nature of the aquatic and riparian habitat, this increased sedimentation would be a potentially significant impact.

Initially, when the mine expansion application was received, it was believed that the resolution of the sedimentation issue would occur with the construction of a small (approximately 0.5 acres) sedimentation basin near the scale house. This basin would be designed as a temporary basin to intercept the last bit of sediment (larger chips) that might be released from the site in the event that other BMP measures (such as covering materials, minimizing production seasonally (in the autumnal months) so that minimum amounts are being stockpiled, and paving of the road) were not 100% effective. The basin would be temporary because, ultimately, the site itself would be mined to drain internally, such that all sediment is captured within the mine. In addition, within the past two to three years, at least 16 additional small sediment traps have been installed along the roadway leading in to the quarry. The applicant is thus no longer proposing the sedimentation basin.
On June 7, 2006, Santa Barbara County P&D staff conducted a conference call with the applicant and the RWQCB to discuss the RWQCB Notice of violation issued in 2004, the need for the additional sediment basin, and measures that have been implemented to date. It now appears that most of the issues of concern to the RWQCB, as associated with the stormwater inspections and violations for the Bee Rock Quarry existing operations described in the RWQCB’s May 22, 2006 Draft EIR comment letter (Refer to Appendix 7, Response to Comments, for further information), have been addressed; the RWQCB has indicated that its staff will conduct an on-site survey at the beginning of the next rainy season to update its records regarding the RWQCB Notice of violation issued in 2004 and implementation of corrective measures since then (Refer to the 2005 Annual Surface Mining Inspection Report prepared by P&D staff for a listing of the corrective measures implemented in response to the notes from the 2004 inspection; these inspection reports are on-file at the Planning & Development Department.) The question still remains, however, about if there is a need to install an on-site sedimentation basin to capture the coarser limestone sediments produced from the expansion of the mine or if there is an equivalent method available to the applicant for capturing the coarser sediments.

With respect to water quality, the RWQCB has jurisdiction by law for ensuring compliance with the applicable water quality objectives of the Water Quality Control Plan for the Central Coastal Basin (“Basin Plan”). The Regional Board implements the Basin Plan by issuing and enforcing waste discharge requirements to individuals, communities, or businesses whose waste discharges can affect water quality. These requirements can be either State Waste Discharge Requirements for discharges to land, or federally delegated National Pollutant Discharge Elimination System (NPDES) permits for discharges to surface water. Methods of treatment are not specified by the RWQCB; rather, the RWQCB reviews an applicant’s proposal to ensure that waste discharges are managed so that: 1) they meet the Basin Plan requirements and water quality objectives; and, 2) beneficial uses are protected.

The Basin Plan contains narrative objectives (and not numeric water quality standards) to be achieved for solids and sediment, as follows:

- **Settleable solids:** Waters shall not contain settleable material in concentrations that result in deposition of material that causes nuisance or adversely affects beneficial uses.

- **Sediment:** The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

These water quality objectives apply to sediment ranging from the powder form (very fine sediments less than silt size) to some of the gravels. The RWQCB has
indicated that there are differing treatment methods depending upon the sediment involved be it limestone sediment in the powder form, in the form of other fines and coarse sands, and some of the gravels, as follows:

1. **Powder Form (Very Fine - Less Than Silt Size).** The best management practice available is to cover and protect the materials so that it does not become entrained in stormflows. Pursuant to the Board’s letter dated May 22, 2006, “The finer particles are calcium carbonate powder and are best prevented from off-site transport by measures such as paving certain road segments and entryways, which Granite has made progress on, and by covering stockpiles and surrounding them with straw rolls, which Granite has not made as much progress on. These measures focus on preventing entrainment of these powdery fines in stormflows. A sediment basin would not serve to significantly reduce transport of these finer particles in large storm events, since the particles typically remain in suspension during high flows. However, we would expect coarser material to be trapped by an appropriately designed sediment basin.”

2. **Other Fines and Coarse Sands.** The best management practice available to manage these materials through a combination of source controls and an on-site retention basin. Pursuant to the Board’s letter dated May 22, 2006, “As early as November 1997, in a letter from Water Board staff Matt Fabry, we supported the construction of a sediment basin as proposed by Granite Construction Company (Granite) in their Sediment Control Plan (September 10, 1997). Since that time, Granite has made no progress on that element of the Sediment Control Plan and repeated violations of their stormwater permit have demonstrated that measures in place were ineffective in preventing discharges of sediment to the creek.

A February 27, 2004 field meeting with County, Department of Fish and Game, Water Board staff, and Granite considered these problems and addressed the need for a sediment basin. Agency staff and Granite identified a potential location for an off-channel sediment basin at that meeting.”

Further, the RWQCB has indicated that an on-site sediment basin (or other equivalent method for ensuring the coarser materials and not the very fine powders) in conjunction with source controls is required so as to: 1) guarantee compliance with the Basin Plan water quality objectives; and 2) to address the potential threat to downstream beneficial uses (e.g. southern steelhead) in Hilton Creek below SR 154 which could create a nuisance or adversely affect the beneficial uses of this Creek.

Pursuant to the Board’s letter dated May 22, 2006,

“Hilton Creek provides habitat for the southern steelhead and Water Board staff is concerned about the potential effects of excessive sedimentation to spawning areas and pools for rearing and cover. While to date no evidence has been
presented that steelhead are affected by quarry operations, staff believes that the potential for repeated sediment discharges into Hilton Creek may ultimately have such an effect.”

“Construction of an off-channel sediment detention basin would likely require permits for the inlet and outlet structures linking it to the creek. Water Board staff would work to expedite water quality permits for these structures in order to achieve an improved level of water quality protection for the entire quarry site.

Water Board staff believes that continued operation of Bee Rock Quarry at accelerated production rates until the year 2043 poses a significant threat to water quality in Hilton Creek. Staff believes mitigation measures proposed in the DEIR are reasonable and commensurate with the level of risk inherent with quarry operations.”

3. Some of the Gravels. The best management practice available to manage these materials are through a combination of source controls and an on-site retention basin previously discussed as part of Item 2 – Other Fines and Coarse Sands.

Impact BIO-4. Potential effects of Dust. Limestone dust generated by the quarry operations accumulates on the oak trees located along the southern edge of the facility. This limestone dust may adversely affect the longevity of these trees. To the extent that an increased production rate would generate more dust emissions, this would represent a potentially significant impact of the proposed project. The planting of 100 oak seedlings of three different species (Quercus wislizenii, Q. douglasii, and Q. lobata) included in the proposed reclamation plan (see Page 19 and Sheet 10) is considered adequate to address this potential impact. Thus, impacts are Class II.

Impact BIO-5. Potential effects of Sedimentation on Southern Steelhead. Although steelhead are not expected in Bee Rock Creek, and are not likely in the reach of Hilton Creek immediately downstream of the site, there is a remote possibility that they could be present, primarily if the State Route 154 culvert is improved to allow passage and hydrological conditions support its presence in the future. Potential increased sedimentation could affect steelhead if the sediments were extensive enough to cover and degrade gravels that are important to spawning. Gravel must be free of fine sediment in order for eggs and embryo to survive and emerge as fry (California Salmonid Stream Habitat Restoration Manual, 2002). In addition, substantial, long-term sedimentation in a stream system can have impacts on the floodplain and stream channel form and pattern. Changes in these factors can affect fish habitat by changing habitat suitability, species composition, and aquatic biomass.
In August, 2000, URS Corporation prepared a report detailing the results of an assessment of Sediment Conditions along Hilton Creek in the vicinity of the Bee Rock quarry (URS 2000). The report is based on a preliminary survey conducted on January 31 and February 3, 2000, and a modified Rapid Stream Assessment conducted on July 6, 7, and 10, 2000. Five reaches of Hilton Creek were assessed, extending from the upper reaches above the quarry, to the lower reach below State Route 154.

During the 2000 survey, URS scientists observed limestone sediments within two of the Hilton Canyon reaches below the quarry, and they observed a higher percentage in the upper reaches compared to downstream areas, and compared to adjacent areas outside the quarry watershed. Fine sediments were observed in the upper 500 ft. of the unnamed tributary, and these occurred primarily in pools and gentle runs. Aquatic insects and invertebrates were “moderately abundant” at each of the 22 pool and riffle transects. URS concluded that the sediments “do not appear to have caused, nor currently cause, any adverse ecological effects” because (1) the amount is insufficient to completely bury other materials; (2) sediments do not appear to be accumulating, altering gravels, or altering the pH of water; (3) upstream areas are not occupied by steelhead due to downstream barriers to steelhead migration (waterfall at State Route 154); and (4) neither water quality nor riparian vegetation appear to have been adversely affected.

P&D staff, however, as noted above under the discussion for Impact Bio-3, observed that sedimentation was adversely affecting water quality and aquatic resources. Measures have since been implemented to correct this problem of very fine sediment in the powder form.

In a Response to the Bee Rock EIR Notice of Preparation, Caltrans indicated that steelhead have been found in the State Route 154 culvert outlet pool, “and are believed to occur upstream of the culvert, which acts as a substantial, but not complete barrier.” The Cachuma Project Contract Renewal EIR reports that the SYRTAC “upstream migrant trap” located on Hilton Creek captured steelhead in February 1994 and again in 1995. This location of this trap, however, is not known, but is presumed to be located on the north side of State Route 154 (Figure Bio-1).

The Lower Santa Ynez River Fish Management Plan (Entrix 2000) describes the lower reach of Hilton Creek on the U.S. Bureau of Reclamation property (north of highway 154). In addition, this report details the nature of the two barriers to fish passage along this reach: (1) the cascade/chute passage impediment located about 1,380 feet upstream from the confluence with the Santa Ynez River; and (2) the highway 154 culvert passage impediment that is located about 4,200 feet

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4 Assessment of Sediment Conditions Along Hilton Creek, Bee Rock Quarry, Granite Construction Co., August 2000. Prepared by URS Corporation 130 Robin Hill Road, Suite 100, Santa Barbara, CA 93117.
5 June 28, 2005 letter from Tamara Babcock, Caltrans District 5 Development Review Coordinator, to Brian Baca, Geologist, County of Santa Barbara.
6 U.S. Bureau of Reclamation, 1995, pg. 5.4-17.
upstream of the confluence. Although the lower cascade/chute barrier is a higher priority, discussion is ongoing between CDFG and Caltrans regarding a potential passage improvement project for the State Route 154 culvert area, to enable steelhead to access available habitat upstream of the culvert “when suitable hydrologic conditions are present.” The State Route 154 passage improvement project is described, and the impacts are evaluated, in the EIS/EIR for the Lower SYRFMP and Cachuma Project BO for Southern Steelhead.

In summary, there may still be some disagreement amongst experts over whether or not steelhead are present in the upper reaches of Hilton Creek. URS (2000) and Dr. Alice Rich (2004) maintain that there is no evidence that steelhead are present and suggest that habitat is unsuitable. The COMB EIR (2004), however, maintains that there is evidence that steelhead are present, though rarely (as evidenced by Dr. Rich’s observation of young *O. mykiss*, reported in the COMB EIR), and their occurrence may be “more frequent” when downstream passage improvement projects are completed. Although the sedimentation problem appears to have been resolved with the paving of the Bee Rock mine road, and although the probability of steelhead occurring in the upper reaches of the creek is low, this EIR conservatively concludes that impacts of sedimentation on steelhead, if present, would be potentially significant (Class II). Long-term monitoring is recommended to (1) definitively determine whether steelhead are present; and (2) ensure that sedimentation does not adversely affect downstream habitats.

Impact BIO-6. Operational Effects of Noise on wildlife. Existing truck loading operations at the mine include one daylight shift per day, and very rarely a second 8-hour shift. Blasting occurs only during the day. It is estimated that with the expansion, some nighttime loading might occur, but this is anticipated to occur only “a few weeks a year” (personal communication with applicant, David White, Environmental Manager, Granite Construction Co., December 14, 2005). Because the mine has been in operation for about 60 years, it is presumed that wildlife in the area have become accustomed to the noise of the current loading operations. Nighttime loading activity could affect some of the common wildlife species that reside in or move through the area (skunks, raccoons, deer, owls, bats). However, it is likely that these animals could move away from the area rather easily, and no significant impacts would occur. Therefore, impacts would be adverse, and not significant (Class III).

5.4.4 Cumulative Impacts

The proposed project involves the removal of nine acres of native vegetation at a single site. Substantial vegetation removal has not occurred in other areas of the rural lands in the vicinity of Bee Rock Quarry. Given the large area removed,
however, it is considered a substantial contribution to the general ongoing loss of wildlife habitat due to development in this area of the County.

5.4.5 Mitigation Measures and Residual Impacts

As discussed above, a Revegetation Plan Report is included as part of the project description (URS 2002). As part of this plan, at least 100 interior, valley, or blue oak trees will be grown in a small on-site nursery, and outplanted to areas of the site that are suitable for oak trees (See Sheet 11 of Appendix 1 of the CUP application). This is intended to provide mitigation for the oak trees that have been and/or may be affected by dust.

**BIO-1. Prepare and Implement Sedimentation and Erosion Control Plan.** In order to minimize sedimentation of Bee Rock, Hilton and Sweetwater creeks, an updated Sedimentation and Erosion Control Plan shall be developed and implemented. This plan shall include, at a minimum, the following components:

a. Eventual Paving of all portions of the quarry access road.

b. The installation of an approximate 0.5-acre temporary off-channel sedimentation basin or other measures deemed acceptable to the RWQCB, that would serve to clarify runoff from the active quarry area.

c. A specific program for the annual installation of additional temporary sediment control improvements prior to the upcoming winter season.

d. A specific timetable for installation of each proposed component of the Plan.

(Addresses Impacts Bio-3 and 4.)

**Plan Requirements and Timing:** Prior to approval of the Land Use Permit required to effectuate the Revised CUP, the applicant shall provide an updated Sediment and Erosion Control Plan for review and approval by P&D staff in consultation with the RWQCB.

**Monitoring:** P&D staff will review the proposed plan prior to the issuance of the LUP. Compliance with the requirements of the approved plan would be assured through the annual site inspection required under SMARA.

**BIO-2. Restoration to Include Imported Topsoil.** In order to increase the potential for successful revegetation of the final excavated quarry slope, the applicant shall revise the Revegetation Plan to include a measure to import topsoil to the site to be used in final reclamation. The applicant shall import not less than 1,000 cubic yards of topsoil. This topsoil shall be placed in discreet areas on the horizontal benches of the final quarry slope and used to support the re-establishment of chaparral and coastal sage scrub vegetation. (Addresses Impact Bio-1).

**Plan Requirements and Timing:** Prior to final reclamation of the site, the specific manner of placement and distribution of this soil shall be proposed in a Revision or Addendum to the Restoration Plan, and said revision shall be prepared by a P&D-
approved biologist retained by the applicant. This report shall be subject to review and approval by the P&D Biologist or an independent peer reviewer.

**Monitoring:** Compliance with this condition would be assured through the required annual SMARA inspections. Importation of topsoil would also be included in the Financial Assurance required under SMARA.

**BIO-3 Develop and implement Steelhead presence/absence and Water Quality Monitoring Program for Hilton Creek and Aquatic species.** The applicant shall hire a qualified biologist to prepare a monitoring plan for Hilton Creek. The plan shall include provisions for (1) affirming steelhead presence/absence; (2) monitoring aquatic habitat and water quality parameters specific to suitable habitat for steelhead, and (3) identifying sources of erosion and sedimentation, (including the main access road), noting embeddedness within stream habitats, and recommending potential treatments for problems identified (Addresses Impacts Bio-4 and 5).

**Plan Requirements and Timing:** The plan shall be prepared by a P&D-approved biologist retained by the applicant, and submitted prior to approval of the Land Use Permit required to effectuate the requested Revised CUP. The program shall be subject to review and approval by the P&D Biologist, the RWQCB, CDFG, and/or an independent peer reviewer.

**Monitoring:** Compliance with this condition would be assured through the required annual SMARA inspections and the affiliated environmental quality assurance program to be established.

**Residual Impacts**

With the implementation of mitigation measure #1, preparation of a sediment and erosion control plan, impacts associated with downstream sedimentation (Impacts Bio-3 and 4) would be reduced to less than significant. Mitigation measure #2, importation of topsoil, would enhance the long-term success of the revegetation effort, but it would not adequately offset the proposed removal of nine acres of chaparral. Much of this area would remain unvegetated for several decades as mining proceeds. Given this circumstance, the loss of chaparral cannot be feasibly mitigated through revegetation efforts. Thus, this impact to biological resources (loss of 9 acres of chaparral vegetation) would remain significant and be unavoidable (Class I).
5.5 Aesthetics/Visual Resources

Changes in visual character of the mining site as seen from public viewing places are under review in this document. The existing level of site disturbance is not an impact of the proposed project (i.e. an expansion of the quarry) but is part of the baseline setting from which impacts are assessed.

5.5.1 Setting

Bee Rock Quarry has been in operation since 1952 when the extraction of limestone material began as part of the construction of Bradbury Dam and Lake Cachuma. The quarry highwall or working face is characterized by vertical slopes and intervening horizontal benches of white to light-gray unvegetated exposures of limestone. Since the onset of operations, all excavation activities have occurred on the south-facing slope of the hill designated “Bee Rock” on the USGS maps of the area. The current reclamation plan requires this excavation method continue as the remaining north-facing slope at the end of mining activities is to remain undisturbed. Thus, the working face of the quarry is not visible from Lake Cachuma. With one very limited exception, the quarry is also not visible from State Route 154, a County-designated Scenic Highway. The exception is a point on the highway about 5 miles to the east of the quarry where the top of Bee Rock Hill is visible for a few seconds. The western edge of the quarry excavation is also remotely visible from a few points in the Santa Ynez community area, including the east-facing seating of the Santa Ynez High School football stadium.

There is no lighting associated with the quarry operation that is visible from public viewing areas. Highly visible night lighting, however, occurs at the Santa Ynez Valley Gun Club shooting range located within the project parcel (APN 141-290-056) along the access road to the quarry. The shooting range is not associated with the Bee Rock Quarry operation.

The quarry is located about 2 miles north of Santa Ynez Peak and Broadcast Peak. The working face is very visible from the area along West Camino Cielo at the ridgeline of the Santa Ynez Mountains. Looking north from this area, the light-colored limestone rock appears in stark contrast to the surrounding forested areas and Lake Cachuma. The 1967 and 1997 aerial photographs presented below at approximately the same scale illustrate the contrast of the excavated areas of Bee Rock Quarry with the surrounding landscape.
IMPACT VIS-1. Although the quarry is visually dominant and incompatible with the surrounding lands when viewed from public viewing areas located along the ridgeline of the Santa Ynez Mountains, the proposed project would not adversely affect this existing condition. As indicated in the aerial photographs, the visual character of the quarry from southerly viewpoints was substantially the same in 1967 as the current condition. Under the proposed reclamation plan, the top of Bee Rock Hill would be dropped in elevation from the currently permitted final configuration by approximately 70 feet due to the proposed additional excavation.
With this drop in elevation, the quarry would be less visible from public viewing places upon implementation of the proposed project. The proposed project would not adversely affect the quarry’s existing limited visibility from State Route 154 and its remote visibility from the Santa Ynez community area. In addition, the proposed reclamation plan includes revegetation requirements that would reduce the visual dominance of the excavated quarry slopes. Thus, impacts on visual resources would be less than significant (Class III).

**VIS-2.** The Traffic Section of this EIR dentifies the potential for traffic safety conflicts at the quarry haul road and State Route 154 as a result of southbound trucks decelerating before entering the quarry. This impact is TRAFFIC-3 and a recommended TRAFFIC-3 mitigation measure was included, as per the recommendation of Caltrans in its letter dated June 16, 2006, for the applicant to install a deceleration lane on the south side of State Route 154, a Caltrans facility.

State Route 154 is a State and County designated scenic highway. Installation of the deceleration could involve some alteration of adjacent slopes and the removal of existing vegetation and up to 20 oak trees. The aesthetic effects would be limited to up to 500 feet of frontage on the south side of State Route 154 and has been identified as a Class I (significant and unavoidable) project-specific impact. Installation of the deceleration lane on the south side of State Route 154 would result in the frontage of both sides of the scenic highway looking similar in terms of the lack of vegetation. Given the extent of the existing visual intrusions within the vicinity, the incremental effect attributable to installation of the proposed deceleration lane would not dominate the landscape nor would it substantively degrade or obstruct scenic views of the natural hillsides and of Lake Cachuma.

### 5.5.3 Cumulative Impact

From the predominate public southerly viewpoints, the visual character of the Bee Rock Quarry has been substantially the same as the current condition since the late 1960s. It does not disrupt the scenic quality of the Santa Ynez Valley, nor does it intrude into the State Route 154 view corridor. Upon completion of the mining activities and subsequent reclamation, the quarry’s visibility would be further lessened. Thus, the visual impacts would not be cumulatively considerable.

### 5.5.4 Mitigation Measures and Residual Impact

**VIS-1.** No mitigation required. Residual impacts would be less than significant (Class III).

**VIS-2.** The impacts resulting from installation of a deceleration lane on State Route 154, a County and State designated scenic highway, for southbound trucks to use before entering the quarry are characterized as Class I (significant and unavoidable) project-specific impact. The Traffic Mitigation Measure is a Caltrans recommendation for State Route 154, which is a state facility over which they
Among other items, installation of the deceleration lane will require that the applicant obtain an encroachment permit from Caltrans. As part of its review and approval of an encroachment permit, Caltrans may impose conditions to lessen visual/aesthetic impacts.
5.6 Cultural Resources

The evaluation of impacts to cultural resources is limited to currently-undisturbed areas that would be excavated under the quarry expansion plan. The increase in annual tonnage exported from the site would not involve any impacts on cultural resources as all necessary access roads and loading facilities already exist on the site.

5.6.1 Setting

The area of new ground disturbance associated with the proposed expansion of the mining area encompasses approximately nine acres located on the steep northern flank of Bee Rock Hill. The ground slope in this area ranges in slope from 30 to 70%. It is characterized by a very thin soil horizon with scattered outcrops of limestone. The natural ground surface on the southern flank of Bee Rock Hill, and most of the top of this Hill, has been removed by past mining excavation.

Based on a comparison of the pre-mining USGS topographic map with the current topographic map of the site, the top 30 feet of Bee Rock Hill has been removed by past mining activities.

The nearest identified archaeological site is located about one mile east of the quarry in Tequepis Canyon at the Drake Boy Scout Camp. This site is located along Tequepis Creek. Numerous other archaeological sites are located along other drainage courses in the area, especially the Santa Ynez River. The quarry site and vicinity have not been surveyed for cultural resources.

5.6.2 Impacts

**IMPACT CUL-1.** It is very unlikely that substantial cultural resources are present in the area proposed for new disturbance. This conclusion is based on the steepness of the slope. According to archaeologist David Stone in an e-mail dated 5-11-04, prehistoric sites are very rarely located on slopes exceeding 20%, and are extremely uncommon on slopes of over 30%. Exceptions to this include temporary hunting areas and rock art sites, spiritual shrine areas on the tops of ridgelines and quarries for collecting stone tool-making material (primarily cherts). The project site does not contain these exceptional characteristics. Thus, it is “extremely unlikely” (Stone, 5-11-04) that unknown prehistoric resources are located within the project site.

Although unlikely, there remains some potential for cultural resources to be present within the area proposed for new disturbance based on the relative proximity to a number of sites located along the Santa Ynez River and its tributaries. Based on the site characteristics, deposits of such resources would not be anticipated to be extensive across the area of new disturbance.
Given the large area (nine acres) that would be subject to new mining excavation, however, impacts on unknown cultural resources are considered potentially significant (Class II).

5.6.3 Cumulative Impacts

As a result of the characteristics of the mining site, additional excavation is not likely to yield cultural resources. It is standard practice in the County to require cessation of mining activities if archaeological remains are encountered and to retain professionals to review the significance of the resources and prescribe an appropriate mitigation program. Thus, the project’s impacts to cultural resources is not considered to be cumulatively considerable.

5.6.4 Mitigation Measures and Residual Impacts

Mitigation Measure

CUL-1 In the event archaeological remains are encountered during the initial excavation of natural ground surfaces in the proposed mining expansion area, excavation activities in this area shall be stopped immediately until a P&D qualified archaeologist and Native American representative are retained by the applicant to evaluate the significance of the find pursuant to Phase 2 investigations of the County Archaeological Guidelines. If remains are found to be significant, they shall be subject to a Phase 3 mitigation program consistent with County Archaeological Guidelines and funded by the applicant.

Plan Requirements/Timing: This condition shall be printed on the reclamation plan (03RPP-00000-00004) map sheets and incorporated into the conditions of approval of Conditional Use Permit 03CUP-00000-00092.

Monitoring: P&D shall review the reclamation plan and Conditional Use Permit to ensure the above requirements are met prior to approval of the Land Use Permit required to implement the proposed revised reclamation plan (03RPP-00000-00004). The County SMARA Inspector shall inspect the expansion area as excavation proceeds during the required annual SMARA inspection.

Residual Impact

With the above mitigation measure, residual impacts on cultural resources would be less than significant (Class II).
5.7 Noise

5.7.1 Setting

No sensitive offsite receptors (i.e. residences) are located within 1,650 feet of the mining site. Furthermore, the noise generated by materials processing activities and controlled blasting does not reach offsite parcels as it is contained by the topography of the mining site. The mining site is located in a small valley bounded on the north and east by Bee Rock Hill and on the south by the Santa Ynez Mountains. Materials processing and blasting occurs only on and below the active quarry face on the south side of Bee Rock Hill. The sounds of these activities do not reach State Route 154 or other offsite areas located north of Bee Rock Hill or the quarry.

5.7.2 Impacts

**NOISE-1.** The proposed project would involve increased noise as a result of longer hours of operation of the materials processing equipment and greater frequency or greater detonation charge of blasting. In order to produce an additional 125,000 tons/year of rock, either the frequency of blasting would increase or the charge of the detonation would increase. The applicant reports that blasting would continue to occur on a bi-weekly basis with the number of blasts ranging from 15 to 25 per year and that the frequency of blasting would not be increased. These changes in operations would not, however, be anticipated to cause a potentially significant noise impact because of the remoteness of the site (Class III).

**NOISE-2.** The proposed project would involve a higher level of truck traffic. The increase in noise from increased transport truck traffic is not expected to substantially change ambient noise levels given the remoteness of the site and the existing level of truck traffic on State Route 154. Impacts would be less than significant (Class III).

5.7.3 Cumulative Impact

The noise generated by materials processing activities and controlled blasting does not reach offsite parcels as it is contained by the site’s topography. The incremental increase in noise levels associated with increased transport truck traffic is not considered to be cumulatively considerable.

5.7.4 Mitigation Measures and Residual Impact

No mitigation required. The residual impacts would be less than significant (Class III).
5.8 Transportation/Circulation:

The proposed project includes an increase in the annual tonnage limit of mined materials that can be exported from the Quarry. Under the current CUP, material production at the Quarry is limited to a maximum of 175,000 tons per year. The applicant is proposing to obtain County approval of an amended CUP to increase this limit to 300,000 tons/year, calculated as a rolling average. By way of background, Bee Rock Quarry has been at a production rate of 175,000 tons per year since 1999.

This section reviews the potential effects of the proposed increase in truck traffic on State Route 154 traffic flow and traffic safety issues at State Route 154 and the Quarry haul road. The discussion is based, in part, on the information provided in the October 2000 September 2004 Traffic Study – Bee Rock Quarry prepared by the Civil and Environmental Engineering Department of California Polytechnic University, San Luis Obispo (A. Rahim and A. Chatziioanou).

5.8.1 Setting

Average annual daily traffic (AADT) values are collected and maintained by the California Department of Transportation (CALTRANS). For the five-year period from 1999 to 2003, AADT along State Route 154 ranged from 12,000 to 14,500 with CALTRANS estimating that trucks account for approximately 5% of the traffic volume. Based on the average of 13,360 AADT over that period, the average daily truck traffic on State Route 154 was 668 trips per day. (“Trucks” in this survey includes both large transport trucks and large, as well as slow-moving recreational vehicles.)

5.8.2 Impacts

TRAFFIC-1. Effects on traffic circulation on State Route 154 from new truck trips. The change in the annual tonnage limit from 175,000 tons to a rolling average of 300,000 tons directly results in an increase in truck traffic on State Route 154. Based on a standard truck capacity of 25 tons, the current CUP allows a total of 7,000 two-way (round trip) truck trips per year (175,000/25 = 7,000). Under the proposed 300,000 tons/year production rate, the number of two-way truck trips would increase by 5,000 to a total of 12,000 trips per year. Table Traffic-1 provides a month by month estimate of rock production at the Quarry and the associated truck traffic based on the historic pattern of sales. Rock production peaks in the summer months and drops in the winter months.

Based on the increase in two-way truck trips from 7,000 to 12,000 per year and 250 working days per year, the average daily truck traffic on State Route 154 associated with the proposed change in the annual production rate would increase by an average of 20 round trips per day (40 one-way trips per day). The estimated 20 two-way truck trips per day increase in the total State Route 154 traffic would represent a 3.0% increase in truck traffic and an overall 0.45% 0.16% increase in overall traffic volume. (Note that two-way truck trips are used for comparison as it represents the number of trucks added to the highway traffic.)
Table Traffic-1. Estimated Daily Truck Traffic generated by Bee Rock Quarry

<table>
<thead>
<tr>
<th>Month</th>
<th>Percentage Of Annual Production</th>
<th>Current permit limit 175,000 tons per year</th>
<th>Proposed permit limit 300,000 tons per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tons Per Month</td>
<td>Tons Per Day</td>
</tr>
<tr>
<td>Jan</td>
<td>3.8</td>
<td>6,650</td>
<td>317</td>
</tr>
<tr>
<td>Feb</td>
<td>3.8</td>
<td>6,650</td>
<td>316</td>
</tr>
<tr>
<td>Mar</td>
<td>3.8</td>
<td>6,650</td>
<td>317</td>
</tr>
<tr>
<td>Apr</td>
<td>8.0</td>
<td>14,000</td>
<td>666</td>
</tr>
<tr>
<td>May</td>
<td>8.0</td>
<td>14,000</td>
<td>667</td>
</tr>
<tr>
<td>June</td>
<td>8.0</td>
<td>14,000</td>
<td>667</td>
</tr>
<tr>
<td>July</td>
<td>13.5</td>
<td>23,625</td>
<td>1,125</td>
</tr>
<tr>
<td>Aug</td>
<td>13.6</td>
<td>23,800</td>
<td>1,133</td>
</tr>
<tr>
<td>Sept</td>
<td>13.5</td>
<td>23,625</td>
<td>1,125</td>
</tr>
<tr>
<td>Oct</td>
<td>8.0</td>
<td>14,000</td>
<td>667</td>
</tr>
<tr>
<td>Nov</td>
<td>8.0</td>
<td>14,000</td>
<td>667</td>
</tr>
<tr>
<td>Dec</td>
<td>8.0</td>
<td>14,000</td>
<td>666</td>
</tr>
<tr>
<td>Annual Totals</td>
<td>100%</td>
<td>175,000 tons</td>
<td>Daily Average 28 trips/day</td>
</tr>
</tbody>
</table>

Based on the operational experience for the last five years, and the recent highway improvements, the small 3.0% increase in truck traffic, and the minimal 0.15% increase in overall traffic volume, the increases in traffic volume on State Route 154 associated with the proposed permit modifications are not substantial and do not represent a potentially significant impact on circulation (Class III).

TRAFFIC-2. Effects on traffic circulation on State Route 154 from employee traffic. The increase in the production rate from 175,000 to 300,000 tons per year does not involve an increase in the number of employees. According to the applicant (David White, 5-26-04 personal communication with Brian Baca), the production capacity of the equipment utilized at the quarry can produce the 300,000 tons of material per year without an increase in employees or hours of operation. Over the past five years, the facility has operated at the proposed output without an increase in employees. Thus, there is no new employee traffic associated with the proposed project and no impacts (Class III).

TRAFFIC-3. Traffic safety issues at entrance/exit road. Traffic safety at the entrance to Bee Rock Quarry at State Route 154 continues to be a concern, as noted in the 2004 Traffic Report and the June 16, 2006 Caltrans Letter (Refer to Appendices 6.0 and 7.0 of this EIR). Empty northbound rock transport trucks have a left turn pocket available to avoid blocking traffic when turning into the facility. Southbound trucks, however, must decelerate in the single highway lane prior to making the turn onto the Bee Rock Quarry on-site haul road. This southbound turning movement causes a traffic delay and potential hazards should drivers attempt to pass the decelerating truck by crossing over the solid yellow line. With the proposed production rate increase, the number of trucks making this turn annually would increase by about 70%. This situation is addressed in the project description as the applicant proposes to install a 200-foot deceleration lane on the southbound side of State Route 154. This deceleration lane would obviate this potentially significant impact.
impact on traffic safety. (Class III). Note: this project component was deleted by the applicant per the applicant’s written comments submitted on the Draft EIR; refer to Appendix 7.0 of this EIR.

Existing safety practices for truck departures onto State Route 154 would be continued or expanded as part of the proposed project. The use of a full-time traffic control person at the entrance/exit gate would remain in effect. This person uses CB radio communications and video camera surveillance of oncoming southbound traffic to control truck departures from the Quarry to assure safe entry onto State Route 154 at all times. The existing traffic control system would be further improved with the proposed re-location of the camera as a result of installation of the deceleration lane. Improved signage near the Quarry haul road is also proposed. Lastly, all trucks leaving the Quarry would be required to turn on headlights.

The traffic control system at the on-site haul road entrance to/exit from Bee Rock Quarry has been successful for more than a decade in assuring that potential conflicts between passenger vehicles and rock transport trucks entering the highway are avoided. The proposed installation of a 200-foot deceleration lane on the southbound side of State Route 154 would further improve this system. It is expected that the additional average of 20 trucks per day can be safely transitioned onto the highway employing the established procedures and proposed improvements.

In fact, the proposed level of truck traffic has been accommodated for the past several years without incident. CHP Accident Investigation Officer Steve Fulmer provided a breakdown of “truck involved” collisions (by year) on SR-154 between SR-246 and Paradise Rd for the period from 1999 to 2006 (1999 - 0, 2000 - 1, 2001 - 2, 2002 - 2, 2003 - 3, 2004 - 1, 2005 - 0, and 2006 - 0). A review of this data shows that there has been no appreciable change in the number of accidents since 1999. According to the CHP Accident Investigation Officer (personal communication 03-10-06 with Tina Ryder), the data compiled “does not mean the truck was at fault or if they had anything to do with Bee Rock. These are just accidents involving trucks”. Further, Michael Navarro, the Safety Manager for Granite Construction Company, has indicated that “he is not aware of any loaded or unloaded accidents involving truck traffic.”

Thus, potential impacts on traffic safety associated with truck departures from and arrivals at the Quarry haul road are considered less than significant (Class III).

5.8.3 Recommended Mitigation

TRAFFIC-3. In order to assure traffic safety during the arrival of south-bound rock transport trucks to Bee Rock Quarry, the applicant shall install a deceleration lane on State Route 154, as recommended by Caltrans in its June 16, 2006 Letter (Applicant-proposed mitigation measure). This right-turn pocket shall be designed to meet CALTRANS design standards, and to minimize visual impacts to the extent practicable, subject to review and acceptance by the County and CALTRANS.
Plan Requirements and Timing: Prior to approval of the Land Use Permit required for the implementation of the CUP and Reclamation Plan and no later than 18 months after the County’s final action on the Bee Rock Quarry Expansion Project, the applicant is required to provide the Traffic Division of the County Public Works Department with written verification from Caltrans that the recommended road improvements to State Route 154 pursuant to the June 12, 2006 letter from Caltrans have been waived, installed, or bonded for to the satisfaction of Caltrans. The applicant shall install a paved deceleration lane of approximately 300 feet in length under the authority of an Encroachment Permit obtained from CALTRANS. Further, the applicant shall post a financial assurance as part of its 2006 SMARA annual review with the County in an amount determined to be adequate by the County to cover the cost of the design, permitting and construction of the deceleration lane in conformance with State and County standards.

The final design of the deceleration lane shall be determined by CALTRANS since State Route 154 is a part of the State Highway System and is under the jurisdiction of Caltrans (Refer to the Caltrans letter dated June 16, 2006 with input from the County. The applicant shall provide P&D staff with copies of the design plans and profiles, the CALTRANS encroachment permit, the final, detailed engineering plans of the deceleration lane, and any associated visual enhancement program established to avoid visual impacts to/from State Route 154 for its files.

Monitoring: P&D staff shall monitor the applicant’s coordination with Caltrans regarding proceeding forward with development and processing of the detailed design plans and profiles for the deceleration lane or having Caltrans waive its recommendation. As appropriate, P&D staff shall either: (1) request a preliminary design/build schedule from the applicant for incorporation into the proposed project Conditions of Approval prior to final action by the Planning Commission and quarterly progress reports thereafter or (2) obtain a copy of any written waiver obtained from Caltrans. P&D staff shall review the progress reports and documents provided by the applicant and shall conduct an inspection to ensure compliance with this condition. No on-going monitoring is required since implementation is to occur prior to land use clearance.

TRAFFIC-3. The applicant shall continue to operate the traffic control systems, as recommended by Caltrans.

Monitoring: P&D and Public Works staff shall review the documents provided by the applicant and shall inspect the site to ensure compliance with this condition.

5.8.3 Mitigation Measures and Residual Impact

With implementation of the above measures, the project-specific and cumulative residual impacts would be less than significant. (Class III), with exception of the visual/aesthetic impacts reviewed in Section 5.5, Aesthetics/Visual Resources, of this EIR.
5.9 Impacts considered less than significant:

This section of the document discusses environmental issue areas in which the proposed project would have insignificant or no impacts based on the preliminary assessment presented in the CEQA Initial Study (see Appendix).

5.9.1 Land Use

The proposed project would not involve a change in the existing land uses in the area. Quarry operations would continue similar to the current conditions. As the quarry site is located in a remote area of the 5,500-acre San Lucas Ranch, no new effects on land use on adjacent properties would be anticipated. Impacts on land use would be less than significant (Class III).

5.9.2 Recreation

There are no established public recreational uses in the vicinity of Bee Rock Quarry. In addition, the proposed mine expansion area would not be visible from the public recreational areas associated with the Lake Cachuma area. The quarry is currently visible from the public trail and West Camino Cielo located along the crest of the Santa Ynez Mountains. The visual character would not substantially change with the proposed mine expansion. The expansion, in fact, would reduce views of the quarry by lowering the elevation of the top of the quarry highwall. Thus, the proposed project would not substantially affect any established public recreational uses. Impacts would be less than significant (Class III).

5.9.3 Hazardous Materials/Risk of Upset

The proposed project would not involve any change in the use and storage of fuels, lubricants, and explosives at the site. These aspects of the mining facility would continue to be regulated by the County Fire Department. Impacts would be less than significant (Class III).

5.9.4 Agricultural Resources

Bee Rock Quarry is located on 32 acres extending across two parcels within the 5,400-acre San Lucas Ranch. The quarry site has been utilized for limestone extraction since 1957. Although various agricultural activities, including irrigated crop cultivation and cattle grazing, take place on portions of the ranch, no agricultural activities occur in the vicinity of the quarry site. No prime soils or farmland of State or Local Importance exist in the vicinity of the quarry, including the proposed quarry expansion area. Thus, the proposed project would not have a substantial effect on agricultural resources or ongoing agricultural operations. Impacts would be less than significant (Class III).
5.9.5 Energy

The proposed project would not involve a substantial increase in energy demand, nor would it require the development of new energy sources. The facility has operated for several years at the proposed permit level as the reclamation plan and conditional use permit applications were prepared. The quarry operation has had no discernible effect on energy resources. Impacts on energy would be less than significant (Class III).

5.9.6 Fire Protection

The proposed project would not result in any substantial change in the ongoing operations at the mining site with respect to fire hazards. Although the rate of excavation and the associated transport truck traffic would increase, it is not expected to have a discernible effect on fire hazards. The increased production, however, does necessitate that improvements are to be installed and conditions are to be satisfied, as set forth in the Fire Department’s May 19, 2006 Memorandum (Refer to Appendix 7, Response to Comments for further information), to ensure compliance with the Department’s established fire protection standards for new development. Trucks would use the same access routes as under the current permitted operation and the materials processing facilities would remain at their current location. Impacts would be less than significant (Class III).

5.9.7 Historic Resources

There are no historic structures within or nearby the proposed boundary of the proposed project (i.e. the area subject to the Conditional Use Permit and Reclamation Plan). No impacts on historic resources are anticipated (Class III).

5.9.8 Public Facilities

The proposed project would not involve the need for new public facilities or services.

Refer to the Biological Resources of this environmental document regarding the need for additional erosion and sediment control facilities needed to address water quality impacts. Mitigation Measure #1 included in Section 5.4 requires the installation of an off-channel sedimentation basin. Adequate space in a non-sensitive area is available for installation of such a basin. Potentially significant effects are not anticipated with implementation of this measure (Class II).
6.0 ANALYSIS OF PROJECT ALTERNATIVES

The State CEQA Guidelines Section 15126(d) discusses the requirement for the analysis of alternatives as follows:

(d) Alternatives to the Proposed Action. Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.

Alternative locations for the proposed project are not feasible as the limestone intended to be mined only occurs within the County of Santa Barbara at the site of Bee Rock Quarry. The infeasibility of alternate locations for mining projects is acknowledged in Section 15126(d)(5)(B)2 of the State CEQA Guidelines. Thus, potential alternatives to the proposed project are limited to variations in the proposed operational limits or extent of mine expansion. The six project alternatives evaluated include:

1. No project. (No increase in tonnage limit; no mine expansion)
2. No increase in annual tonnage limit with reduced mine expansion.
3. No increase in annual tonnage limit but with the proposed mine expansion.
4. Increase in tonnage limit to 250,000 tons/year with proposed mine expansion
5. Increase in tonnage limit to 250,000 tons/year with reduced mine expansion area.
6. Proposed increase in tonnage limit, no mine expansion.

6.1 Alternative #1: No Project

Under the “No Project” alternative, Bee Rock Quarry would continue to operate under the terms of the existing conditional use permit (87-CP-029 RV01) and would be reclaimed as specified in the existing reclamation plan (87-RP-002). As the 175,000 ton/year permit limit and the mine boundary delineated in the existing reclamation plan constitute the CEQA baseline condition, there would be no impacts associated with this project alternative. This alternative, however, would not accomplish the project objectives to meet anticipated customer demand for rock products and to bring under permit additional rock reserves.

There are practical consequences of a “No Project” alternative. The existing permit authorizes the annual production and export from the site of 175,000 tons of limestone rock. Since 1997, production and export of rock from the site has averaged more than 260,000 tons per year. The additional production has been allowed to continue while the mine operator prepared (and had processed by the County) applications for a new conditional use permit and new reclamation plan.

Under the “No Project” alternative, Bee Rock Quarry would again be limited to production and export of 175,000 tons per year. The additional 85,000 ton/year demand for rock materials would not be satisfied by this facility. Absent an economic downturn, the demand for rock products is expected to continue to increase over time. Given the low-cost, high volume nature of the rock material,
this additional demand would likely be met by other mining facilities in the Central Coast area. In terms of large boulders (i.e. riprap), a primary product of Bee Rock Quarry, the only other in-County source would be El Jaro Quarry near Lompoc. The volume of rock available at this small facility could not meet the demand for more than a few years. Because of the location of Bee Rock Quarry in the center of the County, transportation mileage to deliver rock products from remote facilities in the northern portion of the County and from facilities outside the County would undoubtedly increase. Thus, the traffic effects and air pollutant emissions associated with the delivery of rocks products to construction sites within the County of Santa Barbara would increase under the No Project alternative.

The potential increase in traffic and air emissions, however, would not constitute an impact under CEQA. This is because the recent increase in production at Bee Rock Quarry is not authorized by permit and does not alter the CEQA baseline setting. The baseline setting includes Bee Rock operating at 175,000 tons/year and the remaining demand for rock satisfied by import of rock from other remote mining facilities.

6.2 Alternative #2: Reduced mine expansion (No change in production limit)

Under the “Reduced Mine Expansion” (RME) alternative, Bee Rock Quarry would continue to operate under the annual production limitation of 175,000 tons per year specified in the existing conditional use permit (87-CP-029 RV01). The boundary of the mine would extend, however, outside of the current limit indicated in the existing reclamation plan (87-RP-2). For purposes of this alternative, it is assumed that mining would be completed after excavation of Phase II of the proposed mine expansion.

In terms of quarry operations (i.e. the excavation and transport of rock material), maintenance of the 175,000 ton/year production limit under the RME alternative would constitute a continuation of the CEQA baseline condition until the end of 2034. Thereafter, the ongoing environmental effects of the existing quarry operation on traffic and air quality would be attributable to this alternative, unchanged from the currently permitted condition. If limestone products in excess of 175,000 tons/year were no longer available locally, it is conceivable limestone would be imported from mines located outside of the County; and, this in turn could result in larger amounts of NO\textsubscript{x} emissions from the longer travel distances involved (Class I). Absent an economic downturn, the demand for rock products is expected to continue to increase over time. Given the low-cost, high volume nature of the rock material, this additional demand would likely be met by other mining facilities in the Central Coast area.

The mine expansion included under this alternative would allow the excavation area to expand by about five acres. This new excavation area is located on the north side of Bee Rock Hill and is currently vegetated with chaparral/coastal scrub species. Although the chaparral and coastal scrub vegetation is not considered a sensitive plant community, it does provide habitat for native fauna. Loss of nesting
sites for avian species could potentially occur, with resultant displacement of breeding individuals.

The re-vegetation efforts included in the proposed reclamation plan, and those additional measures that may be required as part of project approval, are not likely to result in complete re-vegetation of the site given the limited topsoil, and the geometry and hard bedrock nature of the final quarry slope. (Note: In the early 1950's, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops). Thus, some of this habitat loss could be permanent. Much of the 5 acres of denuded land would remain in that state long after the cessation of mining. Although the RME alternative would reduce the loss of habitat from 9 to 5 acres, the loss or degradation of 5 acres of native chaparral habitat would still represent a potentially significant and unavoidable impact on biological resources. (Class I)

The expansion of the disturbed area of the quarry would have the potential to incrementally increase the generation and offsite transport of limestone sediments. Under this alternative, an increase in offsite sedimentation would be expected to occur to a lesser degree than would occur with the intensification of daily material excavation and material processing activities included in the proposed project. This potential effect is identified as a potentially significant impact (Class II) in the Biologic Resources, Geological Process and Water Resources sections of this document. Although offsite sedimentation would be reduced under this alternative, it remains a potentially significant impact (Class II) in the above issue areas given the sensitivity of the downstream riparian habitat that would be affected.

The expansion of the mining area under this alternative would involve the excavation of a currently-undisturbed 5-acre area located on the top of Bee Rock Hill. As discussed in Section 5.6, substantial cultural resources are not expected to be present in the new disturbance area. Although the disturbance area would be reduced from 9 acres to 5 acres, impacts on cultural resources would remain potentially significant (Class II) based on the existence of known archeological sites in the vicinity.

In addition to the biologic effects of mine expansion, the RME alternative would substantially increase the remaining operational life of the facility. At the current 175,000 tons/year production limit, the remaining 4,000,000 tons of permitted limestone reserves (as of 2001) would be exhausted in about 23 years, or the year 2034. The proposed expansion would add approximately 2.9 million tons of permitted limestone reserves. At the 175,000 tons/year limit, the life of the quarry would be extended to about 39 years, or the year 2040. The extension of facility life, in itself, does not involve any environmental impacts under CEQA as it would involve the continuation of existing operational effects at the site.
In summary, the Reduced Mine Expansion alternative would eliminate impacts associated with an increase in the annual production rate and would result in lesser (but still significant) impacts on biological resources. This alternative, however, would not accomplish the project objective to meet anticipated customer demand for rock products and would only partially accomplish the objective to bring under permit additional rock reserves.

6.3 Alternative #3: Proposed mine expansion (No change in production limit)

Under the “Proposed Mine Expansion” (PME) alternative, Bee Rock Quarry would continue to operate under the annual production limitation of 175,000 tons per year specified in the existing conditional use permit (87-CP-029 RV01). The boundary of the mine would extend, however, outside of the current limit indicated in the existing reclamation plan (87-RP-2). As with the project as proposed by the applicant, this alternative would involve a 9-acre expansion of the excavation area of the mine.

In terms of quarry operations (i.e. the excavation and transport of rock material), maintenance of the 175,000 ton/year production limit under the PME alternative would constitute a continuation of the CEQA baseline condition until the end of 2034. Thereafter, the ongoing environmental effects of the existing quarry operation on traffic and air quality would be attributable to this alternative.

If limestone products in excess of 175,000 tons/year were no longer available locally, it is conceivable limestone would be imported from mines located outside of the County; and, this in turn could result in larger amounts of NO\textsubscript{X} emissions from the longer travel distances involved (Class I). Absent an economic downturn, the demand for rock products is expected to continue to increase over time. Given the low-cost, high volume nature of the rock material, this additional demand would likely be met by other mining facilities in the Central Coast area. The ongoing environmental effects of the existing quarry operation on traffic and air quality would be unchanged from the currently permitted condition.

The mine expansion included under this alternative would allow the excavation area to expand by about 9 acres. This new excavation area is located on the north side of Bee Rock Hill and is currently vegetated with chaparral/coastal scrub species. Although the chapparal and coastal scrub vegetation is not considered a sensitive plant community, it does provide habitat for native fauna. Loss of nesting sites for avian species could potentially occur, with resultant displacement of breeding individuals. The revegetation efforts included in the proposed reclamation plan, and those additional measures that may be required as part of project approval, are not likely to result in complete revegetation of the site given the limited topsoil, and the geometry and hard bedrock nature of the final quarry slope. Thus, some of this habitat loss could be permanent. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops).
Much of the 9 acres of denuded land would remain in that state long after the cessation of mining. The loss or degradation of 9 acres of native chaparral habitat would represent a potentially significant and unavoidable impact. (Class I)

The expansion of the disturbed area of the quarry would have the potential to incrementally increase the generation and offsite transport of limestone sediments. Under this alternative, an increase in offsite sedimentation would be expected to occur to a lesser degree than would occur with the intensification of daily material excavation and material processing activities included in the proposed project. This potential effect is identified as a potentially significant impact (Class II) in the Biologic Resources, Geological Process and Water Resources sections of this document. Although offsite sedimentation would be reduced under this alternative, it remains a potentially significant impact (Class II) in the above issue areas given the sensitivity of the downstream riparian habitat that would be affected.

The expansion of the mining area under this alternative would involve the excavation of a currently-undisturbed 5-acre area located on the top of Bee Rock Hill. As discussed in Section 5.6, substantial cultural resources are not expected to be present in the new disturbance area. Although the disturbance area would be reduced from 9 acres to 5 acres, impacts on cultural resources would remain potentially significant (Class II) based on the existence of known archeological sites in the vicinity.

In addition to the biologic effects of mine expansion, the PME alternative would substantially increase the remaining operational life of the facility. At the current 175,000 tons/year production limit, the remaining 4,000,000 tons of permitted limestone reserves (as of 2001) would be exhausted in about 23 years, or the year 2034. The proposed expansion would add approximately 7.7 million tons of permitted limestone reserves. At the 175,000 tons/year limit, the life of the quarry would be extended to about 67 years, or the year 2068. The extension of facility life, in itself, does not involve any environmental impacts under CEQA as it would involve the continuation of existing operational effects at the site.

In summary, the Proposed Mine Expansion alternative would eliminate impacts associated with an increase in the annual production rate but would result in the same significant impacts on biological resources as the proposed project. This alternative would not accomplish the project objective to meet anticipated annual customer demand for rock products. It would meet the objective to bring under permit 7.7 million tons of additional rock reserves.

6.4 Alternative #4: Increased tonnage limit with proposed mine expansion

Under this alternative, Bee Rock Quarry would be authorized to increase production from 175,000 to 250,000 tons/year. The boundary of the mine would extend outside of the current limit indicated in the existing reclamation plan (87-
RP-2) to the new boundary proposed by the applicant. This boundary change would involve a 9-acre expansion of the excavation area of the quarry.

In terms of quarry operations (i.e. the excavation and transport of rock material), the 75,000 ton/year increase in the production limit under this alternative would result in proportionately less impacts than the requested 125,000 ton/year increase. The additional truck trips required to transport 75,000 tons/year of rock would be 60 percent of those required to transport 125,000 tons/year. As discussed in Section 5.4 of this EIR, the project-related traffic that would be added to State Highway 154 for the 125,000 ton/year production increase would be minor compared to the existing traffic volume and considered less than significant. Thus, the effect of the traffic volume increase under this alternative would also be less than significant. The safety hazard posed by the lack of a deceleration lane at the quarry entrance would continue to exist under the 250,000 ton/year production limit. This impact would remain potentially significant but subject to potentially feasible mitigation. (Class II)

Air quality emissions due to equipment operations and truck traffic would also be proportionally reduced with the 250,000 ton/year production limit rather than the proposed 300,000 ton/year limit. The increase in project-related NOx emissions would be reduced to 22.76 pounds per day from the estimated 37.93 pounds per day. This change would bring the new emissions to less than the 25 pound per day threshold of significance. Thus, the reduction in annual production to 250,000 tons/year would reduce air quality impacts from significant and unavoidable (Class I) to less than significant (Class III).

The mine expansion included under this alternative would allow the excavation area to expand by about 9 acres. This new excavation area is located on the north side of Bee Rock Hill and is currently vegetated with chaparral/coastal scrub species. Although the chaparral and coastal scrub vegetation is not considered a sensitive plant community, it does provide habitat for native fauna. Loss of nesting sites for avian species could potentially occur, with resultant displacement of breeding individuals. The revegetation efforts included in the proposed reclamation plan, and those additional measures that may be required as part of project approval, are not likely to result in complete revegetation of the site given the limited topsoil, and the geometry and hard bedrock nature of the final quarry slope. Thus, some of this habitat loss could be permanent. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops). Much of the 9 acres of denuded land would remain in that state long after the cessation of mining. The loss or degradation of 9 acres of native chaparral habitat would represent a potentially significant and unavoidable impact. (Class I)

The expansion of the disturbed area of the quarry and the increase in annual rock production would have the potential to incrementally increase the generation and offsite transport of limestone sediments. Under this alternative, an increase in offsite sedimentation would be expected to occur to a lesser degree than would
occur with the 300,000 ton/year production limit included in the proposed project. This potential effect is identified as a potentially significant impact (Class II) in the Biologic Resources, Geological Process and Water Resources sections of this document. Although offsite sedimentation would be somewhat reduced under this alternative, it remains a potentially significant impact (Class II) in the above issue areas given the sensitivity of the downstream riparian habitat that would be affected.

The expansion of the mining area under this alternative would involve the excavation of the same currently-undisturbed 9-acre area located on the top of Bee Rock Hill as is included in the proposed project. Thus, impacts on cultural resources would remain potentially significant (Class II) as described in Section 5.6 of this document.

In summary, the Increased Tonnage Limit with Proposed Mine Expansion alternative would reduce impacts associated with an increase in the annual production rate but would result in the same significant impacts on biological resources as the proposed project. This alternative would reduce air quality impacts to a less than significant level. If limestone products in excess of 175,000 tons/year were no longer available locally, it is conceivable limestone would be imported from mines located outside of the County; and, this in turn could result in larger amounts of NO\textsubscript{X} emissions from the longer travel distances involved (Class I). Absent an economic downturn, the demand for rock products is expected to continue to increase over time. Given the low-cost, high volume nature of the rock material, this additional demand would likely be met by other mining facilities in the Central Coast area.

This alternative would not accomplish the project objective to meet anticipated annual customer demand for rock products. It would meet the objective to bring under permit 7.7 million tons of additional rock reserves.

6.5 Alternative #5: Increased tonnage limit with reduced mine expansion

Under this alternative, Bee Rock Quarry would be authorized to increase production from 175,000 to 250,000 tons/year. The boundary of the mine would extend outside of the current limit indicated in the existing reclamation plan to
the new boundary proposed by the applicant. This boundary change would involve a 5-acre expansion of the excavation area of the quarry.

In terms of quarry operations (i.e., the excavation and transport of rock material), the 75,000 ton/year increase in the production limit under this alternative would result in proportionately less impacts than the requested 125,000 ton/year increase. The additional truck trips required to transport 75,000 tons/year of rock would be 60% of those required to transport 125,000 tons/year. As discussed in Section 5.8 of this EIR, the project-related traffic that would be added to State Route 154 for the 125,000 ton/year production increase would be minor compared to the existing traffic volume and would be considered less than significant. Thus, the effect of the traffic volume increase under this alternative would also be less than significant. The safety hazard posed by the lack of a deceleration lane at the quarry entrance would continue to exist under the 250,000 ton/year production limit. This impact would remain potentially significant but subject to potentially feasible mitigation. (Class II)

The expansion of the disturbed area of the quarry and the increase in annual rock production would have the potential to incrementally increase the generation and offsite transport of limestone sediments. Under this alternative, an increase in offsite sedimentation would be expected to occur to a lesser degree than would occur with the 300,000 ton/year production limit included in the proposed project. This potential effect is identified as a potentially significant impact (Class II) in the Biologic Resources, Geological Process and Water Resources sections of this document. Although offsite sedimentation would be somewhat reduced under this alternative, it remains a potentially significant impact (Class II) in the above issue areas given the sensitivity of the downstream riparian habitat that would be affected.

The expansion of the mining area under this alternative would involve the excavation of a currently-undisturbed 5-acre area located on the top of Bee Rock Hill. As discussed in Section 5.6, substantial cultural resources are not expected to be present in the new disturbance area. Although the disturbance area would be reduced from 9 acres to 5 acres, impacts on cultural resources would remain potentially significant (Class II) based on the existence of known archeological sites in the vicinity.

Air quality emissions due to equipment operations and truck traffic would also be proportionally reduced with the 250,000 ton/year production limit rather than the proposed 300,000 ton/year limit. The increase in project-related NOx emissions would be reduced to 22.76 pounds per day from the estimated 37.93 pounds per day. This change would bring the new emissions to less than the 25 pound per day threshold of significance. Thus, the reduction in production to 250,000 tons/year would reduce air quality impacts from significant and unavoidable (Class I) to less than significant (Class III).
The mine expansion included under this alternative would allow the excavation area to expand by about five acres. This new excavation area is located on the north side of Bee Rock Hill and is currently vegetated with chaparral/coastal scrub species. Although the chaparral and coastal scrub vegetation is not considered a sensitive plant community, it does provide habitat for native fauna. Loss of nesting sites for avian species could potentially occur, with resultant displacement of breeding individuals. The re-vegetation efforts included in the proposed reclamation plan, and those additional measures that may be required as part of project approval, are not likely to result in complete re-vegetation of the site given the limited topsoil, and the geometry and hard bedrock nature of the final quarry slope. Thus, some of this habitat loss could be permanent. (Note: In the early 1950’s, prior to initiation of the surface mining activities, Bee Rock hill had areas with exposed limestone rock outcrops). Much of the 5 acres of denuded land would remain in that state long after the cessation of mining. Although the RME alternative would reduce the loss of habitat from 9 to 5 acres, the loss or degradation of 5 acres of native chaparral habitat would still represent a potentially significant and unavoidable impact. (Class I)

This alternative would substantially increase the remaining operational life of the facility. At the current 175,000 tons/year production limit, the remaining 4,000,000 tons of permitted limestone reserves (as of 2001) would be exhausted in about 23 years, or the year 2034. The proposed expansion would add approximately 2.9 million tons of permitted limestone reserves. At the 250,000 tons/year limit, the life of the quarry would be extended to about 28 years, or the year 2029. The extension of facility life, in itself, does not involve any additional environmental impacts under CEQA as it would involve the implementation of permitted mining operations evaluated in this environmental document.

In summary, the Increased Tonnage Limit with Reduced Mine Expansion alternative would reduce impacts associated with an increase in the annual production rate and would result in lesser (but still significant) impacts on biological resources. This alternative, however, would not accomplish the project objective to meet anticipated customer demand for rock products for an additional nine years and would only partially accomplish the objective to bring under permit additional rock reserves.

6.6 Alternative #6: Proposed increase in tonnage limit, no mine expansion.

Under this alternative, Bee Rock Quarry would be authorized to increase production from 175,000 tons/year to 300,000 tons/year. The boundary of the mine would not change and a revised reclamation plan would not be required.

The 125,000 ton/year increase in the production limit under this alternative would result in the same operational impacts as the proposed project. As discussed in Section 5.8 of this EIR, the project-related traffic that would be added to State Route 154 for the 125,000 ton/year production increase would be minor compared to the existing traffic volume and considered less than significant. The safety
hazard posed by the lack of a deceleration lane at the quarry entrance would continue to exist under this alternative. This impact would remain potentially significant but subject to potentially feasible mitigation. (Class II)

The increase in annual rock production would have the potential to incrementally increase the generation and offsite transport of limestone sediments. Under this alternative, any increase in offsite sedimentation would be expected to occur to a lesser degree than would occur with the expansion of the excavation area included in the proposed project. This potential effect is identified as a potentially significant impact (Class II) in the Biologic Resources, Geological Process and Water Resources sections of this document. Although offsite sedimentation would be somewhat reduced under this alternative, it remains a potentially significant impact (Class II) in the above issue areas given the sensitivity of the downstream riparian habitat that would be affected.

Because there would be no expansion of the existing mining area under this alternative, a loss of native chaparral habitat would not occur. Impacts on biologic resources would be limited to sedimentation effects in the local streams as discussed above.

As there would be no expansion of the existing mining area under this alternative, no impacts on cultural resources would be anticipated.

Air quality emissions due to equipment operations and truck traffic would be the same as the proposed project as described in Section 5.3 of this EIR. The increase in project-related NOx emissions would be an estimated 37.93 pounds per day. This emission rate is above the 25 pound per day threshold of significance. As no feasible mitigation has been identified, air quality impacts would be significant and unavoidable (Class I).

This alternative would substantially reduce the remaining operational life of the facility. At the current 175,000 tons/year production limit, the remaining 4,000,000 tons of permitted limestone reserves (as of 2001) would be exhausted in about 23 years, or the year 2034. At the proposed 300,000 tons/year limit, the life of the quarry would be reduced to 13 years, or the year 2014. The reduction in facility life, in itself, does not involve any additional environmental impacts under CEQA as it would involve the implementation of permitted mining operations evaluated in this environmental document.

In summary, the Increased Tonnage Limit with No Mine Expansion alternative would substantially reduce impacts on biological resources (a Class I impact would be avoided) but not reduce impacts associated with an increase in the annual production rate. This alternative would accomplish (at least for a decade) the project objective to meet anticipated customer demand for rock products until the end of 2014 (and would not satisfy customer demand from 2015 to 2043). This alternative but would not accomplish the objective to bring under permit additional rock reserves.
6.7 Comparison of project alternatives:

Provided on the following page is a summary table that compares the proposed project with the six alternatives discussed above.

As indicated in the above table, none of the alternatives except the “No Project” alternative would eliminate both of the significant and unavoidable (Class I) impacts identified in the EIR for biological resources and air quality. All of the other alternatives would include a significant and unavoidable impact in one of these issue areas, and would not meet the project objectives.
**Impact levels:**

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<th>TABLE 6.1: Summary of alternatives analysis</th>
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<td>Alternative</td>
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<td>Proposed Project</td>
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<td>Alt. #1 (No Project)</td>
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Class I: Potentially significant and unavoidable
Class II: Potentially significant but subject to potentially feasible mitigation
Class III: Adverse but not significant

**Impact levels:**

Class I: Potentially significant and unavoidable
Class II: Potentially significant but subject to potentially feasible mitigation
Class III: Adverse but not significant
7.0 EIR PREPARERS, INDIVIDUALS CONSULTED, AND REFERENCES

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