VENTURA COUNTY

PACIFIC ROCK QUARRY EXPANSION PROJECT

PARTIAL RECIRCULATED DRAFT ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NO. 2017081052

OCTOBER 2022

Lead Agency:
Ventura County Resource Management Agency, Planning Division

Preparer:
Benchmark Resources

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LIST OF ACRONYMS

µPa	micropascals
ac	acre
AE	Agricultural Exclusive
AFY	acre-feet per year
amsl	above mean sea level
ANFO	ammonium nitrate fuel oil
APN	Assessor's Parcel Number
bi	dark intrusive basaltic rocks
BMPs	Best Management Practices
BRC	BioResources Consultants
Cal/EPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAT	Camarillo Area Transit
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERS	California Environmental Reporting System
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CSD	Camarillo Sanitary District
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DMR	Division of Mine Reclamation

DOC	California Department of Conservation
DOT	U.S. Department of Transportation
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EHD	Ventura County Environmental Health Division
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Environmental Science Associates
FCGMA	Fox Canyon Groundwater Management Agency
FEMA	Federal Emergency Management Agency
FHRP	Fire Hazard Reduction Program
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
GSP	Groundwater Sustainability Plan
h:v	horizontal:vertical
HCWC	Habitat Connectivity Wildlife Corridor
HMBP	Hazardous Materials Business Plan
HSWA	Hazardous and Solid Waste Amendments Act
Hz	Hertz
in/sec	inches per second
ISAG	Ventura County Initial Study Assessment Guidelines
kW	kilowatt
kWh	kilowatt hour
LARWQCB	Los Angeles Regional Water Quality Control Board
LCA	Land Conservation Act
Leq	average/equivalent sound level over period of time
LIC	Locally Important Community
Lmax	maximum sound level during a given period
LoS	line of sight
LOS	level of service
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Reporting Program

NEC	No Exposure Certification
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resource Conservation Service
OS	Open Space
OWTS	onsite wastewater treatment system
PCE	passenger car equivalent
PPV	peak particle velocity
PRC	Public Resources Code
PWATD	Ventura County Public Works Agency Transportation Department
RCRA	Resources Conservation and Recovery Act
RMA	Resource Management Agency
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SARA Title III	Emergency Planning and Community Right-to-Know
SB	Senate Bill
SCCIC	South Central Coastal Information Center
SGMA	Sustainable Groundwater Management Act
SMARA	Surface Mining and Reclamation Act
SPCC	Spill Prevention Control and Countermeasure
SWRCB	State Water Resources Control Board
Tcvb	dark gray extrusive basalt
Tcvdb	light gray to pinkish gray dacitic breccias
TDS	total dissolved solids
TIS	Transportation Impact Study
TMDL	Total Maximum Daily Load
TNM	Traffic Noise Model
TSCA	Toxic Substances Control Act
VCAPCD	Ventura County Air Pollution Control District
VCTC	Ventura County Transportation Commission

VMT	vehicle miles traveled
VRPA	VRPA Technologies, Inc.
WDID	Waste Discharge Identification Number
WWTP	wastewater treatment plant

CHAPTER 1–INTRODUCTION TO PARTIAL RECIRCULATED DRAFT EIR

1.1 DOCUMENT PURPOSE AND LEGAL AUTHORITY

This document is a Partial Recirculated Draft Environmental Impact Report (Partial Recirculated Draft EIR) for proposed modifications to the Pacific Rock Quarry Conditional Use Permit (CUP) (CUP 3817-3) and Reclamation Plan, collectively defined as the proposed "Project". The Ventura County Resource Management Agency, Planning Division prepared and circulated for public review between December 1, 2020, and January 15, 2021, a Draft Environmental Impact Report (2020 Draft EIR) for the Project.

Section 15088.5 of the State California Environmental Quality Act (CEQA) Guidelines provides that all or a portion of a draft EIR shall be recirculated for public review and comment prior to certification when significant new information is added to a draft EIR. Recirculation provides an opportunity for public review and comment on the new or revised sections.

In accordance with Public Resources Code (PRC) Section 21092.1 and CEQA Guidelines Section 15088.5, Ventura County is recirculating the biological resources section of the 2020 Draft EIR that has been revised in response to comments received addressing biological resources and to incorporate additional analysis and information regarding biological resources.

CEQA Guidelines Section 15088.5 sets forth the legal standards and principles governing the recirculation of draft EIRs. Subdivision (a) of that provision states that recirculation of a draft EIR should occur if:

> *…significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term 'information' can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project…*

Ventura County is recirculating the document to provide the public with a meaningful opportunity to comment on new information. This document is a Partial Recirculated Draft EIR for the Project, and provides a revised Section 3.5, "Biological Resources," and adds Appendix C-3, "Bat Habitat Assessment for the Pacific Rock Quarry Expansion Project," for public review and comment. As authorized under CEQA Section 15088.5(c), the revisions to the 2020 Draft EIR are limited to portions of the Draft EIR; therefore, only those portions are included in this Partial Recirculated Draft EIR. For that reason, this Partial Recirculated Draft EIR includes the revised Biological Resources section, its two original appendices C-1 and C-2, and the new Appendix C-3, for public review prior to preparation of a Final EIR.

CEQA Guidelines Section 15088.5(f)(2) states that:

> *When the EIR is revised only in part and the lead agency is recirculating only the revised chapters or portions of the EIR, the lead agency may request that reviewers limit their comments to the revised chapters or portions of the recirculated EIR. The lead agency need only respond to (i) comments received during the initial circulation period that relate to chapters or portions of the document that were not revised and recirculated, and (ii) comments received during the recirculation period that relate to the chapters or portions of the earlier EIR that were revised and recirculated. The lead agency's request that reviewers limit the scope of their comments shall be included either within the text of the revised EIR or by an attachment to the revised EIR.*

In keeping with this provision, Ventura County requests that commenters limit their written comments to the revisions and new material presented in the Partial Recirculated Draft EIR revised version of Section 3.5, "Biological Resources," and its new appendix.

This Partial Recirculated Draft EIR will be combined with the 2020 Draft EIR, with any additional revisions as may be warranted, to prepare the Final EIR. The Final EIR will include: 1) the 2020 Draft EIR as modified with the recirculated Biological Resources section and new appendix contained herein; 2) comments received on the un-recirculated portions of the Draft EIR and responses to those comments; and 3) comments on this Partial Recirculated Draft EIR and responses to those comments.

Comments on the 2020 Draft EIR Section 3.5, "Biological Resources," will not be responded to in the Final EIR. Comments on other sections of the 2020 Draft EIR will be responded to in the Final EIR that will be prepared after public review of this Partial Recirculated Draft EIR. Therefore, Ventura County requests that comments addressing issues other than biological resources not be resubmitted in comments on this Partial Recirculated Draft EIR.

1.2 REASON FOR RECIRCULATION AND SUMMARY OF REVISIONS

The State CEQA Guidelines indicate that "significant new information" requiring recirculation of a draft EIR would include a new significant environmental impact or a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance, or a feasible project alternative or mitigation measure considerably different from others previously analyzed in the draft EIR (Section 15088.5a). The Pacific Rock Quary Expansion Project 2020 Draft EIR (State Clearinghouse #2017081052) Section 3.5, "Biological Resources," has been revised as included in this Partial Recirculated Draft EIR to:

- add Appendix C-3, "Bat Habitat Assessment for the Pacific Rock Quarry Expansion Project (July 2022)
- add discussion of potential impacts and mitigation measures associated with bat species potentially occurring within the project site;
- clarify discussion of potential species occurrence on the project site;
- amplify the discussion of special-status vegetation communities on the project site;
- provide expanded discussion of potential mountain lion occurrence or presence within the project site;
- amplify the discussion of potential impacts; and
- revise and enhance proposed mitigation measures to avoid or minimize biological resources impacts.

1.3 LIMITATION ON COMMENTS

In keeping with this provision of CEQA Guidelines Section 15088.5(f)(2), Ventura County requests that commenters limit their written comments to the revisions and new material presented in this Partial Recirculated Draft EIR, which consists of Section 3.5, "Biological Resources," and its appendices. Previously submitted comments on the 2020 Draft EIR Section 3.5, "Biological Resources," will not be responded to in the Final EIR. Comments on other sections of the 2020 Draft EIR will be responded to in the Final EIR that will be prepared after public review of this Partial Recirculated Draft EIR.

1.4 USE OF THIS DOCUMENT

This Partial Recirculated Draft EIR will be combined with the previously circulated 2020 Draft EIR as part of the Final EIR. The Final EIR will also include the comments received on the un-recirculated portions of the 2020 Draft EIR and this Partial Recirculated Draft EIR, along with written responses to those comments. County decision makers will certify the Final EIR prior to completing its deliberations on the proposed project. If it approves the proposed project, then the County decision makers will adopt the findings and mitigation monitoring and reporting program that are required by CEQA.

This Partial Recirculated Draft EIR is not the Final EIR. The Final EIR will include other revisions and clarifications in response to the comments received on the 2020 Draft EIR and this Partial Recirculated Draft EIR, or as needed to otherwise clarify the Final EIR.

1.5 PARTIAL RECIRCULATED DRAFT EIR PUBLIC REVIEW

Pursuant to CEQA Guidelines §15088.5(d), this Partial Recirculated Draft EIR is distributed for a 45-day (minimum) period of review and comment by the public, responsible agencies, organizations, and other interested parties. Comments or questions about the EIR should be addressed to:

Justin Bertoline, Senior Planner
Ventura County Resource Management Agency, Planning Division
800 South Victoria Avenue, L# 1740
Ventura, California 93009-1740
Phone: (805) 654-2466
Email: Justin.Bertoline@ventura.org

Copies of the 2020 Draft EIR, comments on the 2020 Draft EIR, and this Partial Recirculated Draft EIR can be reviewed at the following locations:

Ventura County Resources Management Agency
Planning Division
800 South Victoria Avenue, L# 1740
Ventura, California 93009
Contact: Justin Bertoline, Senior Planner

On-line at: https://vcrma.org/en/environmental-impact-reports

Following the public review period, comments and written responses on the 2020 Draft EIR with the exception of those pertaining to Section 3.5, "Biological Resources," and comments on this Partial Recirculated Draft EIR will be used to prepare a Final EIR prior to certification and consideration of Project approval by County decision makers.

RECIRCULATED SECTION 3.5–BIOLOGICAL RESOURCES

This section provides an evaluation of biological resources impacts associated with the proposed Project. The evaluation uses information from the "Initial Study Biological Assessment Report for Pacific Rock – LU10-0003 (CUP 3817-3), Modification" (ISBA) prepared by Biological Resource Consultants, Inc. (BRC, 2017[1]) included as Appendix C-1 of this EIR, the "Rare Plant Survey and Burrowing Owl Habitat Assessment Results" memorandum" (ESA Memorandum) prepared by Environmental Science Associates (ESA, 2018) and included as Appendix C-2, and the "Bat Habitat Assessment for the Pacific Rock Quarry Expansion Project," (Bat Assessment) prepared by ECORP Consulting, Inc., (ECORP, 2022) and included as Appendix C-3. The biological resources study area is shown on Figure 3.5-1, "Biological Resources Study Area and Cover Types," and includes the existing and proposed CUP areas and an approximately 500-foot area surrounding the proposed mine expansion area.

In its October 2, 2017, letter to Ventura County Resource Management Agency Planning Division providing comments on the August 2017 notice of preparation (NOP) for this EIR, California Department of Fish and Wildlife (CDFW) noted:

> *The existing quarry operation has removed numerous ephemeral and intermittent streams in the Project area and two streams flow into existing culverts. Onsite runoff from these two streams is generally directed into an existing pond and used for agricultural irrigation. CDFW has no records of Notification for stream alterations and or stream diversions in the Project area. In addition, there appear to be habitat disturbances beyond the perimeter of the existing CUP area affecting streams. The EIR should identify non-compliance issues resulting in impacts to sensitive species, habitats, and streams beyond the existing CUP area, and include effective compensatory mitigation and restoration of damaged areas associated with direct, indirect, temporal and cumulative impacts.*

Notwithstanding CDFW's comments, the environmental baseline for the purposes of the biological resources evaluation in this EIR is existing conditions at the site at the time the NOP was circulated. Thus, non-compliance issues that may have occurred prior to circulation of the NOP are not germane to the description of the environmental setting or the impact analysis presented in this section. This approach is consistent with CEQA and does not preclude the County or other resource agencies, including CDFW, from investigating and taking appropriate actions regarding potential non-compliance issues that may have previously occurred at the site.

3.5.1 Setting

3.5.1.1 Description of the Project Site and Adjacent Areas

The Project site includes the existing mining and processing area, an area of existing agricultural use, and adjacent generally undisturbed areas proposed for expansion of the mining operation. The Project site ranges in elevation from approximately 180 to 1,248 feet above mean sea level (amsl). The existing mining area includes generally flat terraced areas where aggregate processing, loading, and related activities are conducted and steep slopes to the north and east where mining has created near-vertical slopes in some areas. The Conejo Mountain Memorial Park is located immediately to the west, beyond which are

[1] The April 1, 2019, application submittal to the County includes a 2016 ISBA that was originally submitted to the County with a reclamation plan amendment application in 2016. The 2016 application was superseded in 2017 by a 2017 revised application and was accompanied by a 2017 ISBA. The application was revised again and resubmitted to the County in April 2019. The April 2019 revised application included the 2016 ISBA; however, this biological resources evaluation utilizes the more recent 2017 ISBA, which is included as Appendix C-1 of this EIR.

agricultural fields. Open space and residential neighborhoods are located at higher elevations to the southeast of the Project site. Open space consisting of steep slopes is located north and northeast of the site and open space with more gradual slopes is located to the south and southeast.

3.5.1.2 Vegetation Communities and Landforms

The Project site contains disturbed areas as well as both native and non-native vegetation. Cover types are illustrated on Figure 3.5-1 and Table 3.5-1, "Cover Types and Acreages within Biological Resources Study Area," lists the plant communities and other landforms that compose the study area. The Biological Resources Study Area (study area), which includes the existing mine site, proposed mine expansion area, and a perimeter area of 500 feet surrounding the proposed mine expansion area, encompasses a total of 257.4 acres and extends approximately 1,200 feet northward and eastward from the existing boundary of the quarry and approximately 700 feet southward from the southern boundary of the quarry. Approximately 80 acres of the study area are disturbed from previous and current mining activities and associated vehicle storage yards. Habitat within the remainder of the study area is dominated by chaparral and coastal sage scrub vegetation communities. Non-native vegetation within the study area generally consists of herbaceous, weedy species; the native plant communities that are generally undisturbed by human activities; however, fires have periodically occurred within and adjacent to the Project site, resulting in successional growth of both native and non-native species.

Table 3.5-1. Cover Types and Acreages within Biological Resources Study Area

Plant Community	Acres within Study Area
Laurel Sumac Scrub	120.52
California Sagebrush Scrub	0.14
Deerweed Scrub	1.30
Giant Wild Rye Grasslands	2.04
Cattail Marsh	0.32
Red Willow Thicket	2.01
Mountain Mahogany Scrub	0.23
Disturbed Chamise/Ceanothus Chaparral	1.43
Coast Live Oak Woodland	1.52
Russian Thistle Fields	2.93
Non-Native Annual Grassland	16.38
Agriculture	19
Ornamental	4.25
Developed	1.70
Previously Cleared Land	79.90
Detention Pond	3.73
Total	**257.4**

Source: BRC, 2017.

3.5.1.3 Wildlife

Table 3.5-2, "Wildlife Species Observed within the Project Site," lists wildlife species observed and documented within the study area during field surveys conducted by Impact Sciences in 2010 and BRC in 2016 (field studies conducted by Impact Sciences in 2010 and BRC in 2016 are documented in the BRC 2017 ISBA), ESA in 2018, and ECORP Consulting, Inc. (ECORP) in 2022. The species listed in the table below are

generally indicative of the common species that occur in the area and that are expected to be present within the Project site.

Table 3.5-2. Wildlife Species Observed within the Project Site

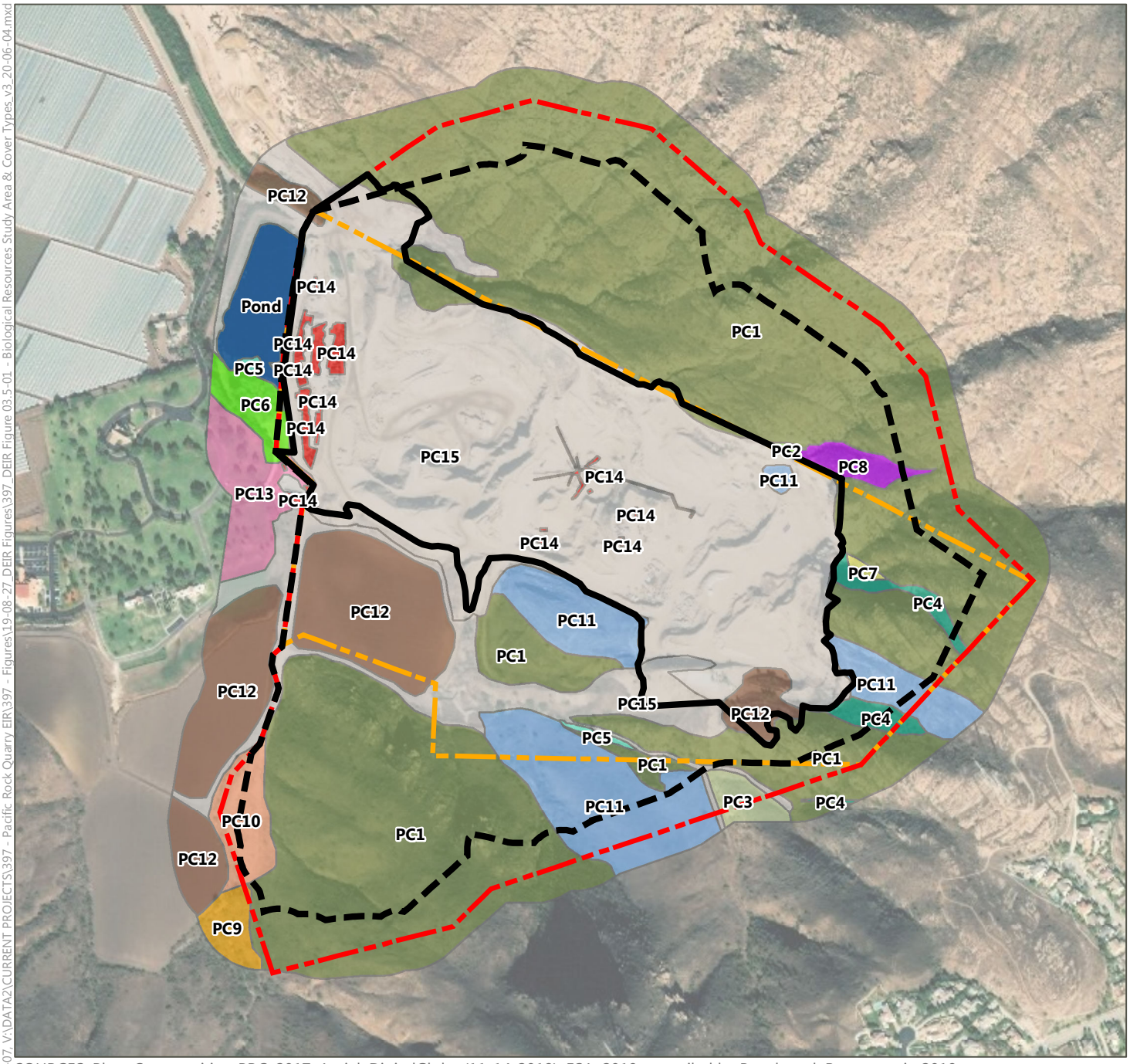
Common Name	Scientific Name
REPTILES	
Great Basin fence lizard	*Sceloporus occidentalis longipes*
Granite spiny lizard	*Sceloporus orcutti*
California side-blotched lizard	*Uta stansburiana elegans*
Coastal whiptail	*Aspidoscelis tigris stejnegeri*
San Diego gopher snake	*Pituophis catenifer annectens*
Southern pacific rattlesnake	*Crotalus oreganus helleri*
BIRDS	
Mallard	*Anas platyrhynchos*
Ruddy duck	*Oxyura jamaicensis*
Pied-billed grebe	*Podilymbus podiceps*
American coot	*Fulica americana*
American pipit	*Anthus rubescens*
Ring-necked duck	*Aythya collaris*
Ruddy duck	*Oxyura jamaicensis*
Great blue heron	*Aredea herodias*
Great egret	*Ardea alba*
Snowy egret	*Egretta thula*
Black-crowned night-heron	*Nycticorax nycticorax*
American kestrel	*Falco sparverius*
Red-tailed hawk[1]	*Buteo jamaicensis*
Red-shouldered hawk[1]	*Buteo lineatus*
Sharp-shinned hawk	*Accipter striatus*
Turkey vulture[1]	*Cathartes aura*
California quail	*Callipepla californica*
Rock pigeon	*Columba livia*
Eurasian collared dove	*Streptopelia decaocto*
Mourning dove	*Zenaida macroura*
Great horned owl	*Bubo virginianus*
Anna's hummingbird	*Calypte anna*
Allen's hummingbird	*Selasphorus sasin*
Nuttall's woodpecker	*Picoides nuttallii*
Downy woodpecker	*Picoides pubescens*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Cassin's kingbird	*Tyrannus vociferans*
American crow	*Corvus brachyrhynchos*
California scrub-jay	*Aphelocoma californica*
Common raven	*Corvus corax*
Northern rough-winged swallow	*Stelgidopteryx serripennis*
Cliff swallow[1]	*Petrochelidon pyrrhonota*
Barn swallow[1]	*Hirundo rustica*
Violet-green swallow[1]	*Tachycineta thalassina*
White-throated swift[1]	*Aeronautes saxatalis*
Wrentit	*Chamaea fasciata*

Common Name	Scientific Name
Bushtit	*Psaltriparus minimus*
Rock wren	*Salpinctes obsoletus*
Canyon wren	*Catherpes mexicanus*
Bewick's wren	*Thryomanes bewickii*
Western bluebird	*Sialia mexicana*
Northern mockingbird	*Mimus polyglottos*
European starling	*Sturnus vulgaris*
Yellow-rumped warbler	*Setophaga coronata*
Spotted towhee	*Pipilo maculatus*
California towhee	*Melozone crissalis*
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*
Song sparrow	*Melospize melodia*
White-crowned sparrow	*Zonotrichia leucophrys*
Hooded oriole	*Icterus cucullatus*
House finch	*Haemorhous mexicanus*
Lesser goldfinch	*Spinus psaltria*
Loggerhead shrike	*Lanius ludovicianus*
MAMMALS	
Coyote	*Canis latrans*
Botta's pocket gopher	*Thomomys bottae*
Dusky-footed woodrat	*Neotoma fuscipes*
San Diego desert woodrat	*Neotoma lepida intermedia*
California ground squirrel	*Spermophilus beecheyi*
Desert cottontail	*Sylvilagus audubonii*
Northern raccoon	*Procyon lotor*
Southern mule deer	*Odocoileus hemionus*

Sources: BRC, 2017; ESA, 2018.

Notes:

[1.] Observed flying over Project site and/or foraging in general area.



SOURCES: Plant Communities–BRC, 2017; Aerial–DigitalGlobe (11-14-2018); ESA, 2019; compiled by Benchmark Resources in 2019

Conceptual Project Description_2015-10-07, V:\DATA2\CURRENT PROJECTS\397 - Pacific Rock Quarry EIR\397 - Figures\19-08-27_DEIR Figure 03.5-01 - Biological Resources Study Area & Cover Types_v3_20-06-04.mxd

- Existing Disturbance Area Boundary
- Proposed Mine Area Boundary
- Existing CUP Boundary
- Proposed CUP Boundary

PC1	Laurel Sumac Scrub	PC9	Coast Live Oak Woodland
PC2	California Sagerush Scrub	PC10	Russian Thistle Fields
PC3	Deerweed Scrub	PC11	Non-Native Annual Grassland
PC4	Giant Wild Rye Grasslands	PC12	Agriculture
PC5	Cattail Marsh	PC13	Ornamental
PC6	Red Willow Thicket	PC14	Developed
PC7	Mountain Mahogany Scrub	PC15	Previously Cleared Land
PC8	Disturbed Chamise/Ceonothus Chapparral	Pond	Pond

BENCHMARK RESOURCES

N

0 400 800 1,600 Feet

Biological Resources Study Area and Cover Types

PACIFIC ROCK QUARRY EXPANSION PROJECT

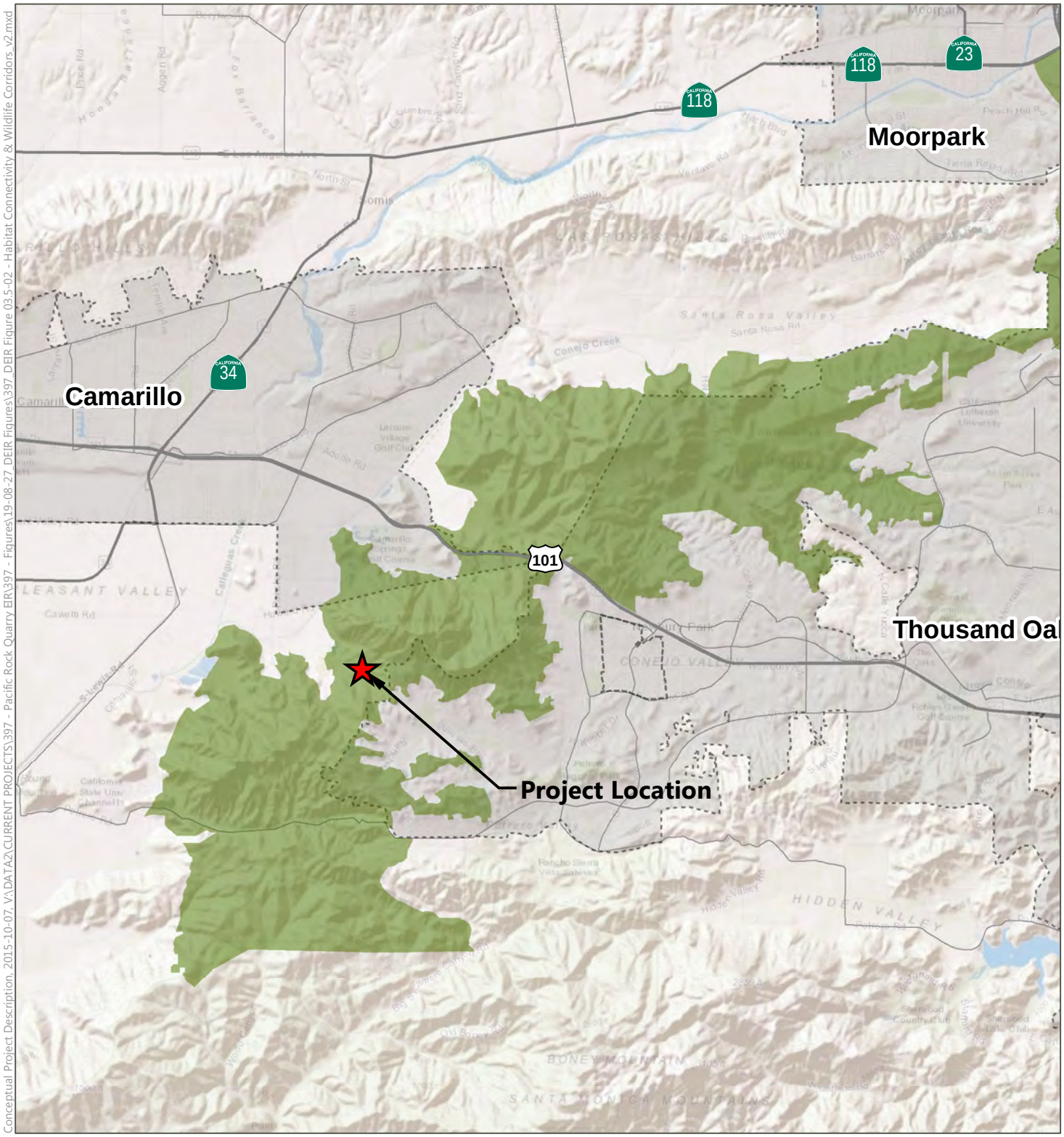
Figure 3.5-1

3.5.1.4 Habitat Connectivity and Wildlife Corridors

Wildlife movement and habitat connectivity features are present within study area. The Santa Monica – Sierra Madre Connection (Connection) is one of the few coastal to inland connections remaining in the South Coast Ecoregion. The Connection stretches from the Santa Monica Mountains at the coast inland to the jagged peaks of the Santa Susana Mountains and the Sierra Madre Ranges of Los Padres National Forest. The Connection is composed of a rich mosaic of oak woodland, savanna, chaparral, coastal sage scrub, grasslands, and riparian forests and woodlands, and has several major strands to accommodate diverse reptile, bird, and mammal species, and ecosystem functions.

On March 12, 2019, the Ventura County Board of Supervisors adopted Ordinance 4537 and on March 19, 2019, the Board adopted Ordinance 4539, collectively establishing regulations for development within habitat connectivity and wildlife corridors and amending the zoning classifications of lots within designated corridors. Ordinance 4539 amended the zoning classifications of lots within the Habitat Connectivity and Wildlife Corridors Overlay Zone to including "/HCWC" in the zoning classification indicating their inclusion in the overlay zone. Both of the Project site parcels are within the overlay zone; thus, Ordinance 4539 amended the zoning designation of APN 234-0-060-19 from OS-160 ac to OS-160 ac/HCWC and amended the zoning designation of APN 234-0-060-22 from AE-40 ac to AE-40 ac/HCWC. The Ordinance also amended the zoning designations of each of the parcels adjacent to the Project parcels to add the HCWC classification. As shown on Figure 3.5-2, "Habitat Connectivity and Wildlife Corridors," and Figure 3.5-3, "Wildlife Corridors in the Project Vicinity," the entirety of the existing and proposed CUP areas is designated as a habitat connectivity and wildlife corridor area. Additionally, three of the drainages within the Project site (W10, W17, and W23, discussed further at Section 3.5.1.7, below) are identified as "surface water feature buffers" on the County's Habitat Connectivity and Wildlife Corridors mapping.

Within and adjacent to the study area, the Santa Monica – Sierra Madre Connection consists of an approximately 1,500-foot-wide corridor to the southeast of the existing Pacific Rock Quarry disturbance areas, between the existing disturbance areas and residential development to the southeast. This portion of the corridor provides a connection between the Santa Monica Mountains and Conejo Mountain area and consists of scattered rock outcroppings within Deerweed Scrub and Laurel Sumac Scrub habitats, and provides essential habitat for foraging, cover, and local and regional movement in a generally west-to-east direction. The Connection abuts the north, south, and east edges of the proposed expansion areas. Although the existing and proposed CUP areas are within an area designated by the County as habitat connectivity and wildlife corridor, the 1,500-foot-wide area between the existing mining area and residences is considered to provide the primary habitat and movement opportunity between areas to the south and north. While wildlife movement may occasionally occur within the existing disturbed areas of the Project site, the limited vegetation and the existing surface mining and processing operations are expected to influence wildlife movement within the existing disturbance areas.



Conceptual Project Description, 2015-10-07, V:\DATA2\CURRENT PROJECTS\397 - Pacific Rock Quarry EIR\397 - Figures\19-08-27_DEIR Figures\397_DEIR Figure 03.5-02 - Habitat Connectivity & Wildlife Corridors_v2.mxd

SOURCES: ESRI World Shaded Relief accessed June 2019, ESRI World Topographic Map accessed June 2019; ESRI World Streetmap, 2009; compiled by Benchmark Resources in 2019

Project Location

County Designated Habitat Connectivity and Wildlife Corridors

City Boundary

Highway

Major Road

BENCHMARK RESOURCES

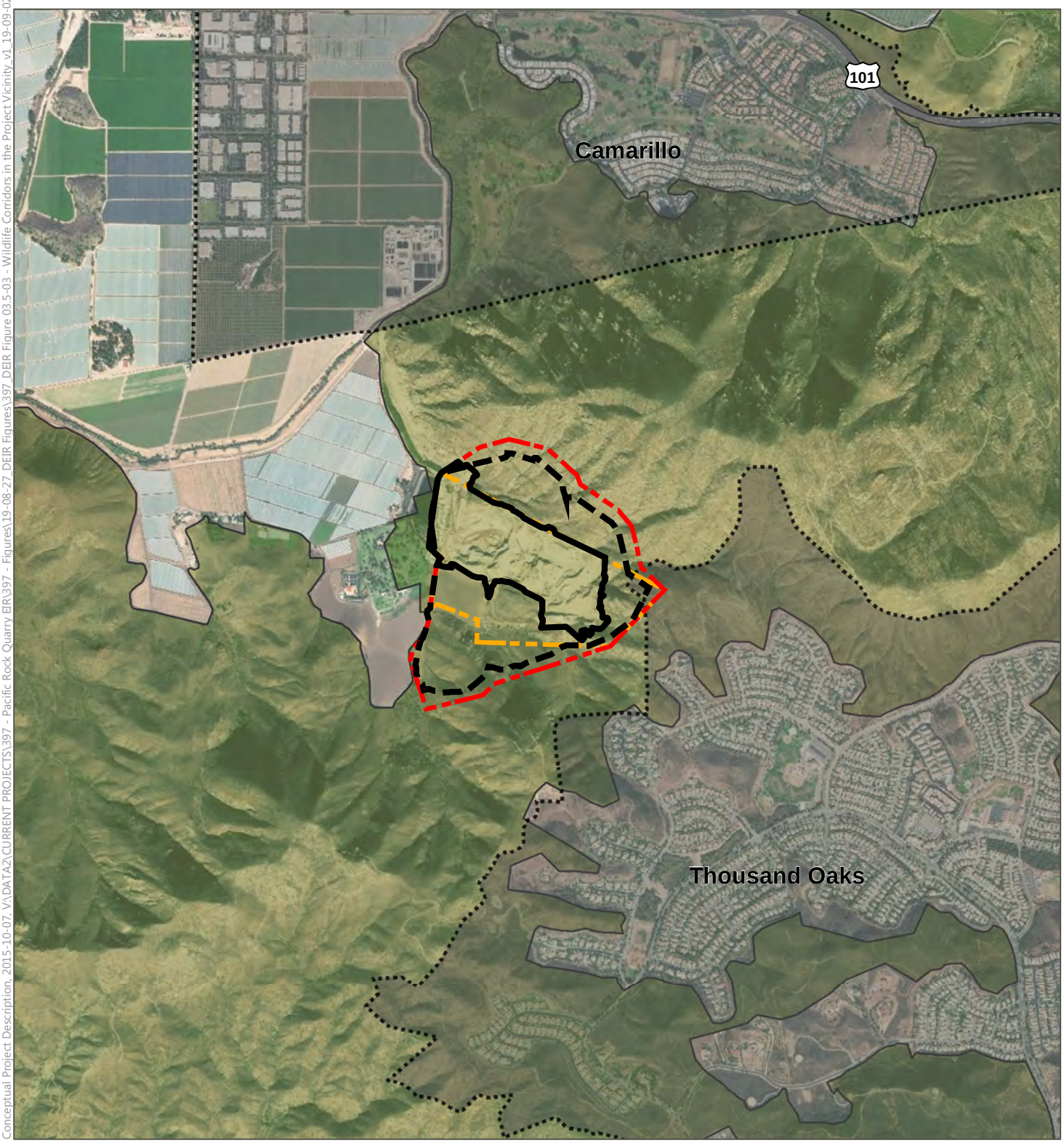
N

0 0.75 1.5 3 Miles

Habitat Connectivity and Wildlife Corridors

PACIFIC ROCK QUARRY EXPANSION PROJECT

Figure 3.5-2



SOURCES: ESRI World Shaded Relief accessed June 2019, ESRI World Topographic Map accessed June 2019; ESRI World Streetmap, 2009; compiled by Benchmark Resources in 2019

- Existing Disturbance Area Boundary
- Proposed Mine Area Boundary
- Existing CUP Boundary
- Proposed CUP Boundary
- County Designated Habitat Connectivity and Wildlife Corridors
- City Boundary
- Highway
- Major Road

BENCHMARK RESOURCES

N

0 500 1,000 2,000 Feet

Wildlife Corridors in the Project Vicinity
PACIFIC ROCK QUARRY EXPANSION PROJECT
Figure 3.5-3

3.5.1.5 Special-Status Vegetation Communities and Plant Species

Special-Status Vegetation Communities

For the purposes of this evaluation, special-status vegetation communities include:

- Riparian habitat or other sensitive natural community identified in local or regional plans, polices, or regulations, or designated as a special-status vegetation community by the CDFW or USFWS.

As shown on Figure 3.5-1 and listed in Table 3.5-3, two special-status plant vegetation communities are present within the study area, consisting of 2.04 acres of Giant Wild Rye Grassland and 2.01 acres of Red Willow Thicket, both of which hold CDFW/NatureServe rankings of G3/S3. As noted in Table 3.5-3, the rankings of G3/S3 indicates these communities are vulnerable to extirpation or extinction Globally or Subnationally (state). Eight of the vegetation communities mapped on the Project site are considered Locally Important Communities (LIC), including Laurel Sumac Scrub, California Sagebrush Scrub, Deerweed Scrub, Giant Wild Rye Grassland, Red Willow Thicket, Mountain Mahogany Scrub, Disturbed Chamise/Ceonothus Chaparral, and Coast Live Oak Woodland (BRC 2017). The Ventura County Initial Study Assessment Guidelines (ISAG) defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The designation of LIC for the vegetation communities on the Project site is related to the potential of these vegetation communities to support listed or special status plant and/or wildlife species (BRC, 2017).

Table 3.5-3. Special-Status Vegetation Communities Observed within the Project Site

Common Name	Status	Habitat Description	Occurrence Within or Adjacent to the Project Site
Laurel Sumac Scrub (*Malosma laurina* Alliance)	G4, S4 LIC	Laurel Sumac (*Malosma laurina*) is the dominant shrub species in the canopy. This community occurs at elevations of 5 to 400 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including the state rare Conejo buckwheat (*Eriogonum crocatum*) and the federally threatened Verity's dudleya (*Dudleya verityi*).	**Present.** 120.52 acres of this community occurs in open/intermittent to moderately dense cover due to the 2013 Springs Fire. This community is the predominant vegetation type within SA1 (BRC, 2017).
California Sagebrush Scrub (*Artemisia californica* Alliance)	G5, S5 LIC	California sagebrush (*Artemisia californica*) is the dominant species in the shrub canopy. This community occurs at elevations ranging from 50 to 925 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including the state rare Conejo buckwheat (*Eriogonum crocatum*), the federally threatened Verity's dudleya (*Dudleya verityi*) and the federally threatened coastal California gnatcatcher (*Polioptila californica californica*).	**Present.** 0.14 acre if this community is primarily distributed on the gentle slopes with variable aspect (BRC, 2017).

Common Name	Status	Habitat Description	Occurrence Within or Adjacent to the Project Site
Deerweed Scrub (*Acmispon glaber* [form. *Lotus scoparius*] Alliance)	G5, S5 LIC	Deerweed (Acmispon glaber) is the dominant species in the shrub canopy. This community occurs at elevations ranging from 50 to 925 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*Calochortus plummerae*), and coastal California gnatcatcher (foraging) (*Polioptila californica californica*).	**Present.** 1.30 acres if this community is intermittently distributed on the gentle slopes with variable aspect and rocky outcroppings (BRC, 2017).
Giant Wild Rye Grassland (*Elymus condensatus* [form. *Leymus condensatus]* Alliance)	G3, S3 LIC	Giant Wild Rye (*Elymus condensatus*) is the dominant species with a sparse herbaceous understory of intermittent non-native grasses. This community occurs at elevations ranging from 0 to 1,500 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including Catalina mariposa lily (*Calochortus catalinae*) and Plummer's mariposa lily (*Calochortus plummerae*).	**Present**. 2.04 acres of this community were mapped on north-facing slopes and in association with ephemeral drainages on the eastern portion of SA1 (BRC, 2017).
Cattail Marsh (*Typha latifolia* Alliance)	G5.S5	Broadleaf cattail (*Typha latifolia*) is the dominant species in the herbaceous layer. This community occurs at elevations ranging from 0 to 350 meters amsl.	**Present.** 0.32 acre of this community are present adjacent to an annual spring and within the bed and bank of an intermittent drainage found in the south-central portion of SA1 as well as near the southwestern portion of the retention pond (BRC 2017).
Red Willow Thicket (*Salix laevigata* Alliance)	G3, S3 SC LIC	Red willow (*Salix laevigata*) is the dominant species in the tree canopy with occurrences of broadleaf cattail and tule. This community occurs at elevations ranging from 0 to 1,700 meters amsl. CDFW considers this a sensitive community type synonymous with Southern willow scrub. Considered a unique habitat within Ventura County and considered a locally important community for sensitive and listed bird species, including yellow warbler (*Setophaga petechia*) and least Bell's vireo (*Vireo bellii pusillus*).	**Present**. 2.01 acres of this community form a continuous canopy adjacent to a culverted drainage feeding into the retention pond (BRC, 2017).

Common Name	Status	Habitat Description	Occurrence Within or Adjacent to the Project Site
Mountain Mahogany Scrub (*Cercocarpus betuloides* [form. *Cercocarpus montanus*] Alliance)	G5, S4 LIC	Birchleaf mountain mahogany (Cercocarpus betuloides) is the dominant species in the shrub layer. This community occurs at elevations ranging from 100 to 2,400 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including Catalina mariposa lily (*Calochortus catalinae*), Plummer's mariposa lily (*Calochortus plummerae*), and coastal California gnatcatcher (foraging) (*Polioptila californica californica*).	**Present.** 0.23 acre of this community occurs in the eastern portion of SA1 in association with an ephemeral drainage (BRC, 2017).
Disturbed Chamise/Ceanothus Chaparral (*Adenostoma fasciculatum* Alliance)	G5, S5 LIC	Chamise (*Adenostoma fasciculatum)* and ceanothus (*Ceanothus* sp.) exist within this open to sparse tree/shrub canopy. This community occurs at elevations ranging from 10 to 1,800 meters amsl. This shrubland alliance is not considered unique habitat within Ventura County but it was determined to be locally important due to its potential to support special-status plant species including the state rare Conejo buckwheat (*Eriogonum crocatum*), the federally threatened Verity's dudleya (*Dudleya verityi*)	**Present.** 1.43 acres of this community, which was burned in the 2013 Springs Fire, is growing in areas adjacent to rock outcroppings in the northeastern portion of SA1 (BRC, 2017).
Coast Live Oak Woodland (Quercus agrifolia Woodland Alliance)	G5. S4 LIC	Coast live oak trees (Quercus agrifolia) form a continuous canopy with understory shrubs and mixed grasses. This community occurs at elevations ranging from 0 to 1,200 meters amsl. The Ventura County Board of Supervisors has deemed this as a locally important community.	**Present.** 1.52 acres of this community is located adjacent to the southwest boundary of SA1 (BRC, 2017).

Sources: BRC, 2017; ESA, 2018.
Notes:
California Department of Fish and Wildlife (CDFW)/NatureServe Rank
G1 or S1—Critically Imperiled Globally or Subnationally (state)
G2 or S2—Imperiled Globally or Subnationally (state)
G3 or S3—Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4 or S4 – Apparently Secure
G5 or S5 - Secure
SC: CDFW Recognized Sensitive Community
LIC – Ventura County Locally Important Community

Special-Status Plant Species

For the purposes of this evaluation, special-status plant species include:

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 2, 2016).

- Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380).
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (Lists 1B and 2).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), State and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (State CEQA Guidelines).
- Ventura County Locally Important Plant Species (updated 2014).

A query of the CDFW California Natural Diversity Database (CNDDB) and CNPS On-line Inventory conducted by ESA (2018) identified seventeen (17) special-status plant species that have been documented within 10-miles of the Project site. Table 3.5-4, "Special-Status Plant Species Observed and Potentially Occurring within the Project Site," lists these species, their current status, the nearest known location relative to the Project site, and the potential to occur on the Project site.

Potential for special-status plant species to occur within the Project site is based on the following criteria:

- **Present** includes special-status species that were confirmed to be present during field surveys conducted on the Project site by BRC in 2016 and/or ESA in 2018.
- **High** potential for occurrence: (1) The habitat on the Project site is the species preferred habitat and is in good condition (i.e., has not been degraded by human disturbance); and/or (2) there is record of the species occurring on or adjacent to the Project site.
- **Moderate** potential for occurrence: (1) The habitat on the Project site is the species preferred habitat, but it has been disturbed or disturbance encompasses the Project site, reducing the quality of the habitat to below a high likelihood that the species would inhabit it; or (2) the habitat on the Project site is not the species preferred habitat, but it contains a similar structure to the preferred habitat and the species has been observed in this habitat type; or (3) the habitat on the Project site is not the species preferred habitat, but there is record of the species occurring in the immediate vicinity of the Project site.
- **Low** potential for occurrence: The habitat on the Project site is not the species preferred habitat, the habitat is highly disturbed, and/or there are no records of the species occurring on or near the Project site.
- No (**None**) potential for occurrence: the habitat does not exist on the Project site and the species requires this habitat for survival.

Table 3.5-4 lists the special-status plant species observed on the Project site during focused surveys in 2010, 2016 and/or 2018 include Blochman's dudleya, club-haired dudleya, Conejo dudleya, Catalina mariposa lily, Verity's dudleya, Conejo buckwheat, and southern California black walnut. The locations where

special-status plants were either observed or where potential habitat is present are shown on the "Special-Status Plant Species Map" in Appendix C-1 and the locations where special-status plant species were observed during the 2018 surveys are shown on Figure 3 (Rare Plant Survey Map) in Appendix C-2.

Special-status plant species with a moderate to high potential to occur within Project site based on the presence of suitable habitat and documented occurrences in the region (BRC, 2017), as well as the results of a CNDDB query conducted in 2018 (ESA 2018), include Plummer's mariposa-lily, Marcescent dudleya, White-veined monardella, Ojai navarretia, Lyon's pentachaeta, and woven-spored lichen.

Table 3.5-4. Special-Status Plant Species Observed and Potentially Occurring within the Project Site

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
Braunton's milk-vetch (*Astragalus brauntonii*)	FE, CRPR 1B.1, G2, S2	Requires recent burns or disturbed areas on limestone outcrops; usually on sandstone with carbonate layers. Chaparral, coastal scrub, valley and foothill grassland on hilltops, saddles or bowls between hills at elevations of 3-640 meters amsl. Flowering Time: March-July	**None**. Required limestone outcrops are not present on site.
Catalina mariposa-lily (*Calochortus catalinae*)	CRPR 4.2	Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 15 and 700 meters amsl. Flowering Time: March-May	**Present**. Observed within study area in 2010 (BRC, 2017) and 2018 (ESA, 2018).
Plummer's mariposa-lily (*Calochortus plummerae*)	LIS, CRPR 4.2	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Common after fire at elevations of 60-2,500 meters amsl. Found in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Flowering Time: May-July	**High.** Not documented within study area, but potential to occur is conservatively considered "high" for the purpose of this evaluation, because suitable habitat is present.
Club haired mariposa-lily (*Calochortus clavatus var. clavatus*)	CRPR 4.3	Occurs in foothill woodlands, chaparral, and valley grasslands	**Present.** Observed within the study area during rare plant surveys in 2018 (ESA, 2018).
Southern tarplant (*Centromadia parryi* ssp. *australis*)	CRPR 1B.1, G3, S2	Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 meters amsl. Vernally mesic, alkaline habitat is not present on site. Flowering Time: June-October	**None.** Required vernally mesic, alkaline habitat is not present within study area.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
Dune larkspur (*Delphinium parryi* ssp. *blochmaniae*)	CRPR 1B.1, S2	Requires maritime chaparral and coastal dunes between 0 and 200 meters amsl. No suitable habitat present. Flowering Time: April-May	**None.** Required maritime chaparral and coastal dunes habitat is not present within study area.
Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*)	CRPR 1B.1, G3, S2	Rocky, clay, or serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland communities between 5 and 450 meters amsl. Flowering Time: April-June	**Present.** Observed within study area in 2010 (BRC, 2017) and during rare plant surveys in 2018 (ESA, 2018).
Marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*)	FT, SR, LIS, CRPR 1B.2, S2	Occurs on sheer rock surfaces and rocky volcanic cliffs at elevations of 145-670 meters amsl in chaparral habitats. Flowering Time: May-June	**Moderate.** Suitable habitat is present. Nearest known occurrences is within 3-miles of Project site. Not observed during site surveys. Project site on edge of known range.
Conejo dudleya (*Dudleya parva*)	FT, LIS, CRPR 1B.2, G1, S1	Grows on clay or volcanic substrates in coastal scrub and valley and foothill grassland communities between 60 and 450 meters amsl. Flowering Time: May-July	**Present.** Observed onsite in 2010; however, not observed during focused surveys in 2016 and 2018 (BRC, 2017; ESA, 2018). This species has potential to occur in inaccessible (i.e., steep) portions of the Project site.
Verity's dudleya (*Dudleya verityi*)	FT, LIS, CRPR 1B.1, G1, S1	Occurs on volcanic outcrops in chaparral, cismontane woodland, and coastal scrub communities between 60 and 120 meters amsl. Flowering Time: May-June	**Present.** Observed onsite in 2010; however, not observed during focused surveys in 2016 and 2018 (BRC, 2017; ESA, 2018). This species has potential to occur in inaccessible (i.e., steep) portions of the Project site.
Conejo buckwheat (*Eriogonum crocatum*)	SR, LIS, CRPR 1B.2, G1, S1	Occurs on Conejo volcanic outcrops in chaparral, coastal scrub, valley and foothill grassland communities between 50 and 580 meters amsl. Flowering Time: April-July	**Present.** Observed in 2010 (BRC, 2017) and during rare plant surveys in 2018 (ESA, 2018).
Southern California black walnut (*Juglans californica*)	CRPR 4.2, G3, S3	Occurs in chaparral, cismontane woodland and coastal scrub communities between 50 and 900 meters amsl. Flowering Time: Mar-May	**Present.** Observed onsite in 2010, 2016 and 2018 (BRC, 2017; ESA, 2018).
White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*)	LIS, CRPR 1B.3, S2	Found on dry slopes in chaparral, cismontane woodland communities from 50-1,525 meters amsl. Flowering Time: May-October	**Moderate.** None identified during site surveys. Nearest CNDDB occurrence located approximately 4 miles to southeast.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
Ojai navarretia (*Navarretia ojaiensis*)	CRPR 1B.1, G2, S2	Openings in chaparral, coastal scrub, and valley and foothill grassland communities between 275 and 620 meters amsl. Flowering Time: May-July	**Moderate.** Suitable habitat is present within the chaparral habitat of the Project site; however, this species has not been observed on the Project site during various field surveys. Nearest CNDDB occurrence located approximately 3 miles to northeast.
Lyon's pentachaeta (*Pentachaeta lyonii*)	FE, SE, CRPR 1B.1, G1, S1	Rocky clay soils of volcanic origin in openings within chaparral, coastal scrub, and valley and foothill grassland communities between 30 and 630 meters. It does not compete well with dense annual grasses or shrubs but occurs where there is a majority of bare ground. Flowering Time: March-August	**Moderate.** Suitable habitat is present within openings of chaparral, coastal scrub communities; however, this species has not been observed on the Project site during various field surveys. Nearest CNDDB occurrence located approximately 3 miles to northeast.
White rabbit-tobacco (*Pseudoghaphalium leucocephalum*)	CRPR 2B.2, G4, S2	Requires open washes, sandy or gravelly alluvium in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats between 0 and 2100 meters amsl. Flowering Time: July-October	**None.** No suitable habitat within Project site due to the absence of required alluvium.
Chaparral ragwort (*Senecio aphanactis*)	LIS, CRPR 2B.2, G3, S2	Occurs on drying alkaline flats within chaparral, cismontane woodland, and coastal scrub habitats at elevations from 20 and 855 meters amsl. Flowering Time: February-May	**None.** No suitable alkaline flat habitat is present on the Project site.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
Woven-spored lichen (*Texosporium sancti-jacobi*)	CRPR 3, G3, S1	Occurs in open sites; in California with chamise, *Eriogonum* ssp., and *Selaginella* ssp. at elevations of 290-660 meters amsl.	**Moderate.** Considered to have potential to be present because of the presence of chamise, *Eriogonum* spp.; however, this species has not been observed on the Project site during various field surveys. Nearest CNDDB occurrence located approximately 2.8 miles to south.

Sources: BRC, 2017; ESA, 2018.
Notes:
FE: Federally Endangered
FT: Federally Threatened
SE: State Endangered
SR: State Rare
California Department of Fish and Wildlife (CDFW)/NatureServe Rank
G1 or S1—Critically Imperiled Globally or Subnationally (state)
G2 or S2—Imperiled Globally or Subnationally (state)
G3 or S3—Vulnerable to extirpation or extinction Globally or Subnationally (state)
California Rare Plant Rank (CRPR)
CRPR 1A—California Native Plant Society/CDFW listed as presumed to be extinct
CRPR 1B—California Native Plant Society/CDFW listed as rare or endangered in California and elsewhere
CRPR 2—California Native Plant Society/CDFW listed as rare or endangered in California by more common elsewhere
CRPR 3—California Native Plant Society/CDFW listed as in need of more information
CRPR 4—California Native Plant Society/CDFW listed as of limited distribution or infrequent throughout a broader area in California
LIS: Locally Important Species (Ventura County, 2014)

3.5.1.6 Special-Status Wildlife Species

For the purposes of this evaluation under CEQA and consistent with County environmental review procedures, special-status wildlife species include the following:

- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notice sin the Federal Register for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 2, 2016).
- Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380).
- Animals listed, proposed for listing, or identified as candidate species for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Animal species of special concern to the CDFW (Shuford & Gardali, 2008 for birds; Williams, 1986 for mammals; Moyle et al., 1995 for fish; and Jennings & Hayes, 1994 for amphibians and reptiles).
- Animal species that are fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Ventura County Locally Important Animal Species (updated 2014).

The potential for special-status wildlife species to occur in the study area was determined based on-site surveys, the presence of suitable habitat for a particular species, and documented occurrences reported to

the CNDDB within 5 miles of the Project site. Table 3.5-5, "Special-Status Wildlife Species Observed and Potentially Occurring within the Project Site," lists special-status wildlife species that have the potential to occur on the Project site. The locations of where special-status wildlife species were observed or where they could potentially occur are shown on the "Special-Status Wildlife Species Map" in Appendix C-1 and the locations of potential bat roosting and foraging habitat are shown on the "Pacific Rock Quarry Expansion Project Bat Habitat" map in Appendix C-3. The potential for special-status wildlife species to occur within or adjacent to the Project site is based on the following criteria:

- **Present** includes special-status species that were confirmed to be present during field surveys conducted on the Project site by BRC in 2016 and/or ESA in 2018.
- **High** potential for occurrence: (1) The habitat on the Project site is the species preferred habitat and is in good condition (i.e., has not been degraded by human disturbance); and/or (2) there is record of the species occurring on or adjacent to the Project site.
- **Moderate** potential for occurrence: (1) The habitat on the Project site is the species preferred habitat, but it has been disturbed or disturbance encompasses the Project site, reducing the quality of the habitat to below a high likelihood that the species would inhabit it; or (2) the habitat on the Project site is not the species preferred habitat, but it contains a similar structure to the preferred habitat and the species has been observed in this habitat type; or (3) the habitat on the Project site is not the species preferred habitat, but there is record of the species occurring in the immediate vicinity of the Project site, and there is potential for the species to forage within the habitat on-site.
- **Low** potential for occurrence: The habitat on the Project site is not the species preferred habitat, the habitat is highly disturbed, and/or there are no records of the species occurring on or near the Project site.
- No (**None**) potential for occurrence: the habitat does not exist on the Project site and the species requires this habitat for survival.

Special-status wildlife species observed within the study area during site surveys and therefore considered "present" for the purpose of this evaluation include coastal whiptail, sharp-shinned hawk, loggerhead shrike, and San Diego desert woodrat. One additional special-status wildlife species, the mountain lion, was not identified during site surveys but is considered "present" based on National Park Service (NPS) telemetry data of collared mountain lions showing occurrences in the vicinity of the Project (NPS, 2015[2]). Predation sites where mountain lions fed on mule deer have also been documented in the vicinity of the Project (Benson et al., 2016b[3]). Mountain lion home ranges in the region around the Project site were mapped and show that the home range of one collared mountain lion encompasses the Project site (NPS, 2013[4]). Special-status wildlife species with a moderate to high potential to occur in the Project site include Crotch bumble bee, Santa Monica grasshopper, western pond turtle, golden eagle, burrowing owl, coastal California gnatcatcher, yellow warbler, least Bell's vireo, pallid bat, spotted bat, western mastiff bat, western red bat, western yellow bat, pocketed free-tailed bat, and big free-tailed bat.

[2] National Park Service. 2015. Mountain Lion GPS Data Points. Mountain Lion GPS Data Points, https://www.nps.gov/samo/learn/nature/pumapage.htm

[3] Benson JF, Sikich JA, Riley SPD. 2016.Individual and Population Level Resource Selection Patterns of Mountain Lions Preying on Mule Deer along an Urban-Wildland Gradient. PLoS ONE 11(7): e0158006. doi:10.1371/journal.pone. 0158006

[4] National Park Service. 2013. Home Range Map for P1 thru P12. Home Range Map for P1 thru P12, https://www.nps.gov/samo/learn/nature/pumapage.htm

Table 3.5-5. Special-Status Wildlife Species Observed and Potentially Occurring within the Project Site

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
INSECTS			
Crotch bumble bee (*Bombus crotchii*)	CESAC, G2, S1/S2,	Found in areas within food plant genera include *Antirrhinum, Ascelpias, Chaenactis, Lupinus, Medicago, Phacelia, Clarkia, Dendromecon, Salvia, Eschscholzia,* and *Eriogonum.*	**Moderate.** Suitable food plants including *Phacelia* and *Eriogonum* are present on the Project site. Nearest CNDDB occurrence located approximately 1.9 miles to west.
Monarch – California Overwintering Population (*Danaus plexippus* pop.1)	FC G4, S2/S3	Overwintering populations of monarch butterflies typically found in larger groves or windrows of trees, including species of *Eucalyptus,* Monterey pine *(Pinus radiata),* Monterey cypress *(Cupressus macrocarpa),* western sycamore *(Platanus racemose),* coast redwood *(Sequoia sempervirens),* coast live oak *(Quercus agrifolia),* and others.	**Low.** Suitable overwintering groves of Eucalyptus (*Eucalyptus* sp.) or other tree species are not present on the Project site. Nearest CNDDB occurrence of monarchs located approximately 8.5 miles to the west.
Santa Monica grasshopper (*Trimerotropis occidentiloides*)	G1, S1	Found on bare hillsides and along dirt trails in chaparral.	**High.** Suitable habitat is found in the chaparral vegetation communities found throughout the Project site.
FISH			
Arroyo chub (*Gilia orcuttii*)	SSC, G2, S2	Requires slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	**None**. This species is known to occur within Conejo Creek; however, a hydrologic connection between the Project site and Conejo Creek has not been identified.
Steelhead – southern California DPS (*Oncorhynchus mykiss irideus*)	FE, S1	Requires aquatic habitat with flowing waters.	**None.** No permanent water source suitable for steelhead on the Project site and a hydrologic connection between the Project site and Conejo Creek has not been identified.
REPTILES			
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	SSC, S3	Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	**Present.** Identified by BRC (2017) as observed onsite and potential habitat is found within portions of the Project site.
Two-striped garter snake (*Thamnophis hammondii*)	SSC, S3	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent freshwater. Often along stream with rocky beds and riparian growth.	**Low.** There is a low potential that this species may occur within the retention pond located immediately to the west of the Project site.
Western pond turtle (*Emys marmorata*)	SSC, G3, S3	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation.	**High.** None observed during site surveys. Suitable habitat exits in the retention pond immediately west of the Project site. Nearest CNDDB occurrence located approximately 1.6 miles to northwest.

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
BIRDS			
Sharp-shinned hawk (*Accipiter striatus*)	WL (nesting)	Prefers riparian areas. North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 feet of water.	**Present.** Observed in 2016 by BRC. Undetermined whether suitable nesting habitat is present within project site.
Golden eagle (*Aquila chrysaetos*)	FP, WL, S3	Requires cliffs for nesting in grassland, chaparral, shrubland, forest, and other vegetated areas. They avoid developed areas and uninterrupted stretches of forest. They are found primarily in mountains up to 12,000 ft.	**Moderate.** Suitable nesting habitat is present within the Project site; however, high levels of disturbance in some portions of the site as a result of existing operations reduce potential for use as nesting habitat. Nearest CNDDB occurrence located approximately 4.2 miles to south.
Burrowing owl (*Athene cunicularia*)	SSC	Requires low-lying grass-dominated areas located within lower elevations and presence of mammal burrows or manmade structures, such as irrigation pipes, culverts, and debris stockpiles.	**Moderate.** Not observed onsite in 2016, but previously reported as present by Hunt in 2010 (BRC, 2017). No suitable burrows or individual owls were observed during the habitat assessment conducted by ESA in 2018; however, this species has potential to occur in open areas of the grassland communities within and adjacent to the Project site (ESA, 2018). Nearest CNDDB occurrence located approximately 1.5 miles from site.
White-tailed kite (*Elanus leucurus*)	FP, S3	Requires open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	**None**. No suitable habitat within the Project site.
Loggerhead shrike (*Lanius ludovicianus*)	SSC	Inhabits open country with short vegetation and well-shaped shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries.	**Present.** Observed in 2016 by BRC on the slopes west of the existing quarry. Potential for nesting within or adjacent to the site is undetermined.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT, SSC, G4, S2	Inhabits dry coastal slopes, washes, and mesas. They are restricted to areas of coastal sage scrub below 2,000 feet in elevation.	**Moderate.** Suitable habitat exists for this species on the lower slopes within and adjacent to the Project site. This species was not detected within during protocol surveys of the existing CUP area conducted in 2010 (BRC, 2017). Nearest CNDDB occurrence located approximately 2.8 miles south of site.
Yellow warbler (*Setophaga petechia*)	SSC	This species is frequently found nesting and foraging in willow thickets and in other riparian plants including cottonwoods, sycamores, ash, and alders.	**High.** Suitable habitat is restricted to red willow thickets located at the southern fringe of the pond west of the site. Not observed on site in 2016 or 2018 surveys, but previously reported

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
			as present in existing CUP area in 2010 (BRC, 2017).
Least Bell's vireo (*Vireo bellii pusillus*)	FE, SE, G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mulefat, and mesquite.	**High.** Observed within red willow thicket in 2010 (BRC, 2017). Suitable habitat is located within the red willow thickets located on the southern fringe of the pond west of the site.
MAMMALS			
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC, S3	Occurs in moderate to dense canopies. They are particularly abundance in rock outcrops, rocky cliffs, and slopes within coastal scrub.	**Present.** Middens and individuals trapped during focused surveys of the existing CUP area in 2010 and middens observed in 2016 (BRC, 2017).
Pallid bat ***(Antrozous pallidus)***	SSC	Occurs within semi-arid and arid landscapes. Found in a variety of habitats including grasslands, high elevation coniferous forests, and desert environments. Will utilize open vegetation at ground level as well as rock crevices, buildings, bridges, and trees for roosting.	**Moderate.** Cliff face habitat and rocky hillsides within the project area provide roosting habitat. Roosting habitat may also be found within bole cavities and exfoliating bark of oak trees and other mature trees on site. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Townsend's big-eared bat ***(Corynorhinus townsendii)***	SSC	Primarily roosts in mines and caves but also found roosting in buildings, bridges or other cavities including tree hollows. Occurs in a variety of habitats including coniferous forests, deserts, prairies, riparian habitats, agricultural areas, and coastal habitats.	**Low.** No cave or open mine shaft habitat is present on site. Roosting habitat may be found within hollow cavities in mature trees on site. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Spotted bat ***(Euderma maculatum)***	SSC	Roosts in crevices and cracks of cliffs and less often in caves or buildings adjacent to cliffs. Occurs in desert and montane habitats such as open pine or pinyon-juniper woodlands, riparian corridors, and canyons.	**Moderate.** Cliff face habitat and rocky hillsides within the project area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Western mastiff bat ***(Eumops perotis californicus)***	SSC	Occurs in open areas in a variety of habitats including desert scrub, chaparral and oak woodland, and mixed conifer forests. Primarily roosts in cliffs and rock crevices. Occasionally found in buildings.	**Moderate.** Cliff face habitat and rocky hillsides within the project area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Western red bat ***(Lasiurus blossevillii)***	SSC	Foliage roosting species, roosts in trees or large leafy shrubs. Occurs in lowlands to mountains, in woodlands and forests and, especially along riparian habitats.	**Moderate.** Roosting habitat is present in the trees within the riparian habitat onsite. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Western yellow bat ***(Lasiurus xanthinus)***	SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly	**Moderate.** Roosting habitat is present in the trees within the riparian habitat onsite. Foraging habitat is present in

Common Name	Status	Habitat Description	Potential for Occurrence Within or Adjacent to the Project Site
		palms. Forages over water and among trees.	the chaparral, oak woodland, and riparian habitat on site.
Pocketed free-tailed bat (***Nyctinomops femorosaccus)***	SSC	Occurs in a variety of arid habitats including pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and pine-oak forests. Primarily roosts in cliffs and rock crevices.	**Moderate.** Cliff face habitat and rocky hillsides within the project area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Big free-tailed bat ***(Nyctinomops macrotis)***	SSC	Found in rocky habitats within arid landscapes. Occurs in a variety of vegetation communities including desert shrub communities, woodlands and forests. Primarily roosts in cliffs and rock crevices.	**Moderate.** Cliff face habitat and rocky hillsides within the project area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Mountain lion (*Puma concolor*)	CESAC	Inhabit a wide range of ecosystems, making their home anywhere there is shelter and prey, including mountains, forests, deserts, and wetlands. They are territorial and have naturally low population densities, which means the species requires large swaths of habitat to thrive. Present in the Santa Monica Mountains west from Ventura and east into Los Angeles, south of the 101 Freeway between the I-405 and Camarillo Springs (Point Mugu, Malibu Creek, and Topanga State Parks).	**Present**. Mountain lion is known to be present within the Santa Monica Mountains and its range includes open space areas adjacent to the project site (CDFW, 2020). GPS data from collared mountain lions show occurrences in and adjacent to the Project area (NPS, 2015) and predation sites where mountain lion have fed on mule deer are also documented in and adjacent to the Project area (Benson et al., 2016b). The Project site is located within the documented home range of one of the NPS GPS collared mountain lions (NPS, 2013).

Sources: BRC, 2017; ESA, 2018; ECORP, 2022.
Notes:
FE: Federally Endangered
FT: Federally Threatened
FC: Federal Endangered Species Act Candidate for Listing
SE: California Endangered
SR: California Rare
SSC: California Species of Special Concern
FP: California Fully Protected Species
WL: California Watch List Species
CESAC: California Endangered Species Act Candidate for Listing
CDFW/NatureServe Rank
G1 or S1 – Critically Imperiled Globally or Subnationally (state)
G2 or S2 – Imperiled Globally or Subnationally (state)
G3 or S3 – Vulnerable to extirpation or extinction Globally or Subnationally (state)

3.5.1.7 Waters and Wetlands

Multiple ephemeral drainages exist within Project site that flow into onsite detention basins or into the pond located west the site. A total of 24 water features (recognized as W1-W24 in the ISBA) were identified within the Project site and survey area in 2016 (BRC, 2017) as shown on Figure 3.5-4, "Waters and Wetlands," and as listed in Table 3.5-6, "Waters and Wetlands Summary." A formal delineation of

jurisdictional waters has not been conducted to define the specific physical and jurisdictional attributes of drainages and other waters and wetland features at the site. However, site surveys and data collection provide information regarding the locations and size (i.e., length of ephemeral drainages and area of the one detention pond in the study area) of features within and adjacent to the site sufficient to inform the impact analysis in this EIR. Until such time as a formal delineation of jurisdictional waters is prepared and all required reviews and approvals are obtained from regulatory agencies, all such features are considered to have the potential to be waters of the U.S. and/or waters of the State.

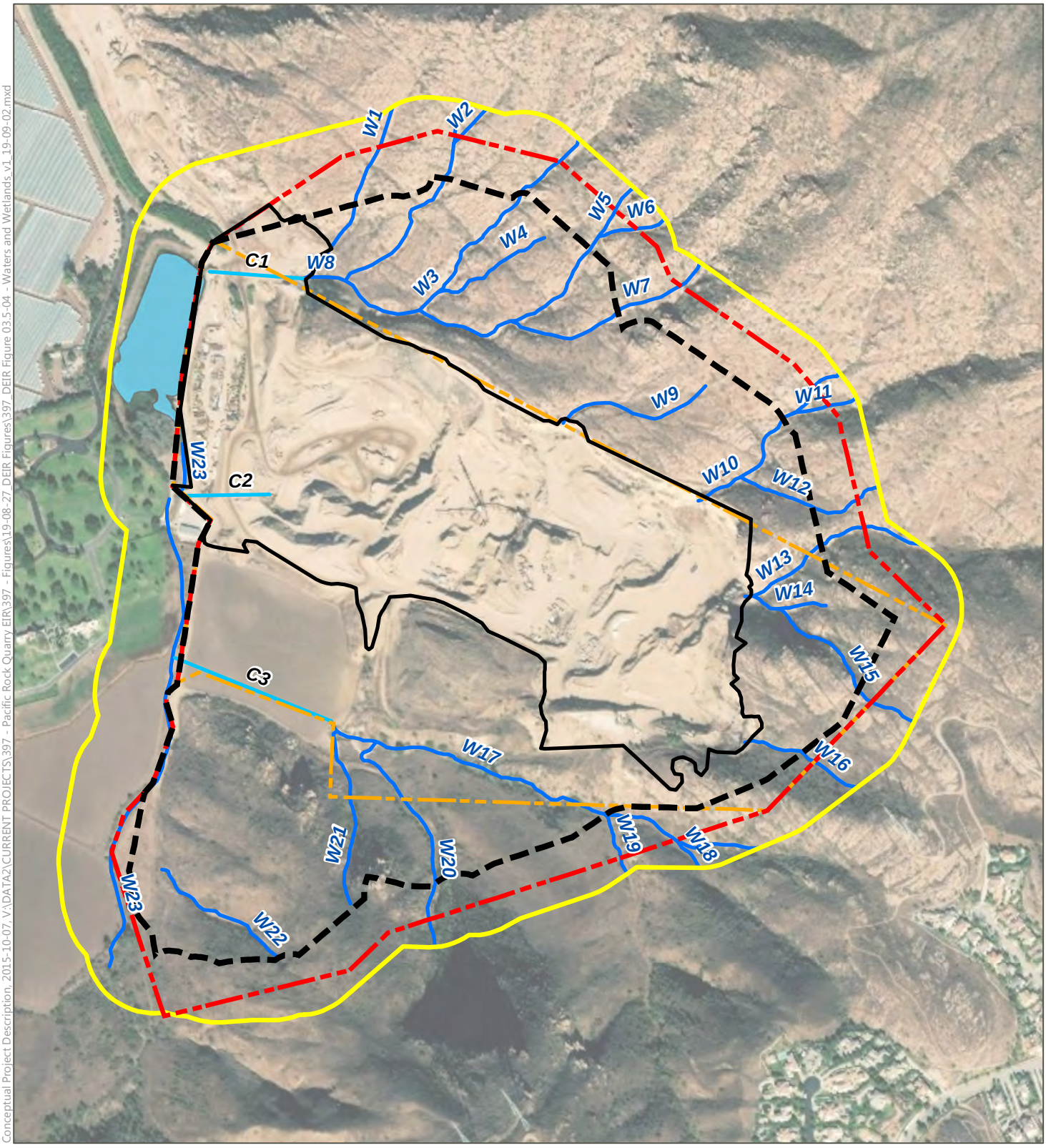
Eight natural ephemeral drainages (W1-W8) exist in the northwestern and north-central portions of the study area. W1 through W7 are tributaries to W8. The existing mining operation has disconnected W8 as a result of installation of a culvert (C3 on Figure 3.5-4) that conveys flows to the detention pond (W24). Additionally, seven natural ephemeral drainages (W9 through W15) exist in the east-central portion of the study area but have also been disconnected by the existing mining operation. The accumulation of sheet flow in these drainages is collected at the lowest point of the quarry and conveyed by culvert (C2 on Figure 3.5-4) that also feeds into the detention pond (W24).

With the exception of the 3.75-acre detention pond west of the site (W24), all of the water features within the study area deliver ephemeral or intermittent surface flows, have a defined bed and bank (some also flow through man-made culverts that have been installed within the existing CUP area as discussed further below), and generally flow in a westerly direction until they are ultimately impounded in the detention pond west of the site (W24).

Ephemeral and intermittent flows in the onsite drainages can serve as an indirect tributary to Conejo Creek, which is a Traditional Navigable Water (i.e., federally regulated watercourse) and a regionally important stream drainage for a substantial portion of southern Ventura County. However, surface water flows from the Project site converge with Conejo Creek via an off-site swale only during high flow events when runoff into the detention pond overtop the pond's outflow elevation. The on-site drainages do not have hydrologic connections to any upstream tributaries as they originate at or below the peaks and ridgelines of the west-facing slopes of the Project site. Ephemeral flows from the peaks and ridgelines to the east of the Project site would occur intermittently during storm events. The on-site drainages do not hold regional significance as they primarily drain onto the immediate property and their flows are contained on-site. The man-made detention pond (W24) is located outside of and adjacent to the western boundary of the Project site between the existing mining operation and Conejo Creek. The detention pond composes a lacustrine system (i.e., a limnetic and littoral-emergent wetland).

The pond is bounded by willow woodlands, supports a persistent stand of emergent vegetation (e.g., bulrush and cattail) throughout much of the entire littoral zone, and is hydrologically connected to other downstream waters or wetlands only during periods of high runoff as discussed above. The detention pond is used by the existing mining operation and others as a water source for commercial operations.

Table 3.5-6 summarizes the water features identified on Figure 3.5-4. As noted in Table 3.5-6, drainages W10, W17, and W23 are each identified on the Ventura County Habitat Connectivity and Wildlife Corridors Map as a "surface water feature buffer." The relevance of these drainages to wildlife movement is discussed further at Section 3.5.1.4.



Conceptual Project Description, 2015-10-07, V:\DATA2\CURRENT PROJECTS\397 - Pacific Rock Quarry EIR\397 - Figures\19-08-27_DEIR Figures\397_DEIR Figure 03.5-04 - Waters and Wetlands_v1_19-09-02.mxd

SOURCES: BioResource Consultants Inc., data recieved in 2019; Aerial–DigitalGlobe (11-14-2018); compiled by Benchmark Resources in 2019

- Existing Disturbance Area Boundary
- Proposed Mine Area Boundary
- Existing CUP Boundary
- Proposed CUP Boundary
- Biological Resources Study Area
- Culvert Connection
- Drainage Feature
- Pond

BENCHMARK RESOURCES

N

0 300 600 1,200 Feet

Waters and Wetlands

PACIFIC ROCK QUARRY EXPANSION PROJECT

Figure 3.5-4

Table 3.5-6. Waters and Wetlands Summary

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
W1	Ephemeral drainage	842	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W2	Ephemeral drainage	1,226	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W3	Ephemeral drainage	1,062	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W4	Ephemeral drainage	552	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W5	Ephemeral drainage	829	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W6	Ephemeral drainage	308	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W7	Ephemeral drainage	980	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W8	Ephemeral drainage	988	Dry	Precipitation, natural runoff. Features W1-W7 serve as tributaries to W8.	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W9	Ephemeral drainage	714	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
W10	Ephemeral drainage	910	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species. W10 is identified on the Ventura County Habitat Connectivity and Wildlife Corridors Map (discussed at Section 3.5.1.4) as a "surface water feature buffer."
W11	Ephemeral drainage	322	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W12	Ephemeral drainage	981	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W13	Ephemeral drainage	894	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W14	Ephemeral drainage	212	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W15	Ephemeral drainage	946	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W16	Ephemeral drainage	555	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W17	Intermittent drainage	2,046	Ponded	Annual spring, precipitation, groundwater, natural and agricultural runoff. Features W18-W21 serve as tributaries to W17.	Intermittent drainage within moderately disturbed sumac scrub and contains a small section of cattail marsh habitat within bed and bank. Moderately disturbed with few invasive species. W17 is identified on the Ventura County Habitat Connectivity and Wildlife Corridors Map (discussed at Section 3.5.1.4) as a "surface water feature buffer."

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
W18	Ephemeral drainage	154	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W19	Ephemeral drainage	292	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W20	Ephemeral drainage	1,070	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W21	Ephemeral drainage	796	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W22	Ephemeral drainage	678	Dry	Precipitation, natural runoff	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W23	Ephemeral drainage	2,405	Dry	Precipitation, natural runoff	Ephemeral drainage that runs through small section of oak woodland and then borders agricultural fields running in a northerly direction. Relatively disturbed in sections adjacent to agricultural fields. Contains numerous invasive species. The northern (downstream) section of W23 is identified on the Ventura County Habitat Connectivity and Wildlife Corridors Map (discussed at Section 3.5.1.4) as a "surface water feature buffer."
W24	Detention Pond	3.75 acres	Ponded	Precipitation, groundwater, natural and agricultural runoff. Artificially impounded	The detention pond contains habitat for multiple federal, state, and CDFW listed species including least bell's vireo, yellow warbler, and western pond turtle. The feature is situated immediately adjacent to existing mining operations and captures all runoff from the facility. Consequently, this feature receives moderately high levels of continual disturbance.

ID #	Water/Wetland Type	Drainage Size (length in feet or acreage where noted)	Hydrological Status	Primary Water Source	Habitat Conditions
W24B1	100-foot area around W24. The feature provides suitable habitat for special-status wildlife species.				

Source: BRC, 2017.

3.5.1.8 Protected Trees

Trees that are protected in accordance with the Ventura County Tree Protection Ordinance are present within the Project site. Table 3.5-7, "Protected Trees within Study Area," provides a list of the trees or tree clusters that have been inventoried within the study area. Under the Ventura County Tree Protection Ordinance, southern California black walnut trees are protected because they are ranked CNPS (CRPR) 4.2, which is defined as a plant or tree that is being watched due to its limited distribution, and the species is facing a moderate degree and immediacy of threat. Additionally, trees of any species measuring 90 inches in girth for single-trunk or 72 inches for multiple-trunk are considered to have "heritage" status and are also protected under the County ordinance.

Three heritage coast live oak trees and 25 southern California black walnut trees are located within the study area. The locations of the protected trees observed during the BRC (2016) survey are shown on the "Protected Trees Map" in Appendix C-1.

Table 3.5-7. Protected Trees within Study Area

ID #	Species	Common Name and Characteristic	Girth (Circumference)
T1	*Juglans californica*	Southern California black walnut (Multi-stem)	10 stems each 1.5″
T2	*Juglans californica*	Southern California black walnut (Sapling)	13 saplings <1″
T3	*Quercus agrifolia*	Coast live oak (Multitrunk)	39″, 44″, 20″ (Heritage)
T4	*Quercus agrifolia*	Coast live oak	115.5″ (Heritage)
T5	*Quercus agrifolia*	Coast live oak (Multitrunk)	14″, 15.5″,8.5″,9.5″ ,8.5″, 7.5″,8.5″, 14.5″ (Heritage)
T6	*Juglans californica*	Southern California black walnut (Multi-stem)	7 stems each 1.5″
T7	*Quercus agrifolia*	Coast live oak (Multitrunk)	6″, 5″, 3.5″
T8	*Quercus agrifolia*	Coast live oak	87.5″
T9	*Quercus agrifolia*	Coast live oak	82″
T10	*Quercus agrifolia*	Coast live oak	80″
T11	*Quercus agrifolia*	Coast live oak (Multi-stem)	27″ and 51″
T12	*Quercus agrifolia*	Coast live oak (Multi-stem)	32″, 47″, and 37″
T13	*Quercus agrifolia*	Coast live oak (Multi-stem)	10″ and 7″
T14	*Quercus agrifolia*	Coast live oak (Multi-stem)	8″, 9″, 13″, and 4″
T15	*Quercus agrifolia*	Coast live oak	Estimated 60″
T16	*Quercus agrifolia*	Coast live oak	Estimated 60″

3.5.1.9 Regulatory Setting

This subsection summarizes federal, state, and local regulations, permits, and policies pertaining to biological resources and wetlands considered for applicability to the Project.

Federal Endangered Species Act

USFWS, which has jurisdiction over plants, wildlife, and most freshwater fish, and NMFS, which has jurisdiction over anadromous fish, marine fish, and marine mammals, oversee implementation of FESA to ensure that federal agencies' actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. A federal agency is required to consult with USFWS and NMFS if it determines that its decision may affect a listed species under the agency's jurisdiction. FESA prohibits the "take" of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

FESA Section 9 take prohibition applies only to wildlife and fish species that are listed as threatened or endangered. Candidate species and species that are proposed for listing or are under petition for listing receive no protection under Section 9. Section 9 also prohibits the removal, possession, damage or destruction of any endangered plant from federal land, as well as acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass.

FESA Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that would potentially harm, harass, injure, kill, capture, collect, or otherwise hurt (i.e., take) any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals that may occur incidental to implementation of otherwise lawful activities, by providing for the overall preservation of the affected species through specific conservation measures.

Under FESA, the Secretary of the Interior (or the Secretary of Commerce, as appropriate) formally designates critical habitat for certain federally listed species and publishes these designations in the Federal Register. Critical habitat is not automatically designated for all federally listed species; thus, many do not have designated critical habitat.

Critical habitat is defined as the specific areas that are essential to the conservation of a federally listed species, and that may require special management consideration or protection. Critical habitat is determined using the best available scientific information about the physical and biological needs of the species. These needs, or primary constituent elements, include: space for individual and population growth and for normal behavior; food, water, light, air, minerals, or other nutritional or physiological needs; cover or shelter; sites for breeding, reproduction, and rearing of offspring; and habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC, §703, Supplement I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. An April 11, 2018, USFWS memorandum indicates that the MBTA's prohibitions on take apply when the purpose of an action is to take migratory birds, their eggs, or their nests. Therefore, take occurring as the result of an activity, the purpose of which is not to take birds, eggs or nests, is not prohibited by the MBTA.

Surface Mining and Reclamation Act

Regulations implementing the Surface Mining and Reclamation Act require that the reclamation of mined lands be implemented in conformance with specified standards (14 CCR §3700 et seq.). Standards regarding wildlife habitat and stream protection are outlined below.

Wildlife and wildlife habitat shall be protected in accordance with the following standards:

(a) Rare, threatened or endangered species as listed by [CDFW], (14 CCR, §§670.2 - 670.5) or the U.S. Fish and Wildlife Service, (50 CFR 17.11 and 17.12) or species of special concern as listed by [CDFW] in the Special Animals List, Natural Diversity Data Base, and their respective habitat, shall be conserved as prescribed by [FESA] and the California Endangered Species Act, Fish and Game Code §2050 et seq. If avoidance cannot be achieved through the available alternatives, mitigation shall be proposed in accordance with the provisions of the California Endangered Species Act, Fish and Game Code §2050 et seq., and the [FESA].

(b) Wildlife habitat 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, unless the proposed end use precludes its use as wildlife habitat or the approved reclamation plan establishes a different habitat type than that which existed prior to mining.

(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.

Streams, including surface water and groundwater, shall be protected in accordance with the following standards:

(a) Surface and groundwater shall be protected from siltation and pollutants which may diminish water quality as required by Federal Clean Water Act §301 et seq. (33 U.S.C. §1311) and §404 et seq. (33 U.S.C. §1344), the Porter-Cologne Water Quality Control Act §13000 et seq., County anti-siltation ordinances, the Regional Water Quality Control Board or the State Water Resources Control Board.

(b) In-stream surface mining operations shall be conducted in compliance with Section 16000 et seq. of the California Fish and Game Code, §404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403).

(c) Extraction of sand and gravel from river channels shall be regulated to control channel degradation in order to prevent undermining of bridge supports, exposure of pipelines or other structures buried within the channel, loss of spawning habitat, lowering of ground water levels, destruction of riparian vegetation, and increased stream bank erosion (exceptions may be specified in the approved reclamation plan). Changes in channel elevations and bank erosion shall be evaluated annually using records of annual extraction quantities and benchmarked annual cross sections and/or sequential aerial photographs to determine appropriate extraction locations and rates.

(d) In accordance with requirements of the California Fish and Game Code §1600 et seq., instream mining activities shall not cause fish to become entrapped in pools or in off-channel pits, nor shall they restrict spawning or migratory activities.

California Environmental Quality Act

The intent of CEQA is to maintain "high-quality ecological systems and the general welfare of the people of the State." It is the policy of the State to "prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." CEQA forbids agencies from approving projects with significant adverse impacts when feasible alternatives or feasible mitigation measures can substantially reduce such impacts.

CEQA Guidelines Section 15065(a) indicates that impacts to state- and federally listed rare, threatened, or endangered plants or animals are significant if they significantly reduce the number or restrict the range of an endangered, rare, or threatened species. Under CEQA Guidelines Section 15380, impacts to other species ("special status species") that meet certain criteria (i.e., it can be shown that the species' survival in the wild is in jeopardy or it is at risk of becoming endangered in the near future) but are not officially listed also may be considered significant by the lead agency under CEQA, depending on the applicability of other laws (e.g., MBTA) and the discretion of the lead agency. For example, CDFW interprets Lists 1A, 1B, and 2 of the CNPS Inventory of Rare and Endangered Vascular Plants of California to consist of plants that, in a majority of cases, would qualify for listing as rare, threatened, or endangered. However, the determination of whether an impact is significant is a function of the lead agency, absent the protection of other laws. Projects subject to CEQA review must specifically address potential impacts to listed species and provide mitigation measures if the impact is significant.

California Oak Woodlands Conservation Act

California Senate Bill 1334, the Oak Woodlands Conservation Act, became law on January 1, 2005, and it was added to CEQA as Public Resources Code Section 21083.4. This law protects oak woodlands that are not protected under the Z'Berg-Nejedly Forest Practice Act (Pub. Res. Code §§4511-4628). This Act requires a county to determine whether or not a project would result in a significant impact on oak woodlands and, when a project would result in a significant impact on oak woodlands, to implement mitigation measures as prescribed under the Public Resources Code to reduce or compensate for the loss of oak woodlands.

California Environmental Quality Act Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not included on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the FESA definition and the FGC section that addresses rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a "candidate species" that has not yet been listed by either USFWS or CDFW. Thus, CEQA provides a CEQA lead agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

California Fish and Game Code

California Endangered Species Act

Under the California Endangered Species Act (CESA) (FGC §2070 et seq.), CDFW has the responsibility for maintaining a list of threatened and endangered species. CDFW also maintains a list of "candidate species," which are species formally noticed as being under review for addition to either the list of endangered species or the list of threatened species. In addition, CDFW maintains lists of "species of special concern," which serve as "watch lists." Pursuant CESA requirements, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the area affected by the project and determine whether the proposed project could have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any proposed project that may affect a candidate species.

California Native Plant Protection Act

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFW (then California Department of Fish and Game) to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. CESA expanded upon the original NPPA and enhanced legal protection for plants. CESA established threatened and endangered species categories and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, there are three listing categories for plants in California: rare, threatened, and endangered.

Nesting Birds

Under FGC Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. In turn, Section 3503.3 prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs.

Bats

Bats in California are currently protected by the California Fish and Game Code, Sections 86, 1600, 2000, 2014, 3007, and 4150; California Public Resources Code, Division 14, Section 21000 et seq.; California Code of Regulations (CCR), Title 14 including, but not limited to Section 251.1, (Harassment of Animals), Section 15000 et seq. (Guideline for implementation of the California Environmental Quality Act [CEQA], including but not limited to Section 15380 (Endangered, Rare, or Threatened Species), and Section 15382 (Significant Effect on the Environment).

Regulations of particular relevance to the Proposed Project include CCR Title 14, Section 251.1, which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior patterns, including breeding, feeding, or sheltering) of nongame mammals (e.g., bats), and California Fish and Game Code Section 4150 prohibits *take* or possession of all nongame mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats resulting in the death of young, or various modes of nonlethal pursuit or capture may be considered *take* as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, may be considered significant under CEQA.

Fully Protected Species

The FGC also allows the designation of a species as Fully Protected (see §3511 regarding birds, §4700 regarding mammals, §5050 regarding reptiles and amphibians, and §5515 regarding fish). This designation provides a greater level of protection than is afforded by CESA, and until recently, fully protected species could not be taken at any time. On October 18, 2011, Senate Bill 618 was signed into law, which permits take of fully protected species where a Natural Communities Conservation Plan has been approved and is being implemented to ensure protection of those species.

Sensitive Natural Communities

Sensitive natural communities are identified as such by CDFW's Natural Heritage Division and include those that are naturally rare and those whose extent has been greatly diminished through changes in land use. The CNDDB tracks 135 such natural communities in the same way that it tracks occurrences of special-status species: information is maintained on each site's location, extent, habitat quality, level of disturbance, and current protection measures. CDFW is mandated to seek the long-term perpetuation of the areas in which these communities occur. While there is no statewide law that requires protection of all sensitive natural communities, CEQA requires consideration of a project's potential impacts on biological resources of statewide or regional significance.

U.S. Army Corps of Engineers—Clean Water Act Section 404

Wetlands and other waters (e.g., rivers, streams, and natural ponds) are a subset of waters of the United States and receive protection under CWA Section 404. The term "waters of the United States," as defined in the Code of Federal Regulations (33 CFR 328.3[a]; 40 CFR 230.3[s]), includes: (1) all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (2) all interstate waters, including interstate wetlands; (3) territorial seas; (4) all impoundments of waters otherwise identified as waters of the United States under this section; (5) all tributaries of waters identified in (1) through (3); (6) all waters adjacent to a water identified in (1) through (5), including wetlands, ponds, lakes, oxbows, impoundments, and similar waters; (7) all prairie potholes, Carolina bays and Delmrva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands where they are determined, on a case-specific basis, to have a significant nexus to a water identified in (1) through (3); and (8) all waters located within the 100-year floodplain of a water identified in (1) through (3) and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in (1) through (5) where they are determined on a case-specific basis to have a significant nexus to a water identified in (1) through (3).

USACE has primary federal responsibility for administering regulations that concern waters of the United States. In this regard, the USACE acts under two statutory authorities: Rivers and Harbors Act (§§9, 10), which governs specified activities in "navigable waters," and CWA (§404), which governs specified activities in waters of the United States, including wetlands. USACE requires a permit if a project proposes placement of structures within navigable waters and/or alteration of waters of the United States. Some classes of fill activities may be authorized under Regional General or Nationwide permits if specific conditions are met. The Nationwide permit outlines general conditions and may specify project-specific conditions as required by USACE during the Section 404 permitting process. When a project's activities do not meet the conditions for a Nationwide Permit, USACE may issue an Individual Permit or Letter of Permission. USACE has a policy of no net loss of wetlands and typically requires mitigation for all impacts to wetlands before it will issue a permit under CWA Section 404. U.S. Environmental Protection Agency

has the ultimate authority for designating dredge and fill material disposal sites and can veto the USACE's issuance of a permit to fill jurisdictional waters of the United States.

The federal government also supports a policy of minimizing "the destruction, loss, or degradation of wetlands." Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

Los Angeles Regional Water Quality Control Board (RWQCB)—National Pollutant Discharge Elimination System (NPDES)

The Los Angeles RWQCB regulates waters within the Project area under the Porter-Cologne Act (Water Code §13000 et seq.). Dredging, filling, or excavation of isolated waters constitutes a discharge of waste to waters of the State. Under the Porter-Cologne Act, anyone who discharges waste or proposes to discharge waste within any region that could affect the quality of the waters of the state must file a "report of waste discharge" with the applicable RWQCB. The RWQCB then issues a permit (called "waste discharge requirements" or WDRs) implementing relevant water quality control plans and taking into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, and the need to prevent nuisances (Water Code §13263).

In addition, California has been delegated CWA Section 402 permit authority for the National Pollutant Discharge Elimination System permit program including stormwater permits. Although the issuance of Section 404 permits remains the responsibility of the USACE, the State actively uses its CWA Section 401 water quality certification authority to ensure that Section 404 permits protect state water quality standards. The RWQCB has a policy of no net loss of wetlands and typically requires mitigation for all impacts to wetlands before it will issue a water quality certification under CWA Section 401.

California Department of Fish and Wildlife

Under FGC Sections 1600–1616, CDFW regulates activities that would substantially divert, obstruct the natural flow of, or substantially change rivers, streams, and lakes. The jurisdictional limits are defined in Section 1602 as the "bed, channel, or bank of any river, stream, or lake." In practice, CDFW may exert authority over activities near such features that adversely affect fish and wildlife resources associated with them. Activities that would "deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" are prohibited by CDFW unless a streambed alteration agreement is issued.

Local Plans and Policies

Ventura County General Plan

Goal COS-1 of the Conservation and Open Space Element of the "Ventura County 2040 General Plan" (Ventura County, 2020) is, "To identify, preserve, protect, and restore sensitive biological resources, including federal and state-designated endangered, threatened, rare, or candidate species and their supporting habitats; wetland and riparian habitats; coastal habitats; habitat connectivity and wildlife corridors; and habitats and species identified as "locally important" by the County." General Plan policies associated with biological resources potentially applicable to the Project are identified in Section 3.13 of this EIR.

Ventura County Tree Protection Ordinance

The Ventura County Tree Protection Ordinance applies to the pruning (beyond specified limits), removal, trenching, excavation, or other encroachment into the protected zone (5 feet outside the canopy's edge and a minimum of 15 feet from the trunk) of protected trees in unincorporated areas (land outside of cities). Alterations or removal of protected trees are subject to permits as defined in the Ventura County Coastal Zoning Ordinance (CZO) and the Ventura County Non-Coastal Zoning Ordinance (NCZO). In the non-coastal zone, protected trees include all oaks and sycamores 9.5 inches in circumference or larger (measured at least 4.5 feet above ground), trees of any species with a historical designation, trees of any species 90 inches in circumference or larger, and most 9.5-inch in circumference or larger native trees that are located in the Scenic Resources Protection Zone. Before any protected tree is trimmed, removed, or encroached upon, property owners must contact the Planning Division to ensure these activities are conducted in compliance with the Tree Protection Ordinance and obtain a permit for tree modification or removal when applicable.

Ventura County Regulations for Development in Habitat Connectivity and Wildlife Corridors

On March 12, 2019, the Ventura County Board of Supervisors adopted Ordinances 4537 and on March 19, 2019, the Board adopted Ordinance 4539, collectively establishing regulations for development within habitat connectivity and wildlife corridors and amending the zoning classifications of lots within designated corridors. Ordinance 4539 amended the zoning classifications of lots within the Habitat Connectivity and Wildlife Corridors Overlay Zone to including "/HCWC" in the zoning classification indicating their inclusion in the overlay zone.

The general purposes of the Habitat Connectivity and Wildlife Corridors overlay zone as described in Ventura County zoning code Section 8104-7.7, "Habitat Connectivity and Wildlife Corridors Overlay Zone," are to preserve functional connectivity for wildlife and vegetation throughout the overlay zone by minimizing direct and indirect barriers, minimizing loss of vegetation and habitat fragmentation and minimizing impacts to those areas that are narrow, impacted or otherwise tenuous with respect to wildlife movement. More specifically, the purposes of the Habitat Connectivity and Wildlife Corridors overlay zone include the following:

a. Minimize the indirect impacts to wildlife created by outdoor lighting, such as disorientation of nocturnal species and the disruption of mating, feeding, migrating, and the predator-prey balance.
b. Preserve the functional connectivity and habitat quality of surface water features, due to the vital role they play in providing refuge and resources for wildlife.
c. Protect and enhance wildlife crossing structures to help facilitate safe wildlife passage.
d. Minimize the introduction of invasive plants, which can increase fire risk, reduce water availability, accelerate erosion and flooding, and diminish biodiversity within an ecosystem.
e. Minimize wildlife impermeable fencing, which can create barriers to food and water, shelter, and breeding access to unrelated members of the same species needed to maintain genetic diversity.

County zoning code sections 8104-7.7 and 8109-4.8 provide specific provisions and requirements for lighting and allows for deviations for surface mining operations, requiring that outdoor lighting utilized for surface mining operations, "may deviate from the [otherwise applicable] standards and requirements and shall be specified in a lighting plan approved by the County during the discretionary

permitting process for the subject facility or operation. All such lighting shall be designed and operated to minimize impacts on wildlife passage to the extent feasible." The code also contains requirements associated with the installation of fencing, including restrictions on installation of wildlife impermeable fencing, and development or activities affecting surface waters and native vegetation. Discretionary permit applicants are required to submit information to the County addressing the proposed development's consistency with the code requirements.

3.5.2 Impact Analysis

3.5.2.1 Significance Thresholds

The analysis of biological resources impacts considers criteria identified in the CEQA Guidelines Appendix G Environmental Checklist for Biological Resources and uses the following significance thresholds from the County's Initial Study Assessment Guidelines (ISAG).

Special-Status Species

The following types of impacts to plant and animal species or their habitats are considered potentially significant:

- Loss of one or more individuals, or the occupied habitat or USFS-designated Critical Habitat for, a species listed as Endangered, Threatened or Rare under the FESA or CESA, a species under review as a candidate for listing under FESA or CESA, or a California Fully Protected Species listed in the California Fish and Game Code.
- Elimination or potential to eliminate one or more element occurrences[5] of a special-status species[6] not otherwise listed under the federal Endangered Species Act or California Endangered Species Act, or as a Candidate Species or California Fully Protected Species.
- Impacts that would threaten the viability of a habitat that sustains a population of a special-status wildlife species.
- Impacts that would restrict the reproductive capacity of a special-status species.
- Take of birds protected under the California Fish and Game Code and the Federal Migratory Bird Treaty Act.
- Increases in noise and/or nighttime lighting to a level above ambient levels that would adversely affect a special status species.
- Increases in human access, predation or competition from domestic animals, pests or exotic species, or other indirect impacts, to levels that would adversely affect special status species.

[5] Element Occurrence: defined as a biological unit that has practical conservation value for a species or ecological community and sustains or contributes to the survival of a species or ecological community. For plants, a population or group of populations found within 0.25 miles and not separated by significant habitat discontinuities. For animals with limited mobility, a breeding population. For mobile animals, the location of breeding areas or parts of the range of a mobile population that contribute to the persistence of that population, such as roosts, overwintering areas, migration areas and staging areas.

[6] Special Status Species: defined as species listed as Endangered, Threatened, or Rare under the federal or state Endangered Species Acts, Candidate Species, California Fully Protected Species, and, pursuant to CEQA Guidelines Section 15380(d), all other species considered by the California Department of Fish and Wildlife to be those species of greatest conservation concern, and locally important species as defined by the Ventura County General Plan. Includes plant species with a California Native Plant Society Rank of 1 (plants presumed extinct in California, or rare, threatened, or endangered in California and elsewhere), 2 (plants that are rare, threatened, or endangered in California but more common elsewhere) or 4 (plants of limited distribution in California).

- Impacts severe enough to substantially reduce the habitat of a wildlife species or cause a wildlife population to decline substantially or drop below self-sustaining levels, pursuant to Section 15065 of the CEQA Guidelines, Mandatory Findings of Significance.

Sensitive Plant Communities

The following types of impacts to sensitive plant communities[7] are considered potentially significant:

- Construction, grading, clearing, or other activities that would temporarily or permanently remove sensitive plant communities. Temporary impacts to sensitive plant communities would be considered significant unless the sensitive plant community is restored once the temporary impact is complete.
- Indirect impacts resulting from Project operation at levels that would degrade the health of a sensitive plant community.

Waters and Wetlands

The following types of impacts to waters and wetlands[8] are considered potentially significant:

- Any of the following activities that would adversely affect waters and wetlands: removal of vegetation, grading, obstruction or diversion of water flow, change in velocity, siltation, volume of flow, or runoff rate, placement of fill, placement of structures, construction of a road crossing, placement of culverts or other underground piping, and/or any disturbance of the substratum.
- Disruptions to wetland or riparian plant communities that would isolate or substantially interrupt contiguous habitats, block seed dispersal routes, or increase vulnerability of wetland species to exotic weed invasion or local extirpation.
- Interference with ongoing maintenance of hydrological conditions in a water or wetland.
- Inadequate buffer for protecting the functions and values of existing waters or wetlands. Ventura County General Plan Policy 1.5.2-4 requires a minimum buffer of 100 feet from significant wetland habitat.

Habitat Connectivity

A project would impact habitat connectivity if it would: (a) remove habitat within a wildlife movement corridor[9]; (b) isolate habitat; (c) construct or create barriers that impede fish and/or wildlife movement, migration or long-term connectivity; or (d) intimidate fish or wildlife via the introduction of noise, light, development or increased human presence. The following types of impacts to habitat connectivity are considered potentially significant:

[7] Sensitive Plant Communities: defined as plant communities that are ranked as G1 or S1 (critically imperiled globally or sub-nationally [state]), G2 or S2 (imperiled), or G3 or S3 (vulnerable to extirpation or extinction) through NatureServe's Natural Heritage Program and the California Natural Diversity Database; and oak woodlands, pursuant to Section 21083.4 of the California Public Resources Code.

[8] Waters and Wetlands: defined as areas that meet the definition of waters, wetlands or streambeds used by one or more of the following agencies: U.S. Army Corps of Engineers (Section 404 of the Clean Water Act), CDFW (California Fish and Wildlife Code, Section 1602), the California Coastal Commission (in Coastal Zone only, Section 30121 of the California Coastal Act), or Ventura County (as defined in the Ventura County General Plan).

[9] Wildlife Movement Corridor: defined as a space identifiable by species using it, which facilitates the movement of animals and plants over time between two or more patches of otherwise disjunct habitat. Examples include riparian pathways along streams and creeks and other remaining pathways of natural vegetation between developed areas that are frequented by wildlife moving between habitats.

- A habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be severed, substantially interfered with, or potentially blocked.
- Wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction would be prevented or substantially interfered with.
- Wildlife would be forced to use routes that endanger their survival.
- Lighting, noise, domestic animals, or other indirect impacts that could hinder or discourage fish and/or wildlife movement within habitat connectivity feature (e.g., a linkage, corridor, chokepoint or stepping stone) would be introduced.
- The width of linkage, corridor or chokepoint would be reduced to less than the sufficient width for movement of the target species (the species relying upon the connectivity feature). The adequacy of the width shall be based on the biological information for the target species; the quality of the habitat within and adjacent to the linkage, corridor, or chokepoint; topography; and adjacent land uses.
- For wildlife relying on visual cues for movement, elimination of visual cues that provide visual continuity (i.e., lines-of-sight) across highly constrained wildlife corridors, such as highway crossing structures or stepping stones.

3.5.2.2 Project-Specific Impacts

The determination of impacts on biological resources is based on a review of the existing mining activities and baseline conditions, activities that would be associated with the proposed expansion of the mine, processing operations, and reclamation activities, use of GIS spatial data, comparisons of maps depicting the Project boundaries, and maps of onsite and adjacent biological resources. The analysis includes an assessment of direct and indirect impacts to biological resources. Direct impacts are those associated with Project-related physical disturbance that would result in loss of vegetation communities, wildlife habitats or wildlife corridors, loss of waters or wetlands, and loss of individuals of special-status plant or wildlife species or those that are protected by federal, state, and local regulations, permits, and policies pertaining to biological resources and wetlands. Indirect impacts are those that would be related to operational activities, including increases in noise and vibration, air pollutants and fugitive dust emissions, vehicular traffic, artificial lighting, and human presence. Additional indirect impacts considered in the analysis include potential habitat degradation in adjacent areas due to invasive or non-native plant species.

Special-Status Species

Impact BIO-1: Project ground disturbance and mining within proposed expansion areas could directly or indirectly impact nesting birds protected by the MBTA and the California Fish and Game Code Section 3503. (Less than Significant with Mitigation)

New areas of ground disturbance or other activities associated with mining within proposed expansion area during the bird nesting/breeding season, generally January through September, the Project could adversely affect nesting birds if active nests are present within or adjacent to such activities. Areas within and adjacent to the Project site provide suitable habitat for nesting birds protected in accordance with the MTBA (16 U.S.C. 704) and California Fish and Game Code Section 3503. Project activities could result in direct adverse impacts to nesting birds due to disturbance or removal of vegetation, which could result in the mortality of nesting birds or their eggs and/or young, if present. In addition, indirect impacts to nesting birds could occur during Project-related activities as a result of elevated noise levels, vibrations associated with blasting and excavation equipment, and nighttime operational lighting.

These factors could result in nest abandonment and morality of eggs or young, if present within up to approximately 300 feet for passerines and up to 500 feet for raptors from proposed mine expansion areas. Such impacts would be significant. Mitigation measure MM BIO-1 requires the Permittee to avoid new disturbance during the nesting season and/or conduct pre-disturbance surveys within and adjacent to new disturbance areas and implement measures to avoid direct and indirect impacts to protected nesting bird species if present. Direct and indirect impacts to protected nesting birds would be reduced to less than significant with implementation of mitigation measure MM BIO-1.

Mitigation for Impact BIO-1:

MM BIO-1(a) Pre-Disturbance Nesting Bird Surveys: *The Permittee shall prevent impacts to birds protected under the Migratory Bird Treaty Act and shall comply with the requirements specified herein.*

Vegetation clearing or ground disturbing activities in new areas of the mine expansion shall be conducted outside of the breeding and nesting season (February 1 through September 1) to the extent practicable. If the initial vegetation clearing for the Project or subsequent incremental expansion of vegetation clearing or ground disturbance into previously undisturbed areas will be conducted during the breeding and nesting season (February 1 through September 1), the County-approved biologist shall conduct a pre-disturbance breeding and nesting bird survey 30 days prior to the vegetation clearing or ground disturbance. The survey shall include the area planned for vegetation removal or ground disturbance plus a 300-foot buffer around the area where the activities will be conducted. The County-approved biologist shall continue to survey the area planned for vegetation removal or ground disturbance and the 300-foot buffer on a weekly basis, with the last survey completed no more than 3 days prior to the initiation of the vegetation clearing or ground disturbance. If occupied (active) nests are found, the County-approved biologist shall establish a no-work buffer around the nests. Vegetation clearing and ground disturbing activities shall be prohibited within the no-work nest buffers. Vegetation clearing and ground disturbing activities may re-commence in the no-work buffer when the nest is vacated (juveniles have fledged) provided that there is no evidence of a second attempt at nesting, or if the nest attempt has failed, as determined by the County-approved biologist. Vegetation clearing and ground disturbing activities shall be allowed to continue in areas located outside of no-work nest buffers. Pursuant to the recommendations of the California Department of Fish and Wildlife, the required no-work nest buffer is 300 feet for most birds and 500 feet for raptors. This setback can be increased to protect nesting birds and habitat occupied by a listed species or decreased based on the recommendation of the County-approved biologist and approval from the Planning Division. Within 30 days of the completion of the pre-disturbance nesting bird surveys for each incremental vegetation clearing or ground disturbing activities in new areas, the County-approved biologist shall submit a pre-disturbance survey report to the County Planning Division that describes the dates of the surveys, methods, and results of the surveys. The reports shall also include maps showing the locations of where nesting birds were observed and the associated no-work buffers.

MM BIO-1(b) Nesting Bird Monitoring: *The Permittee shall prevent impacts to birds protected under the Migratory Bird Treaty Act and shall comply with the requirements specified herein.*

If vegetation clearing is being conducted during the nesting bird season (February 1 to September 1), then after the completion of the pre-disturbance surveys required by MM BIO-1(a), the County-approved biologist shall continue nesting bird surveys on a weekly basis until vegetation clearing is completed. If occupied (active) nests are found, the County-approved biologist shall establish a no-work buffers around the nests. Mining activities shall be prohibited within the no-work nest buffers until the nest is vacated (juveniles have fledged) provided there is no evidence of a second attempt at nesting, or if the nest attempt has failed, as

determined by the County-approved biologist. The required no-work nest buffer is 300 feet for most birds and 500 feet for raptors. This setback shall be increased if deemed necessary to protect nesting birds and habitat occupied by a listed species based on the recommendation of the County-approved biologist and approval from the Planning Division. This setback may be decreased based on the recommendation of the County-approved biologist and approval from the Planning Division if evidence demonstrates that the decreased setback would provide sufficient protection of nesting birds and listed species.

The County-approved biologist shall submit monthly nesting bird monitoring memoranda to the County Planning Division throughout the duration of vegetation clearing during the nesting bird season when monitoring is being conducted. The memoranda shall include the dates of the weekly surveys/monitoring, methods, and results. The memoranda shall also include maps showing the locations of where nesting birds were observed and the associated no-work buffers.

At the end of each nesting bird survey and monitoring season, the County-approved biologist shall prepare and submit a summary of the nesting bird pre-disturbance surveys and monitoring. The summary shall be included in an Annual Mitigation and Monitoring Report (see MM BIO-1(c)). The pre-disturbance survey report and monthly monitoring memoranda shall be included as appendices to the Annual Mitigation and Monitoring Report.

MM BIO-1(c) Prepare an Annual Biological Resources Mitigation and Monitoring Report: *At the end of each year when vegetation removal activities occur, a County-approved biologist shall prepare an annual Biological Resources Mitigation and Monitoring Report documenting the results of all survey, monitoring, and mitigation activities required by biological resources-related mitigation measures for the Project. The report shall include summaries of the activities conducted during the year to protect nesting birds, sensitive plant communities, special-status plant and wildlife species, jurisdictional resources, protected trees, and wildlife corridors, as applicable. Each annual Biological Resources Mitigation and Monitoring Report shall be submitted to the Planning Division for review by January 31 of the year following the survey and monitoring year.*

MM BIO-1(d) Project Documentation and Reporting to the County Planning Division: *The Permittee shall submit all reports required by mitigation measures for the Project to the County Planning Division according to the dates or schedules described in each of the mitigation measures. The Permittee shall also provide copies of all permits issued by the regulatory agencies and signed contracts (financials redacted) with County-approved biologists for services required by the mitigation measures. The Planning Division shall review the reports submitted prior to Project initiation, permits, and contracts with County-approved biologists for adequacy prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance. The County's review, completion of actionable items, and approval of the Permittee's submittal of each report, permit, and contract with County-approved biologists required by the biological mitigation measures (MM BIO-1 through MM BIO-7) shall be completed within 30 days of submittal by the Permittee. The Planning Division maintains copies of the signed contracts with County-approved biologists for the Project, Survey Reports, Permits, and the annual Biological Resources Mitigation and Monitoring Reports in the Project file.*

Impact BIO-2: Project disturbance within proposed expansion areas would result in the loss of special-status vegetation communities. (Less than Significant with Mitigation)

The Project would result in direct impacts to existing native and non-native vegetation communities from clearing of vegetation for the expanded mining operations. Table 3.5-8, "Vegetation Communities and

Impacted Areas," lists the vegetation communities and their status, the acres that would be impacted by the Project, and the percent of the Project planned disturbance area occupied by each community. Figure 3.5-1 shows the distribution of existing vegetation and developed area cover types within the planned disturbance area. Implementation of the Project would directly disturb a total of 166.98 acres, including 97.66 acres of vegetated areas encompassing 74.42 acres of native plant communities and 23.24 acres of non-native plant communities. Native vegetation communities cover approximately 44 percent of the Project site and non-native plant communities cover approximately 14 percent. The remainder of the Project disturbance areas include the 69.32 acres of previously developed and disturbed areas, which cover approximately 42 percent of the Project site. The dominant native plant community within the Project site is Laurel Sumac Scrub (71.02 acres), with a patchy distribution of five other native plant communities, including California Sagebrush Scrub (0.14 acre), Giant Wild Rye Grasslands (1.50 acres), Cattail Marsh (0.19 acre), Mountain Mahogany Scrub (0.23 acre), and Disturbed Chamise/Ceanothus Chaparral (1.34 acres) also located in the Project site. The dominant non-native plant communities are Non-native Annual Grasslands (11.50 acres) and Agriculture (10.21 acres) with lesser amounts of Russian Thistle Fields (1.52 acres) and Ornamentals (0.01 acre).

Table 3.5-8. Vegetation Communities and Impacted Areas

Plant Community	Status	Acres Impacted by Project	Percent of Total Project Area
Laurel Sumac Scrub	G4, S4, LIC	71.02	42 %
California Sagebrush Scrub	G5, S5, LIC	0.14	< 1 %
Giant Wild Rye Grasslands	G3, S3, LIC	1.50	< 1 % %
Cattail Marsh	G5, S5	0.19	< 1 %
Mountain Mahogany Scrub	G5, S4, LIC	0.23	< 1 %
Disturbed Chamise/Ceanothus Chaparral	G5, S5, LIC	1.34	< 1 %%
Subtotal Native Plant Communities		**74.42**	**44 %**
Russian Thistle Fields	N/A	1.52	< 1 %
Non-Native Annual Grassland	N/A	11.50	7 %
Agriculture	N/A	10.21	6 %
Ornamental	N/A	0.01	< 1 %
Subtotal Non-native Plant Communities		**23.24**	**14 %**
Developed		0.29	< 1 %
Previously Cleared Land		69.03	41 %
Subtotal Disturbed, Developed, Pond		**69.32**	**42 %**
Total		**166.98**	**100 %**

Source: BRC, 2017.

Notes:

California Department of Fish and Wildlife (CDFW)/NatureServe Rank
- G1 or S1—Critically Imperiled Globally or Subnationally (state)
- G2 or S2—Imperiled Globally or Subnationally (state)
- G3 or S3—Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4 or S4 – Apparently Secure
- G5 or S5 - Secure

SC: CDFW Recognized Sensitive Community

LIC – Ventura County Locally Important Community

Five of the native vegetation communities that would be impacted within the Project site are considered locally important vegetation communities because of their potential to support special-status plant and/or wildlife species. As noted in Table 3.5-8, these include Laurel Sumac Scrub, California Sagebrush Scrub, Giant Wild Rye Grasslands, Mountain Mahogany Scrub, and Disturbed Chamise/Ceanothus Chaparral. Giant Wild Rye Grassland also holds the NatureServe rankings of G3 and S3, which correspond to communities that are vulnerable to extirpation or extinction Globally or Subnationally (State). The Project would result in the removal of 74.23 acres of these locally important vegetation communities and the associated ecosystem functions, including wildlife habitat, erosion control on steep slopes, creation of soil organic matter, and providing specialized niches for special-status plant species. Project-related disturbance would result in a substantial loss of native vegetation, and would adversely affect the natural biological functions of these vegetation communities.

Mining in the Project site would occur over a period of 30 years and the removal of the existing vegetation would occur incrementally over that period as mining expands within the site. Incremental vegetation removal would allow common and sensitive wildlife species to continue to use the existing vegetation communities in undisturbed portions of the Project site until the vegetation has been removed. The reclamation plan for the mine must conform with the requirements of Section 8107-9 of the County Non-Coastal Zoning Ordinance and the California Surface Mining and Reclamation Act (PRC Section 2710 et. Seq.), which require the final landform to be revegetated for soil stabilization and compatible with the topography and general environment of the surrounding property. The proposed amended Reclamation Plan requires revegetation of the mined areas using plant species currently present in the Project site and adjacent areas. Table 3.5-9, "Proposed Native Plant and Grassland Reclamation Seed Mixes," lists the native upland scrub/grassland seed mix that would be applied to the reclaimed benches. Native topsoil would be salvaged and spread on the benches prior to seeding. Reclamation of the flatter areas of the mine plan would include planting with grassland species for agricultural use (Table 3.5-9). Reclamation would occur incrementally so habitat would be replaced over the 30-year mining period and at the final reclamation stage. The incremental reclamation and revegetation would reduce the impacts associated with the temporal loss of upland habitat for common and special status species. Following the completion of reclamation and revegetation and when the planted areas meet the revegetation performance standards required by the reclamation plan, the Project site would support more acres of native plant communities and grasslands than is present under existing conditions. All areas currently vegetated with native and non-native plant communities (97.66 acres) and the unvegetated disturbed and developed areas (69.32 acres) would be revegetated with the upland scrub/grassland and agricultural grassland seed mixes, resulting in 166.98 acres of reclaimed and revegetated land.

Table 3.5-9. Native Plant and Grassland Reclamation Seed Mixes

Botanical Name	Common Name
Upland Scrub/Grassland Seed Mix	
Artemisia californica	California sagebrush
Salvia mellifera	Black sage
Salvia leucophylla	Purple sage
Encelia californica	California brittlebush
Mimulus aurantiacus	Sticky monkeyflower
Acmispon glaber	Deerweed
Eriogonum fasciculatum	California buckwheat
Adenostoma fasciculatum	Chamise
Cercocarpus betuloides	Mountain Mahogany
Malosma laurina	Laurel sumac

Botanical Name	Common Name
Elymus condensatus	Giant Wild Rye
Vulpia microstachys	Small fescue
Eriophyllum confertiflorum	Golden yarrow
Baccharis pilularis	Coyote brush
Vulpia myuros	Zorro annual fescue
Agricultural Grassland Seed Mix	
Bromus carinatus	California brome
Elymus glaucus	Blue wildrye
Festuca idahoensis	Idaho fescue
Festuca microstachys	Three-weeks fescue
Festuca rubra	Red Fescue
Poa secunda	One-sided bluegrass
Trifolium wildenovii	Tomcat clover

Once mining and reclamation are complete, the proposed amended Reclamation Plan would result in more acres of native vegetation communities and non-native grasslands than currently exist in the Project site. The biological functions and values of the revegetated areas are expected to be less than those that currently exist in the Project site until the revegetated communities mature. Mining would permanently change the topography of the landscape where the existing vegetation communities occur, but the benches would be revegetated with native plants characteristic of the common and sensitive vegetation communities on the site and in adjacent areas under existing conditions. Initially following revegetation, the plant diversity on the revegetated benches is expected to be less than what currently exists in undisturbed areas of the site, but recruitment of other native plant species is expected to occur naturally over time. Whether the species diversity would achieve the level that currently exists cannot be predicted with certainty, however monitoring of the plant cover, species diversity, and species richness in the revegetated areas would be conducted according to the requirements of the reclamation plan.

The growth of the plant species in the revegetated areas is expected to achieve the height and density required by the Project's proposed revegetation plan, which includes 75 percent cover by the third year following revegetation. The loss of the common and sensitive vegetation communities would occur incrementally over the 30-year period of mining and the revegetation would also be conducted incrementally over that period so impacts associated with the temporal loss of vegetation would be reduced. Although reclamation would revegetate the mined benches with native plant communities following the completion of mining, the temporal loss of native vegetation and the associated biological functions between the time when the vegetation is cleared and when revegetated areas restore biological functions constitutes a potentially significant impact on common and sensitive vegetation communities. Additionally, inadvertent disturbance outside of the Project's planned disturbance area would have the potential to adversely affect common and sensitive vegetation communities in those adjacent areas, and such impacts are also considered potentially significant.

Implementation of mitigation measures MM BIO-2(a) and MM BIO-2(b) would ensure that common and sensitive vegetation communities located outside of the Project boundary would not be impacted by the Project, and implementation of mitigation measure MM BIO-2(c) requires the Permittee to permanently preserve lands that support the same vegetation communities as those that would be impacted by the Project. With revegetation of the Project site in accordance with the proposed amended Reclamation Plan and with implementation of MM BIO-2(a), MM BIO-2(b), and MM BIO-2(c), Project impacts to sensitive upland scrub vegetation communities would be less than significant.

Mitigation for Impact BIO-2:

MM BIO-2(a) Demarcate Work Area Boundary: *The Permittee shall prevent impacts to unprotected common and sensitive vegetation communities in areas adjacent to the approved mining area boundary. Prior to the initial vegetation clearing activities or ground disturbance in new areas, the approved mining/reclamation area boundary shall be marked with stakes or other highly visible materials that will be clearly visible to equipment operators and biological monitors during all vegetation clearing or ground disturbing activities. All equipment operators and personnel shall be instructed about the restrictions the boundary markers represent and that vegetation removal or other disturbance outside of the boundary markers shall be avoided.*

If installation of the boundary markers is scheduled to occur during the nesting bird season (February 1 – September 1), then MM BIO-1 shall be implemented.

MM-BIO-2(b) Biological Monitoring During Vegetation Clearing and Boundary Demarcation – *To avoid direct impacts to vegetation located outside of the approved mining area boundary and to avoid direct mortality of wildlife, a County-approved biological monitor shall be on site prior to and during the initial vegetation clearing and boundary demarcation and each subsequent vegetation and habitat disturbing activities in new areas to ensure vegetation impacts do not occur outside of the approved mining area boundary and to move special status wildlife species and other wildlife of low mobility that would be injured or killed out of harm's way. Salvaged wildlife of low mobility shall be removed and placed onto adjacent and suitable (i.e., species appropriate) habitat that will not be impacted by project-related activities. To avoid creating habitat islands during clearing and grubbing activities where wildlife may take refuge and later be killed by heavy equipment, the qualified biological monitor shall ensure the clearing and grubbing of vegetation within a given area of expansion is conducted from the edge of existing disturbed areas working outwards towards adjacent habitat where wildlife may safely escape. If special-status plant species locations have been demarcated or flagged for future salvage, the biological monitor shall ensure the vegetation within these areas is not disturbed until the salvage has been completed. The biological monitor shall record the daily activities conducted during boundary demarcation and vegetation clearing activities on monitoring logs. At the completion of the boundary demarcation and vegetation clearing or ground disturbing in new areas, the Permittee shall provide the Planning Division with a Vegetation Clearing Monitoring Report prepared by the County-approved biological monitor thirty (30) days after completion of the boundary demarcation and vegetation clearing or ground disturbing activities in new areas as required by MM BIO-1(d), The Vegetation Clearing Monitoring Report shall be included as an appendix to the Annual Biological Resources Mitigation and Monitoring Report required by MM BIO-1(c).*

MM BIO-2(c) Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan*: Prior to new vegetation removal or new ground disturbing activities on the Project site for expansion of mining within the approved mine area boundary, the Permittee shall prepare an Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan for review by the Planning Division. At its discretion, the Planning Division may coordinate with the CDFW for CDFW concurrence with the plan prior to Planning Division approval. If the County Planning Division coordinates with CDFW regarding concurrence with the plan, then subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW should respond within 30 days of receiving the plan for review. No disturbance shall occur until written approval of the Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan is provided by the Planning Division, and any pre-disturbance mitigation elements of the plan are implemented. The Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan shall provide for the protection of sensitive upland scrub communities and special-status*

plant species on lands owned or otherwise controlled by the Permittee or its designee, if feasible, that is located adjacent to or in close proximity to the Project site. Protection of sensitive upland scrub vegetation communities and special-status plant species shall be at a minimum of a 1:1 ratio for the 74.23 acres of sensitive upland scrub vegetation communities that will be impacted by the Project. The protected lands shall be on a site where no future disturbance will occur, and such site ("subject property") shall be secured through a conservation easement as specified herein. The plan shall include measures to ensure the site is protected in perpetuity and managed as open space to preserve the sensitive upland scrub communities and special-status plant species in perpetuity. If opportunities for enhancing or restoring habitat exist on the preserved lands, then the plan shall include a description of the methods required to implement the habitat restoration and/or enhancement of upland scrub communities and special-status plant species and the associated monitoring and maintenance that will be required. The requirements of this mitigation measure shall be combined with the requirements of MM BIO-3(h), which incorporates the results of focused rare plant surveys on the proposed mine expansion lands and adjacent lands owned by the Permittee (MM BIO-3(a) and MM BIO-3(b)) into the Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan if properties owned or otherwise controlled by the Permittee will be proposed as mitigation. If the adjacent Permittee-owned lands do not support the upland scrub communities or special-status plant species that would be impacted by the Project and if the adjacent Permittee-owned lands do not provide sufficient restoration opportunities for the special-status plants, then the mitigation and monitoring plan shall include an appropriate offsite alternative for mitigation. At a minimum, the Upland Scrub and Special-Status Plant Species Protection Plan shall include the following:

1. *Description of the impacts and level of impact (e.g., acres of habitat or individual plants impacted)*
2. *The location and adequacy of the mitigation site(s) in protected/preserved areas near the Project site or at a Planning Division- approved location if an adjacent preservation site is not feasible.*
3. *Methods for harvesting seeds or salvaging and transplantation of individual plants to be impacted.*
4. *Instructions for depositing propagules and funding the deposition of sensitive plant propagules collected from the Project site into a Documented Conservation Seed Collection at the Santa Barbara Botanic Garden, California Botanic Garden, or other botanic garden who is part of California Plant Rescue. https://www.caplantrescue.org/about-us.html*
5. *Measures for propagating the special-status plants that would be impacted (from seed or cuttings), including the locations of propagule sources, or transferring living specimens from the salvage site to the restoration site.*
6. *Scientific names of plants being used for restoration and enhancement, if applicable, including Genus and species and subspecies/variety.*
7. *Site preparation procedures for the restoration and enhancement with native plant species (i.e., container or seed), if applicable.*
8. *An irrigation and maintenance schedule if restoration and/or enhancement is conducted.*
9. *Identification of success criteria and performance standards by which to measure the success of the restoration and enhancement areas, if applicable.*
10. *Identification of appropriate reference sites if restoration and/or enhancement are implemented.*
11. *Measures to exclude unauthorized entry into the preservation areas.*
12. *Identification of responsible parties.*
13. *Adaptive management strategies.*
14. *Measures to exclude unauthorized entry into the mitigation areas.*

15. *Contingency measures to implement in the event that mitigation efforts are not successful.*
16. *Identification of responsible parties.*
17. *A five-year maintenance and monitoring program, including annual monitoring reports that shall be prepared and submitted to the Planning Division for review.*
18. *Measures for long-term maintenance and monitoring.*
19. *Additional provisions as may be required by CDFW.*

The Permittee shall record a conservation easement with the deed to the preserved property that includes the land use restrictions and requirements stated herein that are applicable to the portion of property where sensitive upland scrub vegetation communities and special-status plant species are preserved pursuant to this measure and where no future disturbance will be permitted. The Permittee shall record the conservation easement to provide notification of the land use restrictions and requirements of this measure. The conservation easement must include a map and legal description of the areas that are subject to the conservation easement and must include provisions for the long-term maintenance of the areas, if needed. The following shall be prohibited within the areas that are subject to the conservation easement:

1. *removal, mining, excavation, or disturbance of the soil or surface rocks or decaying material such as fallen trees;*
2. *dumping, filling, storing, disposal, burying, or stockpiling of any natural or manmade materials;*
3. *erection of buildings or structures of any kind, including, but not limited to, fencing, corrals, advertising signs, antennas, and light poles;*
4. *placement of pavements, concrete, asphalt and similar impervious materials, laying of decomposed granite for pathways, or setting of stones, paving bricks, or timbers;*
5. *operation of dune buggies, motorcycles, all-terrain vehicles, bicycles, mowers, tractors, or any other types of motorized or non-motorized vehicles or equipment;*
6. *removal or alteration of native trees or plants, through such activities as irrigating, mowing, draining, plowing, tilling or disking (except as necessary for controlled burns for fuel reduction, as regulated by the Ventura County Fire Protection District), removal of non-native species and native habitat restoration or maintenance (which must be under the direction of a qualified biologist);*
7. *application of insecticides or herbicides, poisons, or fertilizers;*
8. *grazing or keeping of cattle, sheep, horses or other livestock, or pet animals;*
9. *agricultural activity of any kind including the harvesting of native materials for commercial purposes;*
10. *planting, introduction, or dispersal of non-native plant or animal species;*
11. *hunting or trapping, except live trapping for purposes of scientific study or removal of non-native species;*
12. *manipulating, impounding or altering any natural watercourse, body of water or water circulation on the [indicate habitat type to be protected], and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters;*
13. *light pollution (e.g., lighting that is directed towards the preserved sensitive upland scrub communities); and*
14. *other activities that damage the existing flora, fauna or hydrologic conditions.*

The conservation easement must be recorded with the Office of County Recorder with the deed for the subject property. The Permittee shall submit a copy of the conservation easement or another mechanism for permanent protection to the Planning Division.

Prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance, the Permittee shall submit a draft of the conservation easement, with all the required attachments, to the Planning Division for review and conceptual approval. Prior to additional vegetation clearing or ground disturbance on the Project site, the conservation easement shall be recorded on the property title.

The Planning Division maintains a copy of the recorded conservation easement in the Project file. The Permittee shall submit all future plans to the Planning Division for review and approval to ensure that future projects comply with the conservation easement. The Planning Division has the authority to inspect the property subject to the conservation easement to ensure that it is maintained as required. If the Planning Division confirms that the restricted area has not been maintained as required, enforcement actions may be enacted in accordance with § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

Impact BIO-3: Project disturbance within proposed expansion areas would result in the loss of special-status plants. (Less than Significant with Mitigation)

The Project would result in vegetation removal and ground disturbance within the proposed mine expansion area. These activities would result in the loss of individual special-status plants that are known to be present or have the potential to be present within the expansion areas. The following special-status plant species were documented within the Project site during field surveys conducted in 2010 and 2016 (BRC, 2017) and/or in 2018 (ESA, 2018) and are therefore considered present within the Project site:

- Conejo buckwheat,
- Blochman's dudleya,
- club haired mariposa-lily,
- Catalina mariposa-lily,
- Conejo dudleya,
- Verity's dudleya, and
- Southern California black walnut.

In addition, although not observed during focused surveys conducted in 2018 (ESA, 2018), based on the presence of suitable habitat and documented occurrences in the region, the following plant species are considered to have a high or moderate potential to occur within the Project site:

- Plummer's mariposa lily (high potential)
- Marcescent dudleya (moderate potential)
- White-veined monardella (moderate potential)
- Ojai navarretia (moderate potential),
- Lyon's pentachaeta (moderate potential) and
- woven-spored lichen (moderate potential) (BRC, 2017).

The direct removal or other disturbance to special-status plants resulting from Project-related vegetation removal and ground disturbance is considered significant. Mitigation measures MM BIO-

3(a) and MM BIO-3(b) require the Permittee to conduct baseline surveys for special-status plants within the proposed mine expansion areas and on adjacent lands owned by the Permittee. MM BIO-3(c) requires pre-disturbance surveys prior to the initial vegetation removal and each subsequent vegetation clearing or ground disturbing activities in new areas. MM BIO-3(d), MM BIO-3(e), and MM BIO-3(f) provide for restrictions on the locations of staging areas, prohibitions on the use of herbicides, and the implementation of a Worker Environmental Awareness Program, respectively. MM BIO-3(g) requires the Permittee to apply for an Incidental Take Permit from CDFW if state-listed plants are impacted by the Project and MM BIO-3(h) requires the preparation and implementation of a Special-Status Plant Mitigation and Monitoring Plan that will replace impacted species at a minimum 1:1 ratio in areas that would not be disturbed by subsequent mining or reclamation activities. Implementation of mitigation measures MM BIO-3(a) through MM BIO-3(h) would reduce potential impacts to special-status plant species to less than significant.

Fugitive dust created during Project activities could have potentially significant indirect impacts on common and special-status plant species. Individual plants located in or near mining areas and adjacent to roads within or adjacent to the mining expansion area may be indirectly impacted by dust deposited on the plants. Deposition of dust on the plants could affect plants by blocking stomata and stigmatic surfaces and dust accumulating on leaves could potentially reduce photosynthesis. Dust accumulations on flowers could interfere with pollination and development of fertile seeds. The existing mining and processing operations at the site are subject to VCAPCD Permit to Operate (PTO) Number 00489, which provides fugitive dust control requirements for various processing and operations at the site (DEIR Section 3.4.1.7). The PTO includes numerous fugitive dust control-related measures, including watering and/or treating road and work areas to control fugitive dust. Operations under the Project would be required to continue to comply with required fugitive dust control-related measures as specified in the existing PTO as well as any additional fugitive dust control measures imposed in the future through the VCAPCD permitting requirements. Continued implementation of the existing measures to control fugitive dust would reduce the indirect impacts on common and special-status plants to less than significant.

Mitigation for Impact BIO-3:

MM BIO-3(a) Baseline Survey for Special-Status Plants: *In the blooming period prior to the vegetation clearing associated with Project expansion of mining within the approved mine area boundary, baseline focused surveys shall be conducted for Conejo buckwheat, Blochman's dudleya, club haired mariposa-lily, Catalina mariposa-lily, Conejo dudleya, Verity's dudleya, and other special status and ESA- and CESA-listed plants to determine presence or absence of species that have a potential to occur. The focused surveys shall be conducted within the entirety of the boundaries of the proposed mine expansion boundary (166.98 acres) and shall be conducted by qualified plant ecologist/biologist(s) according to protocols established by the USFWS, CDFW, and CNPS.*

If ESA- or CESA-listed or candidate plants or special status plant species are found during the surveys, the locations shall be flagged or marked in some way (or by using a sub-meter GPS Unit of equivalent) so the locations can be found to facilitate future plant salvage or seed/bulb collection. The number of individuals in each population of special status plants, ESA- or CESA-listed, or candidate plants found during the surveys shall be recorded. Within 30 days of completing the surveys, the Permittee shall provide to the Planning Division a Special-Status Plants Baseline Survey Report from the qualified plant ecologist/biologist that provides the results of the plant surveys and recommendations for salvage or seed/bulb collection. The Special-Status Plants Baseline Survey Report shall include a map showing which plants or populations will be impacted and a table that clearly documents the number of plants, acres of supporting habitat impacted,

and plant composition (e.g., density, cover, abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, abundance of each species). The results of the baseline focused surveys shall be incorporated into the special status plant species mitigation and monitoring plan described in MM BIO-3(h).

MM BIO-3(b) Special-Status Plant Survey on Adjacent Permittee-Owned Lands: *To determine the presence or absence of Conejo buckwheat, Blochman's dudleya, club haired mariposa-lily, Catalina mariposa-lily, Conejo dudleya, Verity's dudleya, and other special status and ESA- and CESA-listed plants in the vicinity of the Project, focused surveys shall be conducted on contiguous parcels, under common ownership of the Permittee, during the blooming season prior to initial vegetation clearing for the Project. During the focused surveys, the vegetation communities on the adjacent lands shall be mapped to identify suitable habitats for the target species. The purpose of these surveys is to identify if these species are present and if the adjacent lands could potentially be suitable as mitigation for the Project. The focused surveys shall be conducted by qualified plant ecologist/biologist(s) according to protocols established by the USFWS, CDFW, and CNPS.*

If ESA- or CESA-listed or candidate plants or special status plant species are found during the surveys, the locations shall be flagged or marked in some way (or by using a sub-meter GPS Unit of equivalent) so the locations can be found and monitored in the future. The number of individuals in each population of special status plants, ESA- or CESA-listed, or candidate plants found during the surveys shall be recorded. Within 30 days of completing the surveys, the Permittee shall provide to the Planning Division a Special-Status Plants Adjacent Lands Baseline Survey Report from the qualified plant ecologist/biologist that provides the results of the plant surveys. The Special-Status Plants Adjacent Lands Baseline Survey Report shall include a map showing the locations and the number of plants, the acres of supporting habitat, and the plant composition (e.g., density, cover, abundance) within the habitat where the plants were found (e.g., species list separated by vegetation class; density, cover, abundance of each species).

MM BIO-3(c) **Pre-Disturbance Survey for Special-Status Plants***: To minimize impacts to ESA- and CESA-listed plants and other special status plants, a pre-disturbance focused survey shall be conducted in the blooming season immediately prior to new vegetation clearing or new ground disturbing activities in the mine expansion area. The survey shall be conducted within the boundaries of the planned vegetation removal area plus a 100-foot buffer around the perimeter of the planned vegetation removal area and it shall include any new roads needed for access. The survey shall be conducted by qualified plant ecologist/biologist(s). and all previously flagged or marked populations or individuals of rare plants found and flagged/marked during previous focused plant surveys shall be re-flagged or re-marked. If new populations or individuals are found, then the locations shall be flagged and the number of individuals in each population found during the surveys shall be recorded. If seed collection or plant salvage is required by the special status plant species mitigation and monitoring plan, a 50-foot buffer shall also be flagged around the perimeter of each group of rare plants and no work shall occur within the buffer zone until the collection of seed and/or plant material has been completed. Within 30 days of completing the surveys, the Permittee shall provide to the Planning Division a Pre-Disturbance Special-Status Plants Survey Report from the qualified plant ecologist/biologist that provides the results of the plant surveys. If seed collection or plant salvage is conducted as a requirement of the approved special status plant species mitigation and monitoring plan, then the Pre-Disturbance Special-Status Plants Survey Report shall also include the specifics of the collection (and transplantation, if conducted) and a discussion of how the collection satisfies the requirements in the plan. The results of each of the pre-disturbance special-status plants surveys shall be included in the Annual Mitigation and Monitoring Report required by MM BIO-1(c) and the Pre-Disturbance Special-Status Plants Survey Report shall be included as an appendix to the Annual Report.*

MM BIO-3(d) Staging and Material Piling Area Restrictions*: To minimize impacts to ESA- and CESA-listed plants and other special status plant species, staging areas and other material piling areas shall not be located within protected areas for special status plants.*

MM BIO-3(e) Herbicide Use Restrictions*: To minimize impacts to ESA- and CESA-listed plants and other special status plants, herbicides shall not be used to control nonnative plants occurring within 100-feet of special status plant species locations with the limited exceptions discussed below. Within 100 feet of known locations of special status plants, nonnative plants shall only be controlled and/or removed using manual methods, to the extent practicable. Manual methods shall include removal by hand, with hand tools, or with mechanized equipment such as mowers or string trimmers. If an invasive, nonnative plant species cannot be controlled effectively with manual methods, such as plants that grow by rhizomes (for example, giant reed [Arundo donax] and perennial pepperweed [Lepidium latifolium]), plants that are resilient against manual removal methods (such as tree tobacco [Nicotiana glauca], castor bean [Ricinis communis], and fennel [Foeniculum vulgare]), and plants that are particularly invasive and require early response to maximize effectiveness (for example, tumbleweeds [Salsola australis, S. ryanii, S. tragus], five-horn smotherweed [Bassia hysoppifolia], and summer cypress [Kochia scoparia]), then herbicides shall be allowed to control the invasive, nonnative plant species. Prior to using herbicides, all sensitive plants or sensitive plant population locations within the work area shall be marked so that they can be avoided. Herbicide application within 100 feet of special-status plant species (either suspected of being present or actually present) must be focused on individual nonnative plants and may only be applied using the daub method (no spraying). Herbicide use shall not be conducted within a 10-foot buffer of special-status species locations and only hand weeding shall be allowed within the buffer.*

Herbicide shall only be applied when winds are less than five miles per hour, and not within or following 48 hours of a rain event. If there is any chance of applied herbicide being carried by runoff into a body of water or a drainage that conveys flows to a body of water, then only herbicides that are EPA-approved for aquatic use shall be allowed (surfactants must also be approved for aquatic use). All herbicide application shall be supervised and/or conducted by a person with a Qualified Applicators License (QAL) issued by the California Department of Pesticide Regulation (CDPR). All other personnel that apply herbicide shall be CDPR-certified pesticide applicators.

MM BIO-3(f) Worker Environmental Awareness Program*: Prior to the initiation of activities in the mine expansion area, the Permittee shall prepare and conduct a Worker Environmental Awareness Program (WEAP) training for all construction crews and contractors employed or otherwise conducting any work on the Project site. The WEAP training shall consist of a presentation by a qualified biologist and shall include a discussion of the sensitive species and other biological resources that either exist or potentially occur in the Project area, the locations of the sensitive biological resources, their legal status and protections, penalties for violations, and Project-specific protective measures to be implemented for avoidance of these sensitive resources. The training shall also include rules regarding the handling of trash and avoiding contamination of downstream surface waters from vehicle and equipment maintenance. Interpretation shall be provided for non-English speaking workers and the same instruction shall be provided for any new workers prior to their performing work on the Project site. The Permittee shall prepare and distribute wallet-sized cards or a fact sheet that contains this information for workers to carry on the Project site. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. The forms shall be filed at the worksite offices and shall be available to the Planning Division and CDFW upon request. The WEAP shall be repeated annually, and employees/workers shall sign a new form each year stating they attended the WEAP and understand the protection measures. Copies of the WEAP materials shall be maintained at the Project site for worker's reference, as needed.*

MM BIO-3(g) Incidental Take Permit: *If take or adverse impacts to Conejo buckwheat and/or other CESA-listed species cannot be avoided, the Permittee shall obtain an Incidental Take Permit (ITP) from CDFW prior to such take or adverse impacts. The ITP application shall be submitted to CDFW approximately one year prior to the take or adverse impacts to Conejo buckwheat or other CESA-listed species to allow time for the processing of the application and the issuance of the ITP. Subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW shall issue the ITP within one year of receiving the application. Adverse impacts or take of Conejo buckwheat or other CESA-listed species shall not occur until the CDFW has issued the ITP to the Permittee. The Permittee shall provide a copy of the ITP to the Planning Division after receiving the ITP from CDFW. The Permittee shall implement all provisions included in the ITP.*

MM BIO-3(h) Special-Status Plant Mitigation and Monitoring Plan: *MM BIO-2(c), which requires the preparation and approval of an Upland Scrub and Special-Status Plant Species Mitigation and Monitoring Plan shall be implemented prior to vegetation removal or ground disturbing activities on the Project site, The results of the baseline focused rare plant surveys described in MM BIO-3(a) shall be incorporated into the mitigation and monitoring plan. The results of the focused rare plant surveys of adjacent lands owned by the Permittee and described in MM BIO-3(b) shall also be incorporated into the mitigation and monitoring plan if properties owned or otherwise controlled by the Permittee will be proposed as mitigation. If the adjacent Permittee-owned lands do not support the special-status plant species that would be impacted by the Project and if the adjacent Permittee-owned lands do not provide sufficient restoration opportunities for the special-status plants, then the mitigation and monitoring plan shall include an appropriate offsite alternative for mitigation.*

Impact BIO-4: Vegetation removal, surface disturbance, and mining and processing operations could result in the loss of habitat and direct and indirect adverse effects to special-status wildlife species. (Less than Significant with Mitigation)

Vegetation removal and surface disturbance within proposed expansion areas would result in the potential for direct impacts to common and special-status wildlife species known to occur or having the potential to occur within and adjacent to the Project site. Additionally, blasting and excavation in expansion areas, processing of imported concrete and asphalt for recycling, and the associated noise, lighting, and presence of humans could potentially result in indirect effects on common and special-status wildlife species.

Indirect Impacts to Special-Status Wildlife Species

Project activities could have indirect impacts on special-status wildlife species if Project activities are occurring in the vicinity of the habitat where these species occur or have a potential to occur. Noise and vibration, blasting, human presence, project vehicle trips, and air pollutants and fugitive dust, and artificial lighting that could potentially generate disturbance that may affect habitat for special-status wildlife, cause health issues, and generate disturbance that may disrupt nesting, foraging, or movement of special-status wildlife species.

Noise and Vibration: Indirect impacts would potentially result from noise and vibration associated with heavy equipment, small machinery, haul trucks, blasting, material processing, and presence of crews, which would potentially displace animals that are foraging, nesting, breeding, or denning in the vicinity of the activities. The displacement of animals would vary depending on species as some species

may be less tolerant of noise and human activity and would vacate the area more readily than the more tolerant species. Continuous or frequent background noise may interfere with feeding, breeding, territory defense, and avoidance of predators. However, normal day-to-day operations would be expected to be tolerated more over time for some animals as they become accustomed to the noise or disturbance. Additionally, Pacific Rock, Inc. has operated the quarry continuously since 2000 after acquiring the mining operation, and the Project site has a history of active quarrying operations going back decades under past operators. As such, it's presumed that any wildlife species found near the Project site would be acclimated to noise and vibration resulting from existing mining and processing operations, including blasting. Material-loading and hauling would be conducted on days when shifts extend to 10:00 p.m. and the noise and vibration associated with these activities would potentially disrupt the normal activities of nocturnal wildlife, such as owls and bats. The indirect impacts on common and special-status species of wildlife associated with noise and vibration would potentially be significant.

Noise and vibration impacts resulting from onsite mining, processing, reclamation activities, offsite hauling, blasting, and groundborne vibration are analyzed in DEIR Section 3.8.2. Under the Ventura County General Plan, noise standards apply to "sensitive uses," which include sensitive wildlife habitats and the habitats of rare, threatened, or endangered species. The wildlife movement corridor located adjacent to the Project would also be considered a sensitive use because it supports the movement activities of mountain lions, which are a Candidate for listing as endangered or threatened. The noise analysis in DEIR Section 3.8.2 includes modelling of Project noise at Receptor R3, which includes the various hiking trails located in the open space/wildlife movement corridor areas to the southeast, east, and northeast of the Project site. Mitigation measure MM NV-1 (DEIR Section 3.8.2.2) includes noise reduction measures to reduce noise impacts from mining, processing, and reclamation activities to less than significant according to the Ventura County Significance Criteria of 55 dBA. In MM NV-1, excavation, materials processing and recycling, and reclamation activities are restricted to daytime hours (7:00 a.m. to 4:00 p.m.) and requires that excavation and reclamation equipment are fitted with approved exhaust mufflers. MM NV-1 also restricts the time equipment can idle to no more than 30 minutes and specifies that the aggregate plant and recycle plant cannot be operated concurrently and does not allow the aggregate plant or recycling plant to operate when excavation activities are occurring within 1,600 feet of sensitive receptor R1, which is located west of the Project. Noise level measurements are also required by MM NV-1 when Project activities commence to ensure noise levels do not exceed the Ventura County Significance Criteria of 55 dBA at sensitive receptors, including the open space/wildlife movement corridor areas to the east of the Project site. Furthermore, the operational modifications and noise monitoring noise prescribed under MM NV-1 will ensure noise levels do not exceed the 55 dBA at sensitive receptors/the wildlife movement corridor, which corresponds with Receptor R3.

Specific mitigation measures are also included in the DEIR to avoid direct and indirect impacts on nesting birds in areas within and adjacent to where vegetation clearing or ground disturbing activities will be conducted in new areas. MM BIO-1(a) requires surveys for nesting birds and MM BIO-1(b) requires monitoring of identified nests and monitoring for new nests that could potentially be affected by vegetation clearing or ground disturbance in new areas. The mitigation measures require the establishment of no-work buffers around active nests to protect them from direct impacts from the disturbance and indirect impacts from noise and vibration associated with the equipment.

Previous studies have been conducted on the construction and operational noise levels that would have a significant adverse effect on least Bell's vireo nesting habitat. Based on a study conducted by the San

Diego Association of Governments (SANDAG) in 1991, it was theoretically estimated that noise levels in excess of 60 dBA (hourly average L_{eq}) in vireo habitat would mask the bird's song, subsequently reducing the reproductive success of this species during their breeding season, which occurs between mid-March and mid-September, and its ability to defend its territory (SANDAG 2002)[10]. Also, in 1991, the USFWS recommended that noise levels not exceed 60 dBA to protect the coastal California gnatcatcher and other bird species. Based on the recommendation by the USFWS, the 60 dBA (hourly average L_{eq}) will be used as the noise criteria to assess noise impacts on special-status bird species both on and off site in adjacent natural habitats. Similarly, CDFW has also recommended a 65-decibel threshold for wildlife species for another recent construction project within Ventura County, where noise resulting from construction equipment had the potential to impact nearby nesting birds (ECORP, 2021). As stated previously, noise level measurements are required by MM NV-1 when Project activities commence to ensure noise levels do not exceed the Ventura County Significance Criteria of 55 dBA at sensitive receptors. As such, through the implementation of MM NV-1, it's also presumed that Project noise would be below 60 decibels and would therefore not indirectly impact nesting bird species.

Specific mitigation measures are also included in the DEIR to minimize and avoid noise and vibration impacts on special-status bat species, which would be included as sensitive receptors. MM BIO-4(h)(1) requires a baseline survey for bat roosts within the existing mining areas and in the mine expansion areas. The purpose of these surveys is to determine if and where bat maternity roosts and nighttime bat roosts are located so activities can be planned to minimize impacts from noise and vibration. MM BIO-4(h)(2) requires the preparation and implementation of a bat management plan that will clearly identify avoidance and minimization measures to protect maternity and nighttime roosts. MM BIO-4(h)(4) restricts night work near bat roosts to avoid and minimize impacts to occupied maternity and night roosts. Measures implemented to protect bat roosts would also ensure noise and vibration impacts to bats and other wildlife species occupying habitat areas near bat roosts would be minimized, as noise and vibration generating operations would be sufficiently curtailed if a bat roost were identified during the baseline survey.

Therefore, with implementation of MM NV-1, MM BIO-1(a), MM BIO-1(b), MM BIO-4(h)(1), MM BIO-4(h)(2), and MM BIO-4(h)(4), potential indirect impacts related to noise and vibration on special-status wildlife species and the wildlife movement corridor is expected to be less than significant. Additionally, as discussed above, the Project has been an active mining operation for decades, and therefore it's presumed special-status wildlife species that are sensitive to noise or vibration would not have inhabited the areas in and around under current conditions; however, this assumption will be confirmed through completion of the baseline surveys prescribed under MM BIO-4.

Blasting: With the mine expansion Project, blasting will be conducted on the same frequency as is being conducted for the existing mining operations. Specifically, primary blasts will continue to be conducted twice per year and smaller blasts will be conducted up to twice per week. The actual detonation duration of a blast is approximately one second and blasting would be conducted during daytime hours (7 a.m. to 4 p.m.). Impacts of the periodic and short-term blasting associated with mining in the proposed expansion areas were analyzed in DEIR Section 3.8.2.2. The analysis noted that although the vibration levels may be perceptible the very short duration and infrequency of blasting events (i.e., twice per week at most), it's unlikely that blasting would impact special-status wildlife species. Additionally, as discussed previously, due to the historical mining operations, including blasting,

[10] Gregory Canyon Landfill State Clearinghouse No. 1995061007 Final EIR Page 4.6-4 December 2002.

which has occurred at the Project site for decades, existing operations have likely resulted in some special-status wildlife species becoming habituated to the events while others may be less tolerant and may have moved away from the areas where blasting is occurring. As the mine expands with the Project, some special-status wildlife species may continue to be tolerant while others may move further away from the existing mining operations into habitats located in the open space areas around the Project site. Furthermore, vibration impacts on special-status bat species are discussed in the previous paragraphs under the heading of Noise and Vibration. Mitigation measure MM BIO-4(h)(1) would identify if and where special-status bat species are located within the existing mine and mine expansion areas. MM BIO-4(h)(2) requires the preparation and implementation of a Bat Management Plan that will identify avoidance and minimization measures to protect special-status bats from impacts associated with noise, vibration, and blasting as well as other types of indirect impacts. With implementation of MM BIO-4(h)(1) and MM BIO-4(h)(2), the impacts of blasting and the associated groundborne vibration to special-status bat species were determined to be less than significant.

Human Presence: Section 2.6.10 of the DEIR states that up to 12 workers are onsite during normal operations. The number of workers onsite during a typical operational shift with the proposed Project will not increase as compared to existing operations. However, additional shifts could be added on days during which operations are conducted from 5:30 AM to 10:00 PM. The operating schedule for mining and excavation and processing will also not change from the existing mining operations (7:00 AM to 4:00 PM Monday through Saturday). The schedule modifications with the expanded Project includes operating on Sundays, expanding the hours for equipment maintenance and hauling (5:30 AM to 7:00 AM and 4:00 PM to 10:00 PM), and conducting hauling operations on a 24-hour basis for up to 60 days per year to accommodate special circumstances during storm related emergencies. Expanding the mining/operating schedule to include Sundays would not be a significant change over the current schedule. Special-status wildlife species inhabiting natural areas adjacent to the mine are likely habituated to the activities and may be adversely affected but the impacts would not be expected to be significant. While expanding the hours for equipment maintenance and hauling in the early morning and late afternoon/evening hours may have an adverse impact on special-status wildlife species, special-status bat species that are typically active between dusk to dawn, these activities would continue to be localized to areas within the bottom of the mine pit, adjacent to the processing plant and on the existing roads, rather than in the perimeter Project site areas within or adjacent to existing natural habitat areas. Additionally, MM BIO-4(h)(1) requires baseline surveys for bats to identify if bats are roosting within the Project area. MM BIO-4(h)(2) requires the preparation and implementation of a Bat Management Plan if bats are found during the baseline surveys. The Bat Management Plan will include avoidance and minimization measures to reduce potential impacts to bats to less than significant. In addition, MM BIO-4(h)(4) restricts nighttime work near bat roosts to ensure impacts to bats are less than significant. Conducting hauling operations on a 24-hour basis for up to 60 days per year would potentially result in adverse impacts to special-status wildlife species, and potentially significant impacts to special-status bat species; however, truck loading and hauling would also occur within the bottom of the existing point adjacent to the processing plant, and would not occur near the Project site perimeters/adjacent to the open space areas. As such, the presence of humans in the expanded mining operation areas, during additional shifts, and during longer operating hours would result in less than significant indirect impacts on special-status wildlife species and would not require mitigation, and implementation of MM BIO-4(h)(1), MM BIO-4(h)(2), and MM BIO-4(h)(4) would reduce the potentially significant impacts associated with human presence and operational schedule changes to special-status bat species to less than significant.

Project Vehicle Trips: The existing ingress/egress to the Project site would continue to be the only route travelled by vehicles to access the Project site. Section 2.6.5 (pages 2-11 and 2-12) states that under the Project, no changes to truck loading or hauling practices, routing, or the number of annual, daily, or peak-hour maximum haul truck trips are proposed. A proposed extension of operating hours would allow for truck loading and hauling during additional hours of the day and days of the week but loading and hauling practices would remain unchanged as compared to the existing operation. In DEIR Sections 2.6.6 and 2.6.7, the DEIR describes materials brought to the site for recycling, import of fill material to the site, and shipping of the processed materials would be considered in the operation's 60 loads per day truck trip limit, and therefore would also not result in a change as compared to existing conditions. The proposed Project would not result in changes to traffic volumes or traffic patterns as compared to existing conditions. Therefore, the Project would not increase potential adverse effects on special-status species associated with vehicle trips as compared to existing conditions. Therefore, impacts to special-status wildlife species associated with Project-related vehicle trips would be less than significant and do not require mitigation.

Air Pollutants and Fugitive Dust: As described under Impact BIO-2, fugitive dust and air pollutants could have potentially significant indirect impacts on plants located in or near mining areas and adjacent to roads within or adjacent to the mining expansion area. If the air pollutants and fugitive dust resulted in a die-off of habitat for special-status wildlife species, then the impacts could be potentially significant. However, operations under the Project would be required to continue to comply with required fugitive dust control-related measures as specified in the existing PTO as well as any additional fugitive dust control measures imposed in the future through the VCAPCD permitting requirements. The existing measures include watering and/or treating road and work areas to control fugitive dust. Continued implementation of the existing measures to control fugitive dust would reduce the indirect impacts on common and special-status wildlife to less than significant.

The potential air quality impacts associated with the Project are described in DEIR Section 3.4.2.2. Air pollutants that could potentially result in impacts on the health and habitats of special-status wildlife species include CO and SOx emissions, ROC and NOx emissions, toxic air contaminants, and greenhouse gas emissions. Impacts to special-status wildlife species may include disruptions of biological processes affecting the health of the animal, changes in social behaviors, changes in species distributions, and loss of habitat due to plant loss. The impacts to special-status wildlife species and their habitats may be significant if the Project results in significant increases in CO and Sox emissions, ROC and NOx emissions, toxic air contaminants, and greenhouse gas emissions. As discussed in DEIR Section 3.4.2.2, the impacts of toxic air contaminants (Impact AQ-2) and greenhouse gas emissions (Impact AQ-3) were determined to be less than significant because the Project's net daily emissions would not exceed daily mass emissions thresholds of significance. The impact associated with Project NOx emissions as a criteria pollutant and ozone precursor was considered significant without mitigation. MM AQ-1 includes options for implementing operational changes and modifying or replacing the diesel equipment in compliance with CARB standards sufficient to reduce net Project onsite NOx emissions to less than 25 pounds per day over baseline emissions, which is below the significance threshold. Implementation of the operational changes and modifications to diesel equipment will keep the NOx emissions below harmful levels. With the implementation of MM AQ-1, the impacts to special-status wildlife species, including mountain lion resulting from air quality emissions would be reduced to less than significant.

Artificial Lighting: An analysis of artificial lighting on wildlife movement in areas adjacent to the Project is included below at Impact BIO-7. MM BIO-7(a) would minimize the impacts from light and

glare on special-status wildlife species and wildlife migration corridors and requires that all lighting be hooded or be the high cut-off type that diverts lighting downward onto the property to avoid casting direct light onto the adjacent habitat. With implementation of MM BIO-7(a), impacts of artificial lighting on special-status wildlife species that may occupy or move through the adjacent natural habitat areas will be less than significant.

Direct Impacts to Special-Status Wildlife

Potential direct and indirect impacts to special-status wildlife species that have been observed or that have a high or moderate potential to occur on or adjacent to the site are discussed below. Mitigation measures MM BIO-4(a) and MM BIO-4(b) require pre-disturbance surveys and biological monitoring during each incremental vegetation clearing or ground disturbing activities in new areas. These measures would function in combination with additional measures identified to address potential impacts on individual species as discussed below.

Burrowing owl. The ISBA (BRC, 2017) concluded that western burrowing owl are known to occur in the region, and therefore, have potential to occur within the low-lying grass-dominated areas located within the lower elevation of the study area. In 2018 site surveys, ESA biologists searched for sign of burrowing owl presence, including ground squirrel burrows capable of supporting burrowing owls, as well as feathers, scat, pellets, and bone fragments, etc. Burrowing owls are also known to use man-made structures for wintering and breeding, such as irrigation pipes, culverts, and debris stockpiles, each of which are present within the site and were visually inspected by ESA biologists during the 2018 survey. No suitable burrows were observed within the study area and no burrowing owl individuals or sign of presence was observed, and ESA concluded that at the time of the surveys burrowing owls are not expected to occur within the study area. However, due to the potential for burrowing owls to be present within the site and the potential for Project-related ground disturbance activity to adversely affect the owl if present when disturbance occurs, the impact to burrowing owl is considered potentially significant. Mitigation measure MM BIO MM-4(c) requires protocol level burrowing owl surveys to be conducted within suitable habitat areas in the year prior to impacts in the suitable habitat areas. If occupied burrows are identified during surveys, consultation with CDFW would be required to determine the appropriate methods to minimize impacts, including the potential for passive relocation of individuals or burrow exclusion prior to ground disturbance. Mitigation measures MM BIO-4(a) and MM BIO-4(b) require pre-disturbance surveys and biological monitoring during each vegetation clearing or ground disturbing activities in new areas to ensure impacts to special-status wildlife species are avoided and even though burrowing owls are mobile species, biological monitoring would identify if burrowing owls have moved into the area after MM BIO-4(c) has been implemented. With implementation of MM BIO-4(a), MM BIO-4(b), and MM BIO-4(c), impacts to burrowing owl would be less than significant.

San Diego desert woodrat. In 2010, this species was documented to occur throughout the chaparral and coastal scrub vegetation communities, and in 2016 desert woodrat middens were observed in the northeastern portion of the Project site (BRC, 2017). This species may also be present in areas supporting dense scrub and chaparral vegetation (Figure 3.5-1). The potential for direct impacts associated with the Project include mortality to individuals and removal of their nests during ground disturbance activities. The potential for indirect impacts includes the loss of foraging and nesting habitat resulting from the removal of scrub and chaparral vegetation. Mitigation measure MM BIO-4(d) requires pre-disturbance surveys, relocation of individuals, and other measures for protection of this species through consultation with CDFW. MM BIO-4(a) and MM BIO-4(b)

require pre-disturbance surveys and biological monitoring during each incremental vegetation clearing or ground disturbing activities in new areas, clearing in such a way as to not create habitat islands, and moving wildlife out of harm's way. Impacts to San Diego desert woodrats would be less than significant with implementation of mitigation measures MM-BIO-4(a), MM BIO-4(b), and MM BIO-4(d).

Least Bell's vireo and yellow warbler. Focused surveys for least Bell's vireo were conducted in 2010 and at that time, the surveys confirmed that this species was not present within the survey area; however, one yellow warbler was detected in 2010 (BRC, 2017). Suitable habitat for least Bell's vireo and yellow warbler is present within the 2.01 acres of red willow thickets located at the south-end of the detention pond as shown on Figure 3.5-1. Although adjacent to the site, the red willow thicket is outside of the Project site and would not be directly affected by the Project. Therefore, the Project would not result in direct impacts to least Bell's vireo and yellow warbler. These are migratory species and are generally present in the region only during their nesting period between approximately April through July. Because the red willow thicket provides suitable habitat, there is a high potential that these species could be present in the future. Project activities could have an indirect impact on least Bell's vireo and yellow warbler if these species are present in areas adjacent to the site and Project activities occur in the vicinity of the nesting habitat. Indirect impacts from noise, vibration, human presence, vehicles, fugitive dust, and artificial lighting in close proximity to occupied habitat are discussed above under the "Indirect Impacts to Special-Status Wildlife Species." The indirect impacts of human presence on least Bell's vireo and yellow warbler that may use habitat adjacent to the Project site is not expected to be significant because mining activities will not be conducted near the adjacent habitat. The disturbances near the potential habitat will primarily consist of vehicles driving on the mine roads rather than the physical presence of humans near the habitat. With implementation of mitigation measures MM NV-1, MM AQ-1, and MM BIO-7(a), the impacts of noise, air pollutants and fugitive dust, and artificial lighting on least Bell's vireo and yellow warbler would be less than significant. Mitigation measure MM BIO-1(a) (discussed above under Impact BIO-1) requires the Permittee to avoid new disturbance during the nesting season of special-status bird species and/or conduct pre-disturbance surveys within and adjacent to new disturbance areas and implement measures to avoid direct and indirect impacts to protected nesting bird species, if present. MM BIO-4(a) and MM BIO-4(b) require pre-disturbance surveys and biological monitoring during vegetation clearing to avoid impacts to special-status birds and other nesting birds. With implementation of mitigation measures MM BIO-1(a), MM BIO-4(a), MM BIO-4(b), MM NV-1, MM AQ-1, and MM BIO-7(a), impacts to least Bell's vireo and yellow warbler would be less than significant.

Golden eagle. Golden eagles typically require cliffs for nesting, and they are known to avoid developed areas and uninterrupted stretches of forest. Although ongoing operation of the quarry, as well as surrounding land uses that include residential development to the east as well as development to the west make it unlikely that a golden eagle would establish a new nest on the Project site, the ISBA (BRC, 2017) determined that there is a moderate potential for this species to nest on the steep cliffs located in the northern portion of the Project site. Implementation of Mitigation Measure BIO-1(a) would ensure that golden eagles, including any active nests, are not impacted by the Project. Mitigation measure MM BIO-1(a) (discussed above under Impact BIO-1) requires the Permittee to avoid new disturbance during the nesting season of special-status bird species and/or conduct pre-disturbance surveys within and adjacent to new disturbance areas and implement measures to avoid direct and indirect impacts to protected nesting bird species if

present. With implementation of mitigation measure MM BIO-1(a), impacts to golden eagle would be less than significant.

Coastal California gnatcatcher. Focused surveys coastal California gnatcatcher, which were conducted in 2010, determined that this species was not present at the time within the existing CUP boundary and survey area. Coastal California gnatcatcher habitat generally includes California sagebrush scrub and various vegetation community alliances with a similar plant species composition and structure. However, coastal California gnatcatchers may also forage and nest in other vegetation communities, particularly when those communities include plant species characteristic of the coastal sage scrub communities. Figure 3.5-1 shows the location and distribution of vegetation communities on the Project site. As indicated in Table 3.5-8, the Project will impact 74.42 acres of native vegetation communities, with 72.73 acres consisting of upland shrub communities, with 0.14 acre of the upland scrub consisting of California sagebrush scrub.

Project-related activities, including vegetation removal, grading, compaction, and construction, could result in the loss of habitat for coastal California gnatcatchers if this species is present within disturbance areas. In addition, indirect impacts from noise and vibration, air pollution and fugitive dust, and artificial lighting associated with Project activities could adversely affect nesting gnatcatchers if they are present in adjacent habitat. Implementation of mitigation measures MM NV-1, MM AQ-1, and MM BIO-7(a) would reduce the potential indirect impacts of noise, air pollutants and fugitive dust, and artificial lighting on coastal California gnatcatcher. Mitigation measure MM BIO-4(e) requires focused protocol surveys to determine presence/absence and if the species is found and take could occur, then the Permittee would be required to complete consultation under Section 7 or must acquire an Incidental Take Permit under 10(a)(1)(B) of the Endangered Species Act and implement provisions of any such authorizations to ensure potential impacts are avoided or sufficiently reduced to avoid significant impacts to coastal California gnatcatcher. Mitigation measure MM BIO-1(a) (discussed above under Impact BIO-1) requires the Permittee to avoid new disturbance during the nesting season of special-status bird species and/or conduct pre-disturbance surveys within and adjacent to new disturbance areas and implement measures to avoid direct and indirect impacts to protected nesting bird species, if present. MM BIO-4(b) requires biological monitoring during vegetation clearing to avoid impacts to special-status bird species and other nesting birds. With implementation of mitigation measures MM BIO-1(a), MM BIO-4(b), MM BIO-4(e), MM NV-1, MM AQ-1, and MM BIO-7(a), impacts to coastal California gnatcatcher would be less than significant.

Coastal whiptail. Direct impacts to coastal whiptail could include mortality due to increased operational activities and removal of suitable habitat. Mitigation measures MM BIO-4(a) and MM BIO-4(b) require pre-disturbance surveys for this species and monitoring during vegetation clearing. With implementation of mitigation measures MM BIO-4(a) and MM BIO-4(b), impacts to coastal whiptail would be less than significant.

Western pond turtle. The detention pond adjacent to the western portion of the Project site contains potential habitat for western pond turtle. The pond is situated immediately adjacent to existing mining operations and receives surface water runoff from the Project site. The potential for western pond turtle to occur is high because the pond habitat appears to be suitable and the CNDDB includes a sighting of this species approximately 1.6 miles to the northwest of the Project site. Direct impacts to the potential habitat for western pond turtles would not occur from the Project because the Project would not directly impact the pond or adjacent habitat and the use of

surface water from the pond for the expanded mining operations would be the same as under existing operations. Western pond turtles could potentially be killed or injured if they are present in the pond, and they attempt to move into the existing mining operation areas for the purpose of finding nesting or aestivation sites. Mortalities of western pond turtle as a result of Project operations would be a significant impact. Mitigation measure MM BIO-4(f) requires focused surveys to determine presence or absence of wester pond turtle and, if this species is found, requires consultation with CDFW and development of avoidance and minimization measures to protect western pond turtles. With implementation of mitigation measure MM BIO-4(f), impacts to western pond turtle would be less than significant.

Crotch bumble bee. Crotch bumble bee is listed as a Candidate to be listed as Endangered under the CESA (CDFW, 2022[11]) and , thus, receives the same protections as a species listed as endangered or threatened. The Crotch bumble bee is not on the Ventura County Locally Important Animal List, but the species does have NatureServe rankings, including a Global Rank of G2 (Imperiled Globally) and a State Rank of S1/S2 (Critically Imperiled Subnationally/Imperiled Subnationally). This species is known to occur in grasslands and shrublands where it is a generalist forager that has been reported visiting a wide variety of flowering plants, including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheat. Crotch bumblebees are social insects that live in annual colonies and their nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Implementation of the Project will impact 74.42 acres of native shrublands and grassland communities and 11.50 acres of non-native grasslands (Table 3.5-8) that could potentially support the foraging and nesting of Crotch bumblebee. The Crotch bumble bee has a moderate potential to occur based on the presence of shrublands, grasslands, and some of the foraging plants species it is known to visit. A large amount of native habitat is present in the immediate vicinity north and south of the Project site that would not be affected by the Project. The vegetation on the Project site would not be removed all at one time, rather it will be incrementally removed over the 30-year duration of the Project. The reclamation and revegetation will also be conducted incrementally over the 30 years rather than waiting until the end of the 30-year mining period for the Project. Native vegetation where this species would be able to forage will be replaced as part of the ongoing reclamation and revegetation. The revegetation seed mix applied to the reclaimed benches includes native shrub species and nectar producing species characteristic of the shrublands occupied by the Crotch bumblebee. Although there is a substantial amount of available habitat around the Project site, the Project's incremental removal of vegetation and incremental reclamation and revegetation with native plant species utilized by the Crotch bumblebee would serve to minimize potential effects on Crotch bumble bee, the Project impact to this species is considered potentially significant. Mitigation measure MM BIO-4(g) requires focused surveys and development and implementation of avoidance and minimization measures to avoid adverse impacts or "take" of Crotch bumble bee. If adverse impacts or "take" of Crotch bumble bee can be avoided, then the impacts would be less than significant. If adverse impacts or "take" of the species cannot be avoided, then implementation of MM BIO-3(g), which requires an Incidental Take Permit, would be required. With implementation of MM BIO-4(g) and implementation of MM BIO-3(g), as may be required, the impacts to the Crotch bumble bee would be less than significant.

[11] California Natural Diversity Database (CNDDB). October 2022. Special Animals List. California Department of Fish and Wildlife. Sacramento, CA.

Monarch. Overwintering populations of the monarch butterfly in California are listed as a candidate species under the Endangered Species Act. The California overwintering population is not considered a CDFW Species of Special Concern, and it is not on the Ventura County Locally Important Animal List. The California overwintering monarch population does have NatureServe rankings, including a Global Rank of G4 (Apparently Secure) and a State Rank of S2/S3 (Imperiled /Vulnerable). Most of the monarch overwintering sites in California are located within approximately 1.5 miles of the coast and provide very specific microclimate conditions that include dappled sunlight, fresh water, high humidity, and absence of freezing temperatures (Pelton et.al., 2016[12]). The microclimate conditions are typically found at sites where roost trees are present surrounded by a larger grove or windrow of trees. The most common roost trees at overwintering sites include the nonnative blue gum eucalyptus (*Eucalyptus globulus*) and the native Monterey pine (*Pinus radiata*) and Monterey Cypress (*Cupressus macrocarpa*) (Pelton et.al., 2016). Other tree species have also been found to host clusters of overwintering monarchs, including nonnative red gum eucalyptus (*Eucalyptus camadulensis*) and the native western sycamore (*Platanus racemosa*), coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), and others (Pelton et.al., 2016). Groves of eucalyptus or other native trees that would provide suitable overwintering sites for monarchs are not present on the Project site. A small group of coast live oak trees is present in the southwest corner of the survey area, but the trees would not be affected by the Project. The closest CNDDB occurrence of roosting monarchs is approximately 8.5 miles to the west of the Project site. Considering the absence of suitable groves of roosting trees for overwintering populations on the Project site, the Project would not result in impacts to overwintering populations of monarch butterflies, and no species-specific mitigation is required.

Santa Monica grasshopper. Santa Monica grasshopper prefers bare hillsides and dirt trails within native chaparral communities. The Santa Monica grasshopper is not a CDFW Species of Special Concern, and it is not on the Ventura County Locally Important Animal List. This species does have NatureServe rankings, including a Global Rank of G1/G2 (Critically Imperiled Globally/Imperiled Globally) and a State Rank of S1/S2 (Critically Imperiled Subnationally/Imperiled Subnationally). As indicated in Table 3.5-8, the Project will result in the loss of 71.02 acres of laurel sumac scrub, 0.23 acre of Mountain mahogany scrub, and 1.34 acres of disturbed chamise/ceonothus chaparral, resulting in a combined loss of 72.59 acres of chaparral vegetation. These vegetation communities are located to the north-northeast of the existing quarry and are contiguous (i.e., intact) with similar chaparral-dominated communities located in open space areas to the north, northeast, southeast and south. Based on the presence of suitable chaparral habitat, there is a high potential for Santa Monica grasshopper to be present. The vegetation on the mine site will not be removed all at one time, rather it will be incrementally removed over the 30-year duration of the Project. The reclamation and revegetation will also be conducted incrementally over the 30 years rather than waiting until the end of the 30-year mining period for the Project so the temporal loss of native vegetation will be reduced. The revegetation seed mix that will be applied to the reclaimed benches includes native shrub species characteristic of the chaparral communities occupied by the grasshopper. Considering the amount of available habitat around the Project site, the incremental removal of vegetation, and the incremental reclamation and revegetation with native plant species characteristic of chaparral, the impacts to

[12] Pelton, E., S. Jepsen, C. Schultz, C. Fallon, and S.H. Black. 2016. State of the Monarch Butterfly Overwintering Sites in California. 40+vi pp. Portland, OR: The Xerces Society for Invertebrate Conservation).

this species would be temporary and are considered less than significant and no species-specific mitigation is required.

Mountain lion. In April 2020, the California Fish and Game Commission (CFGC) determined that the Southern California/Central Coast evolutionarily significant unit (ESU) of mountain lions is a candidate species as defined by Section 2068 of the Fish and Game Code. Mountain lions are known to be present within the Santa Monica Mountains, which compose much of the range of the Central Coast-South (CC-S) genetic subpopulation identified in the petition on which the CFGC's determination is based. Mountain lion is considered "present" on and in the vicinity to the Project site based on National Park Service telemetry data of collared mountain lions showing occurrences in the vicinity of the Project (NPS 2015). Predation sites where mountain lions fed on mule deer have also been documented in the vicinity of the Project (Benson et al. 2016b). Mountain lion home ranges in the region around the Project site were mapped and show that the home range of one collared mountain lion encompasses the Project site (NPS 2013). Mountain lions are primarily solitary, territorial, and occur in low density. They require large areas of relatively undisturbed habitat with adequate prey abundance, and habitat connectivity to allow for successful dispersal and gene flow. They have large home ranges that include heterogenous habitats including riparian, chaparral, oak woodlands, coniferous forests, grasslands, and occasionally in rocky desert uplands (*Grinnell 1914, Grinnell et al. 1937, Williams 1986, Dickson et al. 2005, McClanahan et al. 2017*; as cited in CDFW, 2020).

The potential for direct impacts to mountain lion includes the loss of habitat, range, and movement corridors, which could affect hunting and foraging opportunities and could limit movement and breeding opportunities limiting reproduction and genetic diversity and potential mortality to individuals if present within disturbance areas during blasting. Indirect impacts could also result from noise associated with mining and blasting, air pollutants and fugitive dust, rodenticides, and artificial lighting on suitable habitat areas adjacent to the mining operations. Based on the potential to directly or indirectly affect mountain lions that may travel through or hunt on the Project site or in the vicinity, the Project could result in significant impact to this species. Mitigation measures MM BIO-4(h)(1) and MM BIO-4(h)(2) require pre-disturbance surveys for mountain lions and natal dens and other protocols to ensure that mountain lion natal dens will not be impacted during vegetation clearing activities. Implementation of MM BIO-4(h)(3), which prohibits the use of rodenticides, including second-generation anticoagulant rodenticides, within the existing mine site and the mine expansion area would ensure that indirect Project impacts to mountain lions related to deaths from rodenticides would not occur. Implementation of MM NV-1, MM AQ-1, and MM BIO-7(a) would ensure indirect impacts from noise, air pollutants and fugitive dust, and artificial lighting would be avoided or reduced to less than significant. Potential impacts associated with the Project's reduction of the Santa Monica-Sierra Madre Connection wildlife movement corridor are discussed in Impact BIO-7, below. Mitigation measures MM BIO-7(a), MM BIO-7(b), and MM BIO-7(c) would minimize adverse effects on the corridor and these measures are considered sufficient to minimize adverse effects on mountain lion use and movement within the corridor adjacent to the Project site. With implementation of mitigation measures MM BIO-1(a), MM BIO-4(a), MM BIO-4(h)1, MM BIO-4(h)2, MM BIO-4(h)3, MM NV-1, MM AQ-1, MM BIO-7(a), MM BIO-7(b), and MM BIO-7(c), impacts to mountain lion would be less than significant.

Bats. Table 3.5-5 lists the special-status wildlife species that either occur or have the potential to occur on the Project site, including eight species of special-status bat species that have a low to moderate potential to occur. A bat habitat assessment was conducted at the Project site in February

of 2022 to identify the presence of bat roosting habitat that could potentially be affected by the Project (ECORP, 2022; included as Appendix C-3). In the bat habitat assessment report, Figure 1 entitled, "Pacific Rock Quarry Expansion Project Bat Habitat" illustrates the various types of bat habitat types within the mine are boundary and the study area. Table 3.5-10, below, lists the types of bat habitat and the acreages of each within the proposed mine boundary and the 500-foot buffer around the proposed mine boundary. Approximately 69.52 acres of the various types of bat habitats are located within the proposed mine boundary and approximately 82.77 acres are located within the 500-foot buffer area around the proposed mine boundary.

Table 3.5-10. Bat Habitat Types and Acreages within the Proposed Mine Boundary and Study Area

Bat Habitat Type	Area within Study Area (acres)		
	Proposed Mine Boundary	500-Foot Buffer Area (from Proposed Mine boundary)	Total
Building-Roosting Habitat	0.04	0.00	0.04
Cliff/Rock Crevice Roosting Habitat - Natural	56.24	66.04	122.28
Cliff/Rock Crevice Roosting Habitat - Manmade	11.60	0.00	11.60
Foraging Habitat	0.18	3.84	4.02
Tree-Roosting Habitat	1.46	4.94	6.40
Tree-Roosting & Foraging Habitat	0.00	7.95	7.95
Combined*	**69.52**	**82.77**	**152.29**

Source: ECORP, 2022

Notes

The acreages provided in this table represent an estimate of the amount of bat habitat present in the study area. These acreages were determined using a combination of aerial imagery and observations during the onsite habitat assessment. It is possible that some areas that were not mapped as roosting habitat may have bat roosts present and it is also possible that areas mapped as habitat will have no roosting habitat present.

Various bat species will use crevices found in large boulders, exfoliating rocks, rock outcrops with fractured boulders, rock quarries, and rocky cliffsides and slopes for roosting, while others may roost buildings or in tree foliage or in cavities in trees. Approximately 56.24 acres of natural cliff/rock crevice features are present within the proposed mine boundary and these areas provide protection for day roosting and deep fissures in the rocks provide thermal stability for thermoregulation. Cliff and rock crevice habitats may be used by large groups of bats for day roosting or maternity roosting but may also be used as night roosting locations. Rock crevice and cliff face habitats are present within the undisturbed natural areas that surround the current mine operation footprint in the mine expansion zones around the northern, eastern, and southern boundaries. These areas contain large boulders with fractures and crevices that are suitable for bat roosting. Additionally, approximately 11.60 acres of rock crevice and cliff face habitat, which have been created within the previously mined areas through previous blasting and mining activities, are also present. Approximately 1.46 acres of tree roosting habitat are also present on the Project site in areas where mature trees and large tree snags are present in the riparian corridor along the

southern edge of the site. Untrimmed fan palms, which are currently being grown agriculturally, are present in the northwest corner of the Project site. Building roosting habitat is also present in an abandoned trailer structure at the west end of the Project site. The detention pond and associated riparian vegetation located west of the Project site, which will not be impacted by the Project, could potentially provide foraging habitat for bats.

Project activities could directly and/or indirectly impact special-status bat species and/or bat maternity colonies that may be present in the suitable habitat areas on the site. Indirect impacts to special-status bats and/or bat maternity colonies could result from increased noise, vibration, and nighttime project lighting and could result in roost abandonment and the potential mortality of young in a maternity roost, if present. Mitigation measures MM NV-1 and MM BIO-7(a) would reduce the potential indirect impacts of noise, vibration, and artificial lighting on special-status bat species. Direct impacts could occur through injury or mortality during blasting activities and/or vegetation or structure disturbance or removal if special-status bats or bat maternity colonies are roosting in these features when the activities occur. Project impacts to special-status bat species would potentially be significant if special-status bat species are present on the Project site. MM BIO-4(i)(1) requires a baseline survey for bats on the Project site and MM BIO-4(i)(2) requires the preparation of a Bat Management Plan that would include the results of the focused surveys and would identify situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting bats. MM BIO-4(i)(3) places restrictions on blasting and vegetation clearing during the bat maternity season (March 1 through September 15), MM BIO-4(i)(4) addresses night work near bat roosts, and MM BIO-4(i)(5) requires specific tree removal protocols to avoid impacts to bats. With implementation of MM NM-1, MM BIO-7(a), and MM BIO-4(i)(1) through MM BIO-4(i)(5), the impacts of the Project on special-status bat species will be reduced to less than significant.

Mitigation for Impact BIO-4:

MM BIO-4(a) Pre-Disturbance Survey for Special-Status Wildlife*: To determine if sensitive wildlife species are present in the areas where the initial vegetation removal will occur and where each subsequent incremental vegetation clearing or ground disturbing activities in new areas will be implemented, a County-approved biologist shall conduct in initial pre-disturbance survey of the areas scheduled for clearing and within 50 feet of areas subject to clearing for the presence of special-status wildlife species. The survey shall be conducted no more than 30 days prior to vegetation removal and shall include methods and protocol sufficient for identification of coastal whiptail, western pond turtle, and any other special-status wildlife species with a moderate to high potential to occur. The County-approved biologist shall repeat the survey no more than three (3) days and no less than one (1) day prior to initial vegetation clearing and prior to each subsequent incremental vegetation clearing or ground disturbing activities in new areas. If special-status species are observed, the County-approved biologist shall develop appropriate protection measures for the species found during the surveys. The protection measures shall include, as appropriate: redirecting the species out of harm's way, constructing exclusionary devices (e.g., fencing), active monitoring during clearing (MM BIO-3(b)), or capturing and relocating wildlife outside of the work area. Observations of special status species made during the surveys shall be recorded onto CNDDB field data sheets and submitted to CDFW for inclusion in the CNDDB within three (3) days of making the observations. Vegetation clearing shall not be initiated unless and until all required protection measures have been implemented sufficient to ensure impact avoidance.*

Following the completion of the pre-disturbance surveys conducted for the initial vegetation clearing or ground disturbance and each incremental removal of vegetation or ground disturbance in new areas, a County-approved biologist shall prepare a Pre-Disturbance Survey Report that documents the survey methods and results of the surveys. The Permittee shall submit the Pre-Disturbance Survey Reports for the initial vegetation clearing and each subsequent incremental removal of vegetation or ground disturbance to the Planning Division within 30 days of completing the surveys. The results of each of the pre-disturbance surveys shall be summarized in the Annual Mitigation and Monitoring Report required by MM BIO-1(c) and the Pre-Disturbance Survey Report shall be included as an appendix to the Annual Report.

MM BIO-4(b) Biological Monitoring During Vegetation Clearing: *To avoid direct mortality to wildlife, MM BIO-2(b) shall be implemented. As described in MM BIO-2(b), a qualified biological monitor shall be on site during the initial vegetation clearing and each subsequent incremental removal of vegetation or ground disturbance in new areas to monitor for the presence of common and special-status wildlife species.*

Specific mitigation measures related to conducting protocol surveys, determining if special status wildlife species are present prior to project implementation, and specific measures relating to preparing and implementing species-specific mitigation and monitoring are included in mitigation measures MM BIO-4(c) through MM BIO-4(i)(4).

MM BIO-4(c) Burrowing Owl*: To minimize impacts to nesting/wintering burrowing owls within the mine expansion area, the Permittee shall retain a County-approved biologist to conduct a burrowing owl habitat assessment following the guidelines in the CDFW Staff Report of Burrowing Owl Mitigation (CDFG, 2012[13]). If suitable habitat for burrowing owl is present within the Project site, then protocol-level burrowing owl surveys shall be conducted in the year prior to the initial vegetation clearing following CDFW guidelines. Within 30 days of completing the surveys, the Permittee shall provide a Survey Report prepared by the County-approved biologist to the Planning Division describing the surveys methods and results. Along with the Survey Report, the Permittee shall provide a copy of a signed contract with the County-approved biologist who will conduct surveys, monitoring, and consultation with CDFW.*

If suitable but unoccupied burrows are found in areas where initial vegetation clearing will occur or in areas where incremental vegetation clearing or ground disturbing activities in new areas will occur, then a County-approved biologist shall conduct a take-avoidance survey between 14 and 30 days prior to vegetation clearing where potential burrows may be impacted. The County-approved biologist shall second take-avoidance survey within 24 hours of the beginning of the initial clearing and each subsequent vegetation clearing or ground disturbance in new areas where potential burrows are present. If burrowing owls are not found during the take-avoidance surveys, then the Permittee shall verbally notify the Planning Division after the 24-hour take avoidance survey. The County-approved biologist shall prepare a Take-Avoidance Survey Report, which shall be submitted to the Planning Division by the Permittee within 14 days of completing the 24-hour take-avoidance survey. If burrowing owls are found during either take-avoidance survey, then vegetation clearing shall be postponed within a 300-foot buffer of the occupied burrow(s) until a Burrowing Owl Exclusion Plan has been prepared and approved, as stated in the next paragraph.

If occupied burrows are identified within planned disturbance areas, the Permittee shall prepare a Burrowing Owl Exclusion Plan that adheres to the requirements in the CDFW Staff Report and submit it to CDFW for review and approval. Subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW should respond within 30 days of receiving the plan for review. The plan shall include a description of the methods used to exclude burrowing owls and the timing of exclusion

[13] CDFW. 2012. Staff Report on Burrowing Owl Mitigation.

activities. If CDFW approves the plan and burrowing owls are allowed to be excluded from the Project site, then the Permittee shall prepare a Mitigation Lands Management Plan that provides for acquisition, preservation, and management in perpetuity of sufficient habitat acreage to address Project impacts to owl burrows and/or burrowing owls. The Permittee shall provide the Mitigation Lands Management Plan to the Planning Division for review and approval prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance.

If burrowing owl exclusion is approved by CDFW, then a County-approved biologist shall conduct a take-avoidance survey of the burrows where exclusion devices have been installed between 14 and 30 days prior to clearing of vegetation where these burrows are located. The County-approved biologist shall conduct a second take-avoidance survey within 24 hours of the beginning of the initial clearing and each subsequent vegetation clearing or ground disturbing activities in new areas where burrows with exclusion devices are located. The County-approved biologist shall prepare a Take-Avoidance Survey Report, which shall be submitted to the Planning Division by the Permittee within 14 days of completing the 24-hour take-avoidance survey. The results of take-avoidance surveys shall be included in the Annual Mitigation and Monitoring Report required by MM BIO-1(c).

The Planning Division reviews for adequacy, and maintains in the Project file, the signed contract, Survey Report(s), Take-Avoidance Survey Report(s), Burrowing Owl Exclusion Plan, and Mitigation Lands Management Plan. If the Planning Division confirms that the required surveys and relocation measures were not implemented in compliance with the requirements of this condition, then enforcement actions may be enacted in accordance with § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

***MM BIO-4(d) San Diego Woodrat**: Within no more than 30 days prior to the initial vegetation clearing and each incremental removal of vegetation clearing or ground disturbance in new areas , a County-approved biologist with a California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit shall survey suitable habitat for woodrats within areas that will be subject to vegetation clearing activities, and within 50 feet of areas that will be subject to vegetation clearing activities.*

If the County-approved biologist does not find any woodrat nests, then a Survey Report shall be prepared by the County-approved biologist and the Permittee shall submit the Survey Report to the Planning Division. The results of the surveys for San Diego desert woodrat shall be summarized in the Annual Mitigation and Monitoring Report required by MM BIO-1(c) and the Survey report shall be included as an appendix.

If the County-approved biologist finds active woodrat nests during the peak nesting season (February 1 through May 31), the County-approved biologist shall implement a 50-foot radius no-work buffer area around the nests. The Permittee shall not conduct vegetation clearing activities within the no-work buffer until the end of peak nesting season (after May 31), in order to protect the nest. Relocation of nests after May 31 and prior to February 1 shall be conducted by a County-approved biologist according to the following instructions:

a. Create new habitat on adjacent areas not impacted by the project by providing a vertical structure using local native material such as tree and shrub trimmings stacked horizontally in areas that are under shady canopies and upslope of seasonal drainages. Piling rocks removed from the mining area can also be used to help achieve structure. If multiple nesting material structures are created, they should be a minimum of 25 feet apart. The County-approved biologist shall place the new nesting material under shady areas in order to increase the chance that woodrats will use the nests.

These areas shall be in locations that do not presently provide this habitat structure to create new nesting opportunities and to reduce potential competition with existing woodrats.

b. *After creating habitat outside of the mining footprint, the County-approved biologist shall begin vegetation clearance around the nest to reduce woodrat dispersal back into the Project site.*
c. *Nudge the nest with a front-end loader type tractor to flush the woodrats from the nest. They will usually abandon the nest and run out into adjacent offsite cover.*
d. *Carefully and slowly pick up the nest material with a front-end loader (to allow any additional woodrats to escape) while maintaining a safe distance from the nest to reduce health hazards to the workers. (Dust masks should be used even when operating equipment.)*
e. *Move the nest material to the creation area and place the nest material adjacent to the created nesting structure.*

If the County-approved biologist finds woodrat nests in areas where vegetation clearing or new ground disturbance will occur, the Permittee shall submit an initial San Diego Woodrat Survey Report prepared by a County-approved biologist to the Planning Division that provides the results of the woodrat survey and includes a plan for avoidance or relocation of the nests in accordance with the requirements set forth in this condition. The initial San Diego Woodrat Survey Report shall be submitted to the Planning Division within 30 days of completing the surveys. Along with the San Diego Woodrat Survey Report, the Permittee shall provide a copy of a signed contract with the County-approved biologist who will monitor avoidance and relocation efforts during land clearing activities. The Planning Division shall review the San Diego Woodrat Survey Report and signed contract and approve them prior to issuance of a Zoning Clearance for Use Inauguration of new disturbance. Within 30 days of the completion of each subsequent incremental vegetation clearing or ground disturbance in new areas, the Permittee shall submit a San Diego Woodrat Survey Report prepared by the County-approved biologist to the Planning Division that documents the results of the woodrat survey and the measures implemented to protect woodrats. The results of surveys and protection measures implemented prior to the initial vegetation clearing and each subsequent incremental vegetation clearing or ground disturbance in new areas shall be summarized in the Annual Mitigation and Monitoring Report required by MM BIO-1(c) and the Survey report shall be included as an appendix.

***MM BIO-4(e) Coastal California Gnatcatcher**: The Permittee shall prevent impacts to coastal California gnatcatcher, land clearing activities shall be regulated as specified herein. Within no more than one year prior to the initial vegetation clearing and each subsequent vegetation clearing or ground disturbance in new areas, a County-approved biologist authorized under § 10(a)(1)(A) of the Endangered Species Act shall conduct protocol surveys for coastal California gnatcatcher, in accordance with the United States Fish and Wildlife Service's (USFWS') "Coastal California Gnatcatcher (Polioptila californica) Presence/Absence Survey Guidelines" (February 28, 1997). The survey area shall include all areas that will be subject to vegetation clearing activities and the area within 500' of the area that will be subject to vegetation clearing activities. The biologist shall follow this protocol unless otherwise authorized by the US Fish and Wildlife Service (USFWS) in writing. Within 30 days after each set of protocol surveys is completed, the Permittee shall provide to the Planning Division a Coastal California Gnatcatcher Survey Report from a County-approved biologist with a Section 10(a)(1)(A) permit under the Endangered Species Act documenting the results of the protocol surveys for coastal California gnatcatcher. The results of the protocol surveys shall be summarized in the Annual Mitigation and Monitoring Report required by MM BIO-1(c) and the Coastal California Gnatcatcher Survey report shall be included as an appendix.*

If surveys confirm the presence of coastal California gnatcatcher on the site, then the Permittee shall implement either one of the following procedures:

a. *If the Project involves federal permitting or funding (collectively, "federal nexus"), then the Permittee must complete consultation with the federal agency and USFWS pursuant to § 7(a)(2) of the Endangered Species Act; or*
b. *If the Project does not involve a federal nexus but may result in the take of coastal California gnatcatcher, the Permittee shall apply to the USFWS for an incidental take permit, pursuant to § 10(a)(1)(B) of the Endangered Species Act. To qualify for the incidental take permit, the Permittee shall submit an application to the USFWS together with a habitat conservation plan (HCP) that describes (at a minimum) how the impacts of the proposed taking of coastal California gnatcatcher shall be minimized and mitigated, and how the plan will be funded. See 50 CFR 17.32 for a complete description of the requirements for a HCP.*

If coastal California gnatcatchers are found during the protocol surveys, the Permittee shall submit the following to the Planning Division:

a. *If the Project involves federal permitting or funding, the Permittee shall submit a copy of one of the following documents: (a) a Biological Opinion issued by the USFWS; or (b) a written concurrence letter from the USFWS stating the Project is not likely to adversely affect the coastal California gnatcatcher; or*
b. *If the Project does not involve federal permitting or funding, the Permittee shall submit a copy of one of the following documents: (a) an incidental take permit and HCP; or (b) a written concurrence letter from the USFWS stating that the Project is not likely to adversely affect the coastal California gnatcatcher.*
c. *If (1) the Project site is located within 1 mile of a recorded occurrence of coastal California gnatcatcher, (2) the Project will result in the removal of coastal sage scrub vegetation, and (3) surveys produced no observations of the species, then the Permittee shall submit a concurrence letter from the USFWS to the Planning Division prior to the issuance of a Zoning Clearance stating the Project is not likely to adversely affect the coastal California gnatcatcher*

The Planning Division shall review the Survey Report and documents issued by the USFWS for adequacy prior to issuance of a Zoning Clearance for Use Inauguration of new disturbance. The Planning Division has the authority to inspect the Project site to ensure that the Permittee implements the mitigation measures set forth in the Biological Opinion or HCP (as applicable). If the Planning Division confirms that the Permittee is not maintaining the Project site in compliance with the Biological Opinion or HCP, Planning Division staff has the authority to initiate enforcement actions pursuant to § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

***MM BIO-4(f) Western Pond Turtle**: During the spring/summer season prior to Project initial vegetation removal or ground disturbance in the mine expansion areas, a County-approved qualified biologist shall conduct a visual survey for western pond turtle in and around the pond and suitable habitat areas. The survey methodology shall adhere to the Draft U.S. Geological Survey (USGS) Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (USGS,2006a) (https://sdmmp.com/upload/SDMMP_Repository/0/4fnpv18xm0sqtw29j7d3rz56bkychg.pdf) or the CDFW updated protocol, if applicable. If the County-approved qualified biologist determines it is unlikely that western pond turtle is present, then the Permittee shall submit a Western Pond Turtle Visual Survey Report to the Planning Division within 30 days of completing the survey.*

If the County-approved qualified biologist determines western pond turtle may be present, then the biologist, who must hold an appropriate CDFW Scientific Collecting Permit, shall implement the Draft USGS Western

Pond Turtle Trapping Survey Protocol for the Southcoast Ecoregion (USGS, 2006b) (https://sdmmp.com/upload/SDMMP_Repository/0/q4x2pztbkns61wv9hy30rjc78fg5dm.pdf) or the CDFW updated protocol, if applicable. If western pond turtles are captured during the survey, the qualified biologist shall develop avoidance measures that can be implemented by the Permittee to eliminate the potential for western pond turtle mortalities (e.g., fencing that keeps turtles from entering the active mining area). The qualified biologist shall prepare and submit CNDDB forms to CDFW within three (3) days of the capture. After the completion of the trapping survey, the County-approved qualified biologist shall prepare a Western Pond Turtle Trapping Report that includes the results of the survey. If western pond turtles were captured, then the qualified biologist shall also prepare a Western Pond Turtle Protection Plan that includes the methods that will be implemented to protect turtles, including the avoidance measures developed by the biologist. The qualified biologist shall submit the Western Pond Turtle Trapping Report and the Western Pond Turtle Protection Plan to the CDFW for review and approval within 30 days of completing the survey. Subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW should respond within 30 days of receiving the report and the plan for review. The Permittee shall submit the Western Pond Turtle Trapping Report and the Western Pond Turtle Protection Plan to the Planning Division within 30 days of receiving approval from CDFW.

The Permittee shall implement the Western Pond Turtle Protection Plan under the supervision of the County-approved qualified biologist prior to the initiation of the Project. The qualified biologist shall prepare any reports required by the Western Pond Turtle Protection Plan and the Permittee shall submit the reports to the Planning Division on the schedule designated in the Western Pond Turtle Protection Plan. The results of the surveys shall be summarized in the Annual Biological Resources Mitigation and Monitoring Report and the survey reports shall be included as an appendix to the report (see MM BIO-1(c)).

The Planning Division reviews for adequacy, and maintains in the Project file, the signed contract, Survey Report, and Annual Mitigation and Monitoring Report. If the Planning Division confirms that the required surveys and relocation measures were not implemented in compliance with the requirements of this condition, then enforcement actions may be enacted in accordance with § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

***MM BIO-4(g) Crotch Bumble Bee:** To avoid adverse effects to Crotch bumble bee that may be present within the mine expansion area, the Permittee shall retain a County-approved qualified biologist knowledgeable of Crotch bumble bee species ecology to conduct a survey of areas that may provide habitat for this species. The qualified biologist shall contact the CDFW to request the agency-approved survey protocol for Crotch bumble bee and shall follow the agency-accepted protocol when conducting the surveys. Within 30 days of completing the survey, the County-approved qualified biologist shall prepare a Crotch Bumble Bee Survey Report and submit it to the County Planning Division. The report shall include a description of the methods to conduct the surveys, a description of suitable habitat areas, and a map of the locations where Crotch bumble bee and any other special status species were observed. The County-approved qualified biologist shall submit CNDDB forms for any Crotch bumble bees or other special-status species observed during the surveys. The survey report shall also include measures sufficient to avoid "take" or other adverse impacts to Crotch bumble bee, if found during the surveys. If adverse impacts or "take" of Crotch bumble bee cannot be avoided, the Permittee shall implement MM BIO-3(g), which requires the Permittee to obtain an Incidental Take Permit from the CDFW and implement all impact avoidance and minimization provisions specified in the Incidental Take Permit.*

MM BIO-4(h) Mountain Lion:

MM BIO-4(h)(1) Mountain Lion Natal Den Survey: *To avoid take or other adverse effects to mountain lion that may be present within the mine expansion area, the Permittee shall retain a CDFW-approved biologist knowledgeable of mountain lion species ecology to conduct a survey of areas that may provide habitat for mountain lion natal dens. The survey, which shall also include looking for the evidence of the presence of mountain lions, shall be conducted within no more than one year prior to the initial vegetation removal or ground disturbance in the mine expansion areas. The biologist shall contact the National Park Service to determine presence or recent use of the area by collared mountain lions. Within 30 days of completing the survey, the CDFW-approved biologist shall prepare an Initial Mountain Lion Natal Den Survey Report. Survey results, including negative findings, shall be submitted to CDFW and the Planning Division. Subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW should respond within 30 days of receiving the report for review. The Initial Mountain Lion Natal Den Survey Report shall include a map of potential denning sites, if applicable. The survey report shall also include measures sufficient to avoid "take" or other adverse impacts to mountain lions and mountain lion dens and cubs, if found. The results of the survey shall be included in the Biological Resources Annual Mitigation and Monitoring Report as required by MM BIO-1(c), and the report shall be included as an appendix.*

MM BIO-4(h)(2) Pre-Disturbance Survey for Mountain Lion Natal Dens: *To avoid take or other adverse impacts to mountain lion natal dens, a pre-disturbance survey for natal dens shall be conducted by a CDFW-approved biologist within no more than two weeks prior to each incremental vegetation clearing or ground disturbing activities in new areas. The survey area shall include the proposed clearing area and a buffer of 2,000 feet (or out to the limits of the property line) from the boundary of the vegetation clearing. If an active natal den is found, CDFW shall be notified within 24 hours. If a natal den is found in the survey area, the start of vegetation clearing shall be delayed until an appropriate setback area is determined in consultation with CDFW. The CDFW-approved biologist shall conduct periodic monitoring of the natal den to determine the status of the den and the cubs. No construction activities or human intrusion shall occur within the established setback area until mountain lion cubs have been successfully reared, the mountain lions have left the area, or as determined in consultation with CDFW. A Pre-Disturbance Mountain Lion Natal Den Survey Report shall be prepared documenting the results of the survey and results of the monitoring, if applicable and shall be submitted to CDFW and the Planning Division within 30 days of the completion of the survey. If a natal den is found and monitoring is implemented, then a Mountain Lion Natal Den Monitoring Report shall be prepared and submitted to CDFW and the Planning Division within 30 days of completing the monitoring. Subject to any specific statutory provisions or regulations specifying time periods for response by CDFW, the CDFW shall respond within 30 days of receiving the survey report and monitoring for review. Along with the Pre-Disturbance Mountain Lion Natal Den Survey Report and Mountain Lion Natal Den Monitoring Report, if applicable, the Permittee shall provide a copy of a signed contract (financial information redacted) with a County-approved biologist responsible conducting the activities required by this mitigation measures. The results of the pre-disturbance surveys and monitoring, if applicable, shall be summarized in the Annual Biological Resources Mitigation and Monitoring Report required by MM BIO-1(c) and the reports shall be included as appendices.*

MM BIO-4(h)(3) Rodenticide Use Restrictions: *To avoid take or other adverse effects to mountain lion that may be present within the mine expansion area, the use of rodenticides and second-generation anticoagulant rodenticides within the existing mining operations area and the mine expansion area shall be prohibited.*

MM BIO-4(i) Special-Status Bat Species: *To reduce impacts to special-status bat species and bat maternity colonies, the following mitigation measures shall be implemented during proposed Project activities.*

MM BIO-4(i)(1) Baseline Surveys for Special-Status Bats: *No less than one year prior to initial vegetation clearing, focused surveys for special-status bat species shall be completed by a County-approved qualified bat biologist to determine the approximate size of the colony(s), species present, and features being used within the mine and the mine expansion areas. Focused surveys shall include a combination of nighttime emergence counts and acoustic techniques appropriate for the roosting habitat and time of year. At a minimum, focused surveys shall be conducted during the spring, summer, fall, and winter to determine how the roosting habitat at the Project site is used by bats throughout the year with at least two surveys conducted during the maternity season to determine a pre- and post-volant count of colonies present. The County-approved bat biologist shall prepare a Baseline Bat Survey Report that identifies the location of occupied or suitable bat habitat found within the Project boundary and the results of the daytime and nighttime surveys.*

The Permittee shall provide the Baseline Bat Survey Report to the Planning Division within 30 days of completing the baseline bat surveys. The results of the baseline bat surveys shall be incorporated into the Bat Management Plan as described in MM BIO-4(h)(2) and into the Annual Mitigation and Monitoring Report as required by MM BIO-1(c).

MM BIO-4(i)(2) Preparation of a Bat Management Plan: *If roosting bats are found during the baseline bat surveys, a Bat Management Plan that includes situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting bats shall be prepared by a County-approved qualified bat biologist prior to the commencement of vegetation clearing and mining activities. If no roosting bats are found during the baseline bat surveys, no bat management plan would be required. The Bat Management Plan shall include, as appropriate to the findings of the focused surveys and roosting habitat affected, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. For each incremental vegetation clearing or ground disturbing activities in new areas, the Bat Management Plan shall be reviewed and modified as necessary to incorporate specific actions to be develop future measures that will increase the protections for special-status bats. The Permittee shall provide the Bat Management Plan and any modifications to the Bat Management Plan during each incremental vegetation or ground disturbance to the Planning Division for review and disturbance in any planned expansion area shall not occur until the Planning Division approves the Bat Management Plan. The Bat Management Plan or any subsequent revisions to the plan prepared during future years of mining shall be included as an appendix to the Annual Biological Resources Mitigation and Monitoring Report required by MM BIO-1(c).*

MM BIO-4(i)(3) Restrictions on Vegetation Clearing and Blasting During the Bat Maternity Season (March 1 to September 15): *If bat maternity roosts are determined to be present in areas where the initial vegetation clearing will be conducted or in areas where subsequent vegetation clearing or ground disturbance activities will occur, or where blasting will occur, then a 500-foot buffer shall be established around the maternity roost site and vegetation clearing and blasting shall be postponed within the buffer until after the end of the maternity season and prior to the next maternity season. The buffer size may be reduced at the discretion of the County-approved bat biologist depending on the type and duration of Project activities to be conducted near the roost. If buffers are established around maternity roost sites during any given year of Project activities, the locations and protection measures shall be documented in the Annual Biological Resources Mitigation and Monitoring Report required by MM BIO-1(c).*

MM BIO-4(i)(4) Night Work Near Bat Roosts: *Night work near suitable roosting habitat shall be avoided to the greatest extent feasible. The County-approved bat biologist shall establish buffers around the bat roosts. The buffer size may be reduced at the discretion of the County-approved bat biologist depending on the type and duration of night work activities to be conducted near the roost. If avoiding night work is impossible, measures shall be implemented to minimize potential impacts to bat roosts. The specific measures shall be identified in the Bat Management Plan (MM BIO-4(h)(2)) and summarized in the Annual Mitigation and Monitoring Report (MM BIO-1(c)). The measures shall include but may not be limited to the following:*

- *Night lighting shall be focused directly on the work area and shall not project onto bat roosting sites (Implement MM BIO-7(a)).*
- *Airspace access to and from the roosting habitat sites shall not be obstructed by equipment.*
- *Internal combustion equipment, such as generators and vehicles, shall not be parked or left idling or operated beneath or adjacent to the roosting habitat unless they are required for Project-related work.*
- *Construction personnel shall avoid working, driving, or loitering in non-active areas of the mine that are located adjacent to roosting habitat.*

MM BIO-4(i)(5) Bat Protection During Tree Removal: *To the extent feasible, tree removal shall be conducted between September 15 and February 28 to avoid the maternity season of bats. Measures designed to protect special-status bat species during the felling of trees shall be included in the Bat Management Plan (MM BIO-4(i)(2)). The measures shall include but not be limited to:*

- *Any trees proposed for removal shall be inspected by a County-approved qualified bat biologist to determine their potential as roosting sites.*
- *If crevice and/or cavity features are present, summer night-time surveys shall be conducted to determine if a maternity colony is present.*
- *If a maternity colony is present, tree removal and/or modification shall be postponed until the fall (after flightless young have become volant) and shall be conducted under the supervision of a County-approved qualified bat biologist.*
- *If no crevice and/or cavity features are present, or if the tree removal is scheduled to occur outside of the bat maternity season, the County-approved bat biologist shall supervise the two-step process of tree removal to avoid direct mortality of foliage-roosting bat species. On the first day, the smaller outer limbs and branches that do not contain roosting habitat shall be removed using chain saws or non-mechanized hand tools under the direct supervision of a County-approved qualified bat biologist. On the second day, the remainder of the tree shall be removed.*

The results of monitoring during tree removals shall be included in the Annual Biological Resources Mitigation and Monitoring Report required by MM BIO-1(c).

Impact BIO-5: Ground disturbance associated with mining and reclamation within mine expansion areas could directly and indirectly impact wetlands and waters of the U.S. and/or waters of the State. (Less than Significant with Mitigation)

As discussed in Section 3.5.1.7, above, multiple ephemeral drainages exist within Project site that flow into onsite detention basins or into the pond located west of the Project site. A total of 24 water features

(recognized as W1-W24 in the ISBA) were identified within the Project site and survey area in 2016 (BRC, 2017) as shown on Figure 3.5-4, "Waters and Wetlands" and as listed above in Table 3.5-6. The retention of the flows onsite and within the detention ponds would not change as a result of the Project. The on-site drainages do not have hydrologic connections to upstream tributaries as they all originate below the peaks of the west-facing slopes of the Project site. The on-site drainages do not hold regional significance as they primarily drain onto the immediate property and their flows are contained on-site. A formal aquatic resources delineation has not been conducted to define the specific physical and jurisdictional attributes of drainages and other waters and wetland features at the site. However, site surveys and data collection provide information regarding the locations and size (i.e., length of ephemeral drainages and area of the one detention pond in the study area) of features within and adjacent to the site sufficient to inform the impact analysis in this EIR. Until such time as a formal aquatic resources delineation of jurisdictional waters is prepared and all required reviews and approvals are obtained from regulatory agencies, all such features are considered to have the potential to be waters of the U.S. and/or waters of the State.

Potential indirect impacts to jurisdictional waters include impacts to surface water quality from erosion, siltation, and introduction of hazardous materials or other chemicals/debris associated with Project operations and ground disturbance. Indirect impacts would be avoided or minimized through mitigation measures identified in this Biological Resources section and Section 3.10, "Water Resources." Specifically, mitigation measure MM BIO-3(f), above, requires the preparation and implementation of a Worker Education and Awareness Program (WEAP) that will include measures to avoid contamination of aquatic habitat and impacts to wildlife from trash and other contaminants. Adverse impacts to surface water quality from materials considered hazardous or that might have deleterious impacts on wildlife are described in Section 3.10.2.2, and three mitigation measures (MM WR-2(a), MM WR-2(b), and MM WR-2(c)) are identified there that would ensure compliance with applicable hazardous material regulatory requirements, minimize potential water quality impacts associated with blasting, and minimize potential water quality impacts associated with vehicle and equipment maintenance, respectively. Impacts to surface water quality from increased runoff, erosion, siltation, and inadequate stormwater storage capacity are also addressed in DEIR Section 3.10.2.2, and mitigation measure MM WR-3 is identified to reduce these impacts to less than significant. MM WR-3 requires the Permittee to prepare and submit an engineered grading and drainage plan to the County for approval that ensures all stormwater retention basins have sufficient capacity to retain all stormwater runoff and are designed to convey calculated flows. The mitigation also requires annual inspections of all stormwater retention basins and submittal of inspection reports to the County. Implementation of mitigation measures MM BIO-2(h), MM WR-2(a), MM WR-2(b), MM WR-2(c), and MM WR-3 will ensure indirect impacts to jurisdictional waters do not result from erosion, siltation, and introduction of hazardous materials or other chemicals/debris. With the implementation of these mitigation measures, the indirect impacts to jurisdictional waters would be less than significant.

Direct impacts to jurisdictional waters that would, or could, result from the Project include elimination or alternation of drainages as a result of ground disturbance, flow alteration as a result of mining or other ground disturbances that are up-gradient of drainages, and changes (increases or decreases) in sediment deposition rates due to flow alternations or up-gradient ground disturbance, all of which could also remove or adversely affect plant species and habitats associated with the water/drainage features. The proposed Project would result in direct impacts (elimination) of drainages within the mine disturbance area. Direct impacts to drainages and other potential waters and wetland features are considered significant for the purposes of this EIR. Mitigation measure MM BIO-5 requires the preparation of a formal aquatic resources delineation report of jurisdiction waters on the Project site,

consultation with regulatory agencies, implementation of impact avoidance and minimization measures, and habitat creation, restoration, or conservation to compensate for direct and indirect impacts to jurisdictional waters. Implementation of MM BIO-5 would reduce direct impacts to jurisdictional waters to less than significant.

Mitigation for Impact BIO-5:

MM BIO-5 Aquatic Resources Delineation and Permitting: *In the year prior to initial vegetation removal or ground disturbing activities in mine expansion areas, or activities that would result in the discharge of fill or dredged material within a potentially jurisdictional watercourse, the Permittee shall retain a qualified wetland scientist to conduct a formal aquatic resources delineation of federal and state jurisdictional waters to determine the extent of jurisdiction present and the extent to which the Project footprint affects jurisdictional resources. The Permittee shall prepare an Aquatic Resource Delineation Report and submit it to the County Planning Division within 30 days of completing the field delineation. The Permittee shall submit applications to the U.S. Army Corps of Engineers for a Section 404 Clean Water Act (CWA) Permit, to the CDFW for a Section 1600 Lake or Streambed Alteration Agreement, and to the Regional Water Quality Control Board (RWQCB) for a Section 401 Water Quality Certification. The Permittee shall prepare a compensatory mitigation plan addressing temporary and permanent impacts to federal and/or state jurisdictional wetlands and waters prior to disturbance. The plan shall be developed in consultation with the USACE, RWQCB, and/or CDFW during the permitting process. The plan shall provide for protection of the mitigation lands in perpetuity with funding for long-term management. The proposed compensatory mitigation, whether it is onsite, offsite, or in a USACE- or CDFW-approved bank, shall be agreed upon with the USACE, RWQCB, and CDFW prior to plan approval. Subject to any specific statutory provisions or regulations specifying time periods for response by the applicable agencies, the applicable agencies should respond within 30 days of receiving the compensatory mitigation plan for review.*

The Permittee shall obtain all required state and federal regulatory agency approvals and shall provide copies of all approvals/permits to the Planning Division prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance.

Impact BIO-6: Vegetation clearing in mine expansion areas would result in the direct removal of Ventura County Protected Trees. (Less than Significant with Mitigation)

As discussed in Section 3.5.1.8, trees that are protected in accordance with the Ventura County Tree Protection Ordinance are present within the Project site. Table 3.5-11, "Impacts to Protected Trees within Study Area," provides a list of the trees or tree clusters that would be impacted by the Project. Impacts would occur as a result of direct removal associated with vegetation clearing in mine expansion areas. Three heritage-size coast live oak trees and fifteen southern California black walnut trees are located within mine expansion areas. These trees would be removed as a result of vegetation clearing in advance of mining in these areas.

The other protected trees mapped within the study area are in an area mapped as coast live oak woodland, which is located outside of the southwestern boundary of the proposed mine expansion area. The protected trees located within the coast live oak woodland community and outside of the Project site would not be directly impacted by the Project. Potential indirect impacts from fugitive dust could potentially occur to the protected trees located outside of the Project site if the Project were to result in fugitive dust emission in an amount that would cause excess dust settling on protected trees

to such an extent that diminished photosynthesis or other deleterious effects on tree health would occur. Implementation of MM AQ-1, which includes watering and/or treating road and work areas to minimize fugitive dust emissions, would substantially reduce fugitive dust emission potential from Project activities and would ensure the Project's potential to effect protected trees outside of the Project site would be less than significant.

For the purposes of this evaluation, the Project's direct removal of the three heritage-size coast live oak trees and fifteen southern California black walnut trees is considered a significant impact. Mitigation measure MM BIO-6 requires that a formal tree survey be conducted prior to the initial vegetation removal from within the Project mine expansion area. The mitigation measure also requires the Permittee to prepare and submit a Tree Protection Plan (TPP) to the Planning Division describing the offset or mitigation that will be provided for the protected trees affected by the Project. Implementation of MM BIO-5 would reduce the direct impacts to protected trees to less than significant.

Table 3.5-11. Impacts to Protected Trees within Project Site

ID #	Species Common Name and Characteristic	Girth (Circumference)	Project Impact
T1	Southern California black walnut (Multi-stem)	10 stems each 1.5″	Tree is located within proposed mine expansion area and would be removed in preparation for mining.
T2	Southern California black walnut (Sapling)	13 saplings <1″	Tree is located within proposed mine expansion area and would be removed in preparation for mining.
T3	Coast live oak (Multitrunk)	39″, 44″, 20″ (Heritage)	Tree is located within proposed mine expansion area and would be removed in preparation for mining.
T4	Coast live oak	115.5″ (Heritage)	Tree is located within proposed mine expansion area and would be removed in preparation for mining.
T5	Coast live oak (Multitrunk)	14″, 15.5″,8.5″,9.5″ ,8.5″, 7.5″,8.5″, 14.5″ (Heritage)	Tree is located within proposed mine expansion area and would be removed in preparation for mining.
T6	Southern California black walnut (Multi-stem)	7 stems each 1.5″	Tree is located within proposed mine expansion area and would be removed in preparation for mining.

Mitigation for Impact BIO-6

MM BIO-6 Compliance with County Tree Protection Regulations: *The Permittee shall comply with the County's Tree Protection Regulations (TPR) set forth in § 8107-25 et seq. of the Ventura County Non-Coastal Zoning Ordinance and the Tree Protection Guidelines (TPG), through implementation of measures as specified herein.*

The Permittee shall avoid impacting protected trees to the extent feasible and shall offset or mitigate any damage to protected trees or associated impacts from such damage. If protected trees are felled/damaged and require offsets/mitigation pursuant to the TPR (§ 8107-25.10) and TPG (§ IV.C, Offset/Replacement

Guidelines), the Permittee shall post a financial assurance to cover the costs of planting and maintaining the offset trees.

The Permittee shall prepare and submit to the Planning Division for review and approval, a Tree Protection Plan (TPP) pursuant to the "Content Requirement for Tree Protection Plans" that is currently available on-line at: http://www.ventura.org/rma/planning/pdf/permits/tree/Tree-Protection-Plan-11-11-19.pdf. The TPP must include (but is not limited to):

a. *measures to protect all TPR-protected trees whose tree protection zones (TPZs) are within 50 feet [less than 50 feet is acceptable with appropriate sign-off from a qualified arborist] of the construction envelope (including stockpile and storage areas, access roads, and all areas to be used for construction activities) or within 10 feet of other trees proposed for felling or removal;*
b. *the offset or mitigation that will be provided for any trees approved for felling; and*
c. *the offset or mitigation that will be provided should any protected trees be damaged unexpectedly.*

A qualified arborist shall prepare the TPP in conformance with the County's TPR, TPG, and "Content Requirements for Tree Protection Plans."

If in-lieu fees will be paid to a conservation agency for tree offsets/mitigation, the Permittee shall submit to the Planning Division for review and approval, a tree mitigation plan from a conservation agency that explains how the mitigation funds will be used to support the preservation of protected trees. After the Planning Division's review and approval of the tree mitigation plan, the Permittee shall provide the Planning Division with a copy of the contract between the conservation agency and the Permittee.

Prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance, the Permittee shall submit the TPP to the Planning Division for review and approval, implement all prior-to-construction tree protection measures, and submit the required documentation to demonstrate that the Permittee implemented the tree protection measures. Unless otherwise approved by the Planning Director, replacement and transplant trees must be planted according to the timing indicated in the TPP and other monitoring and reporting requirements shall be conducted according to the dates indicated in the approved TPP.

If in lieu fees are required and will be paid to the Planning Division's Tree Impact Fund, the Permittee shall submit these fees prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance. Where a TPP damaged tree addendum is prepared, the Permittee shall remit payment of the fees within 30 days of Planning Division's approval of the addendum.

If in lieu fees are required and will be paid to an approved conservation agency, the Permittee shall submit these fees, along with the required tree mitigation plan and contract from the conservation organization, prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance.

If a financial assurance is required for tree offsets/mitigation, the Planning Division shall provide the Permittee with a "Financial Assurance Acknowledgement" form. The Permittee shall submit the required financial assurance and the completed "Financial Assurance Acknowledgement" form to the Planning Division. If a financial assurance is required, the Permittee shall submit the required financial assurance and the completed "Financial Assurance Acknowledgement" form prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance/within 30 days of the Planning Division's approval of the TPP damaged tree addendum. The Permittee shall submit annual verification that any non-cash financial assurances are current and have not expired. The Planning Division may release the financial assurance after

receiving the report from the project arborist that verifies that the replacement trees met their final 5- or 7-year performance targets set forth in the TPP.

The Permittee shall retain an arborist to monitor and prepare the documentation regarding the health of the protected trees, pursuant to the monitoring and reporting requirements set forth in the "Content Requirements for Tree Protection Plans." The Planning Division maintains the approved TPP and all supporting documentation in the Project file. The Resource Management Agency Operations Division maintains copies of all financial documentation. Planning Division staff, Building and Safety Inspectors, and Public Works Agency grading inspectors have the authority to inspect the site during the mining of the Project, in order to verify that tree protection measures remain in place during mining activities, consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

Impact BIO-7: Project implementation would directly and indirectly affect wildlife movement opportunities the Santa Monica-Sierra Madre Connection. (Less than Significant with Mitigation)

As discussed in Section 3.5.1.4 and illustrated on Figures 3.5-2 and 3.5-3, the portion of the Santa Monica – Sierra Madre Connection (Connection) adjacent to the Project site is approximately 1,500 feet-wide between the mine disturbance area of the existing quarry and the residential development to the southeast. Although the entirety of the existing and proposed CUP areas is designed by the County as a habitat connectivity and wildlife corridor area (as discussed in Sections 3.5.1.4), the 1,500-foot-wide area between the existing mining area and residences is considered to provide the primary habitat and movement opportunity between areas to the south and north. While wildlife movement may occasionally occur within the existing disturbed areas of the Project site, the limited vegetation and the presence of surface mining and processing operations are expected to minimize the movement value of the existing disturbance areas. Mining in the proposed expansion areas east of the existing mining area would narrow the Connection at this location to approximately 800 feet. Mining in other portions of the proposed expansion area would also reduce habitat quality in areas designated as habitat connectivity and wildlife corridor areas.

The Project's reduction in available habitat for wildlife Santa Monica-Sierra Madre Connection is not expected to significantly affect wildlife movement through the area as compared to baseline conditions, since mining operations would be generally consistent with existing operations. However, for the purposes of this evaluation, the impact to wildlife movement is considered potentially significant as a result of the reduction in habitat within the County-designated movement corridor. On-site activities that would continue and could occur in expansion areas including potential use of lighting, fence installation, and equipment operation; and the narrowing of the corridor between the site and residential development to the east. As discussed in Section 3.5.1.9, under the heading "Ventura County Regulations for Development in Habitat Connectivity and Wildlife Corridors," County zoning code sections 8104-7.7 and 8109-4.8 contain specific requirements associated with development and activities within wildlife corridor areas. Compliance with the code requirements would substantially reduce the potential for significant impacts associated with wildlife movement. Mitigation Measure MM BIO-7(c) requires the Applicant to develop and submit a wildlife movement mitigation plan containing specific provisions for minimizing potential effects on wildlife movement adjacent to planned mining areas and for compliance with County zoning code Section 8104-7.7. Implementation of MM BIO-7(a), MM BIO-7(b), and MM BIO-7(c)would avoid or minimize potential impacts to habitat and special-status wildlife species, would reduce potential Project impacts to wildlife movement corridors, and is considered sufficient to reduce Impact BIO-7 to less than significant.

Mitigation for Impact BIO-7:

MM BIO-7(a) Minimize Impacts of Light and Glare on Wildlife Corridor and Wildlife Habitat: *The Permittee shall minimize potentially significant environmental impacts from light and glare to wildlife migration corridors and/or wildlife habitat, as specified herein.*

All outdoor lighting must be located within 100 feet of a structure or adjacent to a driveway shall be hooded to direct light downward onto buildings, structures, driveways, or yards, in order to prevent the illumination of surrounding habitat. Floodlights are prohibited. All glass and other materials used on building exteriors and structures must be selected to minimize reflective glare. To minimize light and glare from emanating from the Project site, all light fixtures located on the exterior of structures, as well as all freestanding light standards, must be high cut-off type that divert lighting downward onto the property to avoid the casting of any direct light onto the adjacent habitat.

For any changes proposed to facility lighting existing at the time of Project approval, the Permittee prepare a lighting plan that includes a photometric plan and manufacturer's specifications for each exterior light fixture type (e.g., light standards, bollards, and wall mounted packs). An electrical engineer registered by the State of California shall prepare the lighting plan. The lighting plan must include illumination information for all lighting proposed within parking areas, pathways, streetscapes, and open spaces proposed throughout the Project site.

The Permittee shall submit two copies of a lighting plan to the Planning Division for review and approval prior to the issuance of a Zoning Clearance for Use Inauguration of new disturbance The Permittee shall install all exterior lighting in accordance with the approved lighting plan and shall maintain the lighting pursuant to the lighting plan for the life of the Project.

The Planning Division maintains a stamped copy of the approved lighting plan in the Project file. The Permittee shall ensure that the lighting is installed according to the approved lighting plan prior to the issuance of a Certificate of Occupancy. The Building and Safety Inspector and Planning Division staff have the authority to ensure that the lighting plan is installed according to the approved lighting plan. The Planning Division has the authority to conduct site inspections to ensure ongoing compliance with this condition consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

MM BIO-7(b) Fencing: *The Permittee shall mitigate potentially significant environmental impacts to wildlife migration corridors from fencing, as specified herein.*

The Permittee shall ensure that all new fences or walls are constructed in accordance with the County of Ventura Habitat Connectivity and Wildlife Corridor Ordinance (NCZO §8109-4.8 et. seq.; Ordinance 4537), and Ventura County NCZO §8104-7.8 & §8106-8.1. The Permittee shall submit Fence Location and Design Plans to the Planning Division for review and approval, which identifies any fences and walls to be constructed on the Project site. These plans must identify the fence and wall locations and include schematic elevations detailing the design of, and materials to be used in, the fencing and walls. The Permittee shall install the approved fencing or walls prior to starting a new excavation.

The Planning Division has the authority to conduct site inspections to ensure that the Permittee installs and maintains the fencing in compliance with this condition, consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

MM BIO-7(c) Establishment of Wildlife Passage Areas: *The Permittee shall mitigate the Project's potentially significant environmental impacts to wildlife migration corridors through establishment and maintenance of a wildlife passage (WP), as specified herein. The WP shall include areas held under common ownership by the Permittee or held by a conservation group.*

In these areas, all development (e.g., construction, placement, or erection of any solid material or structure, grading, paving, vegetation removal, installation of fencing or walls, and removing, dredging, or disposal of any materials) is prohibited. Outdoor lighting on the Project site shall not illuminate the WP area.

The Permittee shall prepare a map of the potential WP areas for the Planning Division's review and approval. The WP areas shall be described in metes and bounds and shall be depicted on a map. The WP areas must be depicted on all site plans for future development on the subject property, which are submitted to the County for review and approval. The Permittee shall record the Planning Division-approved map and these conditions of approval with the deed to the subject property prior to conducting new disturbance.

The Planning Division maintains a stamped copy of the map in the Project file. The Planning Division will review site plans for future development on the subject property, to ensure that the proposed development complies with the requirements of this condition. The Planning Division has the authority to conduct site inspections to ensure that the Permittee maintains the WP in compliance with this condition, consistent with the requirements of § 8114-3 of the Ventura County Non-Coastal Zoning Ordinance.

3.5.2.3 Cumulative Impacts

In consideration of the projects discussed in Section 3.1.5 of the EIR, two projects are identified as relevant to cumulative impacts associated with biological resources.

PL-17-0135 consists of a Minor Modification to CUP Case No. LU11-0124 to authorize the continued use of Gerry Ranch for "Agricultural Promotional Uses" and "Festivals, Animal Shows, and Similar Events, Temporary Outdoor;" for a 10-year period, as well as modification to the permitted hours of operation for the agricultural promotional use (called "U-Pick Blueberries") to occur from December 1st through end of June, Monday through Sunday, 8:00 am to sunset during these months. No physical changes are proposed as part of this time extension request.

PL-17-0062 - consists of a Conditional Use Permit to allow "Festivals, Animal Shows and Similar Events, Temporary Outdoor," specifically temporary, outdoor events at a 2.86-acre property within the Open Space (160-ac. min) Zone and the Open Space General Plan land use designation addressed as 1735 Pancho Road.

These two projects are anticipated to have minimal effects on biological resource and the proposed Project would not represent a cumulative impact to sensitive biological resources, including special-status species, wetland resources, and wildlife movement, when considering these two recently approved projects. Thus, the Project would not have a cumulatively considerable impact on biological resources and the Project's cumulative impact is considered less than significant.

3.5.2.4 General Plan Policy Consistency

An evaluation of the Project's consistency with Ventura County General Plan policies associated with biological resources is provided in Section 3.13, "Land Use and Planning."

APPENDICES

APPENDIX C

BIOLOGICAL RESOURCES APPENDICES

APPENDIX C-1
INITIAL STUDY BIOLOGICAL ASSESSMENT REPORT FOR PACIFIC ROCK—LU10-0003 (CUP 3817-3), MODIFICATION

Initial Study Biological Assessment

Cover Page

Original ISBA report date: January 15, 2010

Revision report date(s): February 16, 2017

Case number (to be entered by Planning Div.)**:** LU10-0003

Permit type: Conditional Use Permit

Applicant: Pacific Rock, Inc.

Case Planner (to be entered by Planning Div.)**:** Ebony McGee-Andersen

Total parcel(s) size: 718.11 acres

Assessor Parcel Number(s): 234-0-060-22 and 234-0-060-19

Development proposal description: Modification of existing Conditional Use Permit and the approval of an amended Reclamation Plan to authorize mining expansion area. Mining would occur over an approximate 172.8-acre area with a maximum depth of 180 feet.

Prepared for Ventura County Planning Division by:

As a Qualified Biologist, approved by the Ventura County Planning Division, I hereby certify that this Initial Study Biological Assessment was prepared according to the Planning Division's requirements and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge.

<table>
<tr><td colspan="3">Qualified Biologist (signature):
  </td><td>Date: 2/16/17</td></tr>
<tr><td>Name (printed): Matt Schaap</td><td>Title: Biologist</td><td colspan="2">Company: BioResource Consultants Inc.</td></tr>
<tr><td>Phone: 831.710.7687</td><td colspan="3">email: matt@biorc.com</td></tr>
<tr><td colspan="3">Other Biologist (signature):
  </td><td>Date: 2/16/17</td></tr>
<tr><td>Name (printed): Sarah Termondt</td><td>Title: Biologist</td><td colspan="2">Company: BioResource Consultants Inc.</td></tr>
<tr><td>Phone: 805.794.7324</td><td colspan="3">email: sarah@biorc.com</td></tr>
<tr><td colspan="4">Role: Biologist conducted field work, mapped data, assisted in the report writing.</td></tr>
</table>

Initial Study Checklist

This Biological Assessment DID NOT provide adequate information to make CEQA findings regarding potentially significant impacts or to develop mitigation measures necessary to mitigate potentially significant project and cumulative impacts.

Additional biology-related information, studies, or outside agency permits needed to make CEQA findings, develop mitigation measures, or to satisfy other regulatory agencies will be required.

Per consultation with Ventura County (W. Wilkinson, personal communication, Feb. 9, 2017), focused studies to be conducted in order to provide information for CEQA will include:

- Focused Botanical Surveys for all species with High Potential (see Observed and Potentially Occurring Special-Status Species Table) during appropriate bloom periods in the spring of 2017.
- Update/Amendment to the Jurisdictional Wetland Delineation in the spring of 2017.

Contents

Maps

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Summary

The Project site is located within the westernmost Santa Monica Mountains and contains native and non-native vegetation types. Non-native vegetation is of a ruderal character and is directly associated with the existing mining operation. Native plant communities are primarily undisturbed except for portions of the chaparral and coastal sage scrub which have undergone past grading disturbances and through which a small number of unpaved access roads are routed.

On-site vegetation communities support habitat for five special-status species that were observed within the Survey Area (SA1) conducted by BioResource Consultants, Inc. (BRC) in 2016: southern California black walnut (*Juglans californica*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), loggerhead shrike (*Lanius ludovicianus*), sharp-shinned hawk (*Accipiter striatus*), and San Diego desert woodrat *(Neotoma lepida intermedia*). Previous studies conducted within the SA1 in 2010 identified populations of Blochman's dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), Conejo dudleya (*Dudleya parva*), Verity's dudleya (*Dudleya verity*), Conejo buckwheat (*Eriogonum crocatum*), and an individual yellow warbler (*Setophaga petechia*).

Although not observed on-site during BRC's survey, suitable habitat is available for an additional 17 special-status species: Catalina mariposa-lily (*Calochortus catalinae*), Plummer's mariposa-lily (*Calochortus plummerae*), Blochman's dudleya, Conejo dudleya, Verity's dudleya, Conejo buckwheat, Ojai navarretia (*Navarretia ojaiensis*), Lyon's pentachaeta (*Pentachaeta lyonii*), woven-spored lichen (*Texosporium sancti-jacobi*), Crotch bumble bee (*Bombus crotchii*), Santa Monica grasshopper (*Trimerotropis occidentiloides*), western pond turtle (*Emys marmorata*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), yellow warbler, and least Bell's vireo (*Vireo bellii pusillus*).

SA1 also provides suitable habitat for nesting birds protected by the California Department of Fish and Wildlife (CDFW) and the Migratory Bird Treaty Act (MBTA). Project implementation may impact nesting birds due to crushing, trampling, or removal of vegetation, which could result in the mortality of nesting birds or their eggs and/or young. In addition, indirect impacts to nesting birds could occur due to elevated noise levels and vibrations associated with construction equipment, which could result in nesting birds abandoning their nests, eggs, or young. Potential impacts to protected nesting birds are considered less than significant.

Fifteen southern California black walnut trees (two adults and 13 saplings) fall within the Project Construction Footprint and will likely need to be removed. Due to their size and maturity, these trees are not seen as significant to the local habitat community, and therefore merit implementing a 1:1 mitigation measure to remove the trees and plant replacements in an unaffected area of the parcel. Thirteen coast live oak trees (*Quercus agrifolia*) are located within SA1, with three 'heritage' individuals falling within the Construction Footprint. Consultation with the county Planning Division and an arborist report will likely be required to address the removal of these protected trees.

Twenty-four water features (W1-W24) were identified within SA1 during the 2016 survey. All drainages encountered within SA1 deliver ephemeral or intermittent surface flows (W1-W23); have a defined bed and bank, and at some points are culverted; and generally flow westward and southwestward until they are ultimately impounded in a man-made detention basin (W24) forming a perennial lacustrine system (a limnetic and littoral-emergent wetland). All features except W6, W11, W18, W19, and W24 are expected to be impacted as a result of the Project.

The Project is located within the Santa Monica–Sierra Madre Connection (Connection), one of the few coastal-to-inland connections remaining in the South Coast Ecoregion. The Connection stretches from the rugged Santa Monica Mountains at the coast inward to the jagged peaks of the Santa Susana Mountains and the Sierra Madre Ranges of the Los Padres National Forest. Within SA1, the Connection is characterized as a corridor connecting the Santa Monica Mountains to Conejo Mountain. The expansion of the quarry will narrow the corridor connecting the Santa Monica Mountains to Conejo Mountain, but may not be determined to be significant being that the wildlife movement through the area will not be impeded.

Eight vegetation communities within the SA1 were recognized as locally important communities. These communities include Laurel Sumac Scrub, California Sagebrush Scrub, Deerweed Scrub, Giant Wild Rye Grasslands, Red Willow Thicket, Mountain Mahogany Scrub, and Disturbed Chamise/Ceanothus Chaparral and Coast Live Oak Woodland. These communities were determined to be locally important due to a combination of habitat suitability, limited range, and proximity of known occurrences to several listed species of which include: Verity's dudleya, Conejo buckwheat, Plummer's mariposa lily, Catalina mariposa lily, Least Bell's Vireo, coastal California Gnatcatcher, and Yellow Warbler. Red Willow Thicket and Coast Live Oak Woodland are the only two locally important communities that would not be impacted by Project activities. Additionally, SA1 supports moderate to high quality habitat for four recognized locally important species determined to have high potential to occur on the Project site including: Plummer's mariposa lily, Conjeo dudleya, Verity's dudleya, and Conejo buckwheat.

Section 1: Construction Footprint Description

Construction Footprint Definition (per the Ventura County Planning Division): The construction footprint includes the proposed maximum limits of temporary or permanent direct land or vegetation disturbance for a project including such things as the building pad(s), roads/road improvements, grading, septic systems, wells, drainage improvements, fire hazard brush clearance area(s), tennis courts, pools/spas, landscaping, storage/stockpile areas, construction staging areas, fire department turnarounds, utility trenching and other grading areas. The construction footprint on some types of projects, such as mining, oil and gas exploration or agricultural operations, may be quite different than the above.

Development Proposal Description:

Mining Operations

The Applicant requests a modification to the existing Conditional Use Permit (CUP) and the approval of an amended Reclamation Plan to authorize the extraction (mining) of approximately 13.2 million tons of construction aggregate and the reclamation of the mined lands (i.e. the areas disturbed by mining activities).

The requested CUP modification would authorize a maximum production limit of 468,000 tons per year. Total material production from the site is estimated to be 13.2 million tons (19.8 million cubic yards). Operations would occur Monday through Saturday between the hours of 7:00 am to 4:00 pm. Mining would occur over an approximate 172.8-acre area with a maximum depth of 180 feet.

Mining operations will continue in generally the same manner as they have since the early 1900s. The mining area is being expanded to the east to correct the existing "over steepened" slope conditions at the northerly and northeasterly sided of the quarry and for expansion onto recently acquired adjacent land. The mining methods will include blasting to loosen the hard rock material and various processing methods.

At the proposed maximum mining rate of 468,000 tons per year, mining the 13.2 million tons of material would require approximately 28 years (i.e. to the year 2045). The maximum production limit is not expected to achieved for each of the 28 years; hence the Applicant is proposing a 30-year mining permit and is proposing the end of mine life to be December 31, 2050, which includes an additional five years for reclamation and monitoring.

End Use

The mine site would be reclaimed to Agricultural Open Space, including an agricultural grazing area. The final reclaimed surface would be characterized by a near-level quarry floor with an adjacent excavated slope. The slope would be a maximum of 1:1 (h:v) overall gradient with intervening 50-foot wide benches placed every 50 feet of elevation. The bench surfaces would be re-vegetated with native

species compatible with the surrounding area and the floor would be vegetated with an agricultural barley crop to support grazing cattle. Site drainage would be directed to sedimentation basins to minimize the offsite transport of eroded material while the vegetation is established.

Construction Footprint Size

172.8 acres (Entirely within APN 234006022 and 234006019)

Project Design for Impact Avoidance or Minimization

None

Coastal Zone/Overlay Zones

The Construction Footprint is located outside of the Coastal Zone. No overlay zones were depicted in the Ventura County zoning website for APN 234006022 or 234006019.

Zoning

APN 234006022 – Agricultural Exclusive Zone – 40 acres.

APN 234006019 – Open Space – 160 acres.

Elevation

180 – 1,248 feet above mean sea level (amsl).

Other

An SCE power line easement runs adjacent to the eastern edge of the site.

Section 2: Survey Area Description and Methodology

2.1 Survey Purpose

Discretionary actions undertaken by public agencies are required to demonstrate compliance with the California Environmental Quality Act (CEQA). The purpose of this Initial Study Biological Assessment (ISBA) is to gather enough information about the biological resources associated with the proposed project, and their potential to be impacted by the project, to make a CEQA Initial Study significance finding for biological resources. In general, ISBA's are intended to:

- Provide an inventory of the biological resources on a project site and the values of those resources.
- Determine if a proposed project has the potential to impact any significant biological resources.
- Recommend project redesign to avoid, minimize or reduce impacts to significant biological resources.
- Recommend additional studies necessary to adequately assess potential impacts and/or to develop adequate mitigation measures.
- Develop mitigation measures, when necessary, in cases where adequate information is available.

2.2 Survey Area Description

Survey Area Definition (per the Ventura County Planning Division): The physical area a biologist evaluates as part of a biological assessment. This includes all areas that could potentially be subject to direct or indirect impacts from the project, including, but not limited to: the construction footprint; areas that would be subject to noise, light, dust or runoff generated by the project; any required buffer areas (e.g., buffers surrounding wetland habitat). The construction

footprint plus a 100 to 300-foot buffer—beyond the required fire hazard brush clearance boundary—(or 20-foot from the cut/fill boundary or road fire hazard brush clearance boundary – whichever is greater) is generally the size of a survey area. Required off-site improvements—such as roads or fire hazard brush clearance—are included in the survey area. Survey areas can extend off the project's parcel(s) because indirect impacts may cross property lines. The extent of the survey area shall be determined by the biologist in consultation with the lead agency.

SA1 is associated with the existing Pacific Rock Quarry and adjacent areas at 1000 Howard Road, Camarillo, CA 93012 (APN 234006022, 234006019, 234008079, 234008038, and 234006012), within unincorporated Ventura County on the *Piru* USGS 7.5-minute quadrangle.

Survey Area 1 (SA1)

Location

SA1 is located to the southwest of the city of Camarillo, approximately 1.5 miles southwest of Highway 101, and is bordered by Conejo Mountain Memorial Park to the west. SA1 extends approximately 1,200 feet northward and eastward from the existing boundary of the quarry and approximately 700 feet southward from the southern boundary of the quarry.

Survey Area Environmental Setting

SA1 ranges in elevation from approximately 180 to 1,248 feet above mean sea level (amsl). In general, the topography of the quarry is generally flat within the existing mining area. Within the remainder of SA1, steep slopes are found just outside the existing quarry, notably to the north, inhibiting safe foot access. These areas are referred to as Inaccessible Areas (See Site and Survey Area Map). Habitat within this area was assessed with binoculars and aerial photographs. A large portion of SA1 is considered disturbed due to previous and current mining activities as well as the 2013 Springs Fire that burned much of the surrounding area. The majority of the surrounding habitat is dominated by chaparral, and coastal sage scrub vegetation communities. Multiple ephemeral drainages exist within SA1; these drainages flow into a detention basin located on the western side of the property.

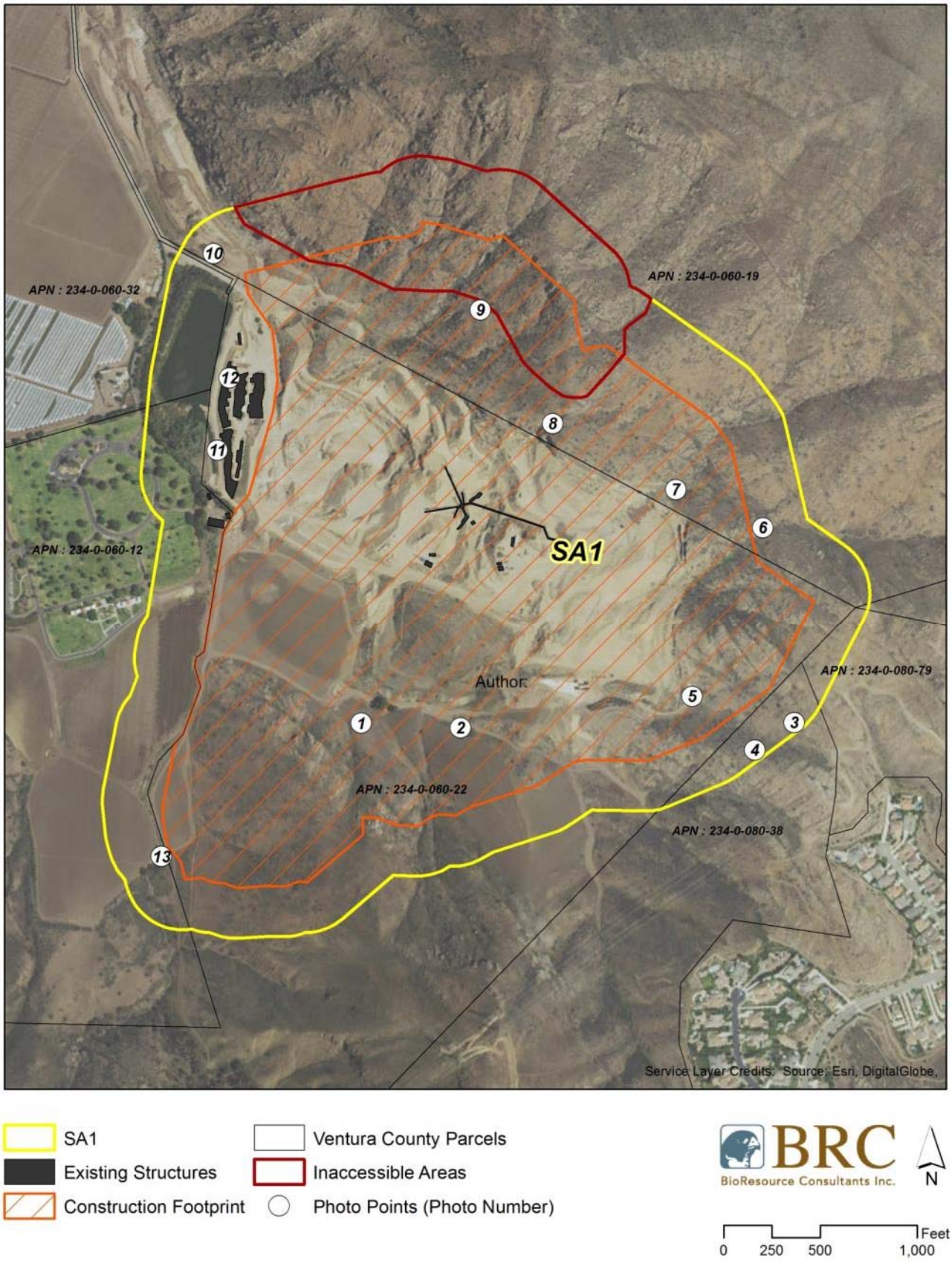
Surrounding Area Environmental Setting

Land uses within and surrounding the SA1 include the existing Pacific Rock Mine quarry, located at the center of the Project site; agricultural lands and the Conejo Mountain Cemetery to the west; residential lands to the southeast; and open space to the north, south, and northeast. Undeveloped lands are composed of natural habitats like those found on site in these open space areas.

Cover

50.3%	Native vegetation
9.2%	Non-native vegetation
50.3%	Recently burned
7.4%	Agricultural/grazing
31%	Bare ground/cleared/graded
0.6%	Buildings, paved roads, and other impervious cover
1.5%	Open water

Project Vicinity Map



Site and Survey Area Map

2.3 Methodology

References

- Aquatic Consulting Services, Inc. January 2010. Preliminary Biological Assessment of the Pacific Rock, Inc. Mining Expansion Area. Prepared for Sespe Consulting, Ventura, California.
- Aquatic Consulting Services, Inc. 1995. Appendix 3. Plant Species Observed within the Lease Boundaries during the December 1994 and May 1995 Field Surveys. Prepared for Sespe Consulting, Ventura, California.
- Baldwin, B.G. et al. [eds]. 2012. The Jepson Manual: Vascular Plants of California: Second Edition. University of California Press. Berkeley and Los Angeles, California.
- Calflora. 2016. The Calflora Database [a non-profit organization]. Berkeley, California. Available online: http://www.calflora.org/. Accessed November, 2016).
- [CNDDB] California Natural Diversity Database. 2016. BIOS [Internet]/ California Department of Fish and Wildlife [v5.47.21].
- CNDDB. 2016. Rarefind 5 [Internet]. California Department of Fish and Wildlife [v5.2.7].
- [CNPS] California Native Plant Society. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). CNPS. Sacramento, California. http://www.cnps.org/inventory. Accessed September 2016.
- Impact Sciences, Inc. August 2010. Initial Study Biological Assessment Report of the Pacific Rock, Inc. Mining Expansion Area. Prepared for Sespe Consulting. Ventura, California.
- Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society. Sacramento, California.
- South Coast Wildlands. 2008. South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion. Regional Report. March.
- [VCPD] Ventura County Planning Division. 2016. GIS Biology Map Packet; Regional Wildlife Corridor and Waterbodies Buffered. Ventura, California.
- VCPD. 2014. Ventura County Locally Important Species. Ventura, California.

BRC performed a site visit to map the vegetation; assess the habitat suitability for potential special-status species and wildlife movement; map any sensitive biological resources encountered on-site; and, record observations of plant and wildlife species.

Survey Details Table

Survey Date & Details							
Survey Key	**Survey Date**	**Survey Area Map Key(s)***	**Survey Type**	**Time Period**	**Methods/Constraints**	**GPS**	**Surveyors**
SD1	12/5/1994	Unknown	ISBA	7:00am - 5:00pm	Surveys consisted of walking the disturbed an undisturbed areas within the initial lease boundary as well as areas adjacent to the east and south of the initial site. Animal and plant species observed were recorded.	Unknown	Aquatic Consulting Services
SD2	5/19/1995	Unknown	ISBA	7:00am - 5:00pm	Surveys consisted of walking the disturbed an undisturbed areas within the initial lease boundary as well as areas adjacent to the east and south of the initial site. Animal and plant species observed were recorded.	Unknown	Aquatic Consulting Services
SD3	12/30/09	SA1	ISBA	Unknown	Surveys conducted to evaluate the existing on-site habitat, flora, fauna, and hydrologic features within the proposed expansion	Unknown	Aquatic Consulting Services; Louis A. Courtois
SD4	1/5/2010	SA1	ISBA	Unknown	Surveys conducted evaluate the existing on-site habitat, flora, fauna, and hydrologic features within the proposed expansion	Unknown	Aquatic Consulting Services; Louis A. Courtois
SD5	5/3/2010	SA1	ISBA	8:00 am - 1:00 pm	A walking reconnaissance survey of the site to review habitat types and determine placement of trap lines for mammals and habitat areas in which special-status plant species focused surveys would be appropriate.	N/A	Joe Decruyenaere
SD6	5/3/2010	SA1	Wetlands	8:00 am - 12:30 pm	Walking site. Approximately 90 percent of the drainages and wetland features were accessible; approximately 10 percent of the drainages areas were mapped using aerial imagery and custom topography.	N/A	R.C. Brody
SD7	5/11/2010	SA1	Botanical	9:00 am - 10:30 am	All accessible habitats were investigated for general plant species, and accessible rocky habitats were investigated in depth for quantitative mapping of special-status Blochman's dudleya and Conejo buckwheat.	Trimble Geo XH sub-meter	Joe Decruyenaere

Survey Date & Details							
Survey Key	**Survey Date**	**Survey Area Map Key(s)***	**Survey Type**	**Time Period**	**Methods/Constraints**	**GPS**	**Surveyors**
SD8	5/19/2010	SA1	Botanical	9:00 am - 10:30 am	All accessible habitats were investigated for general plant species, and accessible rocky habitats were investigated in depth for quantitative mapping of special-status Blochman's dudleya and Conejo buckwheat.	Trimble Geo XH sub-meter	Joe Decruyenaere
SD9	05/03/2010	SA1	LBV/CAGN Surveys	8:30 am - 11:05 pm	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD10	5/4/2010	SA1	Mammal trapping	7:00 pm - 8:00 pm	Initial trapping set-up and baiting. 30 traps were used, placed to sample coastal sage scrub, chaparral, and disturbed areas, both upland and near riparian vegetation south of the agricultural field. Traps were placed in SA1 (3 traps in ruderal vegetation), SA2 (13 traps in ruderal and coastal sage scrub vegetation), SA3 (4 traps in disturbed coastal sage scrub vegetation), and SA4 (10 traps in coastal sage scrub and chaparral vegetation).	Unknown	Joe Decruyenaere; R.C. Brody
SD11	5/5/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody
SD12	5/5/2010	SA1	Mammal trapping	7:00 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD13	5/6/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody
SD14	5/6/2010	SA1	Mammal trapping	7:00 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD15	5/7/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody
SD16	05/13/2010	SA1	LBV/CAGN Surveys	8:42 am - 10:15 pm	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD17	05/24/2010	SA1	LBV/CAGN Surveys	8:15 am - 9:48 pm	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD18	5/25/2010	SA1	Mammal trapping	6:30 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD19	5/26/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody

Survey Date & Details							
Survey Key	**Survey Date**	**Survey Area Map Key(s)***	**Survey Type**	**Time Period**	**Methods/Constraints**	**GPS**	**Surveyors**
SD20	5/26/2010	SA1	Mammal trapping	6:30 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD21	5/27/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody
SD22	5/27/2010	SA1	Mammal trapping	6:30 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD23	5/28/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; R.C. Brody
SD24	06/05/2010	SA1	LBV/CAGN Surveys	7:03 am - 9:10 am	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD25	06/16/2010	SA1	LBV/CAGN Surveys	8:36 am - 10:00 am	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD26	06/26/2010	SA1	LBV/CAGN Surveys	9:18 am - 10:25 am	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD27	6/29/2010	SA1	Mammal trapping	6:00 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD28	6/30/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; Ty Garrison
SD29	6/30/2010	SA1	Mammal trapping	6:00 pm - 8:00 pm	Trap set-up and baiting	Unknown	Joe Decruyenaere
SD30	7/1/2010	SA1	Mammal trapping	6:00 am - 8:00 am	Recordation and release of captured animals	Unknown	Joe Decruyenaere; Ty Garrison
SD31	07/07/2010	SA1,	LBV/CAGN Surveys	9:00 am - 9:40 am	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD32	07/21/2010	SA1	LBV/CAGN Surveys	5:50 am - 6:28 pm	Conducted protocol surveys for least Bell's vireo and coastal California gnatcatcher	Unknown	Thomas Ryan
SD33	11/04/2016	SA1*	ISBA	8:30 am - 4:30 pm	Surveys consisted of walking undisturbed areas within the revised Construction Footprint and 300-ft. buffer (SA1). Animal and plant species observed were recorded.	Digiland DL721-RB	Matt Schaap, Sarah Termondt

* SA1 adjusted in 2016 to reflect proposed change in Construction Footprint. From this point on in the document, SA1 refers to revised Survey Area for 2016.

ISBA .....……..Initial Study Biological Assessment
Botanical.....…… Botanical Survey
LBV/CAGN……...Least Bell's Vireo and California Gnatcatcher Protocol Survey
Mammal Trapping……...Mammal Trapping Surveys
Wetlands……..Jurisdictional Delineation of drainages and wetlands

Section 3: The Biological Inventory

See Appendix 1 for an overview of the types of biological resources that are protected in Ventura County.

3.1 Habitats: Plant Communities, Physical Features and Wetlands

Plant Communities

One CDFW sensitive plant communities and eight locally-important plant communities were found within SA1.

Major Plant Communities Summary

PC1 - Laurel Sumac Scrub (*Malosma laurina* Alliance; S4, G4; Locally Important Community)
In this community within SA1, laurel sumac (*Malosma laurina*) is the dominant species in the shrub canopy. Associated species include chaparral yucca (*Hesperoyucca whipplei*), sugar bush (*Rhus ovata*), and red-topped buckwheat (*Eriogonum fasciculatum* var. *foliolosum*). A sparse-to-grassy herbaceous understory of intermittent non-native grasses is present. Within SA1, this community ranges from open/intermittent to moderately-dense cover because of the 2013 Springs Fire. This community was found to be the predominant vegetation type within SA1 with shrubs located on moderate to steep slopes of variable aspect. It occurs at elevations ranging from 5 to 400 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however, this community was determined to be considered locally important because special-status species with limited range including state rare Conejo buckwheat (*Eriogonum crocatum*) and federally threatened Verity's dudleya (*Dudleya verityi*), have been previously recorded to occupy this community within SA1 (See Special-Status Plant Species Map). Additionally, this alliance does support wildlife connectivity outside of the SA1.

PC2 - California Sagebrush Scrub (*Artemisia californica* Alliance; S5, G5; Locally Important Community)
In this community within SA1, California sagebrush (*Artemisia californica*) is the dominant species in the shrub canopy, with occurrences of black sage (*Salvia mellifera*) and deerweed (*Acmispon glaber*). A sparse herbaceous understory of intermittent non-native grasses is present. Within SA1, this community was found to be intact with principally dried/dormant vegetation and is located on gentle slopes of variable aspect. It occurs at elevations ranging from 50 to 925 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however, this community was determined to be considered locally important because special-status species with limited range including Conejo buckwheat and Verity's dudleya, have been previously recorded within similar habitat in the SA1. Additionally, this alliance does support habitat for the federally threatened coastal California Gnatcatcher (*Polioptila californica californica*) within SA1.

PC3 - Deerweed Scrub (*Acmispon glaber* [form. *Lotus scoparius*] Alliance; S5, G5; Locally Important Community)
In this community within SA1, deerweed is the dominant species in the shrub canopy with red-topped buckwheat and sparse occurrences of laurel sumac. A sparse herbaceous understory of intermittent non-native grasses is present. Within SA1, this community was found to be intermittent with principally dried/dormant vegetation and is located on gentle slopes of variable aspect with rocky outcroppings. It occurs at elevations ranging from 50 to 925 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however this community was determined to be locally important due to its potential to support Catalina mariposa-lily (*Calochortus catalinae*) and Plummer's mariposa-lily (*Calochortus plummerae*), both CNPS 4.2 listed species. Additionally, this alliance does support foraging habitat for the coastal California Gnatcatcher and does support wildlife connectivity outside of the SA1.

PC4 - Giant Wild Rye Grasslands (*Elymus condensatus* [form. *Leymus condensatus*] Alliance; S3, G3; Locally Important Community)

In this community within SA1, giant wild rye (*Elymus condensatus*) is the dominant species in the herbaceous layer, with a sparse herbaceous understory of intermittent non-native grasses. This community was found on north facing slopes and in association with ephemeral drainages on the eastern portion of SA1. It occurs at elevations ranging from 0 to 1500 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however this community was determined to be locally important due to its potential to support special-status plant species including Catalina mariposa-lily and Plummer's mariposa-lily. It should be noted that listed plant species including Conejo buckwheat and Verity's dudleya, were documented within this general area in 2010, but it is assumed these specific population locations were limited to rock outcroppings found within or adjacent to this community.

PC5 - Cattail Marsh (*Typha latifolia* Alliance; S5, G5)

In this community within SA1, broadleaf cattail (*Typha latifolia*) is the dominant species in the herbaceous layer, with occurrences of poison hemlock (*Conium maculatum*) and tule (*Schoenoplectus acutus* var. *occidentalis*). This community occurs adjacent to an annual spring and within the bed and bank of an intermittent drainage found in the south-central portion of SA1 as well as near the southwestern portion of the retention pond. It occurs at elevations ranging from 0 to 350 meters amsl (Sawyer et al. 2009).

PC6 - Red Willow Thicket (*Salix laevigata* Alliance; S3, G3; CDFW Sensitive Community; Locally Important Community)

In this community within SA1, red willow (*Salix laevigata*) is the dominant species in the tree canopy, with occurrences of broadleaf cattail and tule. The trees form a continuous canopy adjacent to a culverted drainage feeding into the retention pond. This community occurs at elevations ranging from 0 to 1700 meters amsl (Sawyer et al. 2009). CDFW considers this a sensitive community type synonymous with Southern Willow Scrub (CNDDB, Holland 1986). This woodland alliance is considered a unique habitat within Ventura County and is considered a locally-important community yellow warbler (*Setophaga petechial*), a CDFW Species of Special Concern, was observed previously nesting within it. Additionally, federally and state endangered least Bell's vireo (*Vireo bellii pusillus*), which has been recorded within one mile of the Project site and has the potential to occur within SA1 (CNDDB, eBird 2016), may utilize this community for nesting. This alliance supports wildlife connectivity outside of the parcel boundary.

PC7 – Mountain Mahogany Scrub (*Cercocarpus betuloides* [form. *Cercocarpus montanus*] Alliance; S4, G5; Locally Important Community)

In this community within SA1, birchleaf mountain mahogany (*Cercocarpus betuloides*) is the dominant species in the shrub layer with sparse occurrences of laurel sumac and an understory of intermittent non-native grasses. This community was found in the eastern portion of SA1 in association with an ephemeral drainage. It occurs at elevations ranging from 100 to 2400 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however this community was determined to be locally important due to its potential to support special-status plant species including Catalina mariposa-lily and Plummer's mariposa-lily. Additionally, this alliance does support foraging habitat for the coastal California Gnatcatcher. It should be noted that special-status plant species including Conejo buckwheat and Verity's dudleya, were documented within this general area in 2010, but it is assumed these specific population locations were limited to rock outcroppings found within or adjacent to the area.

PC8 – Disturbed Chamise/Ceanothus Chaparral (*Adenostoma fascicultatum* Alliance; S5, G5; Locally Important Community)

In this community within SA1, an open to sparse tree/shrub canopy of chamise (*Adenostoma fasciculatum*) and ceanothus (*Ceanothu*s sp.) exists. Within SA1, this vegetation community was recently burned by the 2013 Springs Fire and was starting to show signs of regrowth at the time of BRC's 2016 survey. This community is found adjacent to rock outcroppings in the northeastern portion of SA1. It occurs at elevations ranging from 10 to 1800 meters amsl (Sawyer et al. 2009). This shrubland alliance is not considered to be unique habitat within Ventura County; however, this community was determined to be considered locally important because special-status species with limited range including Conejo buckwheat and Verity's dudleya, have been previously recorded within similar habitat in the SA1.

PC9- Coast Live Oak Woodland – (*Quercus agrifolia* Woodland Alliance; S4, G5, County Locally Important Community)

In this community within SA1, coast live oak trees form a continuous canopy with California sagebrush, saw-toothed goldenbush (*Hazardia squarrosa*), and features a mixed grassy understory with black sage. This community occurs at elevations ranging from 0 to 1200 meters amsl. The Ventura County Board of Supervisors has deemed oak woodlands to be a locally important community.

PC 10 – Russian Thistle Fields

This community is characterized by a dense cover of Russian thistle (*Salsola tragus*), a non-native invasive weed species. This community occurs in the southwestern corner of SA1 within a previously-cleared parcel that is adjacent to several agricultural fields.

PC11- Non-Native Annual Grassland

This community is characterized by a dense-to-sparse cover of annual grasses with germination at the onset of the late fall rains, and growth, flowering, and seed-set occurring from winter through spring. The plants are dead through the summer-to-fall dry season, persisting instead as seeds during that time. Species present include short-pod mustard (*Hirschfeldia incana*), mustard (*Brassica* sp.), ripgut brome (*Bromus diandrus*), yellow star thistle (*Centaurea* melitensis), and foxtail brome (*Bromus madritensis*). Populations of special-status plant species previously recorded in 2010 in these areas no longer exist and conditions are currently considered too disturbed to provide suitable habitat (See Special-Status Plant Species Map).

PC12 – Agriculture

Agriculture includes areas currently utilized for agricultural purposes. Within SA1, this predominantly includes strawberry and palm fields.

PC13 – Undifferentiated Ornamental

Undifferentiated Ornamental includes areas landscaped with non-native ornamental trees and shrubs. Within SA1, this community includes predominantly non-native tree species located within and on the border of the Conejo Mountain Cemetery, which is located directly east of the existing quarry. One coast live oak tree and several oak saplings were located within the community, immediately adjacent to a hedge of ornamental trees and shrubs on the quarry property.

PC14 - Developed

Developed includes areas currently developed with structures or roads. This includes existing paved areas and offices.

PC15 – Previously Cleared Land

Previously Cleared Land includes areas that were previously graded lands that are not vegetated. Within SA1, this area includes the current rock quarry and associated vehicle storage yards. Aerial views show these areas were cleared prior to 1989. Utilizing existing plant communities located adjacent to SA1 as a guide, it is likely these cleared areas were initially composed of intact coastal sage scrub and chaparral communities including Laurel Sumac Scrub and California Sagebrush Scrub.

Plant Communities

Map Key	SVC Alliance	SVC Association	Misc.	Status	Condition	Acres Total	Acres Impacted	Comments
PC1	Laurel Sumac Scrub			LIC (S4,G4)	Overall Intact with portions recovering from 2013 burn	120.52	71.02	Impacted acreage falls within Construction Footprint.
PC2	California Sagebrush Scrub			LIC (S5,G5)	Intact	0.14	0.14	Impacted acreage falls within Construction Footprint.
PC3	Deerweed Scrub			LIC (S5,G5)	Intact	1.30	0	Vegetation community falls outside of Construction Footprint to the east.
PC4	Giant Wild Rye Grasslands			LIC (S3, G3)	Intact	2.04	1.50	Impacted acreage falls within Construction Footprint.
PC5	Cattail Marsh			(S5, G5)	Intact	0.32	0.19	Impacted acreage falls within Construction Footprint.
PC6	Red Willow Thicket			SC LIC (S3, G3)	Intact	2.01	0	Impacted acreage falls within Construction Footprint.
PC7	Mountain Mahogany Scrub			LIC (S4, G5)	Intact	0.23	0.23	Impacted acreage falls within Construction Footprint.
PC8	Disturbed Chamise/ Ceanothus Chaparral			LIC (S5, G5)	Burn	1.43	1.34	Impacted acreage falls within Construction Footprint.

Plant Communities								
PC9	Coast Live Oak Woodland			LIC (S4, G5)	Intact	1.52	0	No anticipated impacts, outside of Construction Footprint.
PC10			Russian Thistle Fields			2.93	1.52	Non-native, falls within Construction Footprint
PC11			Non-Native Annual Grassland			16.38	11.50	Non-native, falls within Construction Footprint
PC12			Agriculture			19	10.21	Within proposed Construction footprint
PC13			Ornamental			4.25	0.01	Within proposed Construction footprint
PC14			Developed			1.70	0.29	Existing structures and paved areas
PC15			Previously Cleared Land			79.90	69.03	Within Construction Footprint. Likely previously intact Laurel Sumac Scrub and California Sagebrush Scrub.
-			Detention Pond			3.75	0	-
					Totals	257.40	166.98	

LIC.....Locally Important Plant Community
SC……CDFW Recognized Sensitive Community
G1 or S1 .....Critically Imperiled Globally or Sub-nationally (state)
G2 or S2 .....Imperiled Globally or Sub-nationally (state)
G3 or S3 .....Vulnerable to extirpation or extinction Globally or Sub-nationally (state)
G4 or S4…..Apparently Secure, uncommon but not rare (state)
G5 or S5…..Secure, common, widespread and abundant (state)

Physical Features

Physical Features		
Map Key	Physical Feature	Comments
PF1 (a,b,c,d)	Volcanic rock outcrop	The north, east, and south central portions of SA1 comprise large sections of volcanic rock outcrops. These areas provide habitat for special status species, including *Dudleya blochmaniae* ssp. *blochmaniae* (Blochman's dudleya, CNPS List 1B.1), *Eriogonum crocatum* (Conejo buckwheat, California Rare; CNPS List 1B.2).
PF2	Cliff face	Large cliff face that provides habitat for roosting bats and nesting birds.
PF3	Cliff face	Large cliff face that provides habitat for roosting bats and nesting birds.
PF4	Cliff face	Large cliff face that provides habitat for roosting bats and nesting birds.

Waters and Wetlands

See Appendix 1 for an overview of the local, state and federal regulations protecting waters, wetlands and riparian habitats. Wetlands are complex systems; delineating their specific boundaries, functions and values generally takes a level of effort beyond the scope of an Initial Study Biological Assessment (ISBA). The goal of the ISBA with regard to waters and wetlands is simply to identify whether they may exist or not and to determine the potential for impacts to them from the proposed project. This much information can be adequate for designing projects to avoid impacts to waters and wetlands. Additional studies are generally warranted to delineate specific wetland boundaries and to develop recommendations for impact minimization or impact mitigation measures.

Waters and/or wetlands were found within SA1.

Waters and Wetlands Summary

Twenty-four water features (W1-W24) were identified within SA1 during the 2016 survey. All drainages encountered with SA1 deliver ephemeral or intermittent surface flows (W1-W23); have a defined bed and bank and at some points are culverted; and generally flow westward and southwestward until they are ultimately impounded in a man-made detention basin (W24) to form a perennial lacustrine system (a limnetic and littoral-emergent wetland). These ephemeral and intermittent flows can serve as an indirect tributary to Conejo Creek (a WPD redline and regionally-important stream drainage for a substantial portion of southern Ventura County); however, surface flows generated from this site join Conejo Creek (via an off-site laurel sumac chaparral swale) only during noteworthy flood events when floodwaters are able to significantly breach the detention pond. As such, on-site drainages do not hold regional significance as they primarily drain onto the immediate property and their flows are contained on-site. A wetland delineation was conducted as part of original ISBA submission by Impact Sciences, Inc., in 2010; however, this delineation did not include the additional impact areas that were added to the revised Construction Footprint. Therefore, an updated formal wetland delineation should be conducted for the revised Project.

Eight natural ephemeral drainages (W1-W8) exist in the northwestern and north-central portions of SA1. W1 through W7 are tributaries to W8, which the existing mining operation has disconnected. W8 is culverted at C3, which feeds into the detention pond (W24). Seven natural ephemeral drainages (W9-W15) exist in the east-central portion of SA1. These features were also disconnected by the existing mining operation. The accumulation of sheet flow produced by these features is collected at the lowest point of the quarry and culverted at C2, which also feeds into the detention pond (W24).

In the southern central portion of SA1, an intermittent drainage with water present, potentially sourced from an annual spring was encountered (W17). This feature supports a small area of a persistent stand of emergent vegetation (PC-5 Cattail Marsh) within its bed and bank. Four ephemeral drainages (W18-W21) located in the southern portion of SA1 serve as tributaries to W17, which is disconnected by an agricultural field and culverted at C1. C1 connects these features to W23, a natural ephemeral drainage that borders agricultural fields to the south and eventually feeds into the detention pond (W24). An additional natural ephemeral drainage (W22) was identified in the southwestern portion of SA1 and appears to have been disconnected by the existing mining/agricultural operation. Currently, flows from W22 appear to either dissipate or to connect to W23 via sheet flow across the disturbed Russian Thistle Fields.

The man-made detention basin (W24) is located outside and along the western boundary of the property between the headquarters of the mining operation and Conejo Creek. This lacustrine feature is bounded by willow woodlands, supports a persistent stand of emergent vegetation (bulrush and cattail) throughout much of the entire littoral zone, and has no regular connection to any other downstream waters or wetlands. The detention basin is shared by neighbors as a water source for commercial operations.

Waters and Wetlands Table

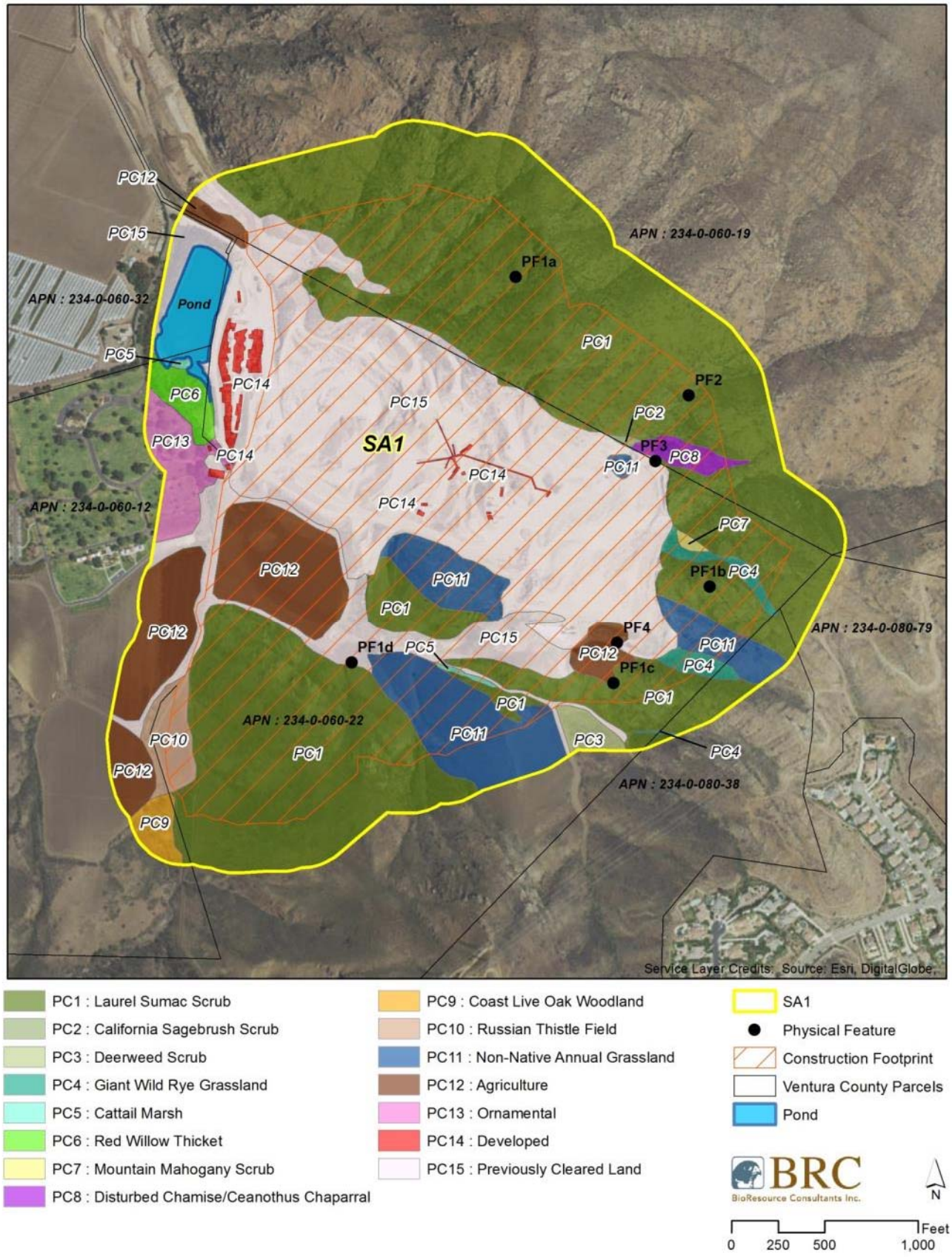
Waters and Wetlands						
Map Key	**Wetland Type**	**Wetland Name (if any)**	**Wetland Status (if known)**	**Wetland Size**	**Hydrologic Status**	**Primary Water Source**
W1	Ephemeral drainage	Unnamed	CDFW	842 linear feet	Dry	Precipitation, natural runoff
W2	Ephemeral drainage	Unnamed	CDFW	1,228 linear feet	Dry	Precipitation, natural runoff
W3	Ephemeral drainage	Unnamed	CDFW	1,062 linear feet	Dry	Precipitation, natural runoff
W4	Ephemeral drainage	Unnamed	CDFW	552 linear feet	Dry	Precipitation, natural runoff
W5	Ephemeral drainage	Unnamed	CDFW	829 linear feet	Dry	Precipitation, natural runoff
W6	Ephemeral drainage	Unnamed	CDFW	308 linear feet	Dry	Precipitation, natural runoff
W7	Ephemeral drainage	Unnamed	CDFW	980 linear feet	Dry	Precipitation, natural runoff
W8	Ephemeral drainage	Unnamed	CDFW	988 linear feet	Dry	Precipitation, natural runoff. Features W1-W7 serve as tributaries to W8.
W9	Ephemeral drainage	Unnamed	CDFW	714 linear feet	Dry	Precipitation, natural runoff
W10	Ephemeral drainage	Unnamed	CDFW	910 linear feet	Dry	Precipitation, natural runoff
W11	Ephemeral drainage	Unnamed	CDFW	322 linear feet	Dry	Precipitation, natural runoff
W12	Ephemeral drainage	Unnamed	CDFW	681 linear feet	Dry	Precipitation, natural runoff
W13	Ephemeral drainage	Unnamed	CDFW	894 linear feet	Dry	Precipitation, natural runoff
W14	Ephemeral drainage	Unnamed	CDFW	212 linear feet	Dry	Precipitation, natural runoff
W15	Ephemeral drainage	Unnamed	CDFW	946 linear feet	Dry	Precipitation, natural runoff
W16	Ephemeral drainage	Unnamed	CDFW	555 linear feet	Dry	Precipitation, natural runoff
W17	Intermittent drainage	Unnamed	CDFW County	2046 linear feet	Ponded	Annual spring, precipitation, groundwater, natural and agricultural runoff. Features W18-W21 serve as tributaries to W17.
W18	Ephemeral drainage	Unnamed	CDFW	154 linear feet	Dry	Precipitation, natural runoff
W19	Ephemeral drainage	Unnamed	CDFW	292 linear feet	Dry	Precipitation, natural runoff
W20	Ephemeral drainage	Unnamed	CDFW	1,070 linear feet	Dry	Precipitation, natural runoff
W21	Ephemeral drainage	Unnamed	CDFW	796 linear feet	Dry	Precipitation, natural runoff
W22	Ephemeral drainage	Unnamed	CDFW	678 linear feet	Dry	Precipitation, natural runoff
W23	Ephemeral drainage	Unnamed	CDFW	2,405 linear feet	Dry	Precipitation, natural runoff

Waters and Wetlands						
W24	Detention Basin	Unnamed	CDFW, County	3.75 acres	Ponded	Precipitation, groundwater, natural and agricultural runoff. Artificially impounded
CDFW ..... California Department of Fish & Game regulated County ..... County General Plan protected wetland						

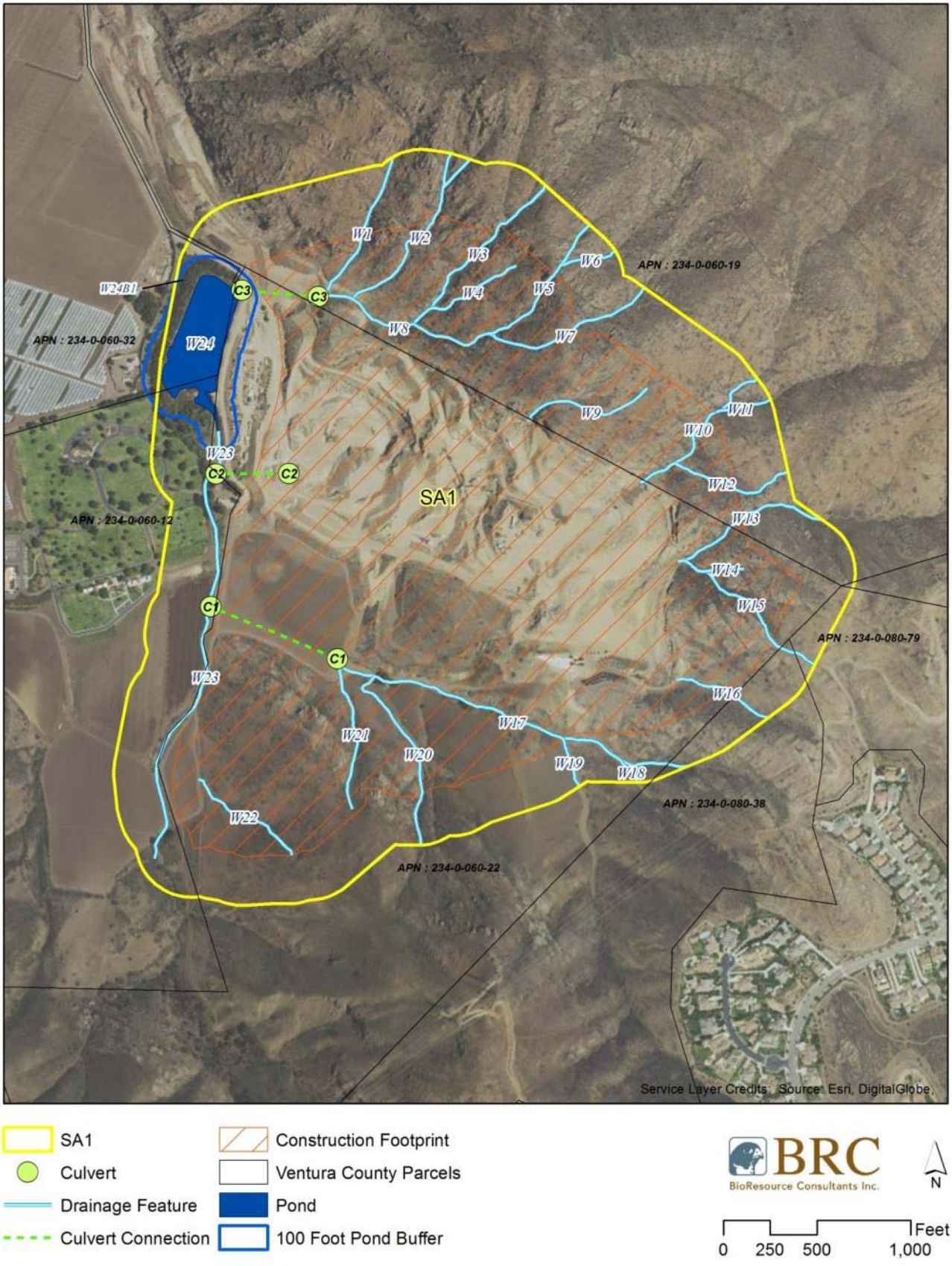
Waters and Wetlands (continued)			
Map Key	**County Wetland Significance**	**Wetland Distance from Project**	**Comments**
W1	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W2	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W3	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W4	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W5	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W6	Unknown	Adjacent to Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W7	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W8	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W9	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W10	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W11	Unknown	Adjacent to Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W12	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W13	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W14	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W15	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W16	Unknown	Within Construction Footprint and immediately adjacent	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W17	Unknown	Within Construction Footprint and immediately adjacent	Intermittent drainage within moderately disturbed sumac scrub and contains a small section of cattail marsh habitat within bed and bank. Moderately disturbed with few invasive species.
W18	Unknown	Adjacent to Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W19	Unknown	Adjacent to Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W20	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed

Waters and Wetlands (continued)			
		and immediately adjacent	chaparral and few invasive species.
W21	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W22	Unknown	Within Construction Footprint	Ephemeral drainage contains healthy, moderately disturbed chaparral and few invasive species.
W23	Unknown	Immediately adjacent to Construction Footprint	Ephemeral drainage that runs through small section of oak woodland and then borders agricultural fields running in a northerly direction. Relatively disturbed in sections adjacent to agricultural fields. Contains numerous invasive species.
W24	Significant	Adjacent to Construction Footprint	The detention pond contains habitat for multiple federal, state, and CDFW listed species including least bell's vireo, yellow warbler, and western pond turtle. The feature is situated immediately adjacent to existing mining operations and captures all runoff from the facility. Consequently, this feature receives moderately high levels of continual disturbance.

Water/Wetland Buffers		
Map Key (1)	Recommended Buffer (2)	Comments
W24B1	100'	The feature provides suitable habitat for special-status wildlife species.



Plant Communities Map



Waters and Wetlands Map

3.2 Species

Observed Species

Plants: The vegetation on the slopes within SA1 consists primarily of chaparral vegetation and portions of coastal sage scrub with openings dominated by a combination of native and non-native grasses, as is expected following a fire. Characteristic species found within SA1 include laurel sumac, California sagebrush, giant wild rye, deerweed, black sage, coast prickly-pear (*Opuntia littoralis*), California buckwheat, ashy-leaf buckwheat (*Eriogonum cinereum*), and yucca. Understory vegetation within chaparral and coastal sage scrub communities on-site supports a variety of herbaceous annuals, perennials, and woody species, including poison-oak (*Toxicodendron diversilobum*), Pacific sanicle (*Sanicula crassicaulis*), California aster (*Corethrogyne filaginifolia*), golden yarrow (*Eriophyllum confertiflorum* var. *confertiflorum*), chalk liveforever (*Dudleya pulverulenta*), big-fruited man-root (*Marah macrocarpus* var. *macrocarpus*), California wishbone bush (*Mirabilis laevis* var. *crassifolia)*, and bluedicks (*Dichelostemma capitatum*).

Invasive species such as short-pod mustard, Russian thistle, yellow star thistle, slender oat (*Avena barbata*), ripgut brome, soft chess (*Bromus hordeaceus*), and red brome were observed to dominate previously disturbed areas at the margins of the active quarry and along the fire road that extends eastward along the southern and western edges of the mining expansion area.

A total of 205 plant species were observed within SA1 during surveys in 2010 by Impact Sciences, Inc., and in 2016 by BRC. Of the 205 plant species observed, 166 are native species (75%) and 39 non-native species (25%). Refer to Appendix 2 for a full list of observed plant species during surveys.

Wildlife: The site provides habitat for upland and riparian/wetland adapted wildlife species, including amphibians, reptiles, birds, and mammals. Reptile species were observed throughout the site. Reptile observations included Great Basin fence lizard (*Sceloporus occidentalis longipes*), California side-blotched lizard (*Uta stansburiana elegans*), coastal whiptail, and San Diego gopher snake (*Pituophis catenifer annectens*) within relatively drier upland vegetation types.

Several bird species were observed utilizing aquatic and riparian habitats located in the western portion of SA1, including pied-billed grebe (*Podilymbus podiceps*), American coot (*Fulica americana*), black phoebe (*Sayornis nigricans*), American pipit (*Anthus rubescens*), ring-necked duck (*Aythya collaris*), and ruddy duck (*Oxyura jamaicensis*). Upland bird species observed include American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), Nuttall's woodpecker (*Picoides nuttallii*), downy woodpecker (*Picoides pubescens*), California scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), bushtit (*Psaltriparus minimus*), rock wren (*Salpinctes obsoletus*), canyon wren (*Catherpes mexicanus*), Bewick's wren (*Thryomanes bewickii*), northern mockingbird (*Mimus polyglottos*), California towhee (*Pipilo crissalis*), house finch (*Carpodacus mexicanus*), and lesser goldfinch (*Carduelis psaltria*).

Two special-status bird species, loggerhead shrike and sharp-shinned hawk, were observed during the 2016 survey. A single loggerhead shrike was observed perched on a small snag on the north side of the quarry. It then flew to east side of SA1 where it was observed a second time. A single sharp-shinned hawk was observed foraging over the quarry throughout the day.

Scat and tracks of coyote (*Canis latrans*) were observed throughout SA1 and a coyote carcass was observed in a northeastern drainage. In addition, burrows and middens of Botta's pocket gopher (*Thomomys bottae*), dusky-footed woodrat (*Neotoma fuscipes*), San Diego desert woodrat, and California ground squirrel (*Spermophilusbeecheyi*) are all common throughout undisturbed portions of the Project site.

BRC observed 43 wildlife species during the 2016 survey. In total, 99 species were observed during the surveys conducted in 2016 by BRC and in 2010 by Impact Sciences. All 99 species are considered native with the exception of the rock pigeon (*Columba livia*). Refer to Appendix 2 for a full list of observed wildlife species during surveys.

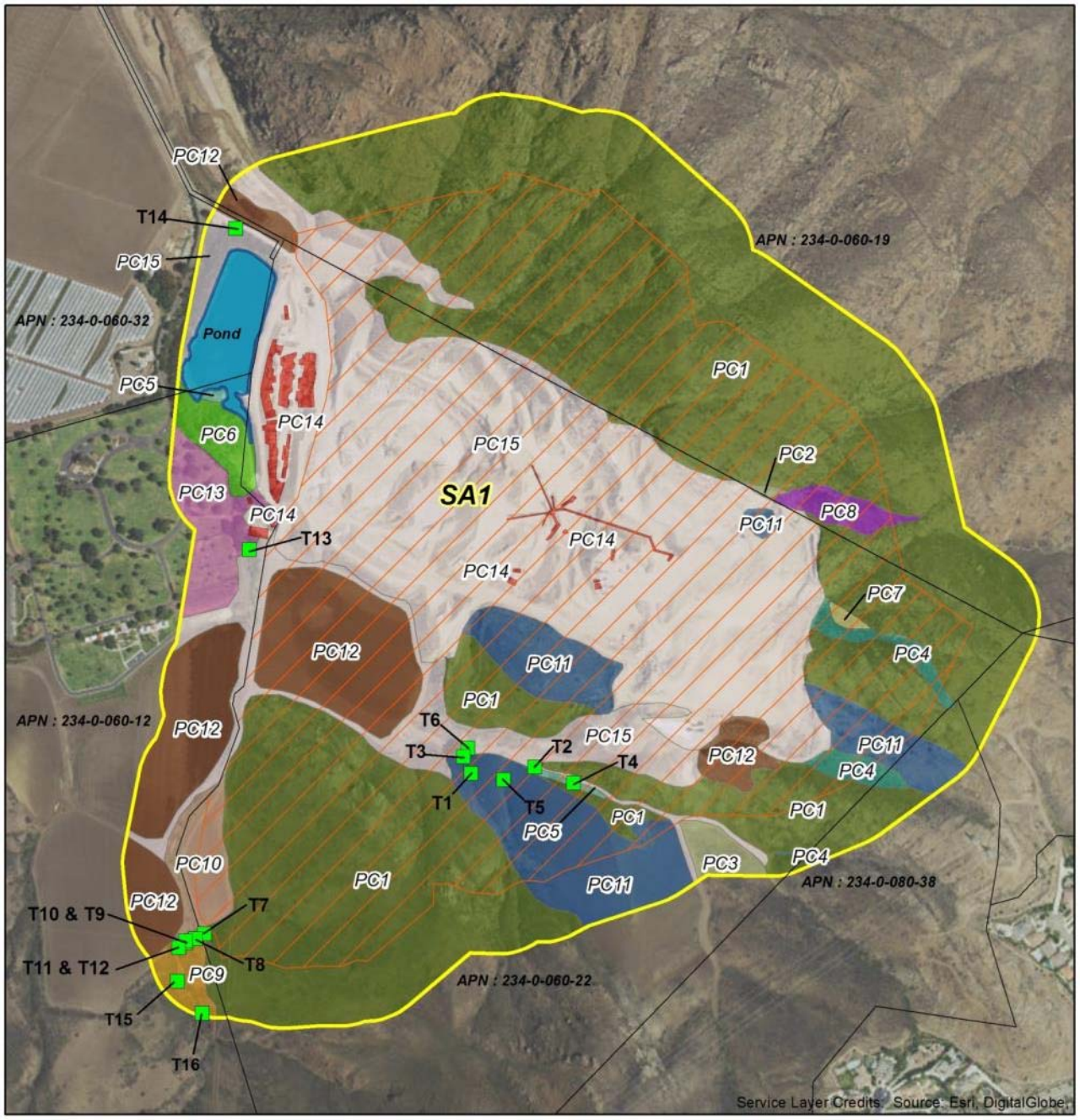
Protected Trees

Protected trees do occur within SA1 and within the Construction Footprint. Below is an inventory of protected trees based on the Ventura County Tree Protection Ordinance and the California National Plant Society (CNPS) special-status plant ranking system. The following oak trees are protected based on the Ventura County standards, as outlined in Appendix 1. The southern California black walnut trees are protected because they are ranked CNPS 4.2, defined as a plant or tree that is being watched due to its limited distribution, and the species is facing a moderate degree and immediacy of threat. Trees of any species measuring 90 inches in girth for single-trunk or 72 inches for multiple-trunk are considered to have "heritage" status and are protected.

Three heritage coast live oak trees and 15 (two adults, 13 saplings) southern California black walnut trees are located within the Construction Footprint and may need to be removed. Ten coast live oak trees are located within SA1 but outside of the Construction Footprint and are not anticipated to be impacted. Consultation with the County Planning Division and an arborist report will likely be required to address the removal of protected trees.

Protected Trees

Map Key	Species	Common Name	Girth (circumference)	Impact
T1	*Juglans californica*	Southern California black walnut (Multi-stem)	10 stems each 1.5 inches	Removal – Tree located within proposed Project footprint.
T2	*Juglans californica*	Southern California black walnut (Sapling)	13 saplings <1 inch	Removal – Trees located within proposed Project footprint.
T3	*Quercus agrifolia*	Coast live oak (Multi-trunk)	39 inches, 44 inches, 20 inches (Heritage)	Removal – Tree located within proposed Project footprint.
T4	*Quercus agrifolia*	Coast live oak	115.5 inches (Heritage)	Removal – Tree located within proposed Project footprint.
T5	*Quercus agrifolia*	Coast live oak (Multi-trunk)	14 inches, 15.5 inches,8.5 inches,9.5 inches,8.5 inches, 7.5 inches,8.5 inches, 14.5 inches (Heritage)	Removal – Tree located within proposed Project footprint.
T6	*Juglans californica*	Southern California black walnut (Multi-stem)	7 stems each 1.5 inches	Removal – Tree located within proposed Project footprint.
T7	*Quercus agrifolia*	Coast live oak (Multi-trunk)	6 inches, 5 inches, 3.5 inches	Tree located within SA1 and outside of Construction Footprint. Tree falls >50 ft. away from Construction Footprint, no encroachment.
T8	*Quercus agrifolia*	Coast live oak	87.5 inches	Not Impacted
T9	*Quercus agrifolia*	Coast live oak	82 inches	Not Impacted
T10	*Quercus agrifolia*	Coast live oak	80 inches	Not Impacted
T11	*Quercus agrifolia*	Coast live oak	27 inches and 51 inches	Not Impacted
T12	*Quercus agrifolia*	Coast live oak	32 inches, 47 inches, and 37 inches	Not Impacted
T13	*Quercus agrifolia*	Coast live oak	10 inches, 7 inches, and inches	Not Impacted
T14	*Quercus agrifolia*	Coast live oak	8 inches, 9 inches, 13 inches, 4 inches.	Not Impacted
T15	*Quercus agrifolia*	Coast live oak	Estimated 60"	Not Impacted
T16	*Quercus agrifolia*	Coast live oak	Estimated 60"	Not Impacted



SA1
Construction Footprint
Ventura County Parcels
Pond
Tree Location

Plant Communities

PC1	PC9
PC2	PC10
PC3	PC11
PC4	PC12
PC5	PC13
PC6	PC14
PC7	PC15
PC8	

BRC BioResource Consultants Inc.

N

0 250 500 1,000 Feet

Protected Trees Map

Endangered, Threatened, Rare, and Locally Important Species and Nests
(Initial Study Checklist A & E)

See Appendix 1 for definitions of the types of special status species that have federal, state or local protection and for more information on the regulations that protect birds' nests.

Endangered, threatened, rare, or locally important species were observed or have a moderate to high potential to occur within the SA1.

Suitable habitat for nesting birds protected under the MBTA exists within SA1.

Special Status Species Summary

Information on special-status species and habitats within a 10-mile radius of SA1 was obtained from the California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife Service (USFWS) Critical Habitat maps, the Calflora database, and Ventura County Planning Division's GIS layer of past biological reports for reference materials. The special-status species that were observed are listed below in the Special Status Species table.

During the 2016 general biological assessment survey, BRC observed multiple individuals of southern California black walnut (see Protected Trees), as well as a sharp-shinned hawk, a CDFW Watch List Species, and a single loggerhead shrike and coastal whiptail, both CDFW species of special concern. Additionally, a CDFW-listed sensitive community, Red Willow Thicket, was encountered within SA1 (see Plant Communities). The Project site contains vegetation that could support nesting birds.

Potential Species

The table below includes all special-status species potentially at the Project site that are recorded in the CNDDB within five miles of the Project site.

Definitions of Low, Moderate and High Potential to Occur

High potential for occurrence: (1) The habitat on the Project site is the species' preferred habitat and is in good condition (has not been degraded by human disturbance); and/or (2) there is record of the species occurring on or adjacent to the Project site.

Moderate potential for occurrence: (1) The habitat on the Project site is the species' preferred habitat, but it has been disturbed or disturbance encompasses the Project site, reducing the quality of the habitat to below a high likelihood that the species would inhabit it; or (2) the habitat on the Project site is not the species' preferred habitat, but it contains a similar structure to the preferred habitat and the species has been observed in this habitat type; or (3) the habitat on the Project site is not the species' preferred habitat, but there is record of the species occurring in the immediate vicinity of the Project site, and there is potential for the species to forage within the habitat on-site.

Low potential for occurrence: The habitat on the Project site is not the species' preferred habitat, the habitat is highly disturbed, and/or there are no records of the species occurring on or near the Project site.

None potential for occurrence: the habitat does not exist on the Project site and the species requires this habitat for survival.

Observed and Potentially Occurring Special-Status Species						
Map Key	**Survey/ Source**	**Scientific Name**	**Common Name**	**Species Status**	**Potential to Occur**	**Habitat Requirements**
PLANTS						
SSP1	CNDDB	*Astragalus brauntonii*	Braunton's milk-vetch	FE, CRPR 1B.1, G2, S2	None	Requires recent burns or disturbed areas; usually on sandstone with carbonate layers. Chaparral, coastal scrub, valley and foothill grassland on hilltops, saddles or bowls between hills at elevations of 3-640 meters amsl. Required limestone outcrops are not present on site. Flowering Time: Mar--Jul
SSP2	Impact Sciences, Inc. 2010	*Calochortus catalinae*	Catalina mariposa-lily	CRPR 4.2	High	Observed in 2010 by Impact Sciences, not observed in 2016 by BRC likely as a result of survey being conducted outside of blooming period. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland communities between 15 and 700 meters amsl. Flowering Time: Mar--May
SSP3	CNDDB	*Calochortus plummerae*	Plummer's mariposa-lily	LIS, CRPR 4.2	High	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Common after fire at elevations of 60-2500 meters amsl. Found in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Flowering Time: May--Jul
SSP4	CNDDB	*Centromadia parryi* ssp. *australis*	southern tarplant	CRPR 1B.1, G3, S2	None	Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 meters amsl. No vernally mesic, alkaline habitat is not present on site. Flowering Time: Jun--Oct
SSP5	CNDDB	*Delphinium parryi* ssp. *blochmaniae*	dune larkspur	CRPR 1B.1, S2	None	Requires maritime chaparral and coastal dunes between 0 and 200 meters amsl. No suitable habitat present. Flowering Time: Apr--May
SSP6	CNDDB, Impact Sciences, Inc. 2010	*Dudleya blochmaniae* ssp. *blochmaniae*	Blochman's dudleya	CRPR 1B.1, G3, S2	High	Not observed on site in 2016, but previously reported as present by Impact Sciences, Inc. 2010. This species has potential to occur in cliffs and rock outcroppings of SA1. Rocky, clay or serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland communities between 5 and 450 meters amsl. Flowering Time: Apr--Jun
SSP7	CNDDB	*Dudleya cymosa* ssp. *marcescens*	marcescent dudleya	FT, SR, LIS, CRPR 1B.2, S2	Low	Occurs on sheer rock surfaces and rocky volcanic cliffs at elevations of 145-670 meters amsl in chaparral habitats. Suitable habitat but no known occurrences within 3 miles of Project site. Project area on edge of species' known range. Flowering Time: May--Jun

Observed and Potentially Occurring Special-Status Species						
SSP8	CNDDB, Aquatic Consulting Services, 2010.	*Dudleya parva*	Conejo dudleya	FT, LIS CRPR 1B.2, G1, S1	High	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). This species has potential to occur in inaccessible portions of SA1. Grows on clay or volcanic substrates in coastal scrub and valley and foothill grassland communities between 60 and 450 meters amsl. Flowering Time: May--Jul
SSP9	CNDDB	*Dudleya verityi*	Verity's dudleya	FT, LIS CRPR 1B.1, G1, S1	High	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). This species has potential to occur in inaccessible portions of SA1. Occurs on volcanic outcrops in chaparral, cismontane woodland, and coastal scrub communities between 60 and 120 meters amsl. Flowering Time: May--Jun
SSP10	CNDDB	*Eriogonum crocatum*	Conejo buckwheat	SR, LIS CRPR 1B.2, G1, S1	High	Not observed within SA1 in 2016, but previously reported as present by Impact Sciences, Inc. 2010. Occurs on Conejo volcanic outcrops in chaparral, coastal scrub, valley and foothill grassland communities between 50 and 580 meters amsl. Flowering Time: Apr--Jul
SSO1	Impact Sciences, Inc. 2010, BRC 2016	*Juglans californica*	southern California black walnut	CRPR 4.2, G3, S3	Observed	Observed in 2010 by Impact Sciences as well in 2016 by BRC. Occurs in chaparral, cismontane woodland and coastal scrub communities between 50 and 900 meters amsl. Flowering Time: Mar--May
SSP11	CNDDB	*Monardella hypoleuca* ssp. *hypoleuca*	white-veined monardella	LIS, CRPR 1B.3, S2	Low	Found on dry slopes in chaparral, cismontane woodland communities from 50-1525 meters amsl. CNDDB occurrence #4 located 4 miles to southeast but site but needs additional information/fieldwork. Flowering Time: May--Oct
SSP12	CNDDB	*Navarretia ojaiensis*	Ojai navarretia	CRPR 1B.1, G2, S2	Moderate	Openings in chaparral, coastal scrub, and valley and foothill grassland communities between 275 and 620 meters amsl. Flowering Time: May--Jul
SSP13	CNDDB	*Pentachaeta lyonii*	Lyon's pentachaeta	FE, SE, CRPR 1B.1, G1, S1	Moderate	Rocky clay soils of volcanic origin in openings within chaparral, coastal scrub, and valley and foothill grassland communities between 30 and 630 m. It does not compete well with dense annual grasses or shrubs, but occurs where there is a majority of bare ground. Flowering Time: Mar--Aug
SSP14	CNDDB	*Pseudognaphalium leucocephalum*	white rabbit-tobacco	CRPR 2B.2, G4, S2	None	Requires open washes, Sandy or gravelly alluvium in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats between 0 and 2100 meter amsl No suitable habitat within SA1 due to the absence of appropriate alluvial soils. Flowering Time: Jul--Oct

Observed and Potentially Occurring Special-Status Species						
SSP15	CNDDB	*Senecio aphanactis*	chaparral ragwort	LIS, CRPR 2B,2 G3, S2	None	Occurs on drying alkaline flats within chaparral, cismontane woodland, and coastal scrub habitats at elevations from 20 and 855 meters amsl. No suitable habitat. Flowering Time: Feb--May
SSP16	CNDDB	*Texosporium sancti-jacobi*	woven-spored lichen	CRPR 3, G3, S1	Moderate	Occurs in open sites; in California with chamise, *Eriogonum* ssp., and *Selaginella* spp. at elevations of 290-660 meters amsl.
INSECTS						
SSP17	CNDDB	*Bombus crotchii*	Crotch bumble bee	G3, S1	Moderate	Found in areas within food plant genera include *Antirrhinum*, *Phacelia, Clarkia, Dendromecon, Eschscholzia*, and *Eriogonum*.
SSP18	CNDDB	*Trimerotropis occidentiloides*	Santa Monica grasshopper	G1, S1	High	Found on bare hillsides and along dirt trails in chaparral. Suitable habitat is found in the chaparral vegetation communities found throughout the project site.
FISH						
SSP19	CNDDB	*Gila orcuttii*	arroyo chub	SSC, G2, S2	None	Requires slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates. There is no direct connection between the quarry's irrigation pond and Conejo Creek. No surveys for chubs were conducted during the current survey, and no chubs are believed to have been previously reported for this site. Conversation with client mentioned poor water quality within pond and possible anoxic conditions due to runoff.
SSP20	CNDDB	*Oncorhynchus mykiss irideus*	steelhead - southern California DPS	FE, S1	None	Requires aquatic habitat with flowing waters. No permanent water on site. There is no direct connection between the quarry's irrigation pond and Conejo Creek. No surveys for chubs were conducted during the current survey, and no chubs are believed to have been previously reported for this site. Conversation with client mentioned poor water quality within pond and possible anoxic conditions due to runoff.
REPTILES						
SSO2	CNDDB	*Aspidoscelis tigris stejnegeri*	coastal whiptail	SSC, S3	Observed	Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Potential habitat is found within the Project site, but heavy disturbance encompasses portions of the Project site reducing the quality of the habitat.

Observed and Potentially Occurring Special-Status Species						
SSP21	CNDDB	*Thamnophis hammondii*	two-striped garter snake	SSC, S3	None	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.
SSP22	CNDDB	*Emys marmorata*	western pond turtle	SSC, G3, S3	High	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 feet elevation. Habitat exists in the retention pond.
BIRDS						
SSO3	BRC 2016	*Accipiter striatus*	sharp-shinned hawk	WL	Observed	Observed in 2016 by BRC. Prefers riparian areas. North-facing slopes, with plucking perches are critical requirements. Nests usually within 275 feet of water.
SSP23	CNDDB	*Aquila chrysaetos*	golden eagle	FP, WL, S3	Moderate	Requires cliffs for nesting in grassland, chaparral, shrubland, forest, and other vegetated areas They avoid developed areas and uninterrupted stretches of forest. They are found primarily in mountains up to 12,000 feet. Suitable nesting habitat is present within SA1; however high levels of disturbance occur at the site as a result of the quarry.
SSP24	Aquatic Consulting Services	*Athene cunicularia*	burrowing owl	SSC,	High	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). This species has potential to occur in open areas of grassland, chaparral and coastal scrub communities within SA1.
SSP25	CNDDB	*Elanus leucurus*	white-tailed kite	FP, S3	None	Requires open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. No suitable habitat within the Project area.
SSO4	BRC 2016	*Lanius ludovicianus*	loggerhead shrike	SSC	Observed	Observed in 2016 by BRC. Inhabits open country with short vegetation and well-spaced shrubs or low trees, particularly those with spines or thorns. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. The species was observed on the slopes west of the existing quarry.
SSP26	CNDDB	*Polioptila californica californica*	coastal California gnatcatcher	FT, SSC, G4, S2	High	Inhabits dry coastal slopes, washes, and mesas, they are restricted to areas of coastal sage scrub below 2,000 feet in elevation. Suitable habitat exists for this species on the lower slopes of SA1.

Observed and Potentially Occurring Special-Status Species						
SSP27	Impact Sciences, Inc. 2010	*Setophaga petechia*	yellow warbler	SSC	High	Not observed on site in 2016, but previously reported as present by Impact Sciences, Inc. in 2010. Believed to be nesting in red willow thicket. This species is frequently found nesting and foraging in willow thickets and in other riparian plants including cottonwoods, sycamores, ash, and alders.
SSP28	CNDDB	*Vireo bellii pusillus*	least Bell's vireo	FE, SE, G5T2, S2	High	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mulefat, and mesquite. Suitable habitat is located west of the Project Construction Footprint within red willow thickets.
MAMMALS						
SSO5	Impact Sciences, Inc. 2010	*Neotoma lepida intermedia*	San Diego desert woodrat	SSC, S3	Observed	Observed in 2010 by Impact Sciences as well as in 2016 by BRC (middens). Occurs in Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes within coastal scrub

Special-Status Species (continued)				
Map Key	Adequate Habitat Onsite	Adequate Habitat Size	Acreage Impacted	Comments
SSP2	Yes	Yes	72.50	Observed in 2010 by Impact Sciences, not observed in 2016 by BRC likely as a result of survey being conducted outside of blooming period. The location of the species was not recorded by Impact Sciences, Inc. Suitable habitat is present throughout SA1 in chaparral, cismontane woodland, coastal scrub, and grassland communities. There are no CNDDB records within 10 miles of the site. Several records of the species are present along Highway 101 within the Consortium of California Herbaria database.
SSP3	Yes	Yes	72.50	Species was not observed during surveys likely since BRC conducted survey outside of the known blooming period for the species. The species tend to be common after fire and would be expected to occur within suitable habitat found on the slopes throughout SA1. A review of CalFlora records identified a recent (2012) record on Conejo Mountain.
SSP6	Yes	Yes	72.36	Not observed within SA1 in 2016, but previously reported as present by Impact Sciences, Inc. 2010.This species has potential to occur in cliffs and rock outcroppings of SA1. Impact Sciences, Inc. identified an area of approximately 0.5 acres of occupied habitat on the rock outcroppings located on the eastern portion of the quarry expansion area. An incidental population of approximately 15 individuals was discovered 200 ft. east of SA1 in 2016. The recent fire of the area may have resulted in the loss of individuals from the previously documented 2010 population. Previously documented observations are mapped.

Special-Status Species (continued)				
SSP8	Yes	Yes	71.02	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). The location of the species was not provided in previous reporting rock outcroppings located on the eastern portion of the mining expansion area.. This species has potential to occur in portions of SA1 on cliffs and rock outcroppings. The species is documented within one mile of the proposed northern expansion area. Surveys conducted by Hunt in 1998 identified the species on the rock outcroppings located in the eastern portion of the mine expansion. Surveys were conducted outside of the blooming period for the species. CNDDB records for the species are located within one mile of the mine expansion area.
SSP9	Yes	Yes	71.02	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). The location of the species was not provided in previous reporting in the rock outcroppings located on the eastern portion of the mining expansion area. This This species has potential to occur in inaccessible portions of SA1. Surveys conducted by Hunt in 1998 identified the species on the rock outcroppings located in the eastern portion of the mine expansion. Surveys were conducted BRC outside of the blooming period for the species. The recent fire of the area may have resulted in the loss of individuals from the documented population. A search of CNDDB has identified several occurrences of the species located within one mile of the site.
SSP10	Yes	Yes	83.86	Not observed within SA1 in 2016, but previously reported as present by Impact Sciences, Inc. 2010. The 25 individuals that were observed by Impact Sciences were not observed by BRC in 2016. These plants were located on the south edge of the quarry and on the eastern edge and are mapped. These individuals may not been observed because of the fire and drought. An incidental population of 9 individuals was discovered by BRC approximately 200 ft. east of SA1 in 2016.
SSO1	Yes	Yes	11.69	Species was observed in 2010 by Impact Sciences as well in 2016 by BRC. Several large trees were observed by Impact Sciences, Inc., along the drainage in the southern portion of SA1. BRC identified 15 trees, 13 of which are saplings. All of which are located within the drainage located within the southern portion of the site. The large trees observed by Impact Sciences were likely burned during the fire.
SSP12	Yes	Yes	72.36	Suitable habitat is present within the chaparral habitat within SA1; however, the species has not been identified during surveys. BRC surveys were conducted outside of known blooming period for the species. The nearest document population (CNDDB occurrence #20) of the species is located 3 miles northeast of SA1.
SSP13	Yes	Yes	72.52	Suitable habitat is present within openings of chaparral, coastal scrub communities observed within SA1. The species was not observed during surveys; however BRC conducted surveys outside of the known blooming period for the species. The nearest documented population (CNDDB occurrence #22) is located 3 miles northeast of the project location.
SSP16	Yes	Yes	1.34	Not detected on site during surveys. Considered to have potential to be present on site because of the presence of chamise, *Eriogonum* spp. within SA1. Species may have been impacted by recent fire. The nearest documented CNDDB occurrence (occurrence #20) is located 2.8 miles south of SA1 along Potrero Road.
SSP17	Yes	Yes	85.26	Not observed during surveys; however suitable food plants genera including *Phacelia* and *Eriogonum* were observed within the survey. The nearest known occurrence (CNDDB occurrence # 124) is located 1.9 miles west of the project site in the city of Camarillo.

Special-Status Species (continued)				
SSP18	Yes	Yes	85.50	Suitable habitat present on the bare hillsides in coastal sage scrub and chaparral communities on site, but species was not observed during surveys. The species is documented (CNDDB occurrence #3) is located 2.8 miles south of SA1 along Potrero Road.
SSO2	Yes	Yes	85.50	Observed in 2010 by Impact Sciences, Inc. as well as in 2016 by BRC. The locations of observations made by Impact Sciences, Inc. were not recorded. A single individual was observed by BRC on the western portion of SA1 located along the western drainage in an area dominated by non-native vegetation. Suitable habitat for the species is found throughout the mining expansion area within the chaparral and coastal scrub vegetation communities.
SSP22	Yes	Yes	0	Not detected on site but considered potentially present due to the presence of permanent surface water (retention pond) and basking and aestivation habitat. Nearby CNDDB records include the North Fork of Conejo Creek; Arroyo Conejo and Conejo Creek, in the eastern region of Pleasant Valley; and 1.6 miles northwest of the intersection of Potrero Road and North Potrero Road.
SSO3	Yes	Yes	71.02	Observed in 2016 by BRC, however the project is located outside of the nesting range of the species. The species is only considered a CDFW WL species for nesting, not wintering.
SSP23	Yes	Yes	71.02	Not observed during surveys. SA1 provides suitable nesting and wintering habitat is present in rocky escarpments in the northern and eastern portion of the project site. The nearest CNDDB occurrence (occurrence # 77) is located 4.2 miles south of SA1. Disturbance as result of quarry activities has potential to impacts nesting and foraging activities.
SSP24	Yes	Yes	72.53	Not observed on site in 2016, but previously reported as present by Hunt (in Aquatic Consulting Services, 2010). Suitable habitat and burrow locations are present within SA1. The nearest eBird record of the species is for a single wintering individual located 1.5 miles of SA1 near Potrero Road.
SSO4	Yes	Yes	72.25	Observed in 2016 by BRC. The species was observed on the slopes west of the existing quarry. Suitable habitat is present within the chaparral and coastal scrub communities present within SA1. The vegetation present on site provides suitable nesting and foraging habitat for the species.
SSP26	Yes	Yes	72.25	Not observed on site during protocol surveys conducted in 2010. Suitable nesting habitat is present within the coastal scrub vegetation communities. The nearest CNDDB occurrence (occurrence # 918) is located 2.8 miles south of the survey along Potrero Road. The recent fire has impacted vegetation communities within SA1 and likely has decreased the suitability of the site for the species.
SSP27	Yes	Yes	0	Observed within red willow thickets located on the southern end of pond during focused least Bell's vireo surveys conducted by Impact Sciences in 2010. BRC did not observe species since survey was conducted outside of the breeding season for the species. Suitable habitat is restricted to red willow thickets.

Special-Status Species (continued)				
SSP28	Yes	Yes	0	Not observed on site during protocol surveys conducted in 2010. Suitable nesting habitat is present within the red willow thickets located on the western end of pond. BRC did not observe species since survey was conducted outside of the breeding season for the species. Suitable habitat is restricted to red willow thickets.
SSO5	Yes	Yes	84	Small mammal trapping was conducted Impact Sciences, Inc. in 2010. The species is documented to occur throughout the chaparral and coastal scrub vegetation communities present on site prior to the fire. The species was caught throughout SA1. During BRC's survey in 2016 desert woodrat middens were observed in the northeastern portion of the mining expansion area.

FE .....Federal Endangered
FT .....Federal Threatened
SFP.....California Fully Protected Species
SE.....California Endangered
SR.....California Rare
SSC .....California Species of Special Concern
FP .....California Fully Protected Species
WL .....California Watch List Species

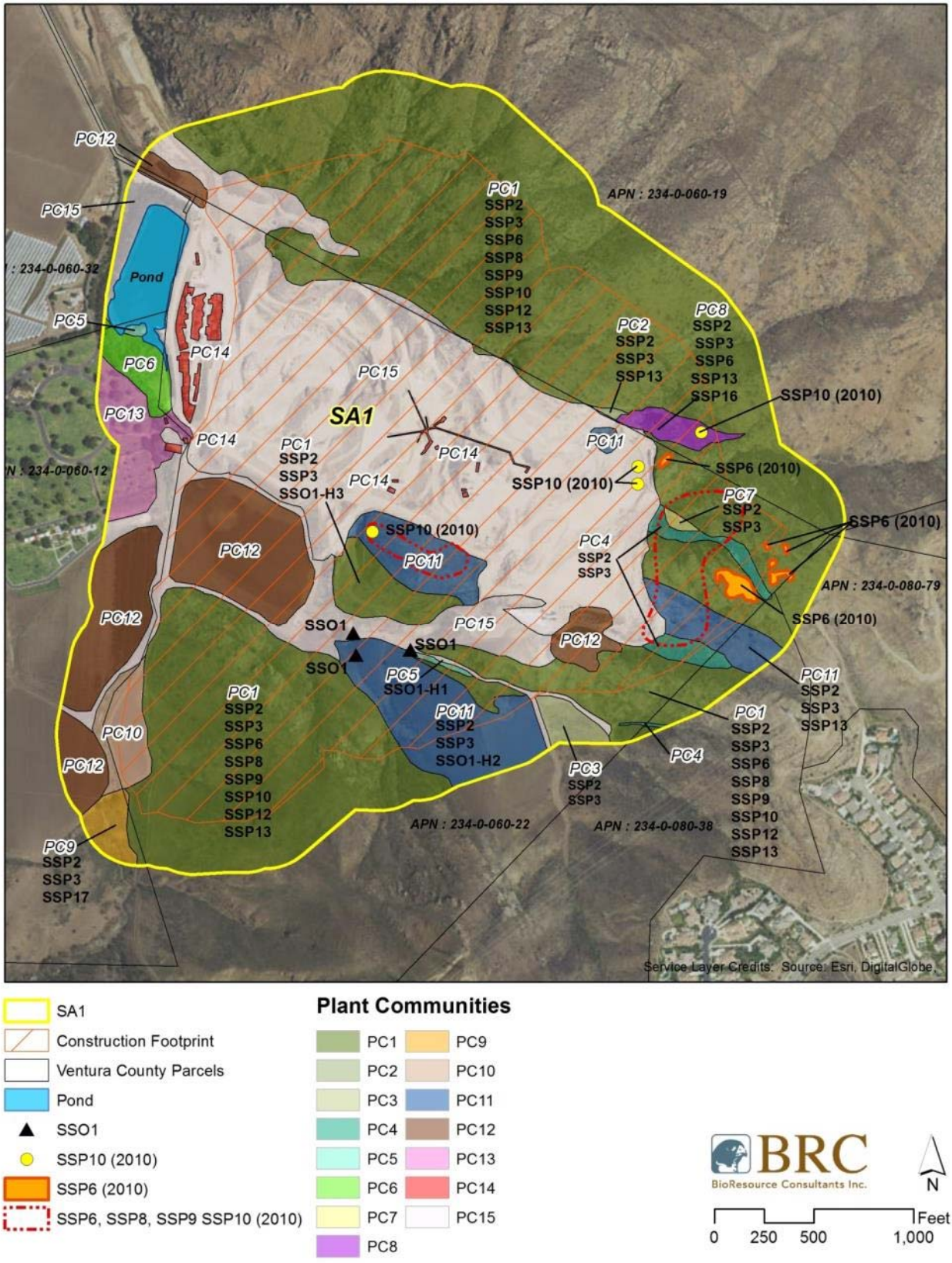
CDFG/NatureServe Rank
- G1 or S1 - Critically Imperiled Globally or Subnationally (state)
- G2 or S2 - Imperiled Globally or Subnationally (state)
- G3 or S3 - Vulnerable to extirpation or extinction Globally or Subnationally (state)

California Rare Plant Rank (CRPR)
- CRPR 1A- California Native Plant Society/CDFG listed as presumed to be extinct
- CRPR 1B- California Native Plant Society/CDFG listed as rare or endangered in California and elsewhere
- CRPR 2 - California Native Plant Society/CDFG listed as rare or endangered in California but more common elsewhere
- CRPR 3 - California Native Plant Society/CDFG listed as in need of more information.
- CRPR 4 - California Native Plant Society/CDFG listed as of limited distribution or infrequent throughout a broader area in California.

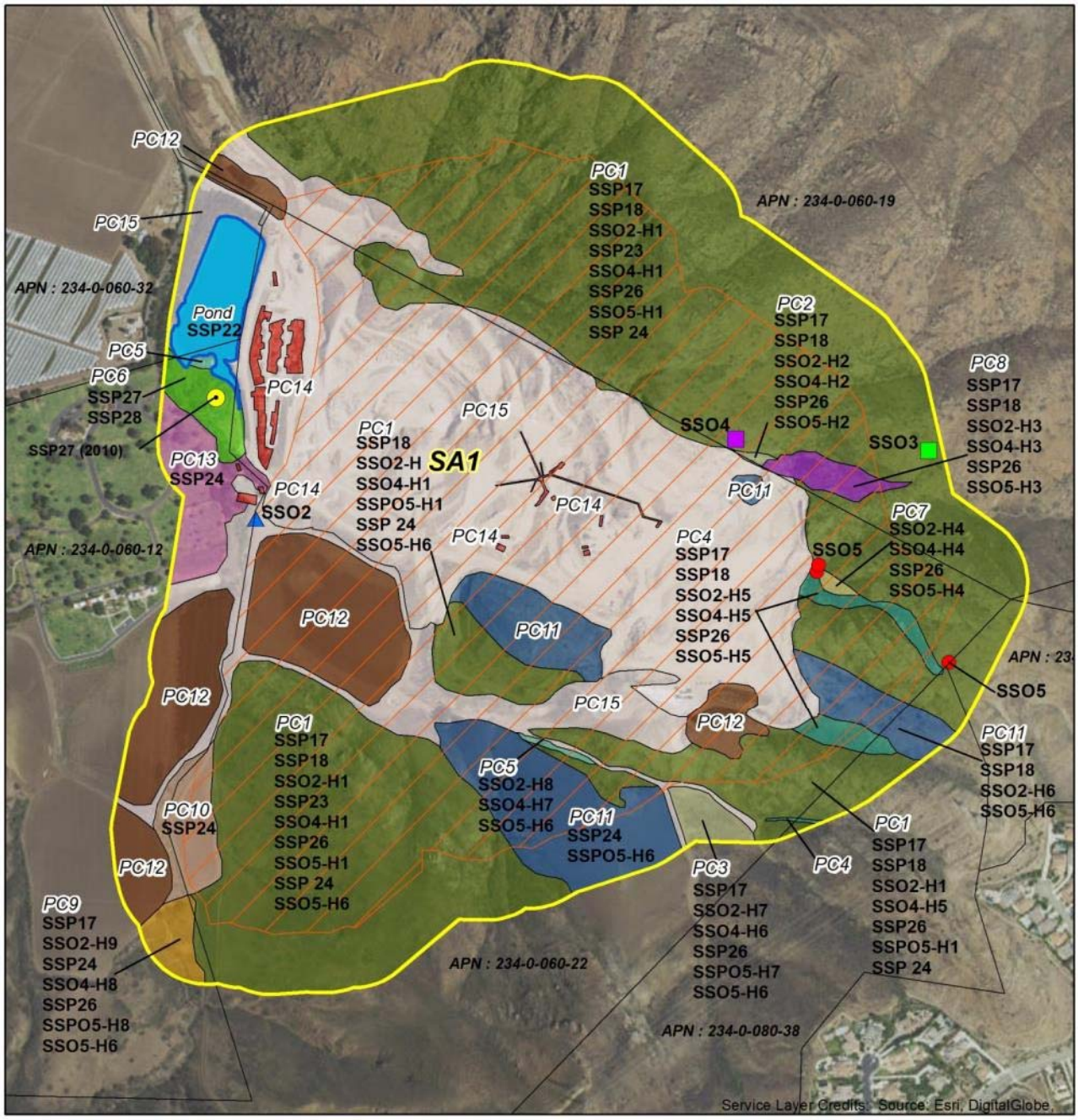
LIS .....Locally Important Species

Nesting Bird Summary

Most of the bird species that were observed during the survey (Appendix 2) likely nest within SA1, predominantly within the vegetated areas and with preference show towards undisturbed native habitats such as the riparian and chaparral scrub communities. Several species, however, were also observed within the quarry and likely nest there, including the white-throated swift (*Aeronautes saxatalis*), which nests in crevices on rock faces, and the canyon wren and rock wren, which both nest on ledges on rock faces. These species are protected under the MBTA and the California Department of Fish and Game Code (Section 3503).



Special-Status Plant Species Map



Special-Status Wildlife Species Map

3.3 Wildlife Movement and Connectivity

(Initial Study Checklist D)

Wildlife movement or connectivity features, or evidence thereof, were found within SA1.

Mapped Corridors or Linkage

Connectivity Feature 1 (C1)

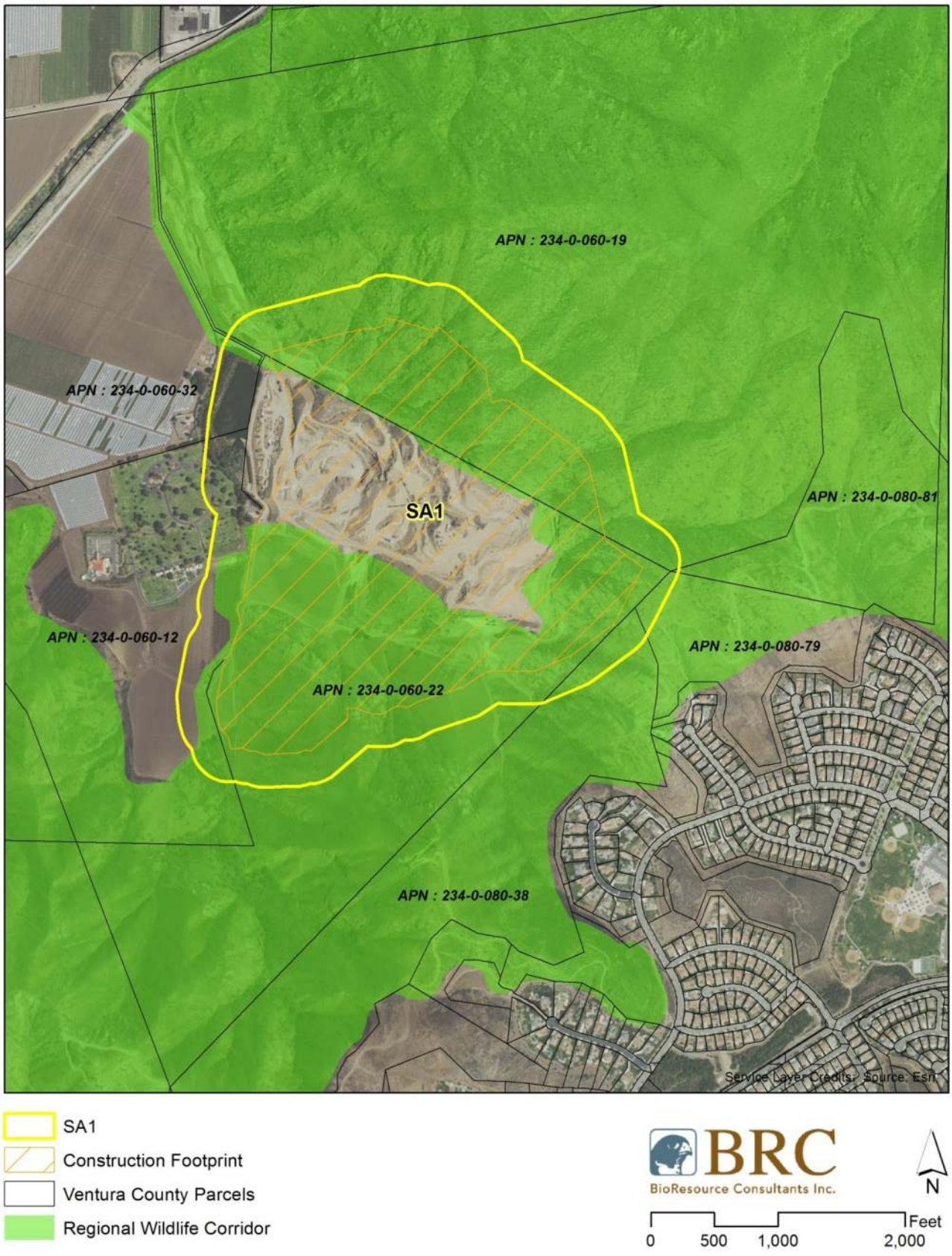
Santa Monica-Sierra Madre Connection

Description

The Santa Monica–Sierra Madre Connection is one of the few coastal to inland connections remaining in the South Coast Ecoregion. The Connection stretches from the rugged Santa Monica Mountains at the coast inland to the jagged peaks of the Santa Susana Mountains and the Sierra Madre Ranges of Los Padres National Forest. The Linkage Design includes substantial public ownership that protects natural habitats from development, with 34% (43,249 of 125,613 acres) of the connection currently receiving some level of conservation protection. The connection comprises a rich mosaic of oak woodland, savanna, chaparral, coastal sage scrub, grasslands, and riparian forests and woodlands, and has several major strands to accommodate diverse species and ecosystem functions.

Within SA1, the connection is characterized as a corridor linking the Santa Monica Mountains to Conejo Mountain. The portion of the corridor that falls within the SA1 consists of scattered rock outcroppings within Deerweed Scrub and Laurel Sumac Scrub. The SA1 corridor/linkage provides essential habitat for foraging, cover, and local and regional movement in a generally west-to-east direction.

Connectivity Features							
Map Key	Type of Connectivity Feature	Description	Species Observed	Evidence	Functional Group/Species Expected	Habitats Connected	Comments
C1	chokepoint	Saddle between Mountains	Coyote, mule deer (*Odocoileus hemionus*)	Carcass, tracks, scat	Mammals, birds, reptiles	Santa Monica Mountains – Conejo Mountain	Connection abuts the north, south and east edges of the expansion areas. Development of the area will narrow the connection, but will not impede movement.



Habitat Connectivity Map

Section 4: Recommended Impact Assessment & Mitigation

4.1 Sufficiency of Biological Data

Additional information needed to make CEQA findings and develop mitigation measures:

Additional information IS needed to make CEQA findings.

Additional biology-related surveys or permits needed prior to issuance of land use permit:

Focused studies that need to be conducted in order to provide information for CEQA include:

- Focused Botanical Surveys for all species with High Potential (see Observed and Potentially Occurring Special-Status Species Table) during appropriate bloom periods in the spring of 2017.
- Update/Amendment to the Jurisdictional Wetland Delineation in the spring of 2017.

BRC has also determined that a discretionary Tree Ordinance Permit will be required for this project and a certified arborist will need to prepare an Arborist Tree Report and Protection Plan. In addition, a Streambed Alteration Agreement will need to be prepared and submitted to the CDFG for issuance. The Project will not impact waters of the U.S., and therefore, permit requirements under Section 404 of the Clean Water Act and water certification under Section 401 are not required.

4.2 Impacts and Mitigation

A. Species Project: PS-M; Cumulative: PS-M

No federally- or state-listed endangered, threatened, or rare animal species were observed within SA1 by BRC during the 2016 survey. Special-status species observed within SA1 include southern California black walnut trees, as well as sharp-shinned hawk, CDFW Watch list species, and loggerhead shrike, coastal whiptail, loggerhead shrike, sharp-shinned hawk, and San Diego desert woodrat, all CDFW Species of Special Concern (see Special-Status Wildlife Map, mapped as SS01 through SS05).

Additionally, SA1 supports moderate to high quality habitat for an additional 17 special-status species—Catalina mariposa-lily, Plummer's mariposa-lily, Blochman's dudleya, Conejo dudleya, Verity's dudleya, Ojai navarretia, Conejo buckwheat, Lyon's pentachaeta, woven-spored lichen, Crotch bumble bee, Santa Monica grasshopper, western pond turtle, golden eagle, burrowing owl, coastal California gnatcatcher, yellow warbler, and least Bell's vireo. SA1 also supports suitable roosting and nesting sites for birds protected by the CDFW and the MBTA.

Significance Finding – Project Impacts: 15 southern California black walnuts and three coast live oak trees were observed within the Construction Footprint. Project implementation may result in impact/ removal of these trees as they are located within the mining expansion area.

Though they were not observed within SA1 during the 2016 surveys, Blochman's dudleya, Conejo dudleya, Verity's dudleya, and Conejo buckwheat have been documented to occur in previous surveys within the rocky outcroppings located in the central and eastern portions of the Construction Footprint. In total, 17 special-status species are documented to occur within the mining expansion area or were determined to have potential to occur on site and may therefore be impacted by the Project.

The Project will result in the loss of 87.44 acres of suitable habitat for special-status species. It is anticipated that, as a result of Project implementation, Project-related activities including vegetation removal, grading, compaction, and construction, may result in the loss of individual coastal whiptails, San

Diego desert woodrats, Crotch bumble bees, Santa Monica grasshoppers, western pond turtles, burrowing owls, loggerhead shrikes, and/or coastal California gnatcatchers and/or their nests. These losses are considered potentially significant but mitigable.

Project implementation may also indirectly impact nesting birds due to elevated noise levels and vibration associated with construction equipment, which may result in birds abandoning their nests, eggs, or young. Potential impacts to protected nesting birds are considered potentially significant but mitigable.

Significance Finding – Cumulative Impacts: Project activities have the potential to indirectly impact several wildlife species. Noise and increased construction activities have the potential to disrupt breeding or foraging special-status wildlife outside of the mine expansion area, including golden eagles, loggerhead shrikes, burrowing owls, coastal California gnatcatchers, and nesting habitat for birds protected under MBTA, which would be considered potentially cumulatively significant but mitigable.

Avoidance and Minimization Measures

MM1: Nesting Birds

Purpose: In order to minimize impacts to nesting birds protected by the MBTA. Active nests of native bird species are protected by the MBTA (16 U.S.C. 704) and the California Fish and Game Code (Section 3503) within the Construction Footprint.

Requirement: If activities associated with construction or grading are planned to occur during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Cooper's hawks or hummingbirds) and from mid-March through September for most bird species, the applicant should have a qualified biologist conduct surveys for active nests to determine the presence/absence of active nests. Pre-construction nesting bird surveys should be conducted weekly beginning 30 days prior to the initiation of ground-disturbance and vegetation removal activities, with the last survey conducted no more than three days prior to the start of clearance/construction work. If ground-disturbing activities are delayed, additional pre-construction surveys should be conducted so that no more than three days have elapsed between the survey and ground-disturbing activities. Surveys should include examination of trees, shrubs, and the ground for nesting birds. Several bird species such as killdeer and night hawks are known to nest on bare ground.

Protected bird nests that are found within or adjacent to the construction zone should be protected by a buffer deemed suitable by a qualified biologist and verified by the CDFW. Typically, a 300-foot buffer is required for most species and a 500-foot buffer is required for raptor species. Buffer areas should be delineated with orange construction fencing or other exclusionary material that would inhibit access within the buffer zone. Installation of the exclusionary material delineating the buffer zone should be verified by a qualified biologist prior to initiation of construction activities. The buffer zone should remain intact and maintained while the nest is active (i.e.: occupied or being constructed by the adults bird[s]) and until young birds have fledged and no continued use of the nest is observed, as determined by a qualified biologist.

Documentation: The Permittee will provide to the Planning Division and the CDFW a Survey Report documenting the results of the pre-construction survey and noting the location species and anticipated fledge date of all active nests within undisturbed areas of SA1.

Timing: January through March for early nesting birds (e.g., Cooper's hawks or hummingbirds) and from mid-March through September for most other bird species, 30 days prior to ground disturbance.

MM2: Rare Plant surveys

Purpose: To minimize impacts to rare plants that have been documented, or have potential to occur within the Construction Footprint.

Requirement: Conduct rare plant surveys within the undisturbed areas of SA1 during the known blooming period for species with potential to document the occurrence and population size of each species occurring within the Construction Footprint.

Documentation: The Permittee will provide to the Planning Division and CDFW a Survey Report documenting the results of the pre-construction survey.

Timing: Prior to land clearing in undisturbed areas of the mine site, rare plant surveys should be conducted during known blooming period for species with potential to occur within the Construction Footprint. Two surveys, occurring between April and June should be conducted in all habitats that have potential to support special-status plants.

MM3: Rare Plant Mitigation Plan

Purpose: To minimize impacts to rare plants that have been documented, or have potential to occur within the Construction Footprint.

Requirement: If rare plants are observed during surveys, a Draft Rare Plant Mitigation and Monitoring Plan shall be submitted to Ventura County and CDFW for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The plan will demonstrate the feasibility of enhancing or restoring habitat of documented rare plants, hereby known as target rare plant species, in selected areas to be managed as natural open space without conflicting with other resource management objectives. The plan shall provide for replacement target rare plant species to be removed at a minimum 1:1 ratio, within suitable habitat at a site where no future mining-related disturbance will occur. The plan shall specify the following:

1. The location of the mitigation site in protected/preserved areas within the Pacific Rock site.
2. Methods for harvesting seeds or salvaging and transplantation of individual plants to be impacted.
3. Measures for propagating target rare plants (from seed or cuttings) or transferring living specimens from the salvage site to the introduction site.
4. Site preparation procedures for the mitigation site.
5. A schedule and action plan to maintain and monitor the mitigation area.
6. The list of criteria and performance standards by which to measure the success of the mitigation site.
7. Measures to exclude unauthorized entry into the mitigation areas.
8. Contingency measures such as erosion control, replanting, or weeding to implement in the event that mitigation efforts are not successful.

The plan will specify methods to collect target plant propagules and to introduce them into these mitigation sites. Introductions will use source material from the Pacific Rock site unless otherwise approved by CDFW. Alternatively, seed may be collected from protected occurrences, following CDFW-approved seed collection guidelines. The applicant or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate survivorship or seedling establishment. Annual monitoring reports will be prepared and submitted to CDFW to guide future mitigation planning for target species. Monitoring reports will describe all restoration/enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe target plant species survival or establishment in quantitative terms.

The performance standards for the Rare Plant Mitigation and Monitoring Plan shall be the following:

1. Within five years after reintroducing target rare plant individuals to the mitigation site, the extent of occupied acreage and the number of established reproductive plants will be no smaller than at the site lost to the project.
2. Non-native species cover will be no more than 5% absolute cover through the term of the restoration period.

Documentation: A Draft Rare Plant Mitigation and Monitoring Plan shall be submitted to Ventura County and CDFW six months prior to vegetation removal.

Timing: Implementation of the mitigation plan and the introduction of plantings would ideally be timed prior to winter rain events. Weeding activities would ideally be timed prior to seed set.

MM4: Oak Trees

Purpose: To mitigate the loss of coast live oaks impacted within the Construction Footprint.

Requirement: Mitigation for impacts to protected oaks will be set forth as conditions of a Tree Permit, issued by Ventura County. If approved, the Tree Permit will include conditions relating to the following general issues:

1. Replacement of removed or relocated oaks at a minimum 2:1 ratio, or 10:1 for heritage oaks.
2. Provisions to ensure that replacement oaks are of the correct type and provenance, and that they are planted in appropriate locations on or off-site.
3. Provisions to ensure the maintenance of replaced and encroached oaks through a monitoring period of at least 2 years, and the reportage of mitigation success through the monitoring period.
4. Provisions to ensure proper supervision by a licensed arborist of protective measures during the construction phase of the project, including provisions that encroaching activities are minimally invasive (e.g. that they be carried out with hand tools).
5. Provisions to ensure proper supervision by a licensed arborist of replacement plantings.

Documentation: The Permittee will provide the Planning Division and CDFW a Survey Report documenting the results of the initial pre-construction survey efforts upon completion of the pre-construction surveys.

Timing: Conduct surveys at least 30 days prior to the tree removal.

Monitoring and Reporting: Provisions to ensure the maintenance of replaced and encroached oaks through a monitoring period of at least 2 years, and the annual reportage of mitigation success through the monitoring period. The Permittee will provide the Planning Division and CDFW a Survey Report documenting the results of the initial pre-construction survey and passive relocation prior to tree removal.

MM5: Burrowing owl surveys

Purpose: To minimize impacts to nesting/wintering burrowing owls within the Construction Footprint.

Requirement: Conduct protocol-level surveys following CDFW guidelines. Breeding season and non-breeding surveys should be conducted if feasible to determine the presence of burrowing owls within the mine expansion area. Surveys should be conducted in all areas that have been determined to provide suitable habitat for the species. If burrowing owls are determined to be present, consultation with CDFW should occur and an appropriate method for passively relocating the burrowing owl should be developed.

Documentation: The Permittee will provide to the Planning Division and CDFW a Survey Report documenting the results of the pre-construction survey and passive relocation efforts.

Timing: Surveys should be conducted no more than 30 days prior to vegetation removal. Surveys should be conducted weekly. If occupied burrows are identified within SA1, passive relocation efforts will occur no more than two weeks prior to the vegetation removal.

Monitoring and Reporting: Upon Project completion, the Permittee will provide the Planning Division and CDFW a Survey Report documenting the results of the initial pre-construction survey and passive relocation efforts.

MM6: Least Bell's vireo and Coastal California gnatcatcher surveys

Purpose: To minimize impacts to nesting least Bell's vireo and coastal California gnatcatcher within the Construction Footprint.

Requirement: Conduct pre-construction protocol-level surveys for least Bell's vireo and coastal California gnatcatcher (per USFWS protocol) within areas with suitable habitat for each species.

Documentation: The Permittee will provide the Planning Division and CDFW/USFWS a Survey Report documenting the results of the protocol-level surveys for the coastal California gnatcatcher and least Bell's vireo upon completion of the pre-construction surveys at Project completion.

Timing: Surveys will occur within the recommended survey period described within the USFWS survey protocols.

- Protocol Least Bell's Vireo Surveys between April 10th- July 31st
- Protocol California Gnatcatcher Surveys between February 15th – August 30th

Monitoring and Reporting: No additional monitoring or reporting is necessary.

MM5: Coastal Whiptail, Western Pond Turtle Surveys

Purpose: To prevent impacts to coastal whiptails and western pond turtles occurring within the Construction Footprint.

Requirement: A qualified biologist will conduct a pre-construction survey within 72 hours of any ground disturbance, and provide periodic site surveys during construction to determine presence of coastal whiptails, western pond turtles, and other reptiles. All reptiles found within the work area shall be relocated by the qualified biologist. If any of these reptiles are detected, they should be relocated to undeveloped areas prior to the commencement of construction, and provisions should be made to prevent their reentry to the site, such as by the placement of silt fencing or other means which would provide a physical barrier to movement. A survey for aestivating southwestern pond turtle is recommended to determine if burrows are available for use by southwestern pond turtle and, if present, whether they are being used by aestivating individuals. If aestivating southwestern pond turtles are found on-site, the formulation of a habitat replacement program is recommended which would incorporate details of replacement aestivation burrows, relocation of aestivating individuals to new burrows and monitoring of habitat replacement success.

Documentation: Upon Project completion, the Permittee will provide the Planning Division and the CDFW a Survey Report documenting the results of the pre-construction survey for coastal whiptails and western pond turtles.

Timing: A pre-construction survey will be conducted within 72 hours of ground disturbance within the Construction Footprint and vegetation removal to determine presence of coastal whiptail and western pond turtle.

Monitoring and Reporting: No additional monitoring or reporting is necessary.

MM7: San Diego Desert Woodrat Trapping

Purpose: To prevent impacts to San Diego desert woodrats and other small mammals occurring within the Construction Footprint.

Requirement: Prior to vegetation removal, trapping and relocation of small mammals should be conducted by a qualified biologist. Trapping should occur outside of the breeding season of the San Diego desert woodrat. Within seven days prior to vegetation removal, a qualified biologist will conduct surveys for small mammals. All small mammals captured during trapping will be relocated to suitable habitat on site outside of the proposed mine expansion area. During trapping efforts all woodrat middens will be dismantled and the material shall be relocated to a suitable receiver location identified on site.

Documentation: The Permittee will provide to the Planning Division and CDFW a Survey Report documenting the results of the trapping and relocation efforts.

Monitoring and Reporting: No additional monitoring or reporting is necessary.

B. Ecological Communities Project: PS-M; Cumulative: LS

Sensitive Plant Communities

One CDFW sensitive plant community was found within SA1: Red Willow Thickets. This sensitive community provides high quality suitable habitat for one federally-endangered species: least Bell's vireo (see Special-Status Wildlife Species Map, mapped as SSP28).

Red Willow Thicket makes up 1.52 acres of SA1 and is located outside of the Construction Footprint. No trees, shrubs, or understory of these communities are anticipated to be impacted by Project activities. Individual oak trees lost as a result of Project activities are addressed in MM4.

Significance Finding – Project Impacts: The Project will not impact or alter any CDFW sensitive plant communities. No impact mitigation measures are necessary.

Significance Findings – Cumulative Impacts: The Project will not have cumulative impacts to this community.

No mitigation measures are necessary.

Waters and Wetlands

Mitigation for impacts to drainages may be accomplished through habitat creation, restoration, or conservation. The required mitigation ratio for each of these approaches varies with the type of habitats affected, the type of mitigation chosen, and the distance of the mitigation site from the Project site.

If impacts to CDFW-jurisdictional areas are foreseen as a result of proposed Project implementation, a Streambed Alteration Agreement (SAA) should be processed with CDFW in parallel with any other permit processing done through local, state or federal agencies. Any conditions or mitigation measures of the SAA should be included as conditions of the lead-agency issued permit granting development entitlements for the Project site.

MM8: Wetland and Waters Delineation

Purpose: To identify wetlands within the project and determine the extent of impact that may occur to each of the drainages as a result of project.

Requirement: Conduct a formal wetland delineation

Documentation: The Permittee will provide the Ventura County Planning Division and CDFW a Jurisdictional Delineation Report documenting the results of the formal wetland delineation.

Timing: The wetland delineation should occur at minimum 90 days prior to ground disturbance.

Monitoring and Reporting: No additional monitoring or reporting is necessary.

C. Coastal Habitat Project: None; Cumulative: None

SA1 is not located within or adjacent to the coastal zone. No mitigation measures are necessary.

Environmentally Sensitive Habitat Areas

N/A

D. Habitat Connectivity (migration corridors) Project: PS; Cumulative: LS

The Santa Monica–Sierra Madre Connection is one of the few coastal to inland connections remaining in the South Coast Ecoregion. It stretches from the rugged Santa Monica Mountains at the coast inland to the jagged peaks of the Santa Susana Mountains and the Sierra Madre Ranges of the Los Padres National Forest. Within SA1, the Connection is characterized as a corridor linking the Santa Monica Mountains to Conejo Mountain. Vegetation within the area consists of scattered rock outcroppings within Deerweed Scrub and Laurel Sumac Scrub. The SA1 corridor/linkage provides essential habitat for foraging, cover, and local and regional movement in a generally west-to-east direction (South Coast Wildlands 2008). The Project site contains an undeveloped area that provides habitat for migrating species and may facilitate movement between developed areas, but there is no evidence that the Construction Footprint contains a significant linkage or corridor necessary for migrating species.

Significance Finding – Project Impacts: Project implementation will reduce the area of the Santa Monica-Sierra Madre Connection around the Conejo Mountain and narrow the corridor between the quarry and residential development to the east. Although the implementation of the Project may reduce available habitat for wildlife Santa Monica-Sierra Madre Connection, the project is not expected to be significant being that the wildlife movement through the area will not be impeded.

Significance Findings – Cumulative Impacts: The Project will not have cumulative impacts.

No mitigation measures are necessary.

E. Locally Important Species/Communities Project: PS; Cumulative: LS

SA1 contains eight recognized locally important communities including Laurel Sumac Scrub, California Sagebrush Scrub, Deerweed Scrub, Giant Wild Rye Grasslands, Red Willow Thicket, Mountain Mahogany Scrub, and Disturbed Chamise/Ceanothus Chaparral, and Coast Live Oak Woodland. The

majority of these communities were determined to be locally important due to a combination of habitat suitability, limited range, and proximity of known occurrences to several listed species of which include: Verity's dudleya, Conejo buckwheat, Plummer's mariposa lily, Catalina mariposa lily, Least Bell's Vireo, coastal California Gnatcatcher, and Yellow Warbler.

SA1 supports SA1 supports moderate to high quality habitat for six recognized locally important species including Plummer's mariposa-lily, marcescent dudleya, Conejo dudleya, Verity's dudleya, Conejo buckwheat, white-veined monardella, and chaparral ragwort. Of these species, Plummer's mariposa lily, Conjeo dudleya, Verity's dudleya, and Conejo buckwheat were determined to have a high potential to occur.

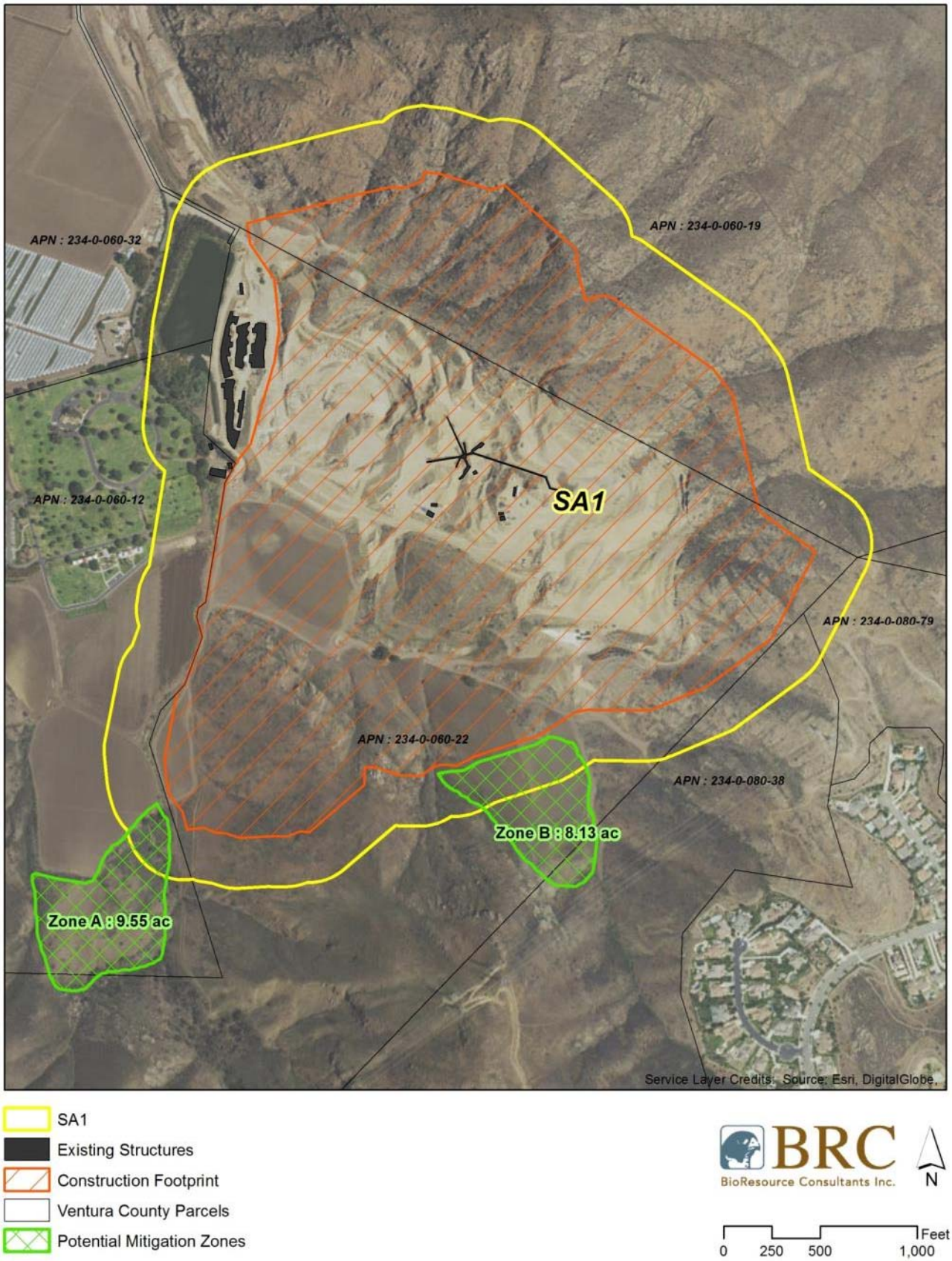
Significance Finding – Project Impacts: Project implementation will result in the removal of 74.23 acres of habitat determined to be Locally Important (See Plant Community Table for individual community acreage loss). Of the eight recognized locally important communities, only Red Willow Thicket and Coast Live Oak Woodlands will avoid Project related impacts.

Locally important species that are documented to occur within or in the immediate vicinity of the mining expansion area and were determined to have potential to occur on site may be impacted by the Project. These include Plummer's mariposa lily, Conjeo dudleya, Verity's dudleya, and Conejo buckwheat. Though they were not observed within SA1 during the 2016 survey, Conejo dudleya, Verity's dudleya and Conejo buckwheat have been documented to occur in previous surveys within the rocky outcroppings located in the eastern portion of the Construction Footprint.

Significance Finding – Cumulative Impacts: The Project will not have cumulative impacts on any recognized Locally Important Species or Communities.

Avoidance and Minimization Measures

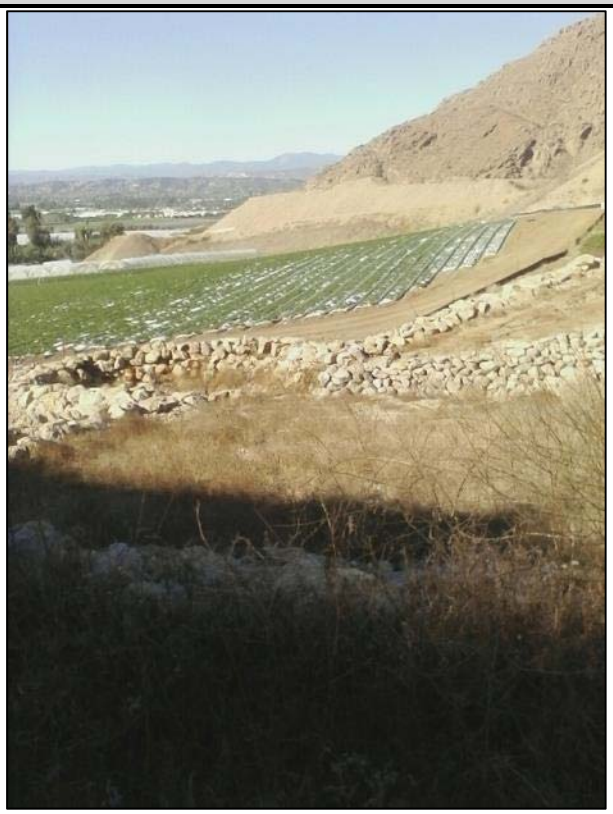
Please see above:
MM2: Rare Plant surveys
MM3: Rare Plant Mitigation Plan



Potential Mitigation Areas Map

Section 5: Photos

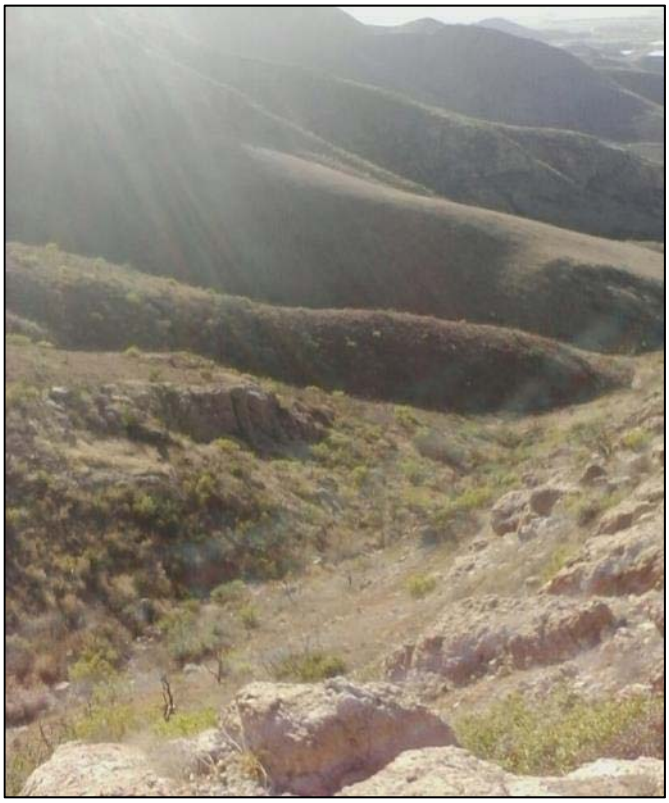
Photos	
Location SA1 **Map Key** PS1 **View Direction** Southeast **Description** Transition between Laurel Sumac Scrub and non-native grassland	
Location SA1 **Map Key** PS1 **View Direction** Northeast **Description** Oak tree (left edge of photo) within the Construction Footprint, intermittent Laurel Sumac Scrub shown in the background.	

Photos	
Location SA1 **Map Key** PS1 **View Direction** Southeast **Description** Transition between Laurel Sumac Scrub and non-native grassland	
Location SA1 **Map Key** PS2 **View Direction** East **Description** Intermittent drainage with oak individual in background.	

Photos

Location	
SA1	
Map Key	
PS2	
View Direction	
West	
Description	
Looking downstream in intermittent drainage at cattail marsh and annual spring area in foreground. Agriculture (strawberry) field and oaks in background.	

Location	
SA1	
Map Key	
PS3	
View Direction	
Southwest	
Description	
Non-native grassland in foreground with Laurel Sumac Scrub (sub dominant of giant rye) in background on hillside.	

Photos	
Location SA1 **Map Key** PS4 **View Direction** Southeast **Description** At edge of rock outcrop facing down into drainage with adjacent hillsides of Laurel Sumac Scrub with understory of deerweed and intermittent *Ceanothus* sp. individuals. Background shows non-native grassland.	
Location SA1 **Map Key** PS5 **View Direction** Northwest **Description** View of quarry operation (previous cleared land) and surrounding area.	

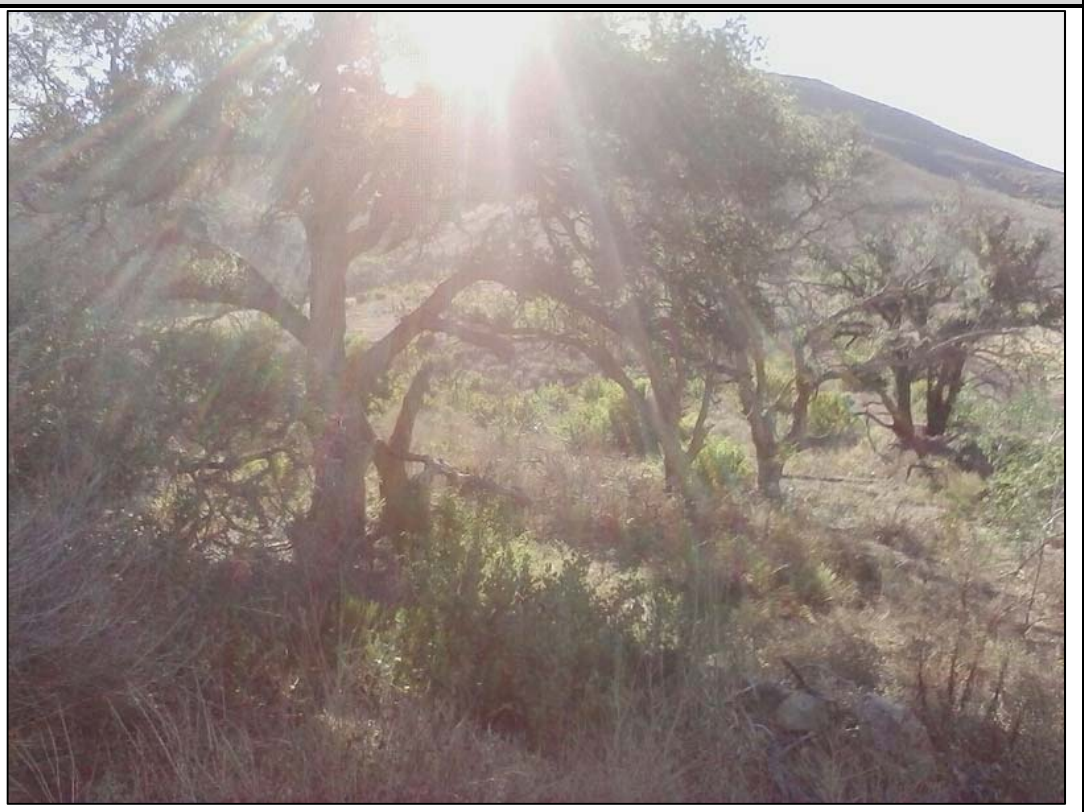
Photos	
Location SA1 **Map Key** PS6 **View Direction** Southeast **Description** Looking down at ephemeral drainage with giant rye grass vegetation community.	
Location SA1 **Map Key** PS7 **View Direction** Northwest **Description** Example of cliff-face physical feature.	

Photos	
Location SA1 **Map Key** PS8 **View Direction** West **Description** Disturbed intermittent sumac scrub, evidence of fire.	
Location SA1 **Map Key** PS9 **View Direction** North **Description** Scattered Laurel Sumac Scrub among portions of inaccessible steep rocky cliffside.	

Photos	
Location SA1 **Map Key** PS9 **View Direction** West **Description** Scattered Laurel Sumac Scrub among steep rocky hillsides.	
Location SA1 **Map Key** PS10 **View Direction** South **Description** Culvert – Overflow from detention pond. Only during significant flooding events can water breach into this area from the detention pond.	

Photos	
Location SA1 **Map Key** PS10 **View Direction** West **Description** Overflow directed into this drain – Directed back into detention pond and used for irrigation.	
Location SA1 **Map Key** PS11 **View Direction** West **Description** Red Willow Thicket adjacent to pond with cattail marsh visible in background.	

Photos	
Location SA1 **Map Key** PS12 **View Direction** West **Description** Detention Pond (W23). All drainages on site are diverted into this pond.	
Location SA1 **Map Key** PS13 **View Direction** Northeast **Description** Russian Thistle Field in foreground with scattered Laurel Sumac Scrub in background.	

Photos	
Location	
SA1	
Map Key	
PS13	
View Direction	
Southwest	
Description	
Oak woodland at the southwestern tip of SA1, outside of Construction Footprint.	

Appendix 1

Summary of Biological Resource Regulations

The Ventura County Planning Division, as “lead agency” under CEQA for issuing discretionary land use permits, uses the relationship of a potential environmental effect from a proposed project to an established regulatory standard to determine the significance of the potential environmental effect. This Appendix summarizes important biological resource regulations which are used by the Division’s biologists (consultants and staff) in making CEQA findings of significance:

Sensitive Status Species Regulations
Nesting Bird Regulations
Plant Community Regulations
Tree Regulations
Waters and Wetlands Regulations
Coastal Habitat Regulations
Wildlife Migration Regulations
Locally Important Species/Communities Regulations

Sensitive Status Species Regulations

Federally Protected Species

Ventura County is home to 29 federally listed endangered and threatened plant and wildlife species. The U.S. Fish and Wildlife Service (USFWS) regulates the protection of federally listed endangered and threatened plant and wildlife species.

FE (Federally Endangered): A species that is in danger of extinction throughout all or a significant portion of its range.

FT (Federally Threatened): A species that is likely to become endangered in the foreseeable future.

FC (Federal Candidate): A species for which USFWS has sufficient information on its biological status and threats to propose it as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

FSC (Federal Species of Concern): A species under consideration for listing, for which there is insufficient information to support listing at this time. These species may or may not be listed in the future, and many of these species were formerly recognized as "Category-2 Candidate” species.

The USFWS requires permits for the “take” of any federally listed endangered or threatened species. “Take” is defined by the USFWS as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct; may include significant habitat modification or degradation if it kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding, or sheltering.”

The Endangered Species Act (ESA) does not provide statutory protection for candidate species or species of concern, but USFWS encourages conservation efforts to protect these species. USFWS can set up voluntary Candidate Conservation Agreements and Assurances, which provide non-Federal landowners (public and private) with the assurance that if they implement various conservation activities to protect a given candidate species, they will not be subject to additional restrictions if the species becomes listed under the ESA.

State Protected Species

The California Department of Fish and Game (CDFG) regulates the protection of endangered, threatened, and fully protected species listed under the California Endangered Species Act. Some species may be jointly listed under the State and Federal Endangered Species Acts.

SE (California Endangered): A native species or subspecies 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.

ST (California Threatened): A native species or subspecies 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."

SFP (California Fully Protected Species): This designation originated from the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians, reptiles, and birds. Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

SR (California Rare): A species, subspecies, or variety of plant is rare under the Native Plant Protection Act when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Animals are no longer listed as rare; all animals listed as rare before 1985 have been listed as threatened.

SSC (California Species of Special Concern): Animals that are not listed under the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist.

The CDFG requires permits for the “take” of any State-listed endangered or threatened species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the California Fish and Game Commission determines to be endangered or threatened. “Take” is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The California Native Plant Protection Act protects endangered and rare plants of California. Section 1908, which regulates plants listed under this act, states: “no person shall import into this state, or take, possess, or sell within this state, except as incident to the possession or sale of the real property on which the plant is growing, any native plant, or any part or product thereof, that the commission determines to be an endangered native plant or rare native plant, except as otherwise provided in this chapter.”

Unlike endangered, threatened, and rare species, for which a take permit may be issued, California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

The California Endangered Species Act does not provide statutory protection for California species of special concern, but they should be considered during the environmental review process.

California Rare Plant Ranks (RPR)

Plants with 1A, 1B, 2 or 4 should always be addressed in CEQA documents. Plants with a RPR 3 do not need to be addressed in CEQA documents unless there is sufficient information to demonstrate that a RPR 3 plant meets the criteria to be listed as a RPR 1, 2, or 4.

RPR 1A: Plants presumed to be extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

RPR 1B: Plants that are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century.

RPR 2: Plants that are rare throughout their range in California, but are more common beyond the boundaries of California. List 2 recognizes the importance of protecting the geographic range of widespread species.

Plants identified as RPR 1A, 1B, and 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing.

RPR 3: A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.

RPR 4: A watch list for plants that are of limited distribution in California.

Global and Subnational Rankings

Though not associated directly with legal protections, species have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled
G2 or S2 – Imperiled
G3 or S3 - Vulnerable to extirpation or extinction

Locally Important Species

Locally important species' protections are addressed below under "Locally Important Species/Communities Regulations."

For lists of some of the species in Ventura County that are protected by the above regulations, go to http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html.

Migratory Bird Regulations

The Federal Migratory Bird Treaty Act (MBTA) and the California Department of Fish and Game (CDFG) Code (3503, 3503.5, 3511, 3513 and 3800) protect most native birds. In addition, the federal and state endangered species acts protect some bird species listed as threatened or endangered. Project-related impacts to birds protected by these regulations would normally occur during the breeding season, because unlike adult birds, eggs and chicks are unable to escape impacts.

The MBTA implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and Russia for the protection of migratory birds, which occur in two of these countries over the course of one year. The Act maintains that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (Title 50 of the Code of Federal Regulations, Section 10.13 as updated by the 1983 American Ornithologists' Union (AOU) Checklist and published supplements through 1995 by the USFWS).

CDFG Code 3513 upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. In addition, there are CDFG Codes (3503, 3503.5, 3511, and 3800) which further protect nesting birds and their parts, including passerine birds, raptors, and state "fully protected" birds.

NOTE: These regulations protect almost all *native nesting birds*, not just sensitive status birds.

Plant Community Regulations

Plant communities are provided legal protection when they provide habitat for protected species or when the community is in the coastal zone and qualifies as environmentally sensitive habitat area (ESHA).

Global and Subnational Rankings

Though not associated directly with legal protections, plant communities have been given a conservation status rank by NatureServe, an international non-profit conservation organization that is the leading source for information about rare and endangered species and threatened ecosystems. The Ventura County Planning Division considers the following ranks as sensitive for the purposes of CEQA impact assessment (G = Global, S = Subnational or State):

G1 or S1 - Critically Imperiled
G2 or S2 - Imperiled
G3 or S3 - Vulnerable to extirpation or extinction

CDFG Rare

Rare natural communities are those communities that are of highly limited distribution. These communities may or may not contain rare, threatened, or endangered species. Though the Native Plant Protection Act and the California Endangered Species Act provide no legal protection to plant communities, CDFG considers plant communities that

are ranked G1-G3 or S1-S3 (as defined above) to be rare or sensitive, and therefore these plant communities should be addressed during CEQA review.

Environmentally Sensitive Habitat Areas

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

ESHA has been specifically defined in the Santa Monica Mountains. For ESHA identification in this location, the Coastal Commission, the agency charged with administering the Coastal Act, has described the habitats that are considered ESHA. A memo from a Coastal Commission biologist that describes ESHA in the Santa Monica Mountains can be found at: http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html.

Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities, but has deemed oak woodlands to be a locally important community through the County's *Oak Woodland Management Plan*.

Tree Regulations

Selected trees are protected by the Ventura County Tree Protection Ordinance, found in Section 8107-25 of the Ventura County Non-Coastal Zoning Ordinance. This ordinance, which applies in the unincorporated areas of the County outside the coastal zone, regulates—through a tree permit program—the removal, trimming of branches or roots, or grading or excavating within the root zone of a "protected tree." Individual trees are the focus of the ordinance, while oak woodlands are additionally protected as "locally important communities."

The ordinance allows removal of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) through a ministerial permit process. Removal of more/other than this may trigger a discretionary tree permit.

If a proposed project cannot avoid impacts to protected trees, mitigation of these impacts (such as replacement of lost trees) is addressed through the tree permit process—**unless the impacts may affect biological resources beyond the tree itself**, such as to sensitive status species that may be using the tree, nesting birds, the tree's role as part of a larger habitat, etc. These secondary impacts have not been addressed through the tree permit program and must be addressed by the biologist in the biological assessment in accordance with the California Environmental Quality Act (CEQA).

A tree permit does not, however, substitute as mitigation for impacts to oak woodlands. The Public Resources Code requires that when a county is determining the applicability of CEQA to a project, it must determine whether that project "may result in a conversion of oak woodlands that will have a significant effect on the environment." If such effects (either individual impacts or cumulative) are identified, the law requires that they be mitigated. Acceptable mitigation measures include, but are not limited to, conservation of other oak woodlands through the use of conservation easements and planting replacement trees, which must be maintained for seven years. In addition, only 50% of the mitigation required for significant impacts to oak woodlands may be fulfilled by replanting oak trees.

The following trees are protected in the specified zones. Girth is measured at 4.5 feet from the midpoint between the uphill and downhill side of the root crown.

PROTECTED TREES			
Common Name/Botanical Name (Genus species)	Girth Standard (Circumference)	Applicable Zones	
		All Base Zones	SRP[1]
Alder (*Alnus* all species)	9.5 in.		X
Ash (*Fraxinus* all species)	9.5 in.		X

Bay (*Umbellularia californica)*	9.5 in.		X
Cottonwood (*Populus* all species)	9.5 in.		X
Elderberry (*Sambucus* all species)	9.5 in.		X
Big Cone Douglas Fir (*Pseudotsuga macrocarpa)*	9.5 in.		X
White Fir (*Abies concolor)*	9.5 in.		X
Juniper (*Juniperus californica)*	9.5 in.		X
Maple (*Acer macrophyllum)*	9.5 in.		X
Oak (Single) (*Quercus* all species)	9.5 in.	X	X
Oak (Multi) (*Quercus* all species)	6.25 in.	X	X
Pine (*Pinus* all species)	9.5 in.		X
Sycamore (*Platanus* all species)	9.5 in.	X	X
Walnut (*Juglans* all species)	9.5 in.		X
Historical Tree[3] (any species)	(any size)	X	X
Heritage Tree[4] (any species)	90.0 in.	X	X

X Indicates the zones in which the subject trees are considered protected trees.

1. SRP - Scenic Resource Protection Overlay Zone

2. SHP - Scenic Highway Protection Overlay Zone

3. Any tree or group of trees identified by the County or a city as a landmark, or identified on the Federal or California Historic Resources Inventory to be of historical or cultural significance, or identified as contributing to a site or structure of historical or cultural significance.

4. Any species of tree with a single trunk of 90 or more inches in girth or with multiple trunks, two of which collectively measure 72 inches in girth or more. Species with naturally thin trunks when full grown or naturally large trunks at an early age, or trees with unnaturally enlarged trunks due to injury or disease must be at least 60 feet tall or 75 years old.

Waters and Wetlands Regulations

Numerous agencies control what can and cannot be done in or around streams and wetlands. If a project affects an area where water flows, ponds or is present even part of the year, it is likely to be regulated by one or more agencies. Many wetland or stream projects will require three main permits or approvals (in addition to CEQA compliance). These are:

- 404 Permit (U.S. Army Corps of Engineers)
- 401 Certification (California Regional Water Quality Control Board)
- Streambed Alteration Agreement (California Department of Fish and Game)

For a more thorough explanation of wetland permitting, see the Ventura County's "Wetland Project Permitting Guide" at http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html.

404 Permit (U.S. Army Corps of Engineers)

Most projects that involve streams or wetlands will require a 404 Permit from the U.S. Army Corps of Engineers (USACE). Section 404 of the federal Clean Water Act is the primary federal program regulating activities in wetlands. The Act regulates areas defined as "waters of the United States." This includes streams, wetlands in or next to streams, areas influenced by tides, navigable waters, lakes, reservoirs and other impoundments. For nontidal waters, USACE jurisdiction extends up to what is referred to as the "ordinary high water mark" as well as to the landward limits of adjacent Corps-defined wetlands, if present. The ordinary high water mark is an identifiable natural line visible on the bank of a stream or water body that shows the upper limit of typical stream flow or water level. The mark is made from the action of water on the streambank over the course of years.

Permit Triggers: A USACE 404 Permit is triggered by moving (discharging) or placing materials—such as dirt, rock, geotextiles, concrete or culverts—into or within USACE jurisdictional areas. This type of activity is also referred to as a "discharge of dredged or fill material."

401 Certification (Regional Water Quality Control Board)

If your project requires a USACE 404 Permit, then you will also need a Regional Water Quality Control Board (RWQCB) 401 Certification. The federal Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the USACE, meets all state water quality standards. In California, the state and regional water boards are responsible for certification of activities subject to USACE Section 404 Permits.

Permit Trigger: A RWQCB 401 Certification is triggered whenever a USACE 404 Permit is required, or whenever an activity could cause a discharge of dredged or fill material into waters of the U.S. or wetlands.

Streambed Alteration Agreement (California Department of Fish and Game)

If your project includes alteration of the bed, banks or channel of a stream, or the adjacent riparian vegetation, then you may need a Streambed Alteration Agreement from the California Department of Fish and Game (CDFG). The California Fish and Game Code, Sections 1600-1616, regulates activities that would alter the flow, bed, banks, channel or associated riparian areas of a river, stream or lake. The law requires any person, state or local governmental agency or public utility to notify CDFG before beginning an activity that will substantially modify a river, stream or lake.

Permit Triggers: A Streambed Alteration Agreement (SAA) is triggered when a project involves altering a stream or disturbing riparian vegetation, including any of the following activities:

- Substantially obstructing or diverting the natural flow of a river, stream or lake
- Using any material from these areas
- Disposing of waste where it can move into these areas

Some projects that involve routine maintenance may qualify for long-term maintenance agreements from CDFG. Discuss this option with CDFG staff.

Ventura County General Plan

The Ventura County General Plan contains policies which also strongly protect wetland habitats.

Biological Resources Policy 1.5.2-3 states**:**

> Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map), shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

Biological Resources Policy 1.5.2-4 states:

> Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100 foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e. same type and acreage), and provide wetland habitat of comparable biological value. On-site replacement shall be preferred wherever possible. The replacement plan shall be developed in consultation with California Department of Fish and Game.

Coastal Habitat Regulations

Ventura County's Coastal Area Plan and the Coastal Zoning Ordinance, which constitute the "Local Coastal Program" (LCP) for the unincorporated portions of Ventura County's coastal zone, ensure that the County's land use plans, zoning ordinances, zoning maps, and implemented actions meet the requirements of, and implement the provisions and polices of California's 1976 Coastal Act at the local level.

Environmentally Sensitive Habitats

The Coastal Act specifically calls for protection of "environmentally sensitive habitat areas" or ESHA, which it defines as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

Section 30240 of the Coastal Act states:

(a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas."

(b) "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

Protection of ESHA is of particular concern in the southeastern part of Ventura County, where the coastal zone extends inland (~5 miles) to include an extensive area of the Santa Monica Mountains. For ESHA identification in this location, the Coastal Commission, the agency charged with administering the Coastal Act, has described the habitats that are considered ESHA. A memo from a Coastal Commission biologist that describes ESHA in the Santa Monica Mountains can be found at: http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html.

The County's Local Coastal Program outlines other specific protections to environmentally sensitive habitats in the Coastal Zone, such as to wetlands, riparian habitats, dunes, and upland habitats within the Santa Monica Mountains (M Overlay Zone). Protections in some cases are different for different segments of the coastal zone.

Copies of the Coastal Area Plan and the Coastal Zoning Ordinance can be found at: http://www.ventura.org/rma/planning/Programs/local.html.

Wildlife Migration Regulations

The Ventura County General Plan specifically includes wildlife migration corridors as an element of the region's significant biological resources. In addition, protecting habitat connectivity is critical to the success of special status species and other biological resource protections. Potential project impacts to wildlife migration are analyzed by biologists on a case-by-case basis. The issue involves both a macro-scale analysis—where routes used by large carnivores connecting very large core habitat areas may be impacted—as well as a micro-scale analysis—where a road or stream crossing may impact localized movement by many different animals.

Locally Important Species/Communities Regulations

Locally important species/communities are considered to be significant biological resources in the Ventura County General Plan.

Locally Important Species

The Ventura County General Plan defines a Locally Important Species as a plant or animal species that is not an endangered, threatened, or rare species, but is considered by qualified biologists to be a quality example or unique species within the County and region. The following criteria further define what local qualified biologists have determined to be Locally Important Species:

Locally Important Animal Species Criteria

Taxa for which habitat in Ventura County is crucial for their existence either globally or in Ventura County. This includes:

- Taxa for which the population(s) in Ventura County represents 10 percent or more of the known extant global distribution; or
- Taxa for which there are five or fewer *element occurrences*, or less than 1,000 individuals, or less than 2,000 acres of habitat that sustains populations in Ventura County; or,
- Native taxa that are generally declining throughout their range or are in danger of extirpation in Ventura County.

Locally Important Plant Species Criteria

- Taxa that are declining throughout the extent of their range AND have five (5) or fewer element occurrences in Ventura County.

The County maintains a list of locally important species, which can be found on the Planning Division website at: http://www.ventura.org/rma/planning/ceqa/bio_resource_review.html. *This list should not be considered comprehensive.* Any species that meets the criteria qualifies as locally important, whether or not it is included on this list.

Locally Important Communities

The Ventura County Initial Study Assessment Guidelines defines a locally important community as one that is considered by qualified biologists to be a quality example characteristic of or unique to the County or region, with this determination being made on a case-by-case basis. The County has not developed a list of locally important communities. Oak woodlands have however been deemed by the Ventura County Board of Supervisors to be a locally important community.

The state passed legislation in 2001, the Oak Woodland Conservation Act, to emphasize that oak woodlands are a vital and threatened statewide resource. In response, the County of Ventura prepared and adopted an Oak Woodland Management Plan that recommended, among other things, amending the County's Initial Study Assessment Guidelines to include an explicit reference to oak woodlands as part of its definition of locally important communities. The Board of Supervisors approved this management plan and its recommendations.

Appendix 2

Observed Species Tables

Species Observed					
Scientific name	**Common Name**	**Native**	**Observed in 2010**	**Observed in 2016**	**Notes**
PLANTS					
Ferns and Allies					
Pellaea andromedifolia	coffee fern	Y	X		
Pentagramma triangularis	goldenback fern	Y	X	X	
Selaginella bigelovii	Bigelow's spike-moss	Y	X	X	
Monocots					
Agrostis microphylla	small-leaf bentgrass	Y	X		
Allium peninsulare var. *peninsulare*	purple wild onion	Y	X		
Avena barbata	slender oat	N	X	X	
Bloomeria crocea	common goldenstar	Y	X		
Bromus catharticus	rescue brome	N	X		
Bromus diandrus	ripgut brome	N	X	X	
Bromus hordeaceus	soft chess	N	X		
Bromus madritensis ssp. *rubens*	red brome	N	X	X	
Calochortus catalinae	**Catalina mariposa-lily**	**Y**	**X**		**CNPS listed 4.2, not observed in 2016 potentially as a result of recent fire.**
Chlorogalum pomeridianum var. *pomeridianum*	wavy-leaf soap plant	Y	X		
Cynodon dactylon	Bermuda grass	N	X	X	
Cyperus eragrostis	nutsedge	Y	X	X	

Dichelostemma capitatum	bluedicks	Y	X	X	
Hordeum murinum ssp. *leporinum*	hare barley	N	X		
Lamarckia aurea	goldentop grass	N	X		
Leymus condensatus	giant wildrye	Y	X	X	
Melica imperfecta	Coast Range melic	Y	X	X	
Nassella pulchra	purple needlegrass	Y	X		
Pennisetum setaceum	African fountaingrass	N	X		
Piptatherum miliaceum	smilo grass	N	X	X	
Poa secunda ssp. *secunda*	one-sided bluegrass	Y	X		
Schismus barbatus	Mediterranean splitgrass	N	X		
Vulpia microstachys var. *ciliata*	Eastwood's fescue	Y	X		
Yucca whipplei	Whipple's yucca	Y	X	X	
Dicots					
Achillea millefolium	common yarrow	Y	X		
Acourtia microcephala	scapellote	Y	X	X	
Adenostoma fasciculatum	chamise	Y	X	X	
Anagallis arvensis	scarlet pimpernel	N	X		
Anthemis arvensis	dog-fennel	N	X		
Apiastrum angustifolium	wild celery	Y	X	X	
Artemisia californica	California sagebrush	Y	X	X	
Artemisia douglasiana	mugwort	Y	X	X	
Asclepias fascicularis	narrow-leaf milkweed	Y	X		
Atriplex lentiformis	quailbush	Y	X	X	
Baccharis pilularis	coyote bush	Y	X	X	
Baccharis salicifolia	mulefat	Y	X	X	
Brassica nigra	black mustard	N	X	X	
Brickellia californica	California brickellbush	Y	X	X	

Calystegia macrostegia sp.	coast/island morning-glory	Y	X	X	
Carduus pycnocephalus	Italian thistle	N	X	X	
Ceanothus crassifolius	hoaryleaf ceanothus	Y	X	X	Ceanothus sp. observed in 2016, indistinguishable due to fire.
Ceanothus megacarpus	big pod ceanothus	Y	X		
Centaurea melitensis	tocolote	N	X	X	
Cercocarpus betuloides var. betuloides	mountain mahogony	Y	X	X	
Chamaesyce albomarginata	rattlesnake weed	Y	X	X	
Chenopodium album	lamb's quarters	N	X		
Clarkia bottae	punch-bowl clarkia	Y	X		
Collinsia parryi	Parry's blue-eyed Mary	Y	X		
Conium maculatum	poison hemlock	N	X	X	
Convolvulus arvensis	field bindweed	N	X		
Corethrogyne filaginifolia	California aster	Y	X		
Crassula connata	pigmy weed	Y	X		
Cryptantha intermedia	common cryptantha	Y	X		
Cryptantha muricata	muricate cryptantha	Y	X		
Deinandra fasciculata	clustered tarplant	Y	X	X	
Descurainia pinnata ssp. *glabra*	smooth western tansy mustard	Y	X		
Dodecatheon clevelandii ssp. sanctarum	coastal shooting-star	Y	X		
***Dudleya blochmaniae* ssp. blochmaniae**	**Blochman's dudleya**	**Y**	**X**		**CNPS Listed, not observed in 2016 potentially as a result of recent fire.**

Dudleya lanceolata	lance-leaved dudleya	Y	X	X	
Dudleya pulverulenta	chalk live-forever	Y	X	X	
Encelia californica	California bush sunflower	Y	X		
Epilobium canum ssp. *canum*	gray California fuschia	Y	X		
Eriastrum sapphirinum	sapphire woolystar	Y	X		
Eriogonum cinereum	ashy-leaf buckwheat	Y	X	X	
Eriogonum crocatum	**Conejo buckwheat**	**Y**	**X**	**X**	**California Rare; CNPS List 1B.2**
Eriogonum fasciculatum var. *foliolosum*	red-topped buckwheat	Y	X	X	
Eriophyllum confertiflorum var. *confertiflorum*	golden yarrow	Y	X		
Erodium cicutarium	red-stem filaree	N	X	X	
Eucrypta chrysanthemifolia var. *chrysanthemifolia*	spotted hideseed	Y	X		
Foeniculum vulgare	fennel	N	X	X	
Galium angustifolium ssp. *angustifolium*	narrow-leaf bedstraw	Y	X		
Galium aparine	goose-grass	Y	X		
Gilia angelensis	chaparral gily-flower	Y	X		
Gnaphalium californicum	California everlasting	Y	X		
Hazardia squarrosa var. *grindelioides*	saw-toothed goldenbush	Y	X	X	
Helminthotheca echioides	bristly ox-tongue	N	X		
Heteromeles arbutifolia	toyon	Y	X	X	
Hirschfeldia incana	short-pod mustard	N	X	X	
Isocoma menziesii	coastal goldenbush	Y	X		
Juglans californica	**southern California black walnut**	**Y**	**X**	**X**	**CNPS List 4.2**
Lactuca saligna	willow-lettuce	N	X		

Lactuca serriola	prickly lettuce	N	X		
Lasthenia californica ssp. *californica*	California goldfields	Y	X		
Leptosyne gigantea	giant coreopsis	Y	X		
Logfia filaginoides	California cottonrose	Y	X		
Lotus scoparius var. *scoparius*	deerweed	Y	X	X	
Lotus strigosus	bishop's lotus	Y	X		
Malacothamnus fasciculatus var. *fasciculatus*	chaparral bush mallow	Y	X	X	
Malacothrix saxatilis var. *tenuifolia*	short leaved cliff aster	Y	X	X	
Malosma laurina	laurel sumac	Y	X	X	
Malva parviflora	cheese weed	N	X	X	
Marah macrocarpus var. *macrocarpus*	big-fruited man-root	Y	X	X	
Medicago polymorpha	burclover	N	X	X	
Melilotus albus	white melilot	N	X		
Melilotus indicus	yellow sweet-clover	N	X		
Mimulus aurantiacus var. pubescens	southern bush monkeyflower	Y	X		
Mimulus cardinalis	scarlet monkey flower	Y		X	
Minuartia douglasii	Douglass's stichwort	Y	X		
Mirabilis laevis var. *crassifolia*	California wishbone bush	Y	X	X	
Nicotiana glauca	tree tobacco	N	X	X	
Opuntia littoralis	coast prickly-pear	Y	X	X	
Oxalis pes-caprae	Cape sorrel	N	X	X	
Phacelia cicutaria	caterpillar phacelia	Y	X	X	Phacelia sp. observed in 2016

Phacelia ramosissima	branching phacelia	Y	X		
Phacelia viscida	sticky phacelia	Y	X		
Polygonum aviculare	prostrate knotweed	N	X	X	
Populus fremontii ssp. *fremontii*	Fremont cottonwood	Y	X		
Pterostegia drymarioides	fairy mist	Y	X		
Quercus agrifolia var. *agrifolia*	coast live oak	Y	X	X	
Rafinesquia californica	California chicory	Y	X		
Rhamnus ilicifolia	holly-leaf redberry	Y	X	X	
Rhus integrifolia	lemonade berry	Y	X		
Rhus ovata	sugar bush	Y	X	X	
Ricinus communis	castor-bean	N	X	X	
Rumex crispus	curly dock	N	X		
Salix laevigata	red willow	Y	X	X	
Salix lasiolepis	arroyo willow	Y	X	X	
Salsola tragus	Russian-thistle	N	X	X	
Salvia apiana	white sage	Y	X	X	
Salvia leucophylla	purple sage	Y	X	X	
Salvia mellifera	black sage	Y	X	X	
Sambucus nigra ssp. *caerulea*	blue elderberry	Y	X		
Sanicula crassicaulis	Pacific sanicle	Y	X		
Schoenoplectus acutus var. *occidentalis*	tule	Y		X	
Senecio vulgaris	common groundsel	N	X		
Silene gallica	windmill pink	N	X		
Silene laciniata ssp. *laciniata*	fringed Indian-pink	Y	X		
Sisymbrium orientale	eastern rocket	N	X		

Solanum xanti	chaparral nightshade	Y			
Sonchus oleraceus	common sow thistle	N			
Stachys ajugoides var. *rigida*	rigid woodmint	Y			
Stylocline gnaphaloides	everlasting nest-straw	Y			
Thysanocarpus laciniatus	narrow-leaf fringepod	Y	X	X	
Toxicodendron diversilobum	poison oak	Y	X	X	
Trifolium willdenovii	tomcat clover	Y	X		
Typha latifolia -	broadleaf cattail	Y		X	
Uropappus lindleyi	silver puffs	Y	X		
Venegasia carpesioides	canyon sunflower	Y	X		
Verbena lasiostachys var. *lasiostachys*	western vervain	Y	X		
Xanthium spinosum	spiny cocklebur	Y	X		
Xanthium strumarium	cocklebur	Y	X	X	
ANIMALS					
Amphibians					
Lithobates catesbeianus	American bullfrog	N	X		
Reptiles					
Aspidoscelis tigris stejnegeri	**coastal whiptail**	**Y**	**X**	**X**	**CDFW SSC**
Crotalus helleri	southern pacific rattlesnake	Y	X		
Elgaria multicarinata webbii	San Diego alligator lizard	Y	X		
Pituophis catenifer annectens	San Diego gopher snake	Y	X	X	
Sceloporus occidentalis	western fence lizard	Y		X	
Trachemys scripta elegans	red-eared slider	N	X		
Uta stansburiana elegans	California side-blotched	Y	X	X	

	lizard				
Birds					
Accipiter striatus	**sharp-shinned hawk**	**Y**		**X**	**CDFW WL, observed in 2016 by BRC**
Aeronautes saxatalis	white-throated swift	Y	X	X	
Agelaius phoeniceus	red-winged blackbird	Y	X		
Anas platyrhynchos	mallard	Y	X		
Anas strepera	gadwall	Y	X		
Anthus rubescens	American pipit			X	
Aphelocoma californica	California scrub-Jay		X	X	
Ardea alba	great egret	Y	X		
Ardea herodias	great blue heron	Y	X		
Aythya collaris	ring-necked duck			X	
Baeolophus inornatus	oak titmouse	Y	X		
Buteo jamaicensis	red-tailed hawk	Y	X	X	
Butorides virescens	green heron	Y	X		
Callipepla californica	California quail	Y	X		
Calypte anna	Anna's Hummingbird		X	X	
Carduelis psaltria	lesser goldfinch	Y	X		
Carduelis tristis	American goldfinch	Y	X		
Cathartes aura	turkey vulture	Y	X		
Catharus guttatus	hermit thrush	Y	X		
Catherpes mexicanus	canyon wren	Y	X	X	
Chamaea fasciata	wrentit	Y	X		
Charadrius vociferus	killdeer	Y	X		
Chondestes grammacus	lark sparrow			X	
Chordeiles acutipennis	lesser nighthawk	Y	X		
Colaptes auratus	northern flicker			X	

Columba livia	rock pigeon	Y	X		
Columbina passerina	common ground-dove	Y	X		
Contopus sordidulus	western wood-pewee	Y	X		
Corvus brachyrhynchos	American crow	Y	X	X	
Corvus corax	common raven	Y	X		
Dendroica occidentalis	hermit warbler	Y	X		
Dendroica petechia	**yellow warbler**	**Y**	**X**		**SSC, not observed in 2016.**
Empidonax difficilis	Pacific-slope flycatcher	Y	X		
Euphagus cyanocephalus	Brewer's blackbird	Y	X		
Falco sparverius	American kestrel	Y	X	X	
Fulica americana	American coot	Y	X	X	
Geococcyx californianus	greater roadrunner	Y	X		
Geothlypis trichas	common yellowthroat	Y	X		
Haemorhous mexicanus	house Finch	Y	X	X	
Hirundo rustica	barn swallow	Y	X		
Icterus bullockii	Bullock's oriole	Y	X		
Icterus cucullatus	hooded oriole	Y	X		
Junco hyemalis	Dark-eyed Junco	Y		X	
Lanius ludovicianus	**loggerhead Shrike**	**Y**		**X**	**CDFW SSC, observed in 2016 by BRC**
Megaceryle alcyon	belted kingfisher	Y	X		
Melospiza melodia	song sparrow	Y	X		
Melozone crissalis	California towhee	Y	X	X	
Mimus polyglottos	northern mockingbird	Y	X		
Molothrus ater	brown-headed cowbird	N	X		
Myiarchus cinerascens	ash-throated flycatcher	Y	X		
Nycticorax nycticorax	black-crowned night-heron	Y	X		

Oxyura jamaicensis	ruddy duck	Y		X	
Passerina amoena	lazuli bunting	Y	X		
Passerina caerulea	blue grosbeak	Y	X		
Petrochelidon pyrrhonota	cliff swallow	Y	X		
Phainopepla nitens	phainopepla	Y	X		
Phalacrocorax auritus	double-crested cormorant	Y	X		
Pheucticus melanocephalus	black-headed grosbeak	Y	X		
Picoides nuttallii	Nuttall's woodpecker	Y	X		
Picoides pubescens	downy woodpecker	Y	X		
Pipilo maculatus	spotted towhee	Y	X		
Podilymbus podiceps	pied-billed grebe	Y	X	X	
Polioptila caerulea	blue-gray Gnatcatcher	Y		X	
Porzana carolina	sora	Y		X	
Psaltriparus minimus	bushtit	Y	X		
Quiscalus mexicanus	great-tailed grackle	Y	X		
Salpinctes obsoletus	rock wren	Y	X	X	
Sayornis nigricans	Black phoebe	Y	X	X	
Sayornis saya	Say's phoebe	Y		X	
Selasphorus sasin	Allen's hummingbird	Y	X		
Sialia mexicana	western bluebird	Y		X	
Spinus psaltria	lesser goldfinch	Y		X	
Stelgidopteryx serripennis	northern rough-winged swallow	Y	X		
Turdus migratorius	American robin	Y		X	
Tyrannus verticalis	western kingbird	Y		X	
Tyto alba	barn owl	Y		X	
Yellow-rumped warbler	yellow-rumped warbler	Y		X	
Zenaida macroura	mourning dove	Y		X	

Zonotrichia leucophrys	white-crowned sparrow	Y		X	
Mammals					
Canis latrans	coyote	Y	X	X	
Chaetodipus californicus	California pocket mouse	Y	X		
Lynx rufus	bobcat	Y	X		
Neotoma fuscipes	dusky-footed woodrat	Y	X	X	
Neotoma lepida intermedia	**San Diego desert woodrat**	**Y**	**X**	**X**	**CDFW SSC, trapped in 2010; middens observed in 2016 by BRC**
Odocoileus hemionus	mule deer	Y	X		
Peromyscus californicus	California mouse	Y	X		
Peromyscus eremicus	cactus mouse	Y	X		
Peromyscus maniculatus	deer mouse	Y	X		
Spermophilus beecheyi	California ground squirrel	Y	X	X	
Sylvilagus audubonii	desert cottontail	Y	X	X	
Thomomys bottae	Botta's pocket gopher	Y	X	X	

APPENDIX C-2

PACIFIC ROCK QUARRY EXPANSION PROJECT: JUNE 2018 RARE PLANT SURVEY AND BURROWING OWL HABITAT ASSESSMENT RESULTS MEMORANDUM

Memorandum

date October 23, 2018

to Bob Delp, Benchmark Resources

from Dale Hameister, Senior Biologist, ESA
Greg Ainsworth, Director of Biological Resources, ESA

subject Pacific Rock Quarry Expansion Project: June 18 Rare Plant Survey and Burrowing Owl Habitat Assessment Results

Introduction

This technical memorandum describes the methods and results of a rare plant survey and burrowing owl habitat assessment conducted by Environmental Science Associates, Inc. (ESA) in June of 2018 to provide information in support of the environmental impact report (EIR) being prepared for the proposed Pacific Rock Quarry Expansion Project (project).

Approval of the project is subject to discretionary review by the County of Ventura (County), requiring environmental review in compliance with the California Environmental Quality Act (CEQA). ESA is subcontracted to Benchmark Resources which is contracted with the County to prepare the an EIR for the project. Because the project would expand mining operations to areas with the potential to contain habitat and species with special status under federal, state, and or local regulations, an assessment of these habitats and potential special-status species occurrence is required. The application materials include a 2017 Initial Study Biological Assessment (ISBA) prepared by BioResources Consultants, Inc., on behalf of the applicant. Upon review of that report, the County determined that supplemental information including rare plant surveys and burrowing owl habitat surveys are necessary to provide information for the EIR. The survey results documented herein are intended for use by ESA and Benchmark Resources in preparing the biological resources impact assessment for the EIR.

Project Overview

The proposed project includes a modification to the existing Conditional Use Permit (CUP) and the approval of an amended Reclamation Plan to authorize the expansion of ongoing mining operations at the Pacific Rock Quarry. The project site is located on Howard Road in unincorporated Ventura County, California, south of the city of Camarillo, south of State Highway 101, and north of Portero Road (**Attachment A, Figure 1**), immediately to the east of active agricultural fields and the Conejo Mountain Funeral Home, Memorial Park & Crematory (**Attachment A, Figure 2)**.

As proposed, mining would occur over an approximately 172.8-acre area (entirely within APNs 234006022 and 234006019). Mining operations would continue in the same manner as under current operations, involving blasting to loosen the hard rock material and various processing methods.

Methodology

Literature Review

ESA conducted a literature review to gather information on the natural resources and special status species known or likely to occur in the area. This included a review of the following:

- Initial Study Biological Assessment (ISBA), BioResource Consultants, Inc. Report Revised February 16, 2017.
- California Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB). Accessed May, 2018.
- CDFW. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, March 20, 2018
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPac) Environmental Conservation Online System (ECOS). Accessed May, 2018.

Rare Plant Survey

ESA biologists/botanists Robert Sweet and Dale Hameister led a plant survey on the project site on June 4, 5 and 6, 2018. The survey included the entire mine area boundary, including areas within the existing CUP and existing mining areas, as well as an approximately 200 ft. "buffer" beyond the proposed project's expansion limits (the combined expansion area and buffer are referred to herein as the "study area"). The survey focused primarily on rare plants; however, all species were inventoried (See **Attachment B**, **Species Compendium**).

The plant survey was conducted during the blooming periods of potentially-occurring special-status plant species (See **Table 1, Targeted Species for Rare Plant Survey**) and in accordance with the *CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW, March 20, 2018)*. A known reference site located approximately one-half mile from the project site that contains blooming populations of Blochman's dudleya (*Dudleya blochmaniae ssp. blochmaniae*), Conejo buckwheat (*Eriogonum crocatum*), and Verity's dudleya (*Dudleya parva*), was surveyed and all three species were in full bloom at the time of the surveys. The study area includes steep slopes and vertical rock faces. Pedestrian transects spaced approximately 30 feet apart were walked in all accessible areas within the study area in search of any rare plants. Steep terrain that was not accessible is located at the northern portion of the expansion area, which was assessed from the nearest vantage point using binoculars. Biologists identified each plant to the species- or subspecies-level using a dichotomous key. Plant species observed are listed in Attachment A.

All wildlife species observed, including any sign such as scat, tracks, feathers, bones, etc. were documented and are listed in Attachment B, Observed Wildlife Species.

Burrowing Owl Habitat Assessment

The ISBA (BioResource Consultants, February 2017) concluded that western burrowing owl (*Athene cunicularia hypugaea*) are known to occur in the region, and therefore, have potential to occur within the low-lying grass-dominated areas located within the lower elevation of the study area. Therefore, during the plant survey, ESA biologists searched for any sign of burrowing owl presence, including any ground squirrel burrows capable of supporting burrowing owls, as well as feathers, scat, pellets, bone fragments, etc. Burrowing owls are also known

to use man-made structures for wintering and breeding, such as irrigation pipes, culverts, and debris stockpiles, each of which are present within the site and were visually inspected during the survey.

Results

Rare Plant Survey

Ten special-status species were determined to have a high potential to occur in the study area based on the results of the CNDDB search and the presence of suitable habitat in the study area (e.g., coastal sage scrub, native soils, elevation, slope). Five of the special-status species were observed during the surveys: Catalina mariposa lily (*Calochortus catalinae*), club haired mariposa lily (*Calochortus clavatus* var. *clavatus*), Blochman's dudleya (*Blochman's dudleya*), Conejo buckwheat (*Eriogonum crocatum*), and southern California black walnut (*Juglans californica*). As depicted in **Attachment A, Figure 3, Rare Plant Locations**, all of the rare plants were observed within the study area. Representative photographs of the habitat within the study area is provided in **Attachment C, Photographs**.

Table 1, Targeted Species for Rare Plant Survey, lists the ten special-status plant species and status, and identifies whether they were observed as present within the survey area and, if so, the general locations/terrain in which they were observed. **Table 2, Rare Plant Survey Results**, identifies the number of individual plants of each species observed within the study area.

Specifically, the two mariposa lily species were observed in clustered populations within the grassland areas in the southwest and southern portions of the study area that are dominated by short-pod mustard and non-native grasses including non-native compact brome (*Bromus madritensis*), wild oats (*Avena fatua*), and Harding grass (*Phalaris aquatica*). The Blochman's dudleya were observed in large numbers on rock outcrops located in the eastern portion of the study area with smaller populations also observed within the rock outcrops located at the southwest portion of the study area. The areas where Blochman's dudleya were observed were commonly associated with Bigelow's spikemoss (*Selaginella bigelovii*) and compact brome. Conejo buckwheat was observed northern, eastern, and southern portions of the study area, generally on south-facing steep to vertical surfaces. The majority of the Conejo buckwheat was observed using binoculars from the nearest vantage point due to its presence on steep slopes that are not accessible.

TABLE 1:
TARGETED SPECIES FOR RARE PLANT SURVEY

Scientific Name	Common Names	Status Federal/State/CNPS	Present or Absent	Location Observed
Calochortus catalinae	Catalina mariposa-lily	None/None/4.2	Present	Observed within grassland slopes in the southern portion of the survey area.
Calochortus clavatus var. clavatus	Club haired mariposa-ily	None/None/4.3	Present	Observed within grassland slopes in the southern portion of the survey area.
Calochortus plummerae	Plummer's mariposa-lily	None/None/4.2	Absent	
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None/None/1B.1	Present	Observed on flat tops of large boulders and steep to vertical surfaces in the east, and southwestern portions of the survey area. Commonly associated with Bigelow's spikemoss and compact brome in patches of soil on the flat tops of large rocks.
Dudleya parva	Verity's dudleya	FT/None/1B.1	Absent	
Eriogonum crocatum	Conejo buckwheat	None/Rare/1B.1	Present	Observed on generally south and east facing steep to vertical surfaces in the north, eastern and southern parts of the survey area.
Juglans californica	Southern California black walnut	None/None/4.2	Present	Observed within the drainage on the south side of the survey area.
Navarretia ojaiensis	Ojai navarretia	None/None/1B.1	Absent	
Pentachaeta lyonii	Lyon's pentachaeta	FE/ SE/1B.1	Absent	
Texosporium sancti-jacobi	woven-spored lichen	None/None/3	Absent	

Federal
FE = Endangered
FT = Threatened
State
SE = Endangered
ST = Threatened
CNPS - California Rare Plant Rank
1B. Rare or Endangered in California and elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

TABLE 2:
RARE PLANT SURVEY RESULTS

Scientific Name	Common Names	Number of Plants within Proposed CUP Boundary	Number of Plants within 200-foot Buffer Area
Calochortus catalinae	Catalina mariposa-lily	180	4
Calochortus clavatus var. clavatus	Club haired mariposa lily	13	
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	857	21
Eriogonum crocatum	Conejo buckwheat	54	35
Juglans californica	Southern California black walnut	6	

Burrowing Owl Habitat Assessment

Burrowing owls generally occur on flat terrain; therefore, the study area provides marginal habitat for burrowing owls due to the presence of steep slopes in much of the site. No suitable burrows were observed within the study area and no burrowing owl individuals or sign of presence was observed; therefore, burrowing owls are not expected to occur within the study area.

The following common wildlife species were observed: reptiles - western fence lizard (*Sceloporus occidentalis*), southern Pacific rattlesnake (*Crotalus oreganus helleri*), and granite spiny lizard (*Sceloporus orcutti*); birds - red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), mourning dove (*Zenaida macroura*), Nuttall's woodpecker (Picoides nuttallii), Western scrub-jay (*Aphelocoma californica*), common raven (*Corvus corax*), bushtit (*Psaltriparus minimus*), northern mockingbird (Mimus polyglottos), California towhee (*Pipilo crissalis*), house finch (*Carpodacus mexicanus*), Bewick's wren (*Thryomanes bewickii*), and lesser goldfinch (*Carduelis psaltria*); mammals - desert cottontail (*Sylvilagus audubonii*), and sign of coyote (*Canis latrans*) and southern mule deer (*Odocoileus hemionus*).

Several species of common waterfowl and wading birds were observed at the basin/pond in the western portion of the study area, including American coot (*Fulica americana*), mallard (*Anas platyrhynchos*), ruddy duck (*Oxyura jamaicensis*), and black-crowned night heron (*Nycticorax nycticorax*). A complete list of wildlife species observed during the field surveys is provided in Attachment B, Species Compendium.

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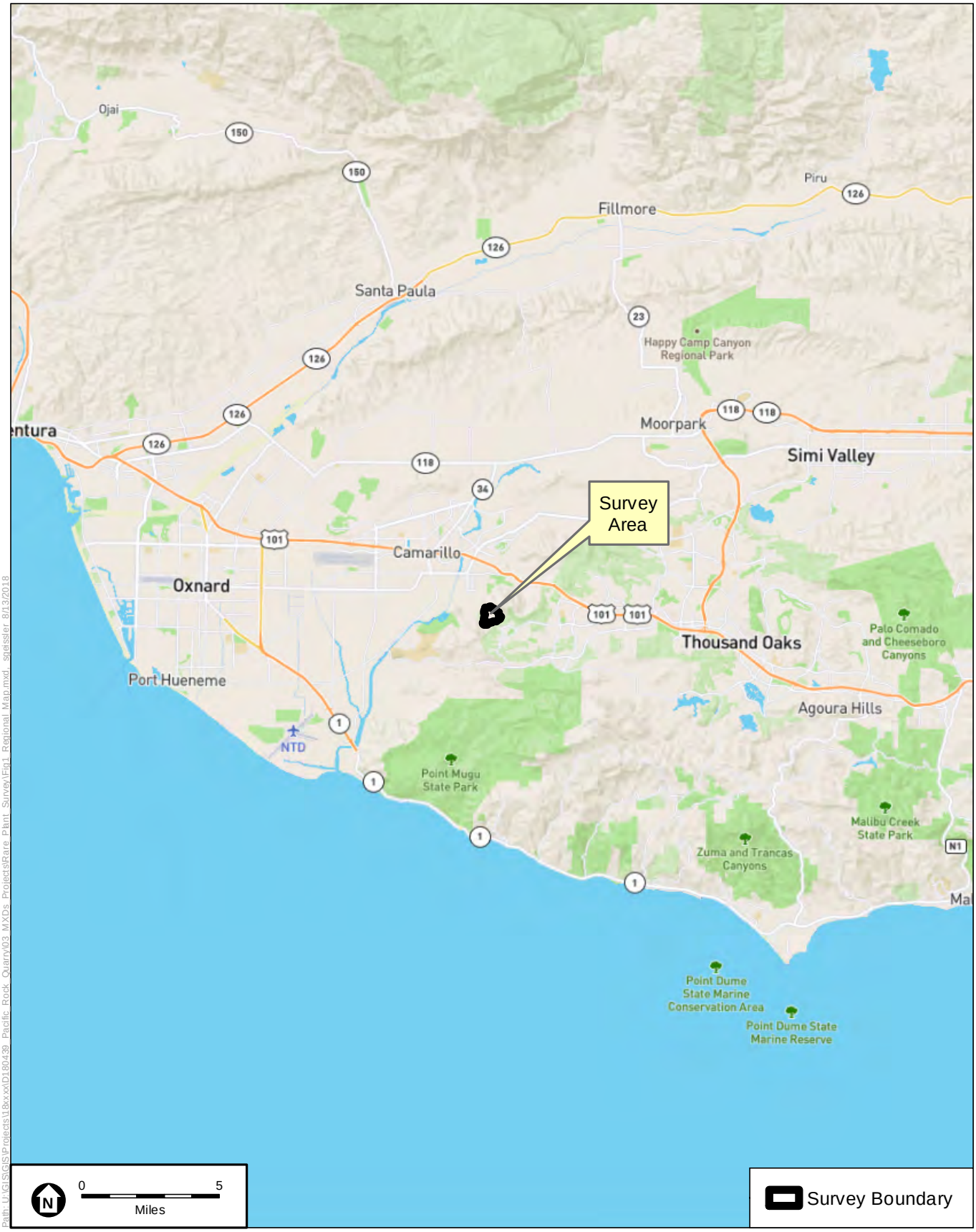
Attachment A
Figures

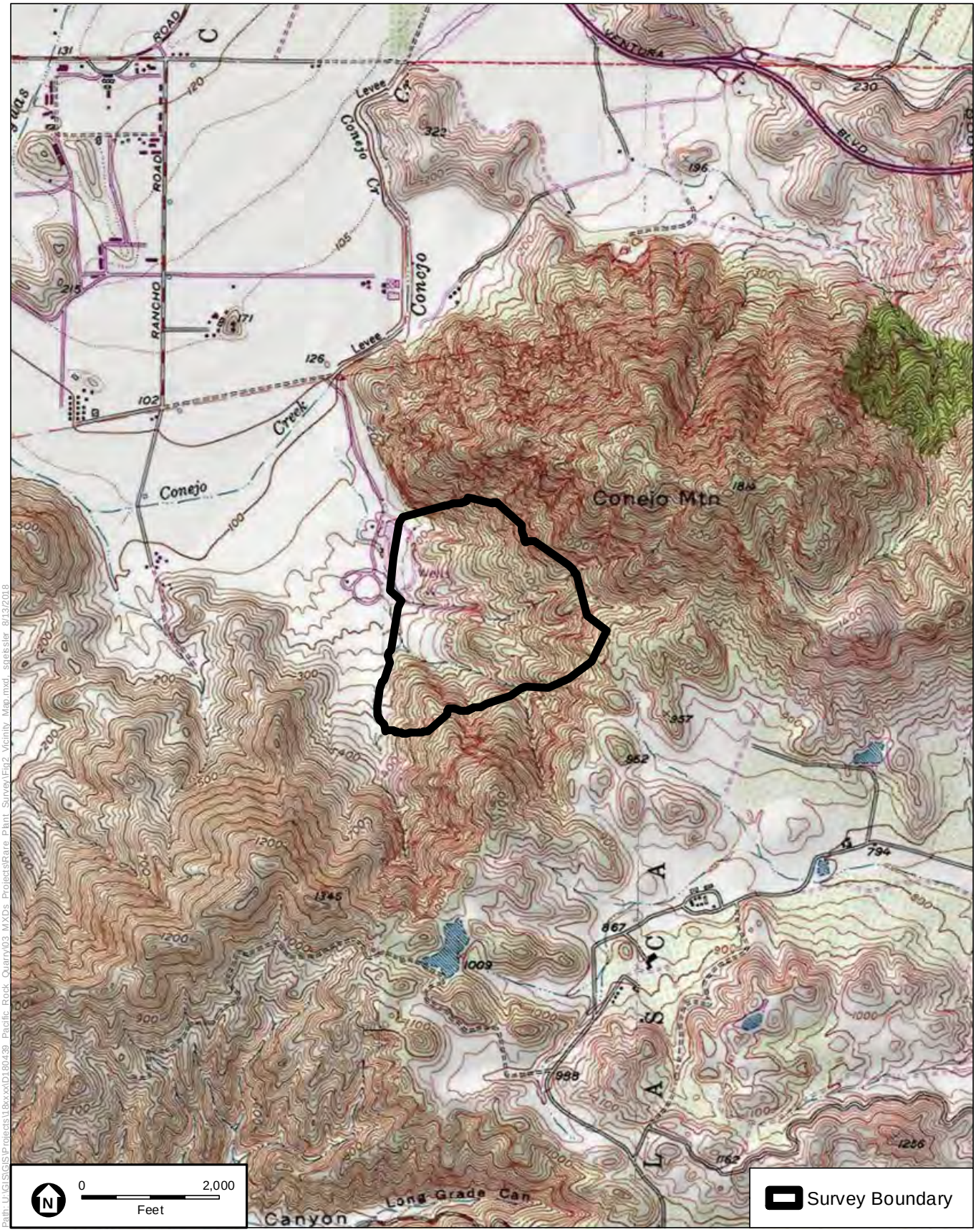


SOURCE: Open Street Map, 2018.

Pacific Rock Quarry Mine Expansion

Figure 1
Regional Map

ESA



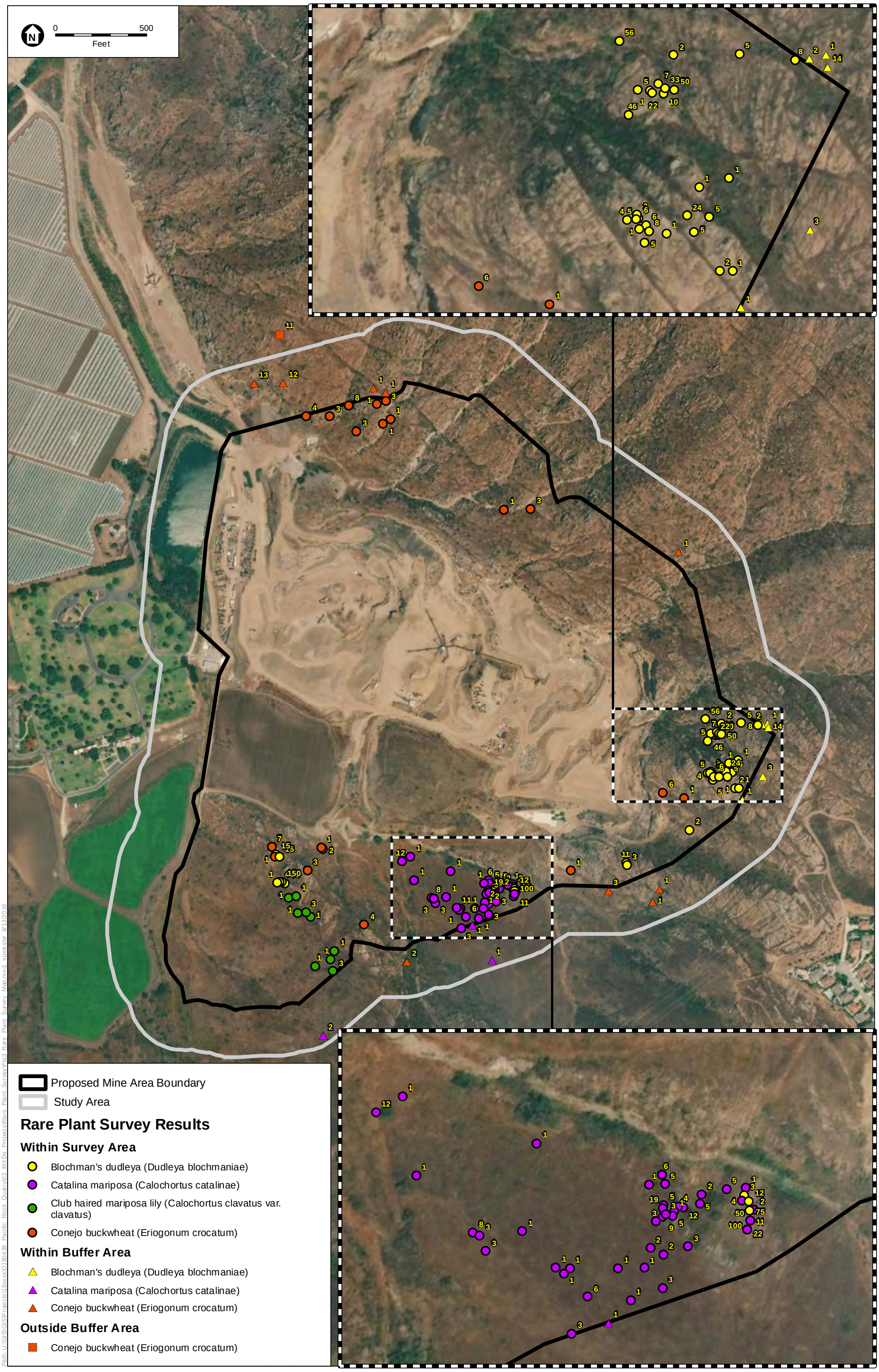
Path: U:\GIS\GIS\Projects\18xxx\D180439_Pacific_Rock_Quarry\03_MXDs_Projects\Rare_Plant_Survey\Fig2_Vicinity_Map.mxd snelssler 8/13/2018

SOURCE: USGS Topographic Series (Camarillo, Newbury Park, CA).

Pacific Rock Quarry Mine Expansion

Figure 2
Vicinity Map

ESA



SOURCE: ESRI, 2018.

Pacific Rock Quarry Mine Expansion

Figure 3
Rare Plant Survey Map

ESA

Attachment B
Species Compendium

Pacific Rock Plant Species Compendia

Scientific Name	Common Name	Special Status
LYCOPHYTES		
Selaginellaceae - Spike-moss family		
Selaginella bigelovii	Bushy spike-moss	
FERNS		
Pteridaceae - Brake family		
Cheilanthes newberryi	Newberry's lip fern	
EUDICOTS		
Aizoaceae - Fig-marigold family		
* *Carpobrotus edulis*	Freeway iceplant	
Anacardiaceae - Sumac Or Cashew family		
Malosma laurina	Laurel sumac	
Rhus aromatica	Skunk bush	
Rhus integrifolia	Lemonade berry	
Rhus ovata	Sugar bush	
Toxicodendron diversilobum	Western poison oak	
Apiaceae - Carrot family		
* *Conium maculatum*	Poison hemlock	
Sanicula crassicaulis	Pacific blacksnakeroot	
Apocynaceae - Dogbane family		
Asclepias fascicularis	Narrow-leaf milkweed	
Asteraceae - Sunflower family		
Ambrosia dumosa	White bur-sage	
Anaphalis margaritacea	Western pearly everlasting	
Artemisia californica	California sagebrush	
Artemisia douglasiana	Mugwort	
Baccharis salicifolia ssp. salicifolia	Mule fat	
* *Centaurea melitensis*	Tocalote	
Deinandra fasciculata	Clustered tarweed	
Encelia californica	California brittlebush	
* *Erigeron bonariensis*	Flax-leaved horseweed	
Erigeron canadensis	Horseweed	
Eriophyllum confertiflorum	Golden-yarrow, yellow-yarrow	
Hazardia squarrosa	Saw-toothed goldenbush	
Helianthus annuus	Common sunflower	
Isocoma menziesii	Coastal goldenbush	
* *Lactuca serriola*	Prickly lettuce	

Scientific Name	Common Name	Special Status
Lasthenia californica	California goldfields	
* *Logfia gallica*	Daggerleaf cottonrose	
Microseris douglasii	Douglas' silverpuffs	
Pseudognaphalium beneolens		
* *Pseudognaphalium luteoalbum*	Jersey cudweed	
* *Sonchus asper ssp. asper*	Prickly sow thistle	
* *Sonchus oleraceus*	Common sow thistle	
Venegasia carpesioides	Canyon sunflower	
Boraginaceae - Borage family		
Cryptantha sp.	Cryptantha	
Phacelia cicutaria var. hispida	Caterpillar phacelia	
Phacelia parryi	Parry's phacelia	
Brassicaceae - Mustard family		
* *Brassica rapa*	Turnip, field mustard	
* *Hirschfeldia incana*	Shortpod mustard	
Lepidium densiflorum	Common pepperweed	
* *Sisymbrium irio*	London rocket	
Cactaceae - Cactus family		
Opuntia littoralis	Coastal prickly-pear	
Chenopodiaceae - Goosefoot family		
* *Chenopodium album*	Lamb's quarters	
* *Salsola tragus*	Russian thistle, tumbleweed	
Convolvulaceae - Morning-glory family		
Calystegia macrostegia	Island false bindweed	
Cuscuta californica	Chaparral dodder	
Crassulaceae - Stonecrop family		
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	CRPR 1B.1
Dudleya cymosa	Canyon liveforever	
Dudleya pulverulenta	Chalk dudleya	
Cucurbitaceae - Gourd family		
Marah macrocarpa	Chilicothe	
Euphorbiaceae - Spurge family		
Croton setigerus	Turkey-Mullein	
* *Ricinus communis*	Castorbean	
Fabaceae - Legume family		
Acmispon argophyllus	Silver bird's-foot trefoil	
Acmispon glaber	Deerweed, California broom	
Lupinus succulentus	Arroyo lupine	

Scientific Name	Common Name	Special Status
* *Melilotus indicus*	Sourclover	
* *Trifolium hirtum*	Rose clover	
Fagaceae - Oak family		
Quercus agrifolia	Coast live oak, encina	
Geraniaceae - Geranium family		
* *Erodium cicutarium*	Redstem filaree	
Grossulariaceae - Gooseberry family		
Ribes malvaceum	Chaparral currant	
Juglandaceae - Walnut family		
Juglans californica	Southern California black walnut	CRPR 4.2
Lamiaceae - Mint family		
Salvia columbariae	Chia	
Salvia leucophylla	Purple sage	
Salvia mellifera	Black sage	
Malvaceae - Mallow family		
Malacothamnus fasciculatus	Chaparral mallow	
* *Malva parviflora*	Cheeseweed, little mallow	
Nyctaginaceae - Four O'clock family		
Mirabilis laevis var. crassifolia	Wishbone bush	
Onagraceae - Evening Primrose family		
Clarkia bottae	Punchbowl godetia	
Epilobium ciliatum	Fringed willowherb	
Orobanchaceae - Broom-rape family		
Castilleja affinis	Coast indian paintbrush	
Castilleja exserta	Purple owl's-clover	
Oxalidaceae - Oxalis family		
* *Oxalis pes-caprae*	Bermuda buttercup	
Phrymaceae - Lopseed family		
Diplacus aurantiacus	Stickly monkeyflower	
Erythanthe cardinalis	Scarlet monkeyflower	
Plantaginaceae - Plantain family		
Antirrhinum nuttallianum		
Collinsia concolor	Chinese houses	
Polygonaceae - Buckwheat family		
Eriogonum cinereum	Coastal wild buckwheat	
Eriogonum crocatum	Conejo buckwheat	SR, CRPR 1B.2
Eriogonum fasciculatum	California buckwheat	
* *Rumex crispus*	Curly dock	

Scientific Name	Common Name	Special Status
Primulaceae - Primrose family		
Dodecatheon clevelandii	Padre's shooting star	
Ranunculaceae - Buttercup family		
Delphinium parryi ssp. parryi	Parry's larkspur	
Rhamnaceae - Buckthorn family		
Ceanothus megacarpus	Bigpod ceanothus	
Frangula californica	California coffee berry	
Rhamnus ilicifolia	Hollyleaf redberry	
Rosaceae - Rose family		
Adenostoma fasciculatum	Chamise, greasewood	
Cercocarpus betuloides		
Rubiaceae - Madder family		
Galium angustifolium	Narrowly leaved bedstraw	
Salicaceae - Willow family		
Salix exigua	Narrowleaf willow	
Salix gooddingii	Goodding's black willow	
Salix laevigata	Red willow	
Salix lasiolepis	Arroyo willow	
Solanaceae - Nightshade family		
Datura wrightii	Sacred thorn-apple	
* *Nicotiana glauca*	Tree tobacco	
Solanum americanum	American black nightshade	
Solanum umbelliferum	Bluewitch nightshade	
Tamaricaceae - Tamarisk family		
* *Tamarix ramosissima*	Saltcedar	
Valerianaceae - Valerian family		
Valeriana occidentalis	Western valerian	
MONOCOTS		
Agavaceae - Century Plant family		
Hesperoyucca whipplei	Chaparral yucca	
Arecaceae - Palm family		
Washingtonia filifera	California fan palm	
* *Washingtonia robusta*	Mexican fan palm	
Cyperaceae - Sedge family		
Cyperus eragrostis	Tall flatsedge	
Schoenoplectus californicus	Southern bulrush	
Iridaceae - Iris family		
Sisyrinchium bellum	Western blue-eyed-grass	

Scientific Name	Common Name	Special Status
Liliaceae - Lily family		
Calochortus catalinae	Catalina mariposa lily	CRPR 4.2
Calochortus clavatus var. clavatus	Club-haired mariposa lily	CRPR 4.3
Poaceae - Grass family		
* *Avena barbata*	Slender wild oat	
* *Avena fatua*	Wild oat	
* *Bromus diandrus*	Ripgut grass	
* *Bromus madritensis*	Compact brome	
Elymus condensatus	Giant wild-rye	
Festuca microstachys	Pacific fescue	
* *Festuca myuros*	Rattail sixweeks grass	
* *Lamarckia aurea*	Goldentop grass	
Melica imperfecta	Little California melica	
* *Pennisetum setaceum*	Crimson fountain grass	
* *Phalaris aquatica*	Harding grass	
* *Polypogon monspeliensis*	Annual beard grass, rabbitfoot grass	
Stipa lepida	Foothill needle grass	
Stipa pulchra	Purple needle grass	
Themidaceae - Brodiaea family		
Bloomeria crocea	Common goldenstar	
Dichelostemma capitatum	Blue dicks	
Typhaceae - Cattail family		
Typha domingensis	Southern cattail	

Scientific Name	Common Name	Special Status

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened

CRPR – California Rare Plant Rank
1A. Presumed extinct in California
1B. Rare or Endangered in California and elsewhere
2. Rare or Endangered in California, more common elsewhere
3. Plants for which we need more information - Review list
4. Plants of limited distribution - Watch list

Threat Ranks
.1 - Seriously endangered in California
.2 – Fairly endangered in California

Scientific Name	Common Name	Special Status
VERTEBRATES		
Reptiles		
Sceloporus occidentalis	Western Fence Lizard	
Sceloporus orcutti	Granite Spiny Lizard	
Uta stansburiana	Side-blotched Lizard	
Aspidoscelis tigris multiscutatus	Coastal Western Whiptail	
Crotalus oreganus helleri	Southern Pacific Rattlesnake	
Birds		
Anas platyrhynchos	Mallard	
Oxyura jamaicensis	Ruddy Duck	
Ardea herodias	Great Blue Heron	
Ardea alba	Great Egret	
Egretta thula	Snowy Egret	
Nycticorax nycticorax	Black-crowned Night-Heron	
Cathartes aura	Turkey Vulture	
Buteo lineatus	Red-shouldered Hawk	
Buteo jamaicensis	Red-tailed Hawk	
Falco sparverius	American Kestrel	
Fulica americana	American Coot	
**Columba livia*	Rock Pigeon	
**Streptopelia decaocto*	Eurasian Collared-Dove	
Zenaida macroura	Mourning Dove	
Bubo virginianus	Great Horned Owl	
Calypte anna	Anna's Hummingbird	
Selasphorus sasin	Allen's Hummingbird	
Picoides nuttallii	Nuttall's Woodpecker	
Sayornis nigricans	Black Phoebe	
Sayornis saya	Say's Phoebe	
Tyrannus vociferans	Cassin's Kingbird	
Aphelocoma californica	Western Scrub-Jay	
Corvus brachyrhynchos	American Crow	
Corvus corax	Common Raven	

Scientific Name	Common Name	Special Status
Stelgidopteryx serripennis	Northern Rough-winged Swallow	
Petrochelidon pyrrhonota	Cliff Swallow	
Hirundo rustica	Barn Swallow	
Psaltriparus minimus	Bushtit	
Thryomanes bewickii	Bewick's Wren	
Mimus polyglottos	Northern Mockingbird	
**Sturnus vulgaris*	European Starling	
Pipilo maculatus	Spotted Towhee	
Aimophila ruficeps canescens	Southern California Rufous-crowned Sparrow	
Melozone crissalis	California Towhee	
Melospiza melodia	Song Sparrow	
Icterus cucullatus	Hooded Oriole	
Carpodacus mexicanus	House Finch	
Carduelis psaltria	Lesser Goldfinch	
Mammals		
Sylvilagus audubonii	Desert Cottontail	
Canis latrans	Coyote	
Procyon lotor	Northern Raccoon	
Odocoileus hemionus	Southern Mule Deer	

Legend

*= Non-native or invasive species

Special Status:

Federal:
FE = Endangered
FT = Threatened

State:
SE = Endangered
ST =Threatened
CSC = California Species of Special Concern
CFP = California Fully Protected Species

Attachment C
Site Photographs

Photograph 1: Blochman's dudleya observed in rocky area in the eastern portion of the expansion area.

Photograph 2: Catalina mariposa-lily observed in the grassland areas in the southern portion of the expansion area.

Photograph 3: Club haired mariposa in the grassland areas in the southern portion of the expansion area.

Photograph 4: Conejo buckwheat observed on steep cliff in the southeastern portion of the expansion area.

Photograph 5: Agricultural area in the western portion of the expansion area. The area was surveyed for potential habitat and suitable burrow for burrowing owl. No suitable burrows were observed.

Photograph 6: Showing habitat for Conejo buckwheat and Blochman's dudleya in the northern section of the expansion area.

APPENDIX C-3
BAT HABITAT ASSESSMENT FOR THE PACIFIC ROCK QUARRY EXPANSION PROJECT

MEMORANDUM

TO: John Hecht, Sespe Consulting, Inc.

FROM: Lauren Simpson, ECORP Consulting, Inc.

DATE: July 25, 2022

RE: Bat Habitat Assessment for the Pacific Rock Quarry Expansion Project, Ventura County, California

The purpose of this memorandum is to document the results of the bat habitat assessment conducted for the Pacific Rock Quarry Expansion Project (Proposed Project). ECORP was contracted by Sespe Consulting, Inc., to conduct a bat habitat and impact assessment for the Proposed Project to provide supplemental information to support Ventura County's environmental review of the Proposed Project.

The Pacific Rock Quarry is located approximately 1.5 miles east of Lewis Road and approximately two miles south of State Highway 101 off a private road (Howard Road) in unincorporated Ventura County at the inland base of the Santa Monica Mountains. The existing hard-rock quarry has been in operation since 1902. The existing operation is subject to a Conditional Use Permit (CUP 3817), originally granted in 1988 and most recently amended in 2011 (CUP 3817-3). The Project proponent is requesting approval of a CUP modification to extend the life of the existing permitted operations for an additional 30 years, expand the CUP boundary and mine/reclamation boundary, extend the operational days from 6 to 7 days per week (adding Sunday for material load out) with additional material load out hours and limited extended 24 hour operations (60 days maximum per year), allow construction and mobile mining equipment in outdoor storage areas, operate a concrete and asphalt recycling plant, allow for imported material to be used in reclamation fill, and replace an existing mobile home to be used as a 24-hour security trailer. Under the Project, mining methods would continue as under existing operations, including blasting to loosen the hard rock material and various processing methods.

The Proposed Project for which this assessment is prepared is fully described in the Draft Environmental Impact Report (DEIR) circulated by Ventura County in November 2020. It is anticipated that this bat habitat assessment will be considered by the County in addressing comments received on the DEIR.

1.0 BAT REGULATORY FRAMEWORK

Bats in California are currently protected by the California Fish and Game Code, Sections 86, 1600, 2000, 2014, 3007, and 4150; California Public Resources Code, Division 14, Section 21000 et seq.; California Code of Regulations (CCR), Title 14 including, but not limited to Section 251.1 (Harassment of Animals), Section 15000 et seq. (Guidelines for Implementation of the California Environmental Quality Act [CEQA] ,

including, but not limited to Section 15380 (Endangered, Rare, or Threatened Species), and Section 15382 (Significant Effect on the Environment).

Regulations of particular relevance to the Proposed Project include CCR Title 14, Section 251.1, which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior patterns, including breeding, feeding, or sheltering) of nongame mammals (e.g., bats), and California Fish and Game Code Section 4150, which prohibits *take* or possession of all nongame mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats resulting in the death of young, or various modes of nonlethal pursuit or capture may be considered *take* as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, may be considered significant under CEQA.

Further, of the 19 bat species identified through this assessment as having the potential to occur in the vicinity of the Proposed Project site, seven are currently listed as a California Species of Special Concern (SSC). Adverse impacts to these species or their habitat may be considered significant under CEQA.

Specifically, the bat habitat assessment was conducted to identify the presence of bat roosting or foraging habitat on and adjacent to the Proposed Project site and the potential for the Proposed Project to adversely affect bats through direct impacts to individuals or impacts to roosting and foraging habitat.

2.0 BAT NATURAL HISTORY

There are 25 bat species known to occur in California, 19 of which are known to or expected to occur within or in the vicinity of the Santa Monica Mountains. Bats are essential to local ecosystems because they are the primary predators of nocturnal flying insects. Factors such as habitat loss, roost disturbance, light pollution, pesticide exposure, and extermination are among the factors causing declines in bat populations throughout the south coast ecoregion of California (Johnston et al. 2004; Miner and Stokes 2005). Due to the relatively low reproductive rate of bats (most California species have only one pup per year), impacts to bat populations that cause mortality or disrupt reproduction can resonate through local populations for several years after the impacts occur.

The term "roost" refers to locations or structures (natural or artificial) that bats utilize for shelter. The term "colony" refers to a group of bats inhabiting a given roost. Roosts provide protection from predators and the external environment, as well as provide sites where social groups can congregate. The thermally stable environment of optimal roost sites reduces the energetic cost of thermoregulation (Smith and Stevenson 2013), allowing bats to use their energy budget for essential activities such as feeding and breeding. Roosts can provide shelter for individuals or large colonies of bats.

Day roosts are locations that provide routine protection and shelter for bats during their inactive daylight hours. Day roosts that are used seasonally by a colony of female bats to give birth to, nurse, and rear young are known as maternity roosts. Maternity colonies in California can range from tens to thousands of individual bats from one or more species, and typically are formed in the spring and disbanded in the fall. Maternity season in southern California generally occurs between March 1 to September 15. Day roosts may also be used by

hibernating bats in the winter where bats enter torpor (a condition of dramatically lowered metabolism) for extended periods of time when ambient temperatures are low, and the insect prey base is reduced; these roosts are known as hibernacula. Day roosts may also provide temporary refuge for groups of migratory bat species, which often includes large groups of bats stopping over in the spring or fall. Migration may overlap portions of maternity season and winter. Some species in California have both resident and migratory populations.

Night roosts are physical features of a substrate that provide shelter for bats to rest and digest food that has been captured throughout the night in between foraging bouts. Additional activities such as grooming, social interactions, and breeding can take place in night roosts. Night roosts are often located in or adjacent to a foraging area.

Bat maternity roosts and hibernacula are particularly susceptible to disturbance, but impacts to or a loss of a night roost or migratory roost location can also have a substantial impact to bat populations. A given roost location may serve as any combination of roost types (i.e., day and night roost, maternity roost, and hibernacula). Further, impacts to bat prey populations through foraging habitat loss or modification is also detrimental to bat populations.

California bat species with the potential to occur within the vicinity of the Proposed Project, and the primary roosting preferences of each, are listed in Table 1.

Table 1. Roosting Preferences of Bat Species that Could Occur within or Near the Proposed Project

Species	Status	Primary Roosting Preference(s)						
		Cliff/Rock Crevice	Cave/ Mine Shaft	Riprap/ Dry Rock Wall	Tree Bark/ Hollow	Tree Foliage	Bridge/ Culvert	Building
Family Molossidae (free-tailed bats)								
Western mastiff bat[+] *Eumops perotis*	CA: SSC	X						X
Pocketed free-tailed bat[β] *Nyctinomops femorosaccus*	CA: SSC	X						
Big free-tailed bat[β] *Nyctinomops macrotis*	CA: SSC	X						
Mexican free-tailed bat[+] *Tadarida brasiliensis*	-	X	X		X		X	X
Family Vespertilionidae (mouse-eared bats)								
Pallid Bat[+] *Antrozous pallidus*	CA: SSC	X	X		X		X	X
Townsend's big-eared bat[β] *Corynorhinus townsendii*	CA: SSC		X		X		X	X
Big brown bat[+] *Eptesicus fuscus*	-	X	X		X		X	X
Spotted bat[+] *Euderma maculatum*	CA: SSC	X						
Silver-haired bat[β] *Lasionycteris noctivigans*	-				X		X	
Western red bat[+] *Lasiurus blossevillii*	CA: SSC					X		
Hoary bat[+] *Lasiurus cinereus*	-					X		

Species	Status	Primary Roosting Preference(s)						
		Cliff/Rock Crevice	Cave/ Mine Shaft	Riprap/ Dry Rock Wall	Tree Bark/ Hollow	Tree Foliage	Bridge/ Culvert	Building
Western yellow bat[β] *Lasiurus xanthinus*						X		
California myotis[+] *Myotis californicus*	-	X	X	X	X		X	X
Western small-footed myotis[+] *Myotis ciliolabrum*	-	X	X				X	
Long-eared myotis[β] *Myotis evotis*	-	X	X	X	X		X	X
Fringed myotis[β] *Myotis thysanodes*	-	X	X		X		X	X
Long-legged myotis[β] *Myotis volans*	-		X		X		X	X
Yuma myotis[+] *Myotis yumanensis*	-	X	X	X	X		X	X
Canyon bat[+] *Parastrellus hesperus*	-	X	X				X	X

SSC = California Species of Special Concern
Roosting preference information derived from Johnston et al. (2019) and life history accounts available from Western Bat Working Group (WBWG 2022).
[+] = Species has been detected in the Santa Monica Mountains (NPS 2019)
[β] = Species likely to be detected in the Santa Monica Mountains

3.0 METHODS

Literature Review Methods

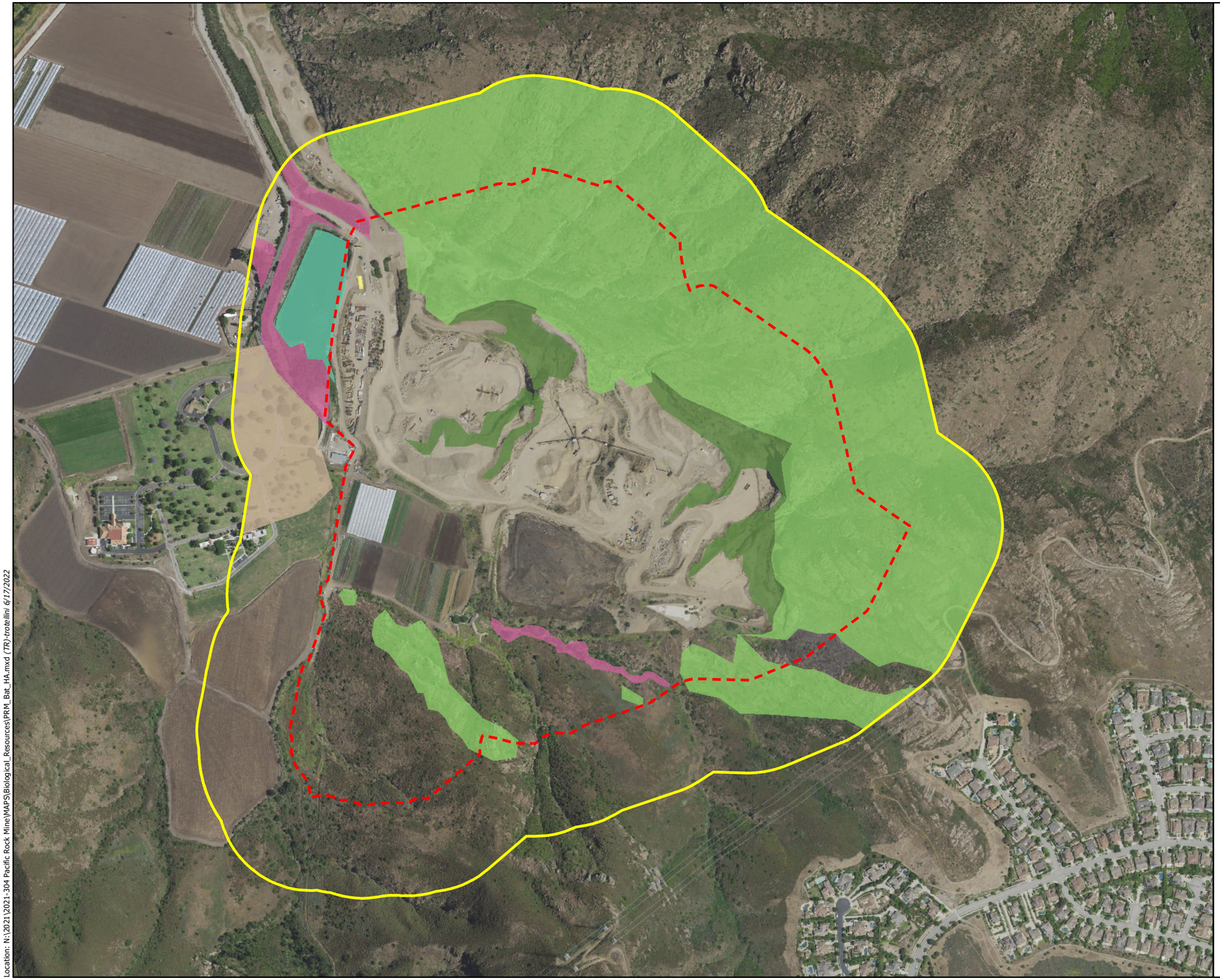
As part of conducting the habitat assessment, ECORP conducted a review of available literature to determine whether bat species have been previously reported within the Proposed Project site and the surrounding USGS 7.5-minute topographic quadrangles: Camarillo, Oxnard, Newbury Park, Triunfo Pass, Saticoy, Santa Paula, Moorpark. The CDFW California Natural Diversity Database (CNDDB; CDFW 2022), including the Biogeographic Information and Observation System (BIOS) and RareFind, was reviewed. Reports previously prepared for the Project were also reviewed for information pertaining to bat habitat or documented observations, including:

- Initial Study Biological Assessment Report for Pacific Rock – LU10-0003 (CUP 3817-3), Modification (BRC 2017).

Bat Habitat Assessment Methods

ECORP bat biologist, Ms. Lauren Simpson, conducted a bat habitat assessment of the Proposed Project site to determine the potential for the presence of roosting bats. Ms. Simpson has over 11 years of experience studying and surveying for southern California bat species. The purpose of the assessment was to look for suitable bat roosting habitat and evidence of bat roosting within 500-feet of the proposed mine area boundary (hereafter referred to as "study area"), as shown on Figure 1, "Pacific Rock Quarry Expansion Project Bat Habitat."

Figure 1. Pacific Rock Mine
Bat Habitat Assessment



Map Content

- Proposed Mine Boundary
- 500-ft Buffer

Bat Habitat Assessment

- Building-Roosting Habitat
- Cliff/Rock Crevice Roosting Habitat - Natural
- Cliff/Rock Crevice Roosting Habitat - Manmade
- Foraging Habitat
- Tree-Roosting Habitat
- Tree-Roosting & Foraging Habitat

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: N:\2021\2021-304 Pacific Rock Mine\MAPS\Biological_Resources\PRM_Bat_HA.mxd *(TR)-trotellini 6/17/2022*

2021-304 Pacific Rock Mine

Scale in Feet
0 550

Photo (or Base) Source: NAIP (2020)

Map Date: 6/17/2022

Suitability of habitat for day roosting is usually determined by the presence of crevices or cavities within a structure or natural feature. Suitable crevice width generally ranges from 0.5 to 4.0 inches wide, with an orientation shielded from wind and rain from above, but that allows entry from below or to the side. Cavities of any size that provide shelter from wind, water, and light may be used by roosting bats. Examples of evidence of bat roosting include the presence of guano, culled insect parts, urine staining, and audible vocalizations.

The bat habitat assessment included visual inspections of features within the site as well as surrounding areas, to identify any potentially suitable roosting and foraging habitat in the Proposed Project area. Due to the size and difficulty of accessing certain areas of the site, individual potential roosting features were not inspected. Rather, the Proposed Project site was classified as a whole for the potential for bat roosting habitat and areas with high concentrations of suitable habitat were noted. Binoculars were used to assist with the visual assessment.

Trees proposed for removal as a result of the Proposed Project were evaluated for their potential for bat roosting. The ECORP bat biologist visually examined the external physical features of the trees located within the Project site for suitability for bat use. Tree features considered suitable as day-roosting habitat for bats include cavities or crevices, trees with suspected heart rot (hollow inside), heavily fissured or exfoliating bark with deep internal spaces, and/or trees with dense foliage suitable for foliage-roosting bats.

All areas of potential bat roosting habitat were mapped using a Global Positioning System unit in World Geodetic System 1984 Web Mercator. Photographs of potential bat roosting habitat were taken during the assessment.

The primary focus of the onsite habitat assessment was on identifying potential bat-roosting habitat, but because the quality and proximity of foraging habitat affects bats' foraging distance (i.e., energy expenditure), foraging habitat availability also influences the overall value of roosting habitat to bats. Therefore, vegetated areas, water, or structures that may provide foraging habitat in the vicinity of the Project site was also noted.

4.0 RESULTS

Literature Review Results

Two databases and one previous Project report were reviewed for information pertaining to bat habitat and documented occurrences of bats within the vicinity of the Proposed Project site.

The CNDDB (BIOS) and RareFind search did not provide any documented bat observations within a five-mile radius around the Proposed Project. The lack of recent CNDDB records for bat observations within the vicinity of the Project site does not indicate a lack of special-status bat presence in the vicinity, as bats tend to be underrepresented in biological resources surveys and observations are commonly underreported due to the sensitivity of known bat roost locations.

A previous biological resources evaluation prepared for the Proposed Project (BRC 2017) did not involve focused bat surveys, but the presence of bat roosting habitat on cliff faces within the site was noted in the document.

Based on the known information on natural history and ranges of special-status bat species and the results of the field investigation performed for this habitat assessment, the eight special-status bat species listed in Table 2 below were determined to have a low or moderate potential to occur at or within 500 the Proposed Project site.

In addition to the species described in the table below, suitable roosting habitat for an additional 11 bat species that are not classified as Species of Special Concern is present onsite within the riparian and oak woodland habitats as well as within the cliff faces and rocky outcroppings within the existing mine footprint and mine expansion area. Maternity roosting sites may be considered a "native wildlife nursery site" under CEQA, and for the purposes of this assessment, impacts to maternity roosting sites of any native bat species, regardless of status, is considered a significant impact.

Table 2 – Special-Status Bat Species with the Potential to Occur

Scientific Name Common Name	**Status**	**General Habitat Description**	**Potential to Occur within the Study Area**
Antrozous pallidus Pallid bat	CA: SSC	Occurs within semi-arid and arid landscapes. Found in a variety of habitats including grasslands, high elevation coniferous forests, and desert environments. Will utilize open vegetation at ground level as well as rock crevices, buildings, bridges, and trees for roosting.	**Moderate.** Cliff face habitat and rocky hillsides within the existing mine footprint and mine expansion area provide roosting habitat. Roosting habitat may also be found within bole cavities and exfoliating bark of oak trees and other mature trees on site. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Corynorhinus townsendii Townsend's big-eared bat	CA: SSC	Primarily roosts in mines and caves but also found roosting in buildings, bridges or other cavities including tree hollows. Occurs in a variety of habitats including coniferous forests, deserts, prairies, riparian habitats, agricultural areas, and coastal habitats.	**Low.** No cave or open mine shaft habitat is present on site. Roosting habitat may also be found within hollow cavities in mature trees on site. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Euderma maculatum Spotted bat	CA: SSC	Roosts in crevices and cracks of cliffs and less often in caves or buildings adjacent to cliffs. Occurs in desert and montane habitats such as open pine or pinyon-juniper woodlands, riparian corridors, and canyons.	**Moderate.** Cliff face habitat and rocky hillsides within the existing mine footprint and mine expansion area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.

Table 2 – Special-Status Bat Species with the Potential to Occur			
Scientific Name Common Name	**Status**	**General Habitat Description**	**Potential to Occur within the Study Area**
Eumops perotis californicus Western mastiff bat	CA: SSC	Occurs in open areas in a variety of habitats including desert scrub, chaparral and oak woodland, and mixed conifer forests. Primarily roosts in cliffs and rock crevices. Occasionally found in buildings.	**Moderate.** Cliff face habitat and rocky hillsides within the existing mine footprint and mine expansion area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Lasiurus blossevillii Western red bat	CA: SSC	Foliage roosting species, roosts in trees or large leafy shrubs. Occurs in lowlands to mountains, in woodlands and forests and, especially along riparian habitats.	**Moderate.** Roosting habitat is present in the trees within the riparian habitat onsite. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Lasiurus xanthinus Western yellow bat	CA: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	**Moderate.** Roosting habitat is present in the trees within the riparian habitat onsite. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Nyctinomops femorosaccus Pocketed free-tailed bat	CA: SSC	Occurs in a variety of arid habitats including pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and pine-oak forests. Primarily roosts in cliffs and rock crevices.	**Moderate.** Cliff face habitat and rocky hillsides within the existing mine footprint and mine expansion area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.
Nyctinomops macrotis Big free-tailed bat	CA: SSC	Found in rocky habitats within arid landscapes. Occurs in a variety of vegetation communities including desert shrub communities, woodlands and forests. Primarily roosts in cliffs and rock crevices.	**Moderate.** Cliff face habitat and rocky hillsides within the existing mine footprint and mine expansion area provide roosting habitat. Foraging habitat is present in the chaparral, oak woodland, and riparian habitat on site.

Bat Habitat Assessment Results

The bat habitat assessment was conducted by ECORP bat biologist Ms. Lauren Simpson on February 18, 2022. Ms. Simpson's resume outlining her bat experience is included as Attachment A. Features throughout the entire Proposed Project site and 500-foot buffer were evaluated for bat roosting potential

and mapped using a combination of aerial imagery and on-site observations. Representative photographs taken during the assessment are included as Attachment B. Figure 1, "Pacific Rock Quarry Expansion Project Bat Habitat," illustrates various bat habitat types within the Proposed Project site and 500-foot buffer area surrounding the proposed mine area boundary during the habitat assessment. Potential bat roosting habitat was identified in areas throughout the Proposed Project site and 500-foot buffer area in six different categories, as summarized in Table 3, "Bat Habitat Types and Acreages within Study Area," and discussed further below.

Table 3 – Bat Habitat Types and Acreages within Study Area

Bat Habitat Type	Area within Study Area (acres)		
	Proposed Mine Boundary	500-Foot Buffer Area (from Proposed Mine boundary)	Total
Building-Roosting Habitat	0.04	0.00	0.04
Cliff/Rock Crevice Roosting Habitat - Natural	56.24	66.04	122.28
Cliff/Rock Crevice Roosting Habitat - Manmade	11.60	0.00	11.60
Foraging Habitat	0.18	3.84	4.02
Tree-Roosting Habitat	1.46	4.94	6.40
Tree-Roosting & Foraging Habitat	0.00	7.95	7.95
Combined*	**69.52**	**82.77**	**152.29**

*The acreages provided in this table represent an estimate of the amount of bat habitat present in the study area. These acreages were determined using a combination of aerial imagery and observations during the onsite habitat assessment. It is possible that some areas that were not mapped as roosting habitat may have bat roosts present and it is also possible that areas mapped as habitat will have no roosting habitat present.

Cliff/Rock Crevice Roosting Habitat (Natural and Manmade)

Several bat species will use crevices found in large boulders, exfoliating rocks, rock outcrops with fractured boulders, rock quarries, and rocky cliffsides and slopes for roosting. These natural crevice features provide protection for day roosting and deep fissures in rocks provide thermal stability for thermoregulation. Further, the height of cliffside crevice roosts provides protection from predation by terrestrial animals. Cliff and rock crevice habitats may be used by large groups of bats for day roosting or maternity roosting but may also be used as night roosting locations. Southern California species that commonly use rocky slopes and outcrops for roosting are listed in Table 1.

Both natural and manmade cliff face and rock crevice habitat is present on the Proposed Project site and buffer area, as shown on Figure 1. Natural rock crevice and cliff face habitat are present within the undisturbed natural areas that surround the current mine operation footprint in the mine expansion zones around the northern and eastern boundaries and within an area in the southern portion of the proposed mine expansion area. These areas comprise approximately 122.28 acres of the proposed mine expansion

area and buffer areas. These natural areas contain large boulders with fractures and crevices that are suitable for bat roosting (Attachment B, Photos 1 through 4).

Additionally, manmade rock crevice and cliff face habitat have been incidentally created within the previously mined areas through previous quarrying activities. Within the Project site and buffer areas, a total of approximately 11.60 acres of manmade steep cliff faces, and rocky hillsides and crevices are suitable for bat roosting (Attachment B, Photos 5 through 8).

Tree Roosting Habitat

Bats may utilize trees as roosts for cavity roosting or for foliage roosting. Cavity-roosting bats may roost under exfoliating bark or in cavities or hollows of snags and trees, and foliage-roosting bats utilize the open foliage of deciduous and coniferous trees, shrubs, and vines as roosts. Cavity-roosting bat species commonly select large diameter, tall trees or snags as roosting sites, especially those in more open areas of upland habitat near water sources (Kalcounis-Rueppell et al. 2005). Tree cavities can be occupied by a single bat (typically males and non-reproductive females) or many bats (maternity colonies). Foliage-roosting bats use leaf petioles as roosting sites (Kunz and Lumsden 2003), often selecting sites in medium to large deciduous trees at the edge of hardwood forest canopies (Willis and Brigham 2005). These bats often roost singly by hanging from a leaf petiole (Lewis 1995).

Palm trees provide roosting habitat for several bat species in southern California. The western yellow bat (*Lasiurus xanthinus*) characteristically roosts between the untrimmed dried leaf fronds of both native and nonnative palm trees. While some groups of western yellow bats are migratory, this species is also known to be active year-round in portions of southern California (WBWG 2022). Tree-roosting bats frequently switch roosts for a variety of reasons, including decreasing commuting costs to foraging areas, seeking out alternate microclimates, avoiding predation, and reducing parasite exposure (Lewis 1995). However, roost-switching in tree bats usually occurs between relatively proximate trees suggesting a degree of faithfulness to a particular forest area (Vonhof and Barclay 1996). Further, western yellow bat has been documented to demonstrate the potential for individual roost tree fidelity (Mixan et al. 2015). In addition to western yellow bat, several other southern California bat species have been documented using palm trees as roosts including canyon bat, pallid bat, and big brown bat, among others. California bat species that commonly use trees for roosting are listed in Table 1.

Approximately 1.46 acres of tree roosting habitat is present on the Proposed Project site and an additional approximately 4.94 acres is located within the 500-foot study buffer area, as shown on Figure 1. First, mature trees and large tree snags are present within the east-west trending riparian corridor present along the southern edge of the existing mine area. Trees with suitable habitat for both cavity and foliage roosting bats are present within this corridor (Attachment B, Photos 9 through 12). Additionally, untrimmed fan palms are present in the northwest corner of the Proposed Project site where they are currently being grown agriculturally. The majority of these fan palms are located within the 500-foot study buffer area and not within the proposed mine area itself.

Tree Roosting and Foraging Habitat

Areas mapped as "tree roosting and foraging habitat" include the trees and vegetation present within the Conejo Mountain Funeral Home grounds. These areas contain mature trees that may be used as roosting habitat for tree-roosting species as well as other vegetation features that may attract insects and provide foraging opportunities. These areas are within the 500-foot buffer of the proposed mine area to the west and make up approximately 7.95 acres.

Building Roosting Habitat

Many bat species are known to seek roosting opportunities in buildings and other anthropogenic structures because these structures can provide habitat characteristics that mimic conditions in natural roost locations, which may be limited in availability due to habitat loss (Erickson et al. 2003). There are several variables that influence how anthropogenic structures are used by bat species, temperature being critical. Most buildings that are used by bats contain crevice or cavity features that provide protection for day roosting. Often, buildings used as roosting locations are abandoned or experience minimal human use. Crevice and cavity features in the attics and walls of buildings, particularly those of older building structures, provide day and night roosting habitat for bats.

Building roosting habitat is present in an abandoned trailer structure at the west end of the Proposed Project site (Attachment B, Photo 13; Figure 1). For safety reasons, the structure was not entered during the onsite bat habitat assessment and was therefore not inspected for signs of bat use, but suitable roosting features may be present within the trailer structure.

Foraging Habitat

In addition to the abundance of potential bat roosting habitat at the Proposed Project site, a manmade lake and associated riparian vegetation present at the western end of the site and within the 500-foot buffer study area provides foraging habitat for bats in the vicinity (Attachment B, Photo 14; Figure 1). This lake also provides drinking opportunities for bats. It is important to note that this area does not represent the only foraging habitat within the study area, rather it has been mapped as such on the map to highlight that it is of high-quality and is expected to attract bats from throughout the region. Foraging habitat is present throughout the entire study area as bats will forage wherever suitable insect prey are present.

5.0 DISCUSSION AND RECOMMENDATIONS

Suitable habitat for roosting bats is present throughout much of the Proposed Project site and adjacent areas in the form of cliff/crevice roosting habitat, tree roosting habitat, and building roosting habitat.

The most predominant and widespread roosting habitat type on the site is the cliff face and crevice habitat that is present both within the previously mined areas and within the mine expansion areas containing natural rock formations. Additionally, suitable roosting habitat is present in mature trees and snags in a drainage in the southern portion of the Proposed Project mine expansion area, untrimmed palm trees at the western end of the existing mine site, and an abandoned trailer structure on the western end of the existing mine site. While suitable habitat is present, the presence or absence of special-status

bat species and/or bat maternity colonies within these habitats cannot be confirmed without nighttime surveying and acoustic monitoring during the appropriate seasons. For the purposes of this assessment, it is assumed that bats may be present or may periodically use the site as roosting or foraging habitat.

If bat species are present or periodically use the site and adjacent areas, it is possible that Proposed Project activities could directly and/or indirectly impact special-status bat species and/or bat maternity colonies. Direct impacts could occur through injury or mortality during blasting and other mining and processing activities and/or through vegetation or structure disturbance or removal should special-status bats or bat maternity colonies be roosting in these features when the activities occur. Indirect impacts to special-status bats and/or bat maternity colonies could result from increased noise, vibration, and nighttime lighting associated with the Proposed Project that could result in roost abandonment and the potential mortality of young in a maternity roost, if present. Impacts could also occur through roosting habitat loss should features within the Proposed Project site be used or serve as suitable roosting locations. The potential for direct and indirect impacts would occur throughout the duration of Proposed Project operations and activities.

In the case of roosting habitat loss of rock crevice habitat in the natural boulder fields, it is noteworthy that rock crevice habitat may be intentionally or incidentally created as a result of mining. During the bat habitat assessment, the rocky hillsides and cliff faces that have been created because of mining activities and remain in place were observed to contain rock crevice roosting habitat that may provide comparable habitat for crevice-roosting species. Similar conditions would result from the proposed mine expansion process, potentially expanding the amount of manmade cliff/rock crevice roosting habitat within the site. Although some increases in manmade cliff/rock crevice roosting habitat may result from the Proposed Project, the creation of such habitat is considered incidental to mining activities and, for this impact assessment, is not considered to be definite outcome of the project or a project benefit.

The need for, and development of, focused protection measures require an inventory of the bat species that occur at the Proposed Project site and their natural history. These data will help inform species-specific and site-specific mitigation strategies as phases of the mine expansion are implemented over the next 30 years. To determine the existing bat populations present at the Proposed Project site and surrounding areas and to understand how these species use the site throughout the year such that specific appropriate impact avoidance measures can be developed and implemented, a minimum of one full year of acoustic monitoring is recommended with week-long passive acoustic monitoring efforts conducted monthly during that period. With such information, specific measures for impact avoidance can be identified and implemented.

Implementation of the following measures as Project mitigation would reduce and avoid significant impacts to special-status bat species and bat maternity colonies that could otherwise occur during Proposed Project activities.

> **Baseline Surveys for Special-Status Bats:** No less than one year prior to initial vegetation clearing and mining activities, focused surveys for bat species shall be completed by a County-approved qualified bat biologist to determine the approximate size of the colony(s), species

present, and features being used within the mine and the mine expansion areas. Focused surveys shall include a combination of nighttime emergence counts and acoustic techniques appropriate for the roosting habitat and time of year. At a minimum, focused surveys shall be conducted during the spring, summer, fall, and winter to determine how the roosting habitat at the Project site is used by bats throughout the year with at least two surveys conducted during the maternity season to determine a pre- and post-volant count of colonies present. The County-approved bat biologist shall prepare a Baseline Bat Survey Report that identifies the location of occupied or suitable bat habitat found within the Project site and the results of the daytime and nighttime surveys.

Preparation of a Bat Management Plan: If roosting bats are found during the baseline bat surveys, a Bat Management Plan identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting bats shall be prepared by a County-approved qualified bat biologist prior to the commencement of vegetation clearing and mining activities. If no roosting bats are found during the baseline bat surveys, no bat management plan would be required. The Bat Management Plan shall include, as appropriate to the findings of the focused surveys and roosting habitat affected, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. For each new phase of vegetation clearing or mining expansion, the Bat Management Plan shall be reviewed and modified as necessary to incorporate specific actions to be develop future measures that will increase the protections for special-status bats. During each review, the potential for newly federal- or state-listed special-status bat species shall be assessed, and any new such listing identified in the modified plan with provisions to ensure implementation of any species-specific provisions necessary to avoid significant impacts to any newly listed bat species.

Restrictions on Vegetation Clearing and Blasting During the Bat Maternity Season (March 1 to September 15): As incremental expansion of the mine site occurs, surveys shall be conducted to determine if bat maternity roosts are present in the area(s) of upcoming incremental expansion. If bat maternity roosts are determined to be present in upcoming incremental expansion areas where vegetation clearing and/or blasting will occur, then a 500-foot buffer shall be established around the maternity roost site and vegetation clearing and blasting shall be postponed within the buffer until after the end of the maternity season and prior to the next maternity season. The buffer size may be reduced at the discretion of the County-approved bat biologist depending on the type and duration of Project activities to be conducted near the roost. This process shall be repeated for each incremental expansion of the mine site. If buffers are established around maternity roost sites during any given year of Project activities, the locations and protection measures shall be documented.

Night Work Near Bat Roosts: Night work within 500-feet of suitable roosting habitat shall be avoided to the greatest extent feasible. The buffer size may be reduced at the discretion of the County-approved bat biologist depending on the type and duration of night work activities to be

conducted near the roost. If avoiding night work is impossible, measures shall be implemented to minimize potential impacts to bat roosts. The specific measures shall be identified in the recommended Bat Management Plan and the measures shall include but not be limited to the following:

- Night lighting shall be focused directly on the work area and shall not project onto bat roosting sites.
- Airspace access to and from the roosting habitat sites shall not be obstructed by equipment.
- Internal combustion equipment, such as generators and vehicles, shall not be parked or left idling or operated beneath or adjacent to the roosting habitat unless they are required for Project-related work.
- Construction personnel shall avoid working, driving, or loitering in non-active areas of the mine that are located adjacent to roosting habitat.

Bat Protection During Tree Removal: To the extent feasible, tree removal shall be conducted between September 15 and February 28 to avoid the maternity season of bats. Measures designed to protect special-status bat species during the felling of trees shall be included in the Bat Management Plan. The measures shall include but not be limited to:

- Any trees proposed for removal shall be inspected by a County-approved qualified bat biologist to determine their potential as roosting sites.
- If crevice and/or cavity features are present, summer night-time surveys shall be conducted to determine if a maternity colony is present.
- If a maternity colony is present, tree removal and/or modification shall be postponed until the fall (after flightless young have become volant) and shall be conducted under the supervision of a County-approved qualified bat biologist.
- If no crevice and/or cavity features are present, or if the tree removal is scheduled to occur outside of the bat maternity season, the County-approved bat biologist shall supervise the two-step process of tree removal to avoid direct mortality of foliage-roosting bat species. On the first day, the smaller outer limbs and branches that do not contain roosting habitat shall be removed using chain saws or non-mechanized hand tools under the direct supervision of a County-approved qualified bat biologist. On the second day, the remainder of the tree shall be removed.

With implementation of focused bat surveys, preparation and compliance with a Bat Management Plan, restrictions on vegetation clearing and blasting during the bat maternity season (March 1 to September 15), bat protection provisions for night work, and bat protection provisions for tree removal, each as outlined above, potential impacts of the Proposed Project on bats would be avoided or reduced to less than significant.

SIGNED: _____ DATE: July 25, 2022

Lauren Simpson
Staff Biologist

REFERENCES

BioResource Consultants, Inc (BRC). 2017. Initial Study Biological Assessment Report for Pacific Rock – LU10-0003 (CUP 3817-3), Modification. Prepared for Ventury County Planning Division.

CDFW. 2022. RareFind CDFW California Natural Diversity Database (CNDDB) for USGS 7.5-Minute Quadrangles California. Sacramento, CA, CDFW Biogeographic Data Branch.

Erickson, G.A., E.D. Pierson, W. Rainey, and P. Brown. 2003. Bat and Bridges Technical Bulletin (Hitchhiker's Guide to Bat Roosts). California Department of Transportation, Sacramento. 143 pp

Johnston, D., Pierson, E. and Tatarian, G. 2004. California bat mitigation techniques, solutions, and effectiveness. California Department of Transportation (Caltrans). Office of Biological Studies and Technical Assistance Sacramento, California. PN 2394-01.

Johnston, Dave S., Kim Briones, and Christopher Pincetich. 2019. California Bat Mitigation: A Guide to Developing Feasible and Effective Solutions. H. T. Harvey & Associates, Los Gatos, CA. Prepared for the California Department of Transportation, Office of Biological Studies, Sacramento, CA. Task Order 7, Agreement No.43A0355.

Kalcounis-Rüppell, M.C., J.M. Psyllakis, and R.M. Brigham. 2005. Tree roost selection by bats: an empirical synthesis using meta-analysis. Wildlife Society Bulletin. 33(3):1123-1132.

Kunz, T.H., and L.F. Lumsden. 2003. Ecology of Cavity and Foliage Roosting Bats, pp. 3–89, in Bat Ecology (T.H. Kunz and M.B. Fenton, eds.). University of Chicago Press, Chicago and London.

Lewis, S.E. 1995. Roost fidelity of bats: a review. Journal of Mammology 76:481-496.

Miner, K. L., and D. C. Stokes. 2005. Bats in the South Coast Ecoregion: Status, Conservation Issues, and Research Needs. Untied States Department of Agriculture Forest Service General Technical Report PSW-GTR-195.

Mixan, R.J., J.M. Diamond, M.D. Piorkowski, and D.P. Sturla. 2015. Distribution and Roost Site Habitat Requirements of the Western Red Bat (*Lasiurus blossevillii*) and the Western Yellow Bat (*Lasiurus xanthinus*). Arizona Game and Fish Department, Wildlife Contracts Branch, Phoenix, Arizona.

National Park Service (NPS). 2019. Bats confirmed in the Santa Monica Mountains National Recreation Area California. Available online at: https://www.nps.gov/samo/learn/nature/bats.htm. Accessed March 1, 2022.

Smith, H.J., and J.S. Stevenson. 2013. The thermal environment of a concrete bridge and its influence on roost site selection by bats (*Mammalia Chiroptera*). Proceedings of the 2013 International Conference on Ecology and Transportation (ICOET 2013).

Vonhof, M.J., and R.M.R. Barclay. 1996. Roost-location selection and roosting ecology of forest-dwelling bats in southern British Columbia. Canadian Journal of Zoology 74:1797-1805.

WBWG. 2022. Western Bat Species Accounts. http://wbwg.org/western-bat-species/. Accessed 2022.

Willis, C.K.R., and R.M. Brigham. 2005. Physiological and ecological aspects of roost selection by reproductive female hoary bats (*Lasiurus cinereus*). Journal of Mammalogy 86(1):85-94.

ATTACHMENTS:

Attachment A: Bat Biologist Qualifications

Attachment B: Representative Photographs

Attachment C: Wildlife Species Observed during 2022 Bat Habitat Assessment

ATTACHMENT A

Bat Biologist Qualifications

Lauren (Dorough) Simpson

Staff Biologist

Ms. Simpson has over nine years of professional experience as a wildlife biologist working in terrestrial habitats throughout southern California. Ms. Simpson has over 11 years of experience conducting habitat and roost assessments and night-time acoustic surveys for bats in southern California. She has conducted focused nighttime bat emergence surveys, and active and passive bat detector monitoring for various projects throughout California. She has experience in capture techniques including mist-netting and has handled over 100 individuals of 18 species. Ms. Simpson has surveyed hundreds of bridges and culverts in support of projects in Los Angeles, Orange, San Bernardino, Butte, Inyo, Mono, and Riverside Counties. Ms. Simpson is proficient at bat call analysis using Analook and Sonobat Software and is experienced in operating several types of bat detectors including Anabat, Pettersson, and Wildlife Acoustics units. Ms. Simpson also has experience evaluating project impacts to bats, designing and implementing bat mitigation, and preparing Bat Management Plans.

Education

B.S., Biological Science, Concentration: Biodiversity, Ecology, and Conservation Biology, California State University, Fullerton

A.A., Natural Science and Mathematics, Mount San Antonio College, Walnut, California

Registrations, Certifications, Permits and Affiliations

- California Department of Fish and Wildlife Scientific Collecting Permit General Use Permit: GW-202100007-21069-001 (exp. 11/3/2024)
- Western Bat Working Group Member: SoCal Bat Chapter

Professional Development Courses/Training

- Combined Field Survey Techniques – Bat Survey Solutions, Portal, AZ, May-June 2022.
- Bat Ecology and Field Techniques – The Wildlife Society Western Section Workshop, Camp Roberts, August 2019.
- Comprehensive Bat Acoustics Course – Desert Studies Center, Zzyzx, CA. Titley Scientific. Sept. 2018.
- Southwestern Desert Bats – Anza Borrego Foundation, Borrego Springs, CA. April 2018.
- Ecology and Conservation of California Bats – San Francisco State University, Sierra Nevada Field Campus, July 2017
- Southwestern Desert Bats – Desert Studies Center, Zzyzx, CA. Maturango Museum. October 2017.

Professional Experience

Bat Management Plan and Mitigation Implementation for the Southern California Logistics Airport (SCLA) Lot 44 Distribution Center Project (Loki Project), San Bernardino County – ECM Management,

LLC. (August 2021-ongoing). Ms. Simpson conducted a bat habitat assessment and emergence survey at an abandoned building located on the Project site. Ms. Simpson identified a maternity roost of *Myotis yumanensis* and *Tadarida brasiliensis* with over 500 individuals within the building in August 2021. Ms. Simpson conducted ongoing roost monitoring surveys at the site to document changes in the size of the roost colony and use of the building while mitigation strategies for the roost were prepared. Ms. Simpson documented a migratory wave of *Tadarida brasiliensis* at the site in September and again in October 2021. Ms. Simpson conducted construction monitoring at the site when work was occurring near the no-work buffer established around the roost. Ms. Simpson worked with permitted bat biologists Mr. David Wyatt and Ms. Stephanie Remington to develop and implement a Bat Management Plan for the Project that included the creation of a temporary roost replacement structure and a permanent roost replacement building as well as a plan for the exclusion of bats from the roost outside of the maternity season. Mitigation implementation at this project is ongoing. The permanent roost replacement building was completed in February 2022 and Ms. Simpson assisted with the physical relocation of 36 bats into the structure. Ms. Simpson is currently conducting monthly emergence counts and ongoing passive acoustic monitoring at the permanent roost replacement building.

Clinton Keith Road Extension Phase 3 Project – City of Murrieta - Riverside County Transportation Department (RCTD) (January 2022 – ongoing). Ms. Simpson conducted a pre-construction bat habitat assessment at the project to locate potential bat roosting habitat that may be impacted by Project activities. Ms. Simpson identified evidence of bat day- and night-roosting within two culverts adjacent to the Project site and provided RCTD with avoidance and minimization measures to prevent impacts to bats that may roost in the culverts during Project activities.

Biological Services for Bridge Preventative Maintenance Program (BPMP) Groups 6, 7, 8, 9 – Preconstruction Surveys and Monitoring- Los Angeles County – Los Angeles County Public Works, (October 2021-ongoing). Ms. Simpson served as project manager and lead biologist to conduct preconstruction surveys at bridge locations proposed for maintenance activities. In October 2021, Ms. Simpson conducted pre-construction bat habitat assessment surveys at 17 bridge locations included in Group 6. In January 2022, Ms. Simpson conducted pre-construction bat habitat assessment surveys at 31 bridge locations included in Groups 7 and 8. Each bridge and all potential habitat areas within the associated buffer were surveyed for suitability for bat use.

On-Call Biological and Ecological Services Contract – Caltrans District 8, Riverside and San Bernardino Counties (2019 – Ongoing). Ms. Simpson served as a wildlife biologist for biological resource studies under a task order contract for the Department of Transportation District 8 (includes all of San Bernardino and Riverside Counties). Ms. Simpson worked on the following Task Orders pertaining to bats:

- **Interstate-10 Bridge Preventative Maintenance Project, Task Order 3, San Bernardino County – Caltrans District 8 (October 2020).** Ms. Simpson served as task order manager and conducted bat habitat assessments and emergence and acoustic surveys at hinges within three bridges identified for joint seal replacement activities to determine the presence of bat roosts within the affected hinges. Ms. Simpson co-authored the bat survey report with permitted bat Biologist Ms. Stephanie Remington that

provided Caltrans with recommendations for avoidance of bat roosts during joint seal replacement activities.

- **Significant Trash Generating Area Project Bat Habitat Assessment, Task Order 11, Riverside County – Caltrans District 8 (June 2021).** Ms. Simpson alongside permitted bat biologist Ms. Stephanie Remington conducted bat habitat suitability assessments at over 40 culverts, bridges, and other structures anticipated to be impacted by the proposed project. Culverts and bridges were assessed for crevices and other features that may provide habitat for day-roosting and night-roosting bats. Guano was observed at several culverts and bridges which were identified as night-roosting locations.
- **Bat Management Plan for the Temecula Auxiliary Lanes Project, Task Order 12, Riverside County – Caltrans District 8 (08/2021).** Ms. Simpson alongside permitted bat biologist Ms. Stephanie Remington conducted a survey for night-roosting bats at the Empire Creek Bridges along Interstate 15 in the city of Temecula. Night-roosting was documented at both bridges during the survey. Ms. Simpson in collaboration with Ms. Remington prepared a Bat Management Plan for the project outlining avoidance and minimization measures to reduce impacts to the night roost.
- **Bat Habitat Assessment for the SBD-SR66 and I-215 Bridge Widening and Overlay Project, Task Order 22, San Bernardino County (October 2021).** Ms. Simpson served as task order manager and was responsible for leading a bat habitat assessment survey at three bridge locations proposed for widening. No bat sign was observed but two of the three bridges contained night-roosting habitat and small amounts of day-roosting habitat. Ms. Simpson prepared the bat habitat suitability report.

Bat Habitat Assessment and Emergence Survey, Victorville, San Bernardino County – Southwest Gas Corporation (07/2021). Ms. Simpson alongside permitted bat biologist Ms. Stephanie Remington conducted a habitat assessment and exit count survey for the Southwest Gas Corporation at the Victorville site after a bat was found on the ground by a project worker. The survey was conducted to ensure that construction at the site was not affecting a bat roost. Ms. Simpson confirmed during the survey that roosting bats were not present at the time of the survey.

Preconstruction Bat Survey for SR-79 Arroyo Seco Bridge Replacement Project, Riverside County – Stephanie Remington (June 2021). Biologist assisted Ms. Stephanie Remington with bat exit count and acoustic surveys at the SR-79 Arroyo Seco Bridge. The bridge was surveyed prior to sunset to identify any recent bat sign. Night emergence surveys and bat counts were conducted to determine the number of bats utilizing the bridge and which features at the bridges were used for roosting. Used the AnaBat and Echometer detectors with night vision googles and acoustically to detect bats. The bridge was determined to be a significant night roost for species of special concern pallid bats and Townsend's big-eared bats.

Bat Habitat Assessment and Surveys and Construction Monitoring for The Coachella Valley (CV) Link Multi-Modal Transportation Corridor Project, Riverside County – Riverside County Transportation Department (December 2020-Ongoing). Lead bat biologist conducted bat habitat assessments of 14 bridges and two culverts along the CV Link Project Segment 1 Corridor. Ms. Simpson prepared a Bat

Management Plan for the project which included measures to protect roosting bats during project construction activities. Ms. Simpson led follow-up bat emergence and acoustic surveys at bridges prior to construction initiation to determine if maternity roosting was occurring at the bridges and/or culverts. Ms. Simpson also conducted construction monitoring site visits for the Project.

Avenue 66 Grade Separation Project, Community of Mecca, Riverside County – Riverside County Transportation Department as a Sub to Anser Advisory (February 2020-Ongoing). As a designated biologist for the project, led pre-construction bat habitat assessment and surveys prior to the removal of palm trees. Also conducted a bat habitat assessment and emergence surveys of structures on the Project site and prepared a Bat Management Plan that was approved by CDFW. Identified a maternity bat roost at the Project site and assisted with CDFW coordination and coordination with Project personnel to avoid impacts to the maternity roost from construction.

Peter's Canyon Channel Maintenance Project, Orange County – Orange County Public Works (March 2020). Ms. Simpson conducted preconstruction bat habitat assessments at bridges crossing Peter's Canyon Wash prior to the initiation of construction activities. Assisted with delineation of protected habitats along the channel edges and mapping of non-native plants.

Biological Surveys and Monitoring for the Olancha-Cartago 4-Lane Widening Project, Inyo County – Sub to Caltrans District 9 (April 2019 – ongoing). Ms. Simpson led bat habitat assessments and surveys for the Olancha/Cartago Four Lane Project. Bat surveys included a bat habitat assessment documenting potential bat roosting locations and evening emergence and acoustic surveys throughout the spring and summer of 2019. Ms. Simpson authored the bat survey report providing recommendations for avoidance of impacts to bats during project construction.

Bridge Preventative Maintenance Program (BPMP) Group 22 Bridges, Los Angeles County – Los Angeles County Public Works (July 2019). Biologist conducted general biological surveys at three bridges in Los Angeles County in support of the Bridge Preventative Maintenance Program: Valyermo Road over Big Rock Creek Bridge, Camp Bonita Road over Cattle Canyon Creek Bridge, and the Big Tujunga Canyon Road over Big Tujunga Canyon Bridge. Responsible for assessing the bridges for their potential as bat roosts as well as conducting evening emergence and acoustic surveys for bats to determine the extent of bat use on the bridges. Each bridge had some degree of roosting bat use with one bridge containing a confirmed maternity roost. Ms. Simpson provided the County with recommendations to avoid impacts to the roosting bats in the bridges as the projects move towards the permitting process.

Ten West Link Transmission Line Project, Blythe, California to Yuma, Arizona - Energy Environmental Group (June 2019). Ms. Simpson conducted a bat habitat assessment along an approximately 130-mile proposed transmission line alignment. The entire alignment plus a 500-foot buffer was surveyed to assess the site for suitability for bat roosting. High-suitability roosting habitat and potential roost locations were mapped throughout the entire transmission line alignment and areas where follow-up focused surveys would be necessary were recommended.

Long Term Roost Monitoring for Interstate-15 Express Lanes Project, Riverside County – Stephanie Remington (November 2017-December 2019). Biologist assisted Ms. Stephanie Remington with monthly bat exit count and acoustic surveys at bridges carrying Interstate 15 that were previously occupied by bat roosts as part of a long-term roost monitoring effort to determine post-construction bat use. The bridges were surveyed prior to sunset to identify any recent bat sign. Night emergence surveys and bat counts were conducted to determine the number of bats utilizing in the bridges and which features at the bridges were used for roosting.

Long Term Roost Monitoring for State Route 91 Corridor Improvement Project, Riverside County – Stephanie Remington (November 2017-December 2019). Biologist assisted Ms. Stephanie Remington with monthly bat exit count and acoustic surveys at bridges carrying State Route 91 that were previously occupied by bat roosts as part of a long-term roost monitoring effort to determine post-construction bat use. The bridges were surveyed prior to sunset to identify any recent bat sign. Night emergence surveys and bat counts were conducted to determine the number of bats utilizing in the bridges and which features at the bridges were used for roosting.

Repairs of Existing Facilities of the Oroville Wildlife Area (OWA) Flood Stage Reduction, Sutter County – Sutter Butte Flood Control Agency (SBFCA) (2018). SBFCA plans to improve the connectivity of the Feather River to its historic floodplain, reduce flood stages within the main channel, provide more frequently inundated floodplain rearing habitat for salmonids, and reduce the extent of invasive plant species. Lead multiple days of bat habitat assessment surveys and nighttime visual and acoustic emergence surveys and preconstruction surveys for tree-roosting bat species within the OWA. Surveys included examining trees and identifying high-quality roosting habitat features. The purpose of the bat surveys was to identify potential roost trees in order to assist in compliance with tree removal guidelines, establish baseline data about bat species occurrence and diversity at the Project site, and complete an assessment of habitat use by bat species within the Project area.

Devil's Gate Reservoir Restoration Project, Los Angeles County – Los Angeles County Public Works (2016-Ongoing). The Devil's Gate Reservoir Restoration Project is a four-year effort to increase flood protection for communities downstream of Devil's Gate Dam and restore habitat within the Arroyo Seco Watershed. Ms. Simpson served as Lead Designated Biologist for all biological monitoring during initial vegetation removal, construction, and restoration phases. Duties included monitoring vegetation removal and moving wildlife out of harm's way, providing worker environmental awareness program (WEAP) trainings to construction and restoration workers, and coordination with County staff and biological monitors to establish a daily monitoring schedule. Ms. Simpson also led preconstruction bat surveys. All potential bat roost trees within the reservoir were surveyed to identify potential roost sites.

CEMEX Soledad Canyon Project, Los Angeles County – CEMEX Construction Materials (2018). Wildlife biologist responsible for conducting a bat habitat assessment for the proposed mining project in Soledad Canyon. During the survey, potential areas within the project site that have suitability for bat use were identified for follow-up emergence and acoustic surveys.

Bear Valley Road over the Mojave River Bridge Rehabilitation Project Focused Bat Surveys, San Bernardino County – Dokken Engineering (2016). Biologist conducted focused bat surveys at the Bear Valley Road Bridge over the Mojave River in the Town of Apple Valley, California. The bridge is proposed for rehabilitation and widening. A daytime roost and habitat assessment was conducted at the bridge followed by a night time emergence count and acoustic survey. Results of focused surveys determined that the bridge served as a maternity roost and was occupied by more than 700 bats. Results of the survey were summarized in a report provided to assist with the Natural Environment Study (NES) prepared for Caltrans District 8 for the project.

Bridgeport Culverts Improvement Project Preconstruction Nesting Birds and Bat Surveys, Mono County – Caltrans District 9 (2016). Biologist conducted pre-construction bat habitat and roost assessments and nesting bird surveys at 40 culverts located along Highway 395 in Bridgeport, CA. Culverts were inspected for evidence of bat use and were determined to be unsuitable for bat roosting. Areas within 300 feet of each culvert were surveyed for nesting bird activity pursuant to the Nesting Bird Management Plan prepared for the project.

Bat Roost Assessments and Nighttime Surveys, Construct Truck Climbing Lane in the East Bound Direction and Truck Descending Lane in the West Bound Direction of State Route 60 Project – Caltrans District 8 (2014-2015). Biologist conducted daytime bat habitat and roost suitability assessment at 34 culverts that span State Route 60 near Beaumont, CA in December 2014. During habitat and roost suitability assessments identified which culverts contained suitable bat roosting habitat, suitable foraging habitat, or had bat sign (guano, urine staining, etc.). Conducted follow-up nighttime acoustic and emergence surveys at eight culverts that were identified during habitat assessment surveys as having the potential for being suitable for roosting bats. Three culverts were determined to have day and night roosting *Myotis* species. Authored both the bat habitat and roost suitability assessment report and the follow-up nighttime survey report.

Bat Habitat and Roost Assessment, SR 371 Widening Project, Riverside County – Caltrans District 8 (2015). Biologist conducted daytime bat habitat and roost suitability assessment at 26 culverts that span State Route 371 in support of the project. No culverts were determined to contain suitable bat roosting habitat. Authored the associated survey technical memorandum.

Bat Surveys and Bat Exclusion Device Installation at SR-138 Bridge over Horsethief Creek at PM 24.1 Replacement Project, San Bernardino County – Caltrans District 8 (2013–2014). Biologist conducted bat habitat and roost assessment and night-time emergence and acoustic bat surveys at the SR-138 Bridge over Horsethief Creek in San Bernardino County for Caltrans District 8. Bat sign was observed beneath the bridge proposed for demolition and the site was determined to be a night-roosting location. Worked with a CDFW permitted bat biologist Ms. Jill Carpenter to design, build and install bat exclusion devices at all weep holes and entrances at the bridge. Authored the technical reports documenting the results of the night-time surveys and exclusion device installation for transmittal to Caltrans and CDFW.

Bridge Preventative Maintenance Program (Groups 4–6, 8–11, and 13) Los Angeles County – Los Angeles County Public Works (2014–2016). Biologist conducted general reconnaissance surveys and

focused bat habitat assessment surveys at more than 100 bridges in support of the Bridge Preventative Maintenance Program projects located throughout Los Angeles County for the Los Angeles County Department of Public Works. Primary author or co-author for each of the eight NES Minimal Impacts, NES(MI)s reports prepared for the projects.

East Fork Road Over North Fork San Gabriel River and East Fork San Gabriel River Seismic Retrofitting Projects, Los Angeles County (2014–2016). Conducted preconstruction surveys and construction monitoring at the two bridges over the course of two years. Preconstruction surveys included general reconnaissance surveys, focused bat surveys (including a roost assessment and nighttime emergence and acoustic surveys) and nesting bird surveys. One of the bridges was determined to be used as a night-roosting location and appropriate measures were implemented during construction. Also administered the Worker Education and Awareness Program training to all construction and County personnel, performed construction monitoring, conducted daily preconstruction sweeps, and conducted nest monitoring during the nesting season. Responsible for coordination with the County, construction crew and foreman on site and participated in meetings with the County and agencies including the CDFW and the U.S. Forest Service regarding the projects. Responsible for authoring and co-authoring technical reports documenting the results of preconstruction surveys and post-construction compliance reports.

SR-710 North Study, Natural Environment Study, Los Angeles County – Los Angeles County Metropolitan Transportation Authority (2013–2016). Biologist conducted bat use and habitat assessments and night-time acoustic surveys at 14 bridges proposed for demolition. Lead protected tree and general reconnaissance surveys throughout the study area. Co-authored the NES and supporting technical memoranda which were used to guide the biological resources analysis within the DEIR/EIS. Reviewed and edited relevant biological resources sections of the EIR/EIS. Provided responses to public comments on the DEIR/EIS. Served as internal project manager from January 2015–May 2016.

3599 Lankershim Blvd. Single-Family Residence, Los Angeles County – Private Client (2015–2016). Biologist conducted a bat habitat assessment and nocturnal acoustic and emergence surveys within the oak woodland habitat on the project property. Provided revisions to the biological resources technical report and the biological resources section of the Environmental Impact Report for the proposed project.

Patterns of Activity and Diversity of Bats at the Urban Wildland Interface in Southern California, Los Angeles County – Southern California Ecosystems Research Program (SCERP) California State University, Fullerton (2011-2013). Developed a 2-year independent research project investigating the activity and diversity of bats at the urban-wildland interface in Southern California, particularly in the east San Gabriel Valley. Spent over 100 hours in the field performing bat acoustic monitoring and analyzed over 6,000 bat echolocation calls using Sonobat software. Presented the results of this study at the American Society of Mammalogists National Conference in 2013, and at several local conferences between 2012 and 2013.

Photo 1: Natural rock formations providing potential crevice roosting habitat north of the existing mine footprint.

Photo 2: Natural rock formations providing potential crevice roosting habitat north of the existing mine footprint.

Photo 3: Isolated natural rock formation providing potential crevice roosting habitat south of the existing mine footprint.

Photo 4: View of isolated natural rock formations providing potential crevice roosting habitat south of the existing mine footprint with manmade fill slope and pad area beyond**.**

Photo 5: Quarry face and potential crevice roosting habitat within the mine footprint created by previous mine activities.

Photo 6: Quarry face and potential crevice roosting habitat within the mine footprint created by previous mine activities.

Photo 7: Overview of both natural rock formations and quarry faces providing potential crevice roosting habitat within the existing mine footprint and expansion areas.

Photo 8: Overview of both natural rock formations and quarry faces providing potential crevice roosting habitat within the existing mine footprint and expansion areas.

Photo 9: Tree snag in canyon south of existing mine footprint providing potential cavity-roosting habitat for tree-roosting species.

Photo 10: Tree snag in canyon south of existing mine footprint providing potential cavity-roosting habitat for tree-roosting species.

Photo 11: View of mature trees with potential foliage roosting habitat in the canyon south of the existing mine footprint.

Photo 12: Untrimmed fan palm trees providing potential roosting habitat located at the northwest corner of the mine site.

Photo 13: Abandoned trailer structure at west end of mine site that provides potential roosting habitat.

Photo 14: Manmade pond west of the mine site that provides potential foraging habitat.

ATTACHMENT C

Wildlife Species Observed during 2022 Bat Habitat Assessment

Scientific Name	Common Name
REPTILES	
Phrynosomatidae	**Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched and Horned Lizards**
Uta stansburiana elegans	western side-blotched lizard
BIRDS	
Accipitridae	**Hawks**
Buteo jamaicensis	red-tailed hawk
Aegithalidae	**Bushtits**
Psaltriparus minimus	bushtit
Anatidae	**Ducks**
Oxyura jamaicensis	ruddy duck
Apodidae	**Swifts**
Aeronautes saxatalis	white-throated swift
Cathartidae	**New World Vultures**
Cathartes aura	turkey vulture
Columbidae	**Pigeons and Doves**
Zenaida macroura	mourning dove
Corvidae	**Jays and Crows**
Aphelocoma californica	California scrub-jay
Fringillidae	**Finches**
Spinus psaltria	lesser goldfinch
Haemorhous mexicanus	house finch
Hirundinidae	**Swallows**
Hirundo rustica	barn swallow (old nest)
Tachycineta thalassina	violet-green swallow
Mimidae	**Mockingbirds and Thrashers**
Mimus polyglottos	northern mockingbird
Odontophoridae	**New World Quail**
Callipepla californica	California quail
Passerellidae (previously Emberizidae)	**Sparrows and Towhees**
Aimophila ruficeps	rufous-crowned sparrow
Melospiza melodia	song sparrow
Pipilo crissalis	California towhee
Pipilo maculatus	spotted towhee
Zonotrichia leucophrys	white-crowned sparrow
Parulidae	**New World Warblers**
Setophaga coronata	yellow-rumped warbler
Podicipedidae	**Grebes**
Podilymbus podiceps	pied-billed grebe
Rallidae	**Rails**

Scientific Name	Common Name
Fulica americana	American coot
Sylviidae	**Sylviid Warblers**
Chamaea fasciata	wrentit
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Troglodytidae	**Wrens**
Catherpes mexicanus	canyon wren
Salpinctes obsoletus	rock wren
Turdidae	**Thrushes**
Sialia mexicana	western bluebird
Tyrannidae	**Tyrant Flycatchers**
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Tyrannus vociferans	Cassin's kingbird
MAMMALS	
Canidae	**Canids**
Canis latrans	Coyote
Cervidae	**Deer**
Odocoileus hemionus	mule deer
Cricetidae	**New World Rats and Mice**
Neotoma (sp.)	woodrat (midden)
Leporidae	**Hares and Rabbits**
Sylvilagus audubonii	desert cottontail
Sciuridae	**Squirrels**
Otospermophilus beecheyi	California ground squirrel

*Nonnative species